



SAFEGUARDS AND SUSTAINABILITY SERIES

Volume 2, Issue 1, December 2015

Integrated Safeguards System

Guidance Materials

Volume 2: Guidance on Safeguard Issues



AFRICAN DEVELOPMENT BANK GROUP

Quality Assurance and Results Department (ORQR)
Compliance and Safeguards Division (ORQR.3)



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Safeguards and Sustainability Series: Integrated Safeguard System Guidance Materials

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Acronyms and abbreviations

ARAP	Abbreviated Resettlement Action Plan	IESIA	Integrated Environmental and Social Impact Assessment
CSP	Country Strategy Paper	ISS	Integrated Safeguards System
DFI	Development Financial Institution	ISTS	Integrated Safeguards Tracking System
ESA	Environmental and Social Assessment	MDB	Multilateral Development Bank
ESAP	Environmental and Social Assessment Procedures	IDEV	Operations Evaluation Department
ESCON	Environmental and Social Compliance Note	OPSM	Operations of Private Sector and Microfinance
ESCR	Environmental and Social Completion Report	ORQR.3	Compliance and Safeguards Division
ESIA	Environmental and Social Impact Assessment	OS	Operational Safeguard
ESMF	Environmental and Social Management Framework	PAR	Project Appraisal Report
ESMP	Environmental and Social Management Plan	PBO	Program-Based Operations
ESMS	Environmental and Social Management System	PCN	Project Concept Note
ESS	Environmental and Social Scoping	PCR	Project Completion Report
ESSM	Environmental and Social Scoping Memorandum	PEN	Preliminary Evaluation Note
E&S	Environmental and Social	PIC	Public Information Centre
FI	Financial Intermediary	RCM	Request for Categorization Memorandum
FRAP	Full Resettlement Action Plan	RISP	Regional Integration Strategy Paper
GECL	General Counsel and Legal Services Department	RMC	Regional Member Country
IPRR	Implementation Progress and Results Report	SESA	Strategic Environmental and Social Assessment
		TOR	Terms of Reference
		VCM	Validation of Categorization Memorandum

FOREWORD

The African Development Bank has revised its existing Integrated Environmental and Social Impact Assessment (IESIA) Guidelines which dates back to October 2003. The IESIA Guidelines are intended to be used as a systematic process for addressing projects' environmental and social impacts with clear understanding of the specific sector characteristics. The IESIA guidelines reflect the scope and content of the new Integrated Safeguards System and Operational Safeguards as well which have been adopted by the Bank in December 2013.

Tremendous practical knowledge, resources and best practices have been used in developing these guidelines which are brought to best international standards. They are intended for national Environmental and Social Assessment practitioners, process managers as well as Bank staff with the intention of:

- Assisting in the project design at early stages, as many potential adverse impacts can be avoided or mitigated by modifying or adding certain project components to the initial design. As well, improvements in the project design can enhance several beneficial impacts at a minimal cost.
- Providing necessary guidance on how to adequately consider the Bank's priority safeguards themes in both the preparation and assessment phases. Thus the staff of the Bank and RMCs should refer to the IESIA Guidelines from the beginning of the project cycle to the end.

The IESIA guidelines are published in the Safeguards and Sustainability Series in three sets:

- Volume 2 Issue 1 containing 10 general guidance notes on ESA – responding to the requirements set out in OS1, providing specific guidance in the form of checklists on specific themes and requirements in the OSs as well as on sector-specific assessment issues. The guidance notes cover environmental mainstreaming, strategic assessments, impact assessments, environmental management plans, and environmental management systems, supervision of compliance and use of country systems.

- Volume 2 Issue 2 which deals with Sector Keysheets for 27 sectors and sub-sectors including transport, power generation, sustainable land and natural resources management, oil and gas, urban and rural water supply and sanitation as well as social infrastructure.
- Volume 2 Issue 3 providing 10 specific guidance notes on specific OS requirements such as consultation, working with vulnerable groups, and grievance mechanisms. Some address specific areas of environmental and social risk not previously covered by Bank policies, such as cultural heritage, environmental flows, biodiversity, labor standards, HIV AIDS, dams and large scale land acquisition. These are not “manuals” but provide sufficient information to enable Sector Department staff to understand fully the requirements of the OSs.

This new set of guidance materials has which will be completed with other items and updated using new knowledge and emerging best practices as it a leaving material has three critical advantages:

- It provides a system of technical support both for its own staff and for borrowers or clients to cover not only project preparation but also implementation – with a new emphasis on monitoring, reporting and supervision,
- Puts in place a dynamic and customized resource that can respond to current needs and be adapted to future safeguard implementation challenges faced by Bank staff, in both regional and sector departments, and its borrowers or clients; and,
- Offers a basis for capacity building in the Bank and in RMCs with respect to implementing the safeguards.

The Bank hopes that the provision of high quality technical guidance is key to ensuring effective compliance, capacity and ownership of the ISS for Bank staff and borrowers alike. Therefore, it is our hope that Regional Member Countries will optimally use them when undertaking

Environmental Assessments for Bank financed projects/ programs. The Bank encourages its own Operational staff

to refer to it when reviewing and clearing ESA studies and in project supervision.



EXECUTIVE SUMMARY

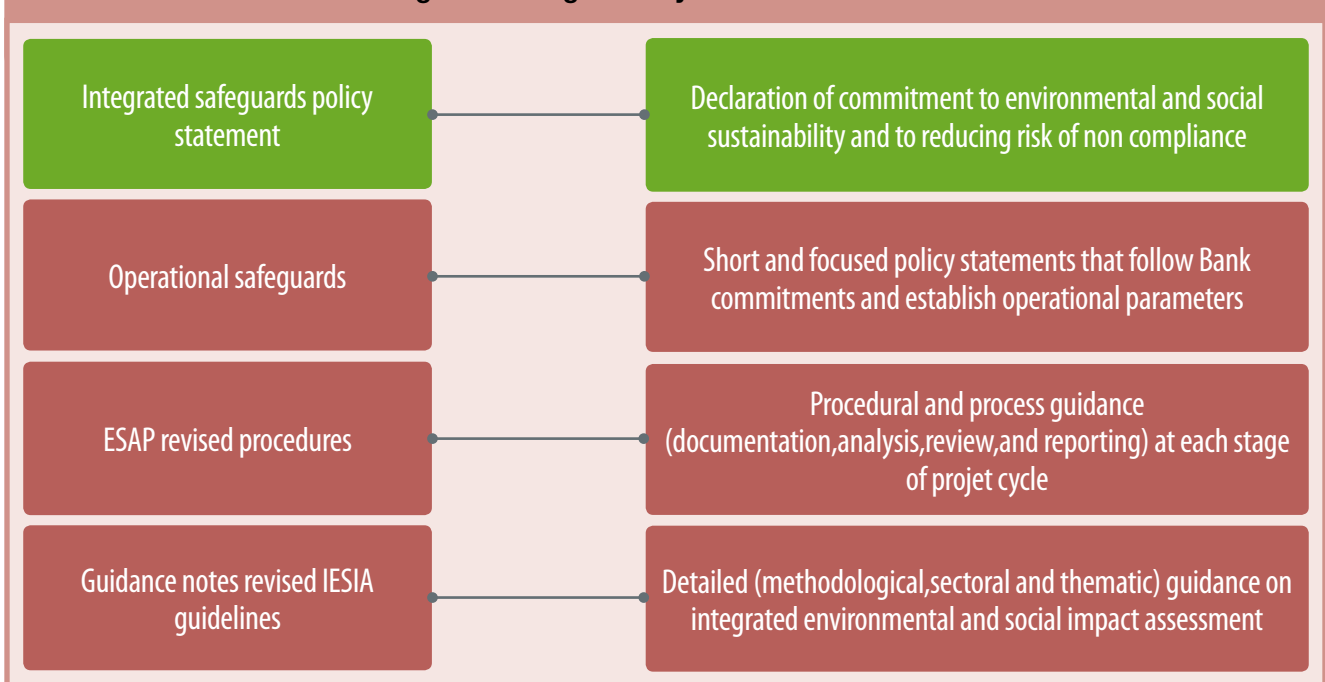
Context and process

The African Development Bank (the Bank) is introducing the Integrated Safeguards System (ISS) to update and articulate more clearly its environmental and social safeguards to support inclusive and sustainable growth in the region. The ISS consists of four interrelated components (Figure 1):

- An Integrated Safeguards Policy Statement declaring the Bank's commitment to environmental and social sustainability and the management of risks associated with non-compliance with the Bank's Policies and Procedures;
- Operational Safeguards (OSs) – which are a set of brief and focused policy statements that clearly set out the operational requirements with which Bank-financed operations must comply; and
- A revised set of Environmental and Social Assessment Procedures (ESAPs) that will provide information on the specific procedures that the Bank and its borrowers or clients should follow to ensure that Bank operations meet the requirements of the OSs at each stage of the Bank's project cycle.
- Integrated Environmental and Social Impact Assessment (IESIA) Guidance Notes that provide technical guidance for the Bank and its borrowers or clients on safeguards instruments, methodological approaches and specific topics or project types relevant to meeting the new OSs.

The first two components of the ISS were approved by the Board in December 2013 and became operational in July 2014. The last 2 components have been adopted by OpsCom in October 2014.

FIGURE 1: Structure of the Integrated Safeguards System



The development of the ESAP and the IESIA Guidance Notes have benefitted from Bank-wide consultations on the ISS and reflect the guidance provided during these consultations. Training sessions have been carried out at the HQ on the documents for Task Managers and Environmental and Social Safeguards Experts. Three regional training sessions have

also been carried out in Dakar for staff in Western, Central and Northern Africa, in Nairobi for Eastern Africa and in Pretoria for Southern Africa. The feedback from these training sessions have also been incorporated into the development of these procedures and guidelines. Key revisions applied in the ESAP procedures are summarized below:

Key Environmental and Social Assessment Procedures (ESAP) Revisions

Revision	Brief Description of Revision
Broadened ESAP scope – to cover private sector projects.	<ul style="list-style-type: none"> The revised ESAP cover not only public, but also private sector Bank lending operations.
Introduction of Integrated Safeguards Tracker (IST).	<ul style="list-style-type: none"> The revised ESAP contain an IST system. The IST's basic purpose is to facilitate the verification of project compliance with the requirements set out in the Operational Safeguards (OSs), over the course of the Project Cycle. A more detailed description of the IST is provided in the revised ESAP document itself.
Introduction of Environmental and Social Categorization Memorandum (ESCM).	<ul style="list-style-type: none"> The revised ESAP require the Sector Departments to draft an ESCM during the project identification phase of the Project Cycle. This ESCM assigns the project a Category and requests ORQR.3 to review and clear the Category.
Broadened use of Environment and Social Scoping Memorandum (ESSM) – to cover Category 4 projects and private sector projects.	<ul style="list-style-type: none"> The revised ESAP require that, during the project preparation phase of the Project Cycle, the Sector Departments develop an ESSM not only for Category 1 and 2 projects, but also for Category 4 projects. The revised ESAP require that an ESSM is developed not only for public sector projects, but also for private sector projects.
Broadened use of ORQR.3 compliance check – to cover private sector projects and Environmental and Social Management System (ESMS).	<ul style="list-style-type: none"> The revised ESAP require that ORQR.3 engages in a PCN compliance check not only for public projects, but also for private projects. The revised ESAP require that ORQR.3 engages in a PAR compliance check not only for public sector projects, but also for private sector projects. The revised ESAP require that ORQR.3 engages in an ESMS compliance check for Category 4 projects during the project appraisal phase of the Project Cycle.
Increased ORQR.3 responsibility for disclosure.	<ul style="list-style-type: none"> The revised ESAP require that ORQR.3 itself is responsible for disclosing the ESA and ESMP summaries (and where applicable the FRAP / ARAP) during the project appraisal phase of the Project Cycle.

The implementation of the ISS enables the Bank to (i) promote social and environmental benefits, (ii) protect against harm, (iii) pursue a more sustainable approach to development which can generate benefits in terms of environmental security and human well-being, and (iv) manage projects' trade-offs in the best interest of Africa's development. But more than that, the Integrated Safeguards System is one of the strongest tools the Bank can use to promote the well-being of our true clients, Africa's people while the ESAP

and the IESIA Guidance Notes provide a strong procedural basis for the operationalization of the ISS at country level.

Scope of the guidelines

The Integrated Environmental and Social Impact Assessment (IESIA) Guidelines provide a systematic

process for addressing projects' environmental and social impacts with clear understanding of the specific sector characteristics.

The IESIA complements the guidance and formats provided in ESAP and provides guidance to RMCs when undertaking Environmental and Social Assessments for Bank financed projects/programs. It will also be used by the Bank's Operational staff in reviewing and clearing these studies and in project supervision. The provision of high quality technical guidance is key to ensuring effective compliance, capacity and ownership of the ISS for Bank staff and borrowers alike. The development of the IESIA Guidance Notes has been guided by the following principles:

- Need to address the new and more challenging elements and required outputs of the OSs – in particular those set out in OS 1 on Environmental and Social Assessment;
- Addressing emerging or challenging issues or topics relevant to the scope of the set of OSs, in particular it seeks to address the implementation challenges with that are anticipated in the ISS and responds to the changing profile of Bank operations;
- Provision of specific support to identifying and managing the key environmental and social risks associated with operations in a number of priority sectors;
- Ease of use, accessibility and effectiveness in meeting the practical needs of project staff involved in Bank operations and in borrower institutions;
- Appropriate scope and scale drawing on the experience of other MDBs and development agencies and taking into account the lessons learned over the years in the Bank in implementing safeguards.

The IESIA Guidance Notes, which are designed to be reviewed and updated on a regular basis and as necessary, offer three critical benefits:

- provides a system of technical support both for Bank staff and for borrowers or clients to cover not only project preparation but also implementation – with a new emphasis on monitoring, reporting and supervision;
- puts in place a dynamic and customized resource that can respond to current needs and be adapted to future safeguard implementation challenges faced by Bank staff, in both regional and sector departments, and its borrowers or clients;

- offers a basis for capacity building in the Bank and in RMCs with respect to implementing the safeguards.

Structure and content

The IESIA Guidance Notes are presented in three standalone volumes that provide guidance in the three essential components of (i) the Environmental and Social Assessment process, (ii) specific topics and operational safeguard requirements, and (iii) technical guidance on key sectors and subsectors that have been proposed by operational departments as areas where guidance is needed:

Volume 1: Environmental and Social Assessment Instruments and Outputs

In OS1 and the ESAP, several new environmental and social assessment instruments and outputs are introduced. These include the use of Strategic Environmental and Social Assessment (SESA) for policy and programme lending and the use of Environmental and Social Management Frameworks and Systems (ESMFs and ESMSs) for programme lending and Financial Intermediaries. There is also greater emphasis on compliance monitoring during project implementation as well as greater attention to country systems.

For Bank operations staff and their counterparts in borrowers or clients, it is vital that they have clear and easy to use guidance on these different instruments and outputs. This guidance is therefore designed specifically to complement the ESAP Annexes, which provide templates and report formats in many cases. The main purpose of this category of guidance should be to:

- Make it clear to staff what is the nature of the different instruments in the specific context of the OSs and ESAP
- Assist them to prepare TORs, report formats and select high quality consultants
- Evaluate the quality of reports and deliverables to judge if the OS1 requirements are followed satisfactorily
- Highlight key issues of importance for good compliance.

Volume 2: Environmental and Social Assessment Topics

The OSs introduce or elaborate on a number of key ESA requirements and topics. It is of great importance to

provide Bank and borrower staff with clear and easy to use guidance to ensure a high level of understanding of what is required, best practice on meeting the requirements and where appropriate sources of good technical information.

Some of these topics reflect specific OS requirements such as applying safeguards to policy and programme lending, public (free, prior and informed) consultation and grievance mechanisms. Some address specific areas of environmental and social risk not previously covered specifically by Bank policies, such as vulnerable groups, cultural heritage, environmental flows, biodiversity, GHG emissions and labour standards. Others cover topics long recognised to be of great importance and where compliance may be improved through better technical guidance, such as resettlement or pollution control.

It should be noted that the Bank has introduced a Climate Safeguards System (CSS) to complement the IESIA and has also integrated the associated climate vulnerability and adaptation requirements and procedures into the ISS. The CSS can be accessed using this link <http://css.afdb.org:8080/AfDB-CSS/afdbhomepage.html> and following login instructions Login: Tmanager, PW: taskmanager.

Volume 3: Guidance on Specific Sectors called Sector Keysheets

30 specific project types, within four key sector areas for which checklists should be prepared. The aim of such checklists should be to identify typical project components, sources of impacts, commonly applied assessment methods and likely management options. These can be

used by Bank staff to assist in the process of screening projects in the early stage of the Project Cycle as well as for tailoring TORs for Environmental and Social Assessments.

The preparation of such checklists and sector specific guidance by development agencies has been common over the past two decades or more. Many have been produced in a variety of different “shapes and sizes”. However, it is interesting to note that few if any MDBs are currently applying sub-sector guidance of this kind within their safeguards systems. For example, the World Bank Group’s Environmental, Health and Safety Guidelines are organised around types of pollution or risk.

It is important for the Bank to take full account of how useful such guidance has been for other agencies, what format and scale would be best suited for use by Bank staff and the selection of specific sectors for which checklists may be useful. Extensive consultation with the Bank’s environmental and social specialists for different sectors will be essential to determine how sub-sector specific guidance would be valuable.

The ESAP and IESIA Guidance Materials will be uploaded in the online Integrated Safeguards Tracking System (ISTS) that has been jointly developed by ORQR and CIMM. The ISTS is linked to the Bank’s project management/SAP database system to provide to Bank staff an automated and one-stop platform for processing Bank projects’ environmental and social due diligence. The ISTS aims at facilitating the verification of project compliance with the requirements set out in the OSs, over the course of the project cycle.

CONSULTATION

OS requirements on consultation

OS 1 states that the borrower or client shall be responsible for conducting and providing evidence of meaningful consultation (i.e. consultation that is free, prior and informed) with communities likely to be affected by environmental and social impacts, and with other local stakeholders. The key focus of meaningful consultation is equity and inclusivity; namely, the approach taken needs to ensure that all groups (including those that are disadvantaged or vulnerable) are embraced within the consultation process on equal terms, and that all groups are given the capacity to express their views with the knowledge that these views will be properly considered.

OS 1 also states that the borrower or client shall be responsible for ensuring the satisfaction of Broad Community Support (BCS), especially for Category 1 projects and for projects affecting Indigenous Peoples, with a view to promoting appropriate solutions that do not harm livelihoods.

The Bank requires that consultation shall start at the project identification stage, or at least at an early stage during project preparation, that it shall continue throughout, and that it shall be based upon a stakeholder analysis. It shall also be conducted in a timely manner in the context of key project-preparation steps, in an appropriate language, and in a manner that is accessible and fully informed as a result of prior disclosure of project information. The results of such consultation shall be adequately reflected in project design, as well as in the preparation of project documentation. In all cases, consultation should be carried out after, or in conjunction with, the release of environmental and social information.

Definition of consultation

Consultation can be defined as the means by which a project communicates with the people living in the project's area of influence, as well as with other relevant stakeholders. It is the basis for building strong and constructive relationships which seek to facilitate a responsiveness to the concerns of all, which prioritize equity and inclusivity, and which are thus essential for the successful management of a project's environmental and social risks and impacts.

Consultation is a two-way process between a project and its affected communities / other stakeholders. On the project's side, it allows the borrower or client to present information (mainly the objectives, scope, timing and potential environmental and social impacts and risks associated with a project) in a way that can be understood by all. On the affected communities' / other stakeholders' side, it creates the space and opportunity to allow such groups to respond and express their doubts, concerns and opinions on the project. Consultation also allows affected communities / other stakeholders the opportunity to share their knowledge, insights and understanding of the local context, and enables them to recommend modifications or changes to the project with an informed view.

Objective of consultation

Consultation shall be conducted with the objectives of ensuring BCS for a project and of ensuring that affected people endorse the proposed mitigation and management measures. Considered by the Bank as a key principle, BCS is defined as a collection of expressions by affected communities, through individuals or their recognized representatives, in support of the project. It should be noted that there may be BCS even if some individuals or groups object to the project.

To ensure BCS, consultation shall provide opportunities for affected communities to express their views on project risks, impacts and mitigation and management measures, and shall allow the borrower or client to consider and respond to them in ways that facilitate the ultimate realization of BCS.

Consultation requirements

The main criteria for meaningful consultation are as follows:

- Free: consultation shall be free of external manipulation, interference, intimidation or coercion.
- Prior: consultation shall be timely in relation to the assessment process, allowing sufficient time to access and understand the information and prepare appropriate responses.

- **Informed:** consultation shall be grounded in the provision of relevant, understandable and accessible information, in the appropriate language, and in advance. Examples of relevant information that should be provided include: (i) the nature, scope and reversibility of the project; (ii) the purpose of the project; (iii) the location and scale of the project; (iv) the project schedule and duration; (v) a preliminary presentation of potential impacts, including employment benefits; (vi) the constituent elements of the Bank's safeguards etc.

In addition, consultation shall be:

- **Open:** consultation shall be open to all communities likely to be affected by a project, and to other stakeholders concerned, such as government officials, civil society organizations, labour organisations, academia, regional research institutions, private sector operators etc.
- **Accessible:** information grounding the consultation process shall be provided in a manner that is concise easy to understand and culturally appropriate.
- **Transparent:** through the consultation process, the borrower or client shall be honest in explaining the details of a project, including the more difficult and controversial issues.
- **Sensitive:** consultation activities shall be sensitive in terms of respecting local values and cultures.
- **Inclusive:** consultation shall focus on those directly and negatively affected by a project, as opposed to those not directly and negatively affected, and shall include all stakeholders – such as men, women, the elderly, youth, displaced persons, and vulnerable or disadvantaged individuals or groups.
- **Fair and even-handed:** the borrower or client shall allow critics to express their views, and enable all groups to speak out freely and with equal opportunity, so as to facilitate a full debate involving all viewpoints. In addition though, consultation shall give extra focus to those groups or sectors that are more likely to be directly and negatively affected by a project, and that may have more difficulty in defending themselves or taking advantage of the benefits offered by a project.
- **Effective:** the consultation process shall facilitate the presentation of information in a way that can be comprehended, and shall also create the space to allow people to respond.

Consultation shall allow affected communities and other stakeholders to express their doubts, concerns and opinions on a project. These shall then be seriously considered by the borrower or client and, wherever possible, addressed. The project shall inform, in a timely manner, the affected communities and other stakeholders about the results of the consultation process, and how their recommendations and concerns have been considered in the project's design and alternatives.

How to carry out consultation

Who shall be involved?

The starting point for any process of consultation is a stakeholder mapping analysis - the process of identifying the different stakeholders that may be affected by, or have an interest in, the project. The stakeholder mapping analysis should be as inclusive as possible, aiming to capture all affected communities and other relevant stakeholders. In the ESIA context, this requires taking account of the project's area of influence in order to determine the different groups that live in the area, or that may be affected by, or critical to, the outcome of a project. The stakeholder mapping analysis process shall also help to establish in what ways stakeholders may be affected by a project.

Once a stakeholder mapping analysis exercise has been instigated, the borrower or client is advised to develop and implement a Stakeholder Engagement Plan (SEP) (or Consultation Engagement Plan) that is scaled to the project risks, impacts and development stage, and that is tailored to the characteristics and interests of the affected communities. The advantage of having a SEP is that it provides a formal commitment, defines responsibilities, and ensures that adequate funds are made available to carry out the program of consultation.

A SEP should describe differentiated measures to allow the effective consultation and participation of all affected communities, and, where applicable, of vulnerable or disadvantaged individuals or groups, including Indigenous Peoples. It should also include a timetable for the different stages of the consultation process, a description of any consultations that have already taken place, a budget, a definition of the reporting procedures and a description of institutional responsibilities for consultation.

A Grievance and Redress Mechanism shall also be developed (often as part of the SEP), that details the procedures that a project will establish for managing complaints and grievances (see the Guidance Note on GRM).

Typically, stakeholders who shall be consulted include:

- **Affected communities:** defined as any people or communities located in a project's area of influence, particularly those close to the existing or proposed project facilities, who are subject to actual or potential direct project-related risks and / or adverse impacts on their physical environment, health or livelihoods.
- **Local and national government agencies:** government support can be critical to the success of a project, and routine engagement with various regulatory and public service authorities is often required as part of doing business. Local government authorities may have long-established relationships with affected communities and other local and national stakeholder groups, and as such can play a role in convening and facilitating discussions between a project and stakeholders.
- **Traditional leaders:** even if not always officially recognized, traditional leaders (such as village chiefs, religious leaders etc.) can play the same role as local and national government agencies in helping a project establish a relationship with the affected communities as well as in providing information.
- **NGOs and community based organizations:** these can be sources of local knowledge, sounding boards for project design and mitigation, conduits for consulting with sensitive groups, and partners in planning, implementing and monitoring various project-related programs.
- **Vulnerable groups:** this vulnerable status can be determined by identifying a group's likelihood of facing harder conditions as the result of a project, owing to specific factors such as a group's gender, economic status, ethnicity, religion, cultural behavior, sexual orientation, language or health condition (see Guidance Note on Vulnerable Groups).

The consultation process with vulnerable groups shall:

- Involve representative bodies and civil society organizations, as well as members of the vulnerable groups themselves.
- Ensure inclusivity in a socially and culturally appropriate manner (e.g. through ensuring that the locations and set-up for consultation activities are suitable for those being consulted, allow them to feel at ease etc.).

- Allow sufficient time for the vulnerable groups' decision-making processes.
- Facilitate the vulnerable groups' expression of their views, concerns and proposals in the language and manner of their choice, without external manipulation, interference, coercion or intimidation.
- Respect the culture, knowledge and practices of vulnerable groups, especially Indigenous Peoples.

At what stage shall consultation take place?

Consultation shall be considered an ongoing process, not just as a step in the procedures for obtaining project approval. It shall begin at the project identification stage, or at least at an early stage during project preparation, and shall continue throughout the life of the project through to construction, operation and decommissioning.

Project Design: consultation is crucial in the earliest stages of project design as it allows a project to gauge potential local support for, or opposition to, different options and alternatives. It allows the identification of key issues and concerns that might affect the viability of a project before too many decisions are made. The concerns, fears, doubts and recommendations expressed by affected communities and stakeholders during this early project design stage should be fed back into the decision-making process.

Environmental and Social Assessment (ESA): consultation is an essential part of the ESA process and should be carried out in alignment with the various steps that constitute this process. In particular, for Category 1 projects, the affected communities and stakeholders should be consulted to obtain their input into the preparation of the draft ToR for the SESA or ESIA, the draft SESA or ESIA report and summary, and the draft ESMP. For Category 2 projects, the affected communities and stakeholders should be consulted about the draft ESA report and the draft ESMP. In addition, detailed consultation with affected communities and stakeholders should be compulsory to the development of a FRAP / ARAP, where a resettlement process is taking place as a precursor to the operation of the project.

Implementation (Construction and Operation): the implementation phase is often a time of great concern for affected communities and stakeholders. It is important for sustainability and ownership during implementation to involve affected communities and stakeholders in monitoring the anticipated impacts and implementation of management measures. It is also about being responsive to grievances, and about identifying alternative mitigation and management measures where existing ones are failing. Evidence of

consultation activities and the outcomes of these should feature in the Quarterly Implementation Reports.

Decommissioning: a project shall develop a decommissioning plan that includes an initial outline consultation engagement plan that will be developed in more detail once the project begins to approach the end of its productive life. Engaging with stakeholders both well before this stage, and through it, can help lower costs, reduce liabilities and strengthen the overall reputation of the borrower or client.

Throughout a project's life cycle, the extent and degree of consultation required shall be commensurate with a project's environmental and social risks and impacts, and with the concerns raised by the affected communities and other stakeholders. Consultation shall also be underlain by impartiality, such that all articulated concerns are considered equally throughout the project's life cycle.

How shall people be consulted?

Consultation shall be tailored to the language preferences of the affected communities, their decision-making process, and the needs of disadvantaged or vulnerable individuals or groups.

Careful consideration and attention shall be given to:

- Actively facilitating consultation with, and participation by, both women and men, in ways that are sensitive to the social and political constraints and barriers that vulnerable individuals or groups may face.
- The location and scheduling of consultation activities, to ensure that people of all ages and social groups can attend and participate with confidence and ease.
- The way in which information is disseminated, as levels of literacy and networking may differ according to age, gender, economic status and other lines of social hierarchy / discrimination.
- The time allocated for consultation activities, as consultation is often a lengthy process that requires patience. Time is required not only to present people with information, but also to listen and respond to viewpoints, fears, concerns and doubts.

Consultation can take a number of forms, which will vary depending on the context and the individuals / groups subject to the consultation. Examples of consultation activities include:

- **Focus groups:** these are small group discussions, facilitated by a moderator who directs the conversational flow to the particular topic or issue under consideration. Focus groups seek to create a more natural context for consultation and discussion, and in doing so, give participants the opportunity to express their views with ease and confidence. Depending on the context, it may be appropriate to conduct differentiated focus groups through which certain sectors of society – such as farmers, young women, elders etc. – are grouped and consulted in focus groups specifically designed for the type of participant being engaged.
- **Community meetings:** these are more formal, larger scale consultation groupings, to which all community members are invited. They tend to be used to disseminate key messages and introduce key themes and topics, to then later be considered in more detail through smaller group discussions. Community meetings are useful as a starting point, but may exclude the expression of certain viewpoints, particularly those held by vulnerable groups or others who might be unwilling to express their perspectives in such a formal setting.
- **Key informant interviews:** these are one-on-one interviews with particular individuals who may have particular or specialized knowledge about the topic under discussion. For example, in the context of project impacts on schools, head teachers may be identified as key informants. Key informant interviews tend to be semi-structured, with particular questions framing the discussion, but with the capacity to allow for interviewee elaboration and the covering of topics that may not necessarily have been identified by the interviewer in advance of the interview.
- **Household surveys:** these are structured questionnaires that are administered at the household level, usually with households that are likely to face direct socio-economic impacts from a project. Household surveys tend to cover a broad range of topics, including basic demographics, health and education status, economic livelihood activities, resource dependence, asset base etc. Household surveys are useful in obtaining a high-level picture of the impacted community and producing largely quantitative statistical outputs that should then be supplemented by more qualitative data, obtained through focus groups, key informant interviews etc.

The following bullets provide a summary of the sorts of participative methods that it is recommended be used in

the consultation process (where relevant), particularly with those directly and negatively affected by a project:

- Diagrams flow / causal diagrams; Venn / institutional diagrams; systems diagrams; pie charts; histograms etc.
- Ranking techniques: preference ranking and scoring; pairwise ranking; direct matrix ranking; ranking by voting; wealth ranking etc.
- Time trends analysis: historical and future (visioning) mapping; time trends charts; oral histories etc.
- Mapping techniques: mobility mapping; social mapping; transect walks to assess resource use etc.
- Calendars: seasonal calendar; historical seasonal calendar etc.
- Ethno-classifications: proverbs; stories; Indigenous categories and terms; taxonomies etc.

Consultation shall be documented; in particular, the specific actions, measures or other instances of project decision-making that have been influenced by, or resulted directly from, the input of those who participated in the consultation. In addition, the specific consultation activities should themselves be documented, in the form of attendance registers, meeting minutes, photographs and other forms of consultation log (such as diagrams, drawings etc.). If consultation has already taken place on a project, the borrower or client shall be able to provide adequate documented evidence of such prior consultation.

Consultation outcomes shall also be reported back to affected communities and other stakeholders at regular intervals. Affected communities and other stakeholders will want to know how their opinions and recommendations have been taken into consideration by the borrower or client, which ones have been adopted by the borrower or client, what risk or impact mitigation measures will be put in place to address their concerns, and how, for example, project impacts are being monitored.





VULNERABLE GROUPS' IDENTIFICATION AND INCLUSION IN DEVELOPMENT

OS requirements on vulnerable groups

The Bank is committed to promoting Human Rights on the African continent as well as to protecting vulnerable groups – particularly Indigenous Peoples – within the context of national systems and regulations.

OS 1 states that, *in assessing the potential impacts of Bank operations on affected communities, the borrower or client shall make use of adequate and qualified expertise to identify people and groups that may be directly, indirectly and/or disproportionately affected or marginalized by the project because of their recognized vulnerable status.*

OS 1 also states that, *where groups are identified as vulnerable, the borrower or client shall implement appropriate differentiated measures so that unavoidable adverse impacts do not fall disproportionately on these vulnerable groups, and so that they are not disadvantaged in sharing development benefits and opportunities (such as roads, schools, healthcare facilities etc.).*

OS 1 also emphasizes *the need to assess gender issues in the context of vulnerability. A gender assessment shall be made for every project and shall form the basis for project design and compensation plans that lead to enhanced gender balance.*

Finally, OS 1 states that *groups that may be considered vulnerable may include social or cultural groups recognised as Indigenous Peoples. The Bank seeks to promote the safeguarding of Indigenous Peoples' lands, natural assets and other cultural heritage by its member countries and to provide special protection for projects that may involve their resettlement.*

Vulnerable groups and the environmental and social assessment process

The Environmental and Social Assessment (ESA) process shall systematically identify vulnerable groups. The identification of vulnerable groups shall be the result of a careful analysis of the social and economic context in which the project will operate. The presence of factors that cause vulnerability should be analysed, as should potential project impacts on vulnerable groups, the capacity of the vulnerable groups to cope with, or adapt to, such impacts, and the potential for such impacts to be mitigated in a way that takes account of the specific vulnerabilities or marginalization status in question. Taking the

particular circumstances of the vulnerable groups into account should help borrowers or clients to better define impacts relevant to the groups, and to improve the design and implementation of a specific Community Development Plan (CDP) or an Indigenous Community Development Plan (ICDP).

Objective and scope of vulnerable group identification

Definition of vulnerable groups

Vulnerable individuals or groups can be defined as those within a project's area of influence who are particularly marginalized or disadvantaged and who might thus be more likely than others to experience adverse impacts from a project. Vulnerability can be determined by identifying the likelihood that an individual or a group faces harder conditions as the result of the implementation of a project.

This vulnerable status may stem from a group's gender, economic status, ethnicity, religion, cultural behaviour, sexual orientation, language or physical and psychological health conditions. Vulnerable groups may include, among others, female-headed households, those below the poverty line, the landless, those without legal title to assets, ethnic, religious and linguistic minorities, Indigenous Peoples, those who are disabled, etc.

Vulnerable groups are more likely to be exposed to adverse impacts in large-scale projects with a large area of influence, potential cumulative impacts and multiple affected communities, than in small-scale projects that have site-specific issues.

Identification of vulnerable groups

The objective of identifying vulnerable groups is to enable a strategic focus on the consideration of their views and specific needs during the project planning, and thereby to specifically avoid harm to them, as well as to ensure that they have the opportunity to participate in and benefit from the proposed project. Having identified the vulnerable groups, the objective becomes to define differentiated measures for them to ensure that they are protected and that suitable benefits are adequately planned and directed to them (see below).

Vulnerable Groups and Gender

Projects may have different impacts on women and men, owing to their different socio-economic roles and their varying degrees of access to and control over assets,

productive resources and employment opportunities. Gender discrimination often limits access to the resources, opportunities, and public services necessary to improve standards of living. In addition, there may be norms, societal practices, or legal barriers that impede the full participation of people of one gender (usually women, but potentially men) in consultation, project planning, decision-making, implementation of project activities or the sharing of benefits.

Vulnerable Groups and Indigenous Peoples

Projects may impact social or cultural groups recognised as Indigenous Peoples, either by national legislation or according to their own identification as members of a distinct cultural group with collective attachment to geographically distinct habitats or ancestral territories; customary cultural, economic, social or political institutions separate from the dominant society or culture; and an indigenous language – often different from the official language of the country. It is often the case that Indigenous Peoples are more impeded than other groups in their capacity to cope with project impacts and to retain sufficient access to the cultural and material resources that they require to survive and sustain their livelihoods.

Other Vulnerable Groups

Those of low economic status, particularly those below the poverty line, the landless and those without legal title to assets may also lack the resources and capacity to participate in project decision-making or benefit-sharing to the same degree as those of higher economic status. In addition, those with health conditions, those who are disabled etc., are also groups that commonly lack the capacity, means or voice through which to avoid negative project impacts and reap project benefits.

Differentiated measures for vulnerable groups' inclusion in development

Once groups have been identified as vulnerable, the borrower or client shall propose and implement differentiated measures so that adverse impacts do not fall disproportionately upon them, and so that vulnerable groups are not disadvantaged in sharing development benefits and opportunities.

Protection of vulnerable groups' collective "economic and social" rights

Collective Rights are also referred to as 'solidarity rights'. The AfDB recognizes the value of the exercise of collective

economic and social rights and will assess the opportunities, benefits and risks within its own projects to promote them and to facilitate the borrowers and clients compliance with them. They are built in the **African Charter on Human and Peoples Rights**:

- Article 19: All people shall be equal; they shall enjoy the same respect and shall have the same rights.
- Article 20: All peoples shall have the same right to existence. They shall have the unquestionable and inalienable right to self-determination. They shall freely determine their political status and shall pursue their economic and social development according to the policy they have freely chosen.
- Article 21(1) "All people shall freely dispose of their wealth and natural resources
- Article 22(1): All people shall have the right to their economic, social and cultural identity and in the equal enjoyment of the common heritage of mankind
- Article 23(1) All peoples shall have the right national and international security
- Article 24: All peoples shall have the right to a general satisfactory environment favorable to their development.

These rights are particularly important within the context of the protection and economic support to groups which are identified during the screening exercise embedded in the ESA process and shall be incorporated in Key ESA documentation, i.e. ESIA, ESMP and RAP as well as specific Community Development Plan which is due to be prepared as a complementary efforts to resettlement assistance to project affected groups.

Meaningful consultation to determine appropriate differentiated measures

Meaningful consultation is of vital importance in determining what differentiated measures are necessary for the particular vulnerable groups in question, as well as in seeking broad community support (BCS) from such vulnerable groups. There should be a targeted and meaningful consultation process, backed by adequate information, and carried out with each vulnerable group. Specific, targeted consultation sessions with each vulnerable group are important because consultations with non-vulnerable groups may not always reveal the special conditions or concerns of vulnerable groups, and how these might be addressed in a differentiated and targeted manner (see Guidance Note on Consultation).

Consultation around differentiated measures for vulnerable groups requires a socially and culturally sensitive approach that shall ensure that:

- The vulnerable group in question is represented in discussions, and that members of this group are given ample and appropriate opportunities and channels to express their views, concerns and aspirations in the language and manner of their choice, without external manipulation, interference, coercion, or intimidation.
- Representative bodies and civil society organizations, as well as a sufficient number of members of the vulnerable group themselves, are included in the consultation process.
- Local leaders deemed to "represent" the views of vulnerable members of the community actually have the members' consent and understand their views and perspectives.
- Spaces for discussions are created that are perceived to be "safe" from the perspective of the vulnerable group, and that are easily accessible to them.

The consultations with each vulnerable group should primarily seek to elucidate the special conditions and concerns of the group in question, and the form that associated differentiated measures should take in order to ensure that the vulnerabilities of the group in question are not further exacerbated by the project, and that the group is given the opportunity and the capacity to benefit from the project according their views and needs.

Differentiated measures that may respond to the requirements of specific types of vulnerable groups are detailed below.

Gender: Differentiated measures

In the context of gender discrimination, differentiated measures shall form the basis for project design and impact mitigation plans; namely, measures that prevent the exacerbation of gender imbalance and lead to the enhancement of gender equality. Such differentiated measures may include the following:

- Development of gender-driven mechanisms for consultation, in order to provide opportunities to enhance full participation and influence in the decision-making process.
- Development of strategies that allow both women and men equal opportunity to overcome impediments in identifying and accessing employment opportunities.

- Implementation of innovative financing structures that give both women and men equal access to credit and other means to encourage entrepreneurship.
- Provision of support for the special gender needs of women, including in relation to land ownership, women's poverty, legal literacy and access to education.
- Provision of support for the special gender needs of men, including in relation to awareness of HIV/AIDS, the gendered division of labour and male responsibility in reproductive health issues.
- Employment of intermediaries such as specialist NGOs who have expertise in working with the Indigenous Group, and in elucidating their concerns, needs and how to address these.
- Definition of goals for the development of Indigenous Groups and design of an ICDP using a results-based framework.
- The Bank shall take a development approach by deliberately designing and promoting interventions which should achieve the greatest possible reduction of poverty among affected Indigenous Groups through an ICDP.
- ICDPs should be prepared for projects that have clear risks for Indigenous Groups, which need to be mitigated. Specific risks associated with land, resettlement or environmental damage, shall be integrated in the RAP or the ESMP and support measures should be designed and managed in consultation with them to respect their cultural preferences.

Indigenous groups: differentiated measures

In the context of Indigenous Groups, differentiated measures shall be required to ensure the protection of their interests and practices, and their equitable access to opportunities to benefit from project operations. Such differentiated measures may include the following:

- Development of mechanisms for consultation that ensure that sufficient time is provided for the Indigenous Group's traditional decision-making processes.

Other vulnerable groups: differentiated measures

Differentiated measures shall also be necessary for other vulnerable groups, such as those of low economic

BOX 1: Indigenous Community Development Plan (ICDP): Guiding Principles

1. Engage in effective participation by affected Indigenous Groups

Culturally appropriate and effective community consultation is key to proper Indigenous Groups development. Consultation through all phases of a client's operations forms a basis of trust and helps clients identify Indigenous Group needs and concerns, define the development responsibilities of stakeholders and manage expectations among group members.

2. Build trust

Building trust between the client, Indigenous Group members and other stakeholders is essential to a successful program. Culturally appropriate consultation and participation, along with good faith and transparency, are essential to building and maintaining trust between all stakeholders.

3. Manage expectations by clearly defining roles and responsibilities of stakeholders

New development tends to raise expectations for Indigenous Group development. Unless clients clearly define their commitments they run the risk of failing to meet these heightened expectations.

4. Develop appropriate capacity

Where clients lack personnel with Indigenous Group experience and knowledge of local customs and needs, people with these skills should be hired or they should work with partner organizations such as national or local governments, community groups, or NGOs.

5. Set measurable goals and report on progress in a culturally appropriate manner

Setting goals and measuring progress allows a client and its stakeholders to monitor the program's successes and shortcomings.

Source: Adapted from Investing in People: Sustaining Communities through Improved Business Practice, IFC, 2000

BOX 2: content of an indigenous community development plan

1. A summary of results of the consultation with the affected Indigenous Groups that was carried out during project preparation and that led to Broad Community Support for the project.
2. A framework for ensuring free, prior, and informed consultation with the affected Indigenous Groups during project implementation.
3. An action plan of measures to ensure that the Indigenous Groups receive social and economic benefits that are culturally appropriate.
4. When potential adverse effects on Indigenous Groups are identified, an appropriate action plan of measures to avoid, minimize, mitigate, or compensate for these adverse effects.
5. The cost estimates and financing plan for the ICDP.
6. Culturally appropriate procedures to address grievances by the affected Indigenous Groups arising from project implementation.
7. Mechanisms and benchmarks appropriate to the project for monitoring, evaluating, and reporting on the implementation of the ICDP.

Source: Adapted from World Bank OP 4.10 Annex B

status, those with health conditions, those who are handicapped etc. Such differentiated measures may include the following:

Groups of low inclusion, representation and economic status:

- Provision of legal and/or financial support to enable landless people and those without legal title to assets to acquire land plots and/or formalize their asset ownership status.
- Provision of access to training and education programmes to facilitate skill development and the enhancement of job opportunities.
- Provision of education to enhance financial literacy and capacity to use credit productively and sustainably.

Groups with particular health conditions/those who are disabled:

- Provision of enhanced access to appropriate medical and other public facilities.
- Provision of education around disease prevention and how to achieve this.
- Raising awareness around disability and discrimination and how to address this in a positive and productive manner.

Vulnerable groups experiencing resettlement: differentiated measures

Where resettlement is required by a proposed project, special attention shall be given to the needs and concerns of vulnerable groups set to experience resettlement. Members of vulnerable groups may require differentiated or supplementary resettlement assistance because they are less able to cope with the physical and/or economic displacement, including livelihoods' recovery processes, than the affected population at large. They may also be limited in their ability to formulate or articulate their claims and to take advantage of general resettlement assistance and related developmental benefits. Differentiated support shall thus be provided to help these vulnerable groups cope with the resettlement and to improve their status, in line with national laws. In particular, it shall be ensured that such groups do not disproportionately shoulder adverse effects, and that they are not disadvantaged in relation to designing and sharing the benefits and opportunities that the project should bring. Differential assistance to vulnerable groups in the context of resettlement may include the following:

- Provision for separate and confidential avenues and methods of consultation.
- Priority in site selection in the host area.
- Relocation near to kin and former neighbours.
- Provision of assistance to construct replacement housing.

- Assistance with dismantling salvageable materials from original housing.
- Priority access and control to all other resettlement mitigation measures, livelihood improvement measures and development assistance.
- Monitoring of nutritional and health status to ensure successful post-relocation well-being and welfare outcomes.

Grievance redress for vulnerable groups: differentiated measures

When establishing a credible Grievance and Redress Mechanism, the borrower or client may have to make special, differentiated plans for vulnerable groups to ensure that they have sufficient, equitable and speedy access to grievance redress procedures and to timely and direct settlement of any agreed redress and compensation. Such plans may include the employment of members of vulnerable groups to facilitate the grievance redress process, or the recruitment of groups representing the interests of vulnerable groups to take part in the grievance redress process.

Evidence of differentiated support to vulnerable groups

Finally, the borrower or client shall provide evidence that vulnerable groups have been party to effective and meaningful informed consultation and participation, and that the potential impacts and specific or exacerbated risks to vulnerable groups will be mitigated to the satisfaction of the vulnerable groups themselves, and in a way that responds to their differential needs and concerns. Such evidence may include, among other documentation:

- Project records of engagement with vulnerable groups (meeting minutes etc.), including records of discussions with legitimate representatives of vulnerable groups. The Bank shall, at its own discretion, verify the accuracy of such information.
- Project records of specific and differentiated measures to inform them on progress and changes on a regular basis and taken to avoid, minimize and mitigate risks and adverse impacts on vulnerable groups, in response to feedback received during consultation with such groups, and of the effectiveness of implementation of measures for enhancing inclusivity and economic benefits.

PROJECT GRIEVANCE AND REDRESS MECHANISMS (GRMS)

OS requirement on GRMs

In OS 1, the Bank requires the borrower/client to establish a “credible, independent and empowered local grievance and redress mechanism to receive, facilitate and follow up on the resolution of the affected people’s grievances and concerns regarding the environmental and social performance of the project. The local grievance mechanism needs to be sufficiently independent, empowered and accessible to the stakeholders at all times during project cycle and all responses to grievances shall be recorded and included in project supervision formats and reports.”

Some Bank operations may inevitably have the potential to impact the local population’s well-being. The aim of a project GRM is therefore to enable people fearing or suffering adverse impacts to be able to be heard and assisted.

The main advantages of establishing and maintaining an appropriate GRM linked to a Bank-funded project are:

- Helping maintain good development conditions in the field, conducive to harmonious sustainable development.
- Minimising the risk of violent or otherwise destructive behaviours, and their associated economic and social costs.
- Helping to protect the most vulnerable local groups and individuals.
- Alleviating the risk of dispute or conflict escalation, such as cases being brought to the Bank’s Independent Review Mechanism.

Objectives and scope of a GRM

A project GRM is a systematic process for receiving, evaluating and facilitating resolution of affected people’s project-related concerns, complaints and grievances about the borrower’s/client’s social and environmental performance on a project.

People potentially or actually affected by a Bank-funded project need a trusted way to voice and resolve project-related concerns, and the project needs an effective way to address affected people’s concerns. The GRM provides a structured and managed way of allowing the concerns of affected people to be heard and addressed, including by the borrower’s/client’s project management staff and, in certain circumstances, by Bank staff.

Developing and implementing a GRM

Developing a GRM

The process by which the GRM is designed should be integrated into the overall approach to project preparation as prescribed in the Bank’s ISS. It should also be included in the concrete actions required in the Environmental and Social Management Plan (ESMP) for Category 1 projects and, on a case by case basis, for Category 2 projects that exhibit specific potential social tensions, in particular risks of mismanagement of compensation/resettlement schemes or the presence of particularly vulnerable groups in the project’s area of influence.

The first step is to determine the primary goal of the GRM which would generally be to resolve specific grievances in a manner that meets both project management and community needs, but with important local variations.

The scope of the grievances that may legitimately be brought forward by the communities and/or individuals affected needs to be defined in advance. That scope generally covers most, if not all, of the issues raised in a typical Environmental and Social Assessment: natural resources, pollution, cultural property, land acquisition, income of resettled/displaced populations, the welfare of vulnerable groups etc.

In determining the specific objectives of the GRM, the following questions should be asked:

- Will the GRM be oriented primarily around concerns of the community or around joint concerns of the project and community?

- Is the GRM oriented towards identifying root causes of conflict and addressing them through systemic change, or is it exclusively focused on the resolution of individual complaints?
- Is the GRM primarily oriented toward project investigation and internal redress, or toward a more comprehensive set of options for resolution and the provision of justice?
- How can the grievance mechanism be structured in a way that does not reinforce power inequities?
- Make use of multiple channels (e.g. face to face, phone conversation, mail, text or e-mail, message on a dedicated website), sensitive to cultural customs and traditional methods that may influence or impede the expression of grievances.
- Existence of a central point of contact that will receive complaints and log them into a central register.
- Existence and operation of designated complaint-resolution staff.

The second step is to design the GRM by:

- Preparing a preliminary design.
- Selecting ways and means to receive, register, assess and respond to grievances.
- Select grievance resolution approaches.
- Design a means to track and monitor grievances.
- Develop the grievance mechanism infrastructure.
- Review and refine the design.

The preliminary design should be ideally carried out as part of the ESIA/ESMP for category 1 or 2 projects. For large and/or controversial projects, using a specialised independent consulting team to help design the GRM is advisable, should resources be available. The specialised consulting team should work closely with the borrower's organization and with community leaders, using the following principles:

- Involve individuals of mixed levels and functions from the company (e.g. operations, environmental affairs, community relations, legal affairs, contractors). Staffing the design team from just one function such as community relations or human resources is unwise.
- Include a balanced group of representatives from the community, representing the range of constituencies and demographics that will be using the grievance mechanism, while keeping the team small enough to be responsive.
- Rely upon clear terms of reference and a work plan that outlines team goals, roles and responsibilities, level of decision-making authority, reporting lines, tasks, time frame, and products.

- Processes for acknowledging the receipt of a grievance and informing the complainant about the time frame in which a response can be expected.

The process by which a complaint will be accepted or rejected needs to be carefully designed, and should maximise interactivity and cultural sensitivity. The acceptance/rejection of a complaint should go through a discussion stage where the plaintiff and the GRM staff interact on the grounds and motives of the complaint, after which the plaintiff should clearly and transparently be told whether or not the complaint is eligible and will be processed. It is best if the acceptance/rejection of the complaint is based on objective criteria that are posted by the GRM, including a written copy displayed in the public access area of the GRM in an appropriate language.

The processing of the complaint, if accepted should go through various phases:

- Filing of the complaint and labelling with an identification code, communicated immediately to the plaintiff.
- Assessment of the complaint (including severity of the risk/impact).
- Formulation of the response.
- Selection of the grievance resolution approach is key. There are four general approaches to choose from:
 - The project's management proposes a solution.
 - The community and the project's management decide together.
 - The project's management and the community defer to a third party to decide.

- The project's management and the community utilize traditional or customary practices to reach a solution.

"Decide together" approaches are usually the most accessible, natural and unthreatening ways for communities and a project's management to resolve differences. With the potential to resolve perhaps the majority of all grievances, "decide together" should be the centrepiece of any grievance mechanism's resolution options.

Implementing a GRM

During project implementation, five steps may be required:

- Establish human resources and logistics.
- Introduce the GRM to project staff.
- Communicate with the local communities to build awareness.
- Train and support participants.
- Develop a monitoring programme.

Establishment of the GRM shall include recruitment of key staff, creation of a multi-year budget, securing the funding and purchasing the necessary equipment. The size of a GRM needs to be commensurate with the expected magnitude and likelihood of impacts on communities, and the best efforts of project staff, using safeguards, should go into minimising the need for the GRM. A typical GRM is composed of a small team of highly qualified individuals such as lawyers, communication specialists and social scientists. GRM staff should operate as a team. Internal/external controls, in particular financial controls, should be tight.

An internal communication campaign among the key project staff should highlight that the function of the GRM is not to put blame on individuals or to identify mistakes and other errors, but rather that it identifies the risk of unintended negative impacts so as to avoid them altogether or, at worst, to compensate for them if intervention/warning comes too late.

Effective communication also needs to be established with the community itself to explain that the borrower/client has

established a GRM, what the goals and roles of the GRM are and how GRM intervention can or should be triggered. This effort should follow these key principles:

- Develop simple, visually engaging marketing materials;
- Provide materials in an understandable format and language; and
- Use face-to-face, informal meetings in local communities.

Training and incentives for using the GRM should be designed and executed rapidly during the project cycle. Appropriate resources should be dedicated to these activities.

Finally an important element of implementation is monitoring and reporting, including evaluating success and identifying need for improvement.

Relevance to the Bank's independent review mechanism

Within the bank itself, the Independent Review Mechanism (IRM) makes itself accessible to any group (a minimum of 2 persons living in the project's area of influence) actually or potentially negatively affected by a Bank-funded project. The IRM reports to the Bank's Board of Directors and is thus independent from Bank management.

So far, the IRM has received approximately six requests for intervention. Based on the World Bank's Inspection Panel experience, dating back to 1993, which has processed 80 requests since then, the IRM is likely to intensify its activities during the coming years.

The IRM has been set up by the Bank to achieve more transparency. It is also a costly mechanism to trigger. The establishment of local GRMs can help to alleviate the need for plaintiffs to resort to the IRM, while problem-solving can be more rapidly and cost-effectively done locally. The cultural context in which GRMs operate also helps to defuse complaints and to find appropriate and commensurate solutions.



ENVIRONMENTAL FLOWS

Purpose

The purpose of the following Guidance Note on environmental flows is:

- To assist operations financed by the Bank to maintain downstream flow regimes which will sustain the important and often multiple economic and social functions and services of water resources in a river basin, including maintenance of ecosystem services.
- To ensure that environmental flows are designed for projects affecting surficial and underground water resources and watersheds to maintain river basin ecosystems in a desired state while balancing social and ecological water-related needs.
- To harness the opportunities of improving human health and nutrition linked to provisioning services for safe drinking water and food, to the control of important water-related tropical diseases' vectors and to the cultural services that are important for mental well-being.

The above will be achieved by undertaking an environmental flow assessment (EFA) in cases where programs or projects are deemed to have the potential to alter flow regimes significantly. These will mainly be projects requiring the abstraction or storage of water and the regulation of flow by infrastructure (e.g. hydropower and irrigation projects), but they may include upstream land-use changes owing to forestry, agriculture, and urbanization that can also significantly affect water and sediment flows within a watershed.

Definition of environmental flows

There is no standard definition for environmental flow; however, a good general description is provided by the IUCN's pre-release to the Third World Water Forum in Kyoto, as follows:

"An 'environmental flow' is the provision of water within rivers and groundwater systems to maintain downstream ecosystems and their benefits, where the river or groundwater system is subject to competing water uses and flow regulation."

Environmental flows are therefore more than minimum flows defined on the basis of hydrological conditions. Rather, they are flows that are optimally designed to allow for the multipurpose use of water, including consideration of water's ecological functions and the integrity of river systems and wetlands. These functions, or 'ecosystem services', include the provision of clean drinking water, biodiversity conservation, aquatic food sources, riparian (e.g. flood recession) based agriculture, flood protection, navigation and various other recreational, cultural or religious based uses. The impacts of environmental flows can also extend beyond rivers to groundwater, estuaries and even coastal areas.

Increasingly dry conditions in many regions combined with poor management of environmental flows may affect human health by limiting both the amount and quality of drinking water. Also irrigated agriculture and floodplain cultivation may need to cope with increasingly lower shares of water. Poorly managed reservoir flow release regimes may also have direct consequences for health, including the possibility of drowning (e.g. due to rapidly rising water levels) or changes in the abundance and distribution of disease vectors. In addition, there may be important indirect health consequences such as malnutrition, contaminated drinking water, injury, stress, communal violence and loss of well-being. (See table below on the links between EFA and MDGs).

Environmental flow assessment

EFA can be used in the context of integrated water resources management to make it more likely that decisions about water allocation will be sustainable and productive downstream. Moreover, if carried out at an early enough stage during project development, it is usually possible to design and implement initiatives to protect environmental flows and community resources without affecting a project's technical and economic feasibility.

Measures to achieve this include the following:

- Incorporation of EFA within the project feasibility and design process, either as part of the ESA or as a separate stand-alone study. The EFA methodology to be adopted should be scoped and agreed according to the specific project circumstances,

Table 1: Links between Environmental Flows and the MDGs

Links between Environmental Flows and the MDGs	
Millennium Development Goal	Example of Environmental Flow Linkages
1. Eradicating extreme poverty and hunger	Securing environmental flows will ensure healthy fish populations.
2. Achieve universal primary education	Water-related diseases such as diarrhoea infections cost about 4423 million school days each year, and diminish learning potential.
3. Promote gender equality and empower women	Woman and girls are often the ones responsible of collecting water, an assignment that gets more difficult when water gets degraded.
4. Reduce child mortality	Water-related diseases kill an estimated 3 million people/year in developing countries; the majority of women are children under age five.
5. Improve maternal health	Provision of clean water reduces the incidences of disease that undermine maternal health and contribute to maternal mortality.
6. Combat major diseases	Many amphibians have developed a variety of compounds that they release when stressed or injured. Many of them have or can have important medical use for humans. Amphibians are among the most threatened organisms on earth; most of them have close ties with water and are threaten by the degradation of freshwater.
7. Ensure environmental sustainability	Current trends in freshwater degradation must be reversed in order to sustain the health and productivity of these ecosystems. According to the MEA, freshwater ecosystems are the worst off. About 50 per cent of inland water systems have been lost during the twentieth century.
8. Develop a global partnership for development	Unfair globalization practices export harmful side-effects. E.g. extensive trade of so-called “virtual water” from water scarce areas that often lack effective governance, to regions with water abundance, are aggravating global water stress.

Source: Forslund, A., et al. Securing Water for Ecosystems and Human Well-being: The Importance of Environmental Flows. Swedish Water House Report 24. SIWI, 2009.

choosing from the range of available methods (see below), according to the levels of environmental and/or social risk, available data and expertise, and time and budget constraints. This selection process should be undertaken either as part of, or in parallel with, the ESA scoping process, and should thereby be subject to an open and transparent process of stakeholder engagement and discussion.

- The chosen EFA method should necessarily incorporate an integrated assessment of environmental, social and economic effects and benefits, and should address all components of the hydrological cycle, including groundwater systems, rivers, lakes, estuaries and coastal regions. An assessment of potential climate change effects should also be made.
- Finally, the project must include ongoing real-time flow (and, where appropriate, water quality and/or ecological) monitoring and enforcement mechanisms to ensure that allocation agreements defined following the EFA are implemented. This would also ideally include trial releases during the first few years of operations, to test assumptions and uncertainties

inherent in the EFA process with regards to the river's response to environmental flows.

Further details on EFA implementation are provided in the final section of this guidance note.

Available methods

The concept of environmental flows has been known and widely understood for many years in developed countries such as the US, Canada, Australia, New Zealand, South Africa and parts of Europe. Consequently, environmental flows have been incorporated and protected within water resources legislation and policy in these countries, and an extensive body of experience and knowledge has built up concerning the application of different methods and approaches to evaluating these flows. In addition, a number of international development agencies, research groups and NGOs have been at the forefront of transferring this knowledge to developing countries in recent years, through the development and application of EFA methodologies, training programmes and information resources etc. These include organisations such as the

World Bank, UNESCO, UNEP, IUCN, WWF, the Stockholm International Water Institute, the International Water Management Institute and the International Hydropower Association.

As a result of this long and varied experience, there are a range of methodologies for EFA which provide a choice of technique to suit various timetables, budgets, and timetables.

Table 2: Environmental Flow Assessment (EFA) Methodologies (Hirji and Davis, 2009)³

Estimated Time and Resource Requirements of Selected EFA Methods					
Method	Type	Data/time requirements	Duration of assessment	Relative confidence in results	Level of experience
Tennant	Hydrologic index	Moderate to low	2 weeks	Low	United States: extensive
Wetted perimeter	Hydrologic index	Moderate	2–4 months	Low	United States: extensive
Expert panel	Holistic	Moderate to low	1–2 months	Medium	South Africa, Australia: extensive
Holistic	Holistic	Moderate to high	6–18 months	Medium-high	Australia, South Africa: extensive
Instream flow incremental methodology	Habitat simulation	Very high	2–5 years	High	United States, United Kingdom: extensive
DRIFT	Holistic	High to very high	1–3 years	High	Lesotho, South Africa, Namibia Tanzania: limited

Source: Davis and Hirji 2003.

Implementing EFA

The ESA process provides an opportunity to undertake an EFA during project preparation and to design mitigation/offset measures for inclusion in an ESMP.

During project preparation

The screening (classification) stage of project preparation provides the first substantive opportunity to determine the need for undertaking an EFA. It also serves to trigger the respective safeguard policy on ESA and other environmental and social safeguard policies. Certain locations and their sensitivities merit consideration during screening (classification) for the inclusion of an EFA:

- In or near sensitive and/or ecologically valuable ecosystems, such as forests, wetlands; estuaries and associated ecological services.
- Supports threatened/endangered species and their habitats.
- In or near protected areas, parks, and other urban recreational areas.

- Riparian vegetation provides stabilization for river banks, resources for local people and natural habitat.
- Involve watercourse(s) used for human consumption, navigation and recreational and cultural features.
- In waters containing valuable economic resources, such as fisheries, minerals, medicinal plants and/or other natural resources.
- Support flood –recession agriculture.
- In or near Indigenous Peoples lands.
- Source of recharge for aquifers and groundwater.
- In areas of high vulnerability to natural hazards, such as earthquakes, landslides, flooding, etc.

The scoping stage involves identifying and analyzing potential environmental and social impacts of projects (including siting and structural alternatives) so that the ESA focuses solely upon those likely to be of significance. For a project to be properly scoped, a site visit and preliminary consultations with relevant regulatory authorities must be

³ Although there are various methods for undertaking EFAs, they fall into four discrete groups, namely hydrological index methods, hydraulic rating methods, habitat simulation methods, and holistic methodologies. Many early environmental flows methods were designed to protect a single species or to address a single issue. However, managing flows for a single species (and sometimes even for a single ecosystem function such as low-flow connectivity) may not result in robust aquatic ecosystems and may even fail to preserve the target species because of their dependence on a wide range of ecosystem functions (e.g. food webs, habitat). Consequently, holistic methodologies, which typically incorporate all components of the flow regime, are at the cutting edge of EFA methodology. Applying these methods involves a wide range of water users and sometimes includes considerations of the social and economic dependence of communities on environmental flows. Holistic methods were developed in South Africa and Australia, but are increasingly being tried in other parts of the world. The wide range of methods provides a choice of technique to suit various timetables, budgets and purposes

included. This permits initial discussions on the existing flow regime and the potential impacts of different flows and EFA methods to be deployed, and helps to determine mitigation measures. It also provides the borrower and the public with an opportunity to exchange information and express their views and concerns about the proposed project. Sequencing the use of various methods during project preparation may be advisable starting with simple methods which are less intensive in terms of data and time requirements and to scale up gradually dependent on the need for accuracy and level of agreement reached among water users. TORs should be prepared for conducting the ESA including requirements for EFA and specialists necessary for the method/technique selected. Special attention should be given to assuring the equitable distribution of and access to water and services provided by the aquatic system(s), and to addressing climate shifts and the ability of ecosystems to adapt to such changes.

The third stage involves conducting the EFA as part of the ESA. This requires close consultation between the assessment and engineering design teams, public consultation and preparation of an ESMP. These consultations may sometimes involve an iterative process of 'negotiation' with scheme design engineers in order to agree on trade-offs between ecological and power generation objectives. The public consultations should also try and capture local (e.g. indigenous) knowledge of the river characteristics and uses, particularly where data are limited. As part of the ESMP, measures for compensation and mitigation should be developed in response to downstream effects of the reduction in water flows and the resulting impacts. To ensure that mitigation measures are implemented effectively and on time, clauses in contract documents should specify environmental and social practices to be adopted during construction and operation.

Flow related effects that are not easily expressed in monetary terms need to be included in the assessment process. If not included, effects on development arising from changes in flow regime - such as the loss of a fish species, health-related impacts or the declining quality of life of riparian people - will be undervalued and lead to disproportionate costs being borne by those groups in society not fully integrated into a market economy, or fully represented in the decision-making process.

During project implementation:

The project implementation stage requires periodic monitoring and supervision to ensure that anticipated impacts are maintained within the levels predicted; unanticipated impacts are suitably mitigated; and the benefits of the ESA are retained as the project is implemented and operated. To undertake this for environmental flows management, arrangements should be made to:

- Provide information for periodic review (and possible modification) of the management measures in the ESMP, to help optimize environmental protection at all stages of implementation.
- Assess performance and monitoring compliance with flow regulatory requirements and agreed conditions specified in construction contracts and operating licenses.
- Demonstrate to all parties (including civil society) that the project activities comply with ESA requirements and that mitigation measures are being implemented effectively.
- Undertake regular site visits by the executing agency and water resources and environment agency staff to supervise environmental management requirements and help resolve issues.
- Include mechanisms to retain flexibility in order to accommodate provisions for the protection of environmental flow needs as water availability changes.

Environmental flows are only one part of an integrated set of environmentally-sensitive issues. Complementary mitigation, focusing on biophysical features, that could be considered include fish ladders; managed flood releases from reservoirs (including for disease vector control); water-chemistry and temperature sensors at the different off-take structures; outlet pipes to take the volume from all off-takes simultaneously if necessary; structures that minimize anticipated water-quality conditions such as anoxic or super-saturated water; and a facility for passing sediments through reservoirs and past the dam walls or weirs.

Given the generally poor understanding of the links between flow and ecological dependency, the use of a monitoring program is particularly important. The monitoring programme should be designed to provide essential feedback on whether:

- The agreed-upon flow is being released.
- The desired river condition objective is being achieved.
- The objectives for different components of the flow regime are being met.
- The environmental flow allocation needs to be modified in the light of the observed responses.

The implementation of an agreed flow regime should allow for adaptive management based on the monitoring program.

The monitoring program should be designed to allow the effects of environmental flows on different biota to be separated from the effects of other interventions - for example, improved water quality from sewage treatment plants - and from climatically induced variations in river flows. In practice, this is extremely difficult to do, and the interpretation of any monitoring program will always rely on the experience of the hydrologists and ecologists involved and lessons learned from practice.

Water resource sector support

Finally, where relevant the concept of environmental flows and EFA should be incorporated within the early stages of strategic or sector support to a potential borrower, including any water resources policy and planning assistance and/or lending programs that entail large scale water infrastructure or major land-use change in a watershed.

Where appropriate, measures to achieve this may include the following:

- The formal definition and recognition of environmental flows in water resources protection legislation. This would also ideally be introduced retrospectively for existing dams and infrastructure in order to re-engineer and improve environmental performance for older structures (e.g. as part of a rehabilitation program).
- The definition of environmental quality objectives and the provision for environmental flows in river basin plans and strategies (taking into account the available EFA methodologies described earlier), including attention where possible to the recovery of overstressed river systems.
- Clear requirements for both institutional and public stakeholder engagement in river basin planning and EFA processes, with participatory methods tailored to suit stakeholder capacity.
- Support for the establishment of ecological and hydrological monitoring networks in important or sensitive river basins to provide the basic information for undertaking EFAs at the project level (see earlier).
- Support for raising awareness of a common understanding across water and environment communities about the concepts, methods and good practices related to environmental flows, including the potential socio-economic, health as well as ecological benefits of downstream water allocations.
- Incorporation of EFAs into the strategic assessment of lending programs that entail the development of large scale water infrastructure (e.g. retention and/or abstraction facilities) or major land-use change in a watershed.

Key references

The references cited below have in particular provided information and material that has been directly relevant to the development of this guidance note.

- *Hirji R. and Davis R. Environmental Flows in Water Resources Policies, Plans, and Projects: Findings and Recommendations. World Bank, 2009.* This document was the primary reference source for the development of the guidance note, and includes a comprehensive analysis of seventeen case studies, selected from around the world, to identify the lessons from incorporating environmental flows into water resources policy, basin and catchment plans, new infrastructure projects, and the rehabilitation and reoperation of existing infrastructure.
- *Davis R. and Hirji R., (eds). Water Resources and Environment Technical Note. C.3 Environmental Flows: Flood Flows. World Bank, 2003.*
- *Louise Korsgaard. Environmental Flows in Integrated Water Resources Management: Linking Flows, Services and Values. Ph.D. Thesis December 2006, Institute of Environment & Resources Technical University of Denmark.*
- *Dyson, M., Bergkamp, G. and Scanlon, J., (eds). Flow – The essentials of environmental flows, 2nd Edition. Gland, Switzerland: IUCN. Reprint, Gland, Switzerland: IUCN, 2008.*
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TRANSBOUNDARY AND REGIONAL IMPACTS

Environmental and social assessment of transboundary impacts

The Bank's operations involve a range of programs and projects that may generate adverse environmental and social impacts that extend beyond national borders, either because the projects take place in more than one country or because the impacts affect areas or regions outside the borders of the country in which the project is located. Such projects include large multi-country power or land management projects, multi-country linear projects such as roads, railways or transmission lines, or major infrastructure projects located near national borders.

The implementation of the Bank's OSs in the case of transboundary projects requires particular attention to the institutional arrangements needed to ensure that ESA work is coordinated and harmonized among the countries affected and/or that the authorities and stakeholders in affected countries are provided information in a timely manner. The ESA work also requires some additional effort to ensure that scoping, impact assessment and development of management measures respond to the additional challenge of transboundary impacts. In particular, borrowers or clients should be particularly aware that this type of project is likely to induce indirect and cumulative impacts, sometimes calling for special studies and responses.

Types of transboundary projects

There are a number of different types of transboundary projects each of which requires a slightly different institutional and technical response.

A project that takes place in one country but whose impacts cross national boundaries

A coal-fired power plant located near the border with another country can cause air pollution that may adversely affect the neighboring country's air quality and the health of local communities. A hydropower project may change

downstream flow patterns that have an adverse impact on downstream environmental conditions and water users in another country. The impacts of water abstraction from transboundary aquifers, major land use changes in areas of important aquifers, watersheds or water basins may also cross national boundaries.

The potential impacts of projects with transboundary consequences present several challenges. First, the country initiating the project needs to inform and consult the neighboring country. Second, there needs to be a means of cooperation in undertaking ESA work. Third, there should be particular attention to the risk of cumulative impacts as a result of the interaction with other projects taking place in the "downstream" or neighboring country.

In some cases, there may be existing international agreements and institutional mechanisms to facilitate communication, coordination and joint action between the project host country and the potentially impacted country or countries. However, in most cases this is not in place. The borrower or client, with support if needed from the Bank, should take the following steps:

- Notify the neighboring country's authorities that the project is planned and that there may be adverse environmental and social impacts.
- Establish a reliable channel of communication to the appropriate authorities to ensure information on scoping and environmental and social assessment is shared.
- Where appropriate, coordinate with and invite the participation of technical experts and stakeholder in the neighboring country in the course of conducting ESA work.
- Establish a protocol or MoU that enables the originator of impacts to have full access to the affected country/ies both during construction and operation.
- Ensure the ESA work adequately covers the potential transboundary impacts and any likely sources of cumulative impacts.

- In some cases, establish and/or legally and technically empower an inter-governmental body to oversee assessment of high risk transboundary or cumulative impacts.
- Ensure that ESMPs include the institutional responsibilities for implementation between the host and the affected countries.
- Reach agreement with affected country on its role and responsibility in dealing with aspects of implementing the ESMP and monitoring of impacts resulting from the host country project.
- Highlighting any differential in specific policies or regulations, such as levels of compensation for involuntary resettlement and specific environmental standards.
- Ensuring a consistent, coordinated and harmonized execution, monitoring and reporting of ESA work by the different national bodies.
- Ensuring that technical components of the ESA work that need to focus on study areas that cross boundaries are conducted in an effective manner.

Regional programs or projects that are designed to operate in more than one country

Power generation and distribution projects can often cover more than one country. Agricultural and natural resource management projects often involve implementation by a number of neighboring countries that share the same resource. Major water resource management projects often require joint activities among riparian countries or countries sharing a major watershed.

The challenge in these cases is to conduct the ESA work to match the program or project's area of influence across a number of national boundaries. This requires both institutional and technical measures.

As the program or project needs to be implemented by more than one country, it is likely that a multi-national implementing body will be established to administer it – sometimes called a Special Purpose Vehicle (SPV). For example, in the case of multi-national power distribution, a power pool body may be established. The Bank and the governments involved need to ensure that some form of Environmental and Social Management Unit is established within the SPV to oversee the ESA work, supervise implementation of the ESMP and ensure that the monitoring program is adequate.

The key issues include:

- Ensuring appropriate capacity within the implementing body to manage the ESA work.
- Delegating components of the ESA work to national authorities and competent bodies especially during operation.
- Assessing different environmental and social policy frameworks and technical capacities in the participating countries.
- Identifying the need for a strategic (or cumulative) environmental and social assessment if the environmental and social risk is likely to be significant.
- Ensuring a consistent and harmonized ESA approach to the different national sections of the project.

Linear projects that cross national boundaries

Linear projects such as roads, railways or pipelines that cross national boundaries are another example of transboundary projects. It is common for these projects to be prepared and implemented in country specific sections. To facilitate this process, a Steering Committee is likely to be established to ensure effective coordination among the participating countries.

The challenge in these cases is to ensure that there is consistency and harmonization between the ESA work conducted by each country on its own section of the project. In addition, it is important to ensure that some coordination takes place in order to address any potential impacts that may cross boundaries or result in cumulative impacts as well as assess regulatory frameworks and institutional capacity in order to reach agreement on ensuring adequate implementation of the common ESMP.

Examples of impacts that require handling on a transboundary level are adverse impacts to migration patterns of fauna, as well as effects on biological corridors and protected areas that cross borders. Another example is that the checkpoints at border crossings invite delays and the consequent emergence of informal settlements catering to truck drivers. They can also attract sex workers with consequent spreading of infectious diseases including STDs on either side of the border.

The Bank and the borrowers at the national level need to address the following:

- Addressing any differential in management and technical capacity in the different participating countries.
- Ensuring the ToRs of the ESA work in the different countries address the potential transboundary impacts as well as those limited to the national context.
- Where feasible it is recommended that joint TORs and/or ESA work be the preferred option.

Transboundary consideration in the ESA process

Early in the project cycle, ESA process should identify and address any potentially significant transboundary environmental and social impacts associated with the project.

Scoping

This is the first opportunity to determine if the project poses any significant transboundary or regional risks. If there is any significant risk the Bank and the borrower or borrowers should determine the need for notifying the affected country or countries, establishing multi-country institutional arrangements and ensuring the ToRs address potential transboundary or cumulative impacts. When each country is required to do its own ESA, consideration should be given to forming a Multinational Steering Committee or equivalent.

Assessment of Impacts

The ESA should identify and assess transboundary or regional significant impacts and propose and design measures to avoid and mitigate them. Given the possibility of different ESA procedures and standards, the ESA should determine their significance in relation to the application of the Bank's OSs and needed actions to assure compliance. Special studies should be included in the TORs to review baseline conditions in the affected countries and regions and to focus on institutional capacity.

In addition, the ESA will entail a review of applicable regional/international agreements to ensure that the operation does not violate Multilateral Environmental Agreements (MEAs) that are relevant to the project's impacts and that have been ratified by the borrowing country. MEAs take many forms such as treaties, declarations, protocols and conventions. They have especially important meaning when ecosystem linkages or resource use considerations make international cooperation necessary. Conventions of relevance include: the Convention on Wetlands of International Importance Especially as Waterfowl Habitat; Convention on the Conservation of Migratory Species of Wild Animals; Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; Convention on Long-Range Air Pollution.

Consultation

When such operations are identified as having significant impacts, the appropriate government agencies in consultation with the borrower should inform other sovereign states about the operation in an official and documented form that summarizes the activities of the operation and its associated impacts and risks of concern and opportunities to implement mitigation measures to reduce such impacts and risks as they would impact on the affected state or states. In addition, the Bank will assist the borrower in offering further information, if deemed necessary by the affected state(s), and allow sufficient time for the affected states to respond to the information and provide feedback.

Dispute Resolution

It is particularly important in this context to consider institutional mechanisms and processes for dispute resolution to deal with complaints or differences in assessment of impacts between the host country and other affected countries. Such arrangements should be incorporated into the agreed institutional body or process to manage and coordinate the project or set up independently if no such institutional arrangements are in place. It may be necessary to involve independent technical experts.

PHYSICAL CULTURAL HERITAGE

Os requirement on physical cultural heritage

OS1 states that the borrower or client shall be responsible for ensuring that the siting, design, construction and operation of projects should avoid significant damage to cultural heritage (both physical and intangible). Cultural heritage likely to be affected by the project shall be identified and qualified, and experienced experts shall assess the project's potential impacts on this cultural heritage.

When a project may directly affect cultural heritage, or impede access to it, the borrower or client shall consult with the communities who use or have used it within living memory and should incorporate indigenous knowledge to identify its importance. When the project is likely to have adverse impacts on cultural heritage, the borrower or client shall identify appropriate measures for avoiding or mitigating these impacts.

The project shall not remove any physical cultural heritage unless the following conditions are met:

- No technically or financially feasible alternatives to removal are available.
- The overall benefits of the project substantially outweigh the anticipated cultural heritage loss from removal.
- Any removal is conducted in accordance with relevant provisions of national and/or local laws, regulations, protected area management plans and national obligations under international laws.
- Any disturbance or removal is not done until appropriate consultation with local communities has been carried out, taking full account of traditions, beliefs and cultural norms.
- Any removal employs internationally accepted best available techniques.

Definition of physical cultural heritage

Physical cultural heritage is considered a unique and often non-renewable resource that possesses cultural, scientific,

spiritual, and/or religious value and includes moveable or immovable objects, sites, structures, groups of structures, natural features, or landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural value. Examples of different physical cultural heritage examples are:

- Archaeological sites.
- Historic structures.
- Historic districts.
- Historic or cultural landscapes.
- Archaeological artefacts.

It is important to note that damage to physical cultural heritage can result from activities other than direct excavation or refurbishment of buildings. Some project aspects may also impact physical cultural heritage in less direct ways, for example, by increasing erosion to a coastal site, or building a road into a previously inaccessible area. Impacts on the natural environment that may affect the sustainability of physical cultural heritage may require special attention.

Assessment

In many cases, it is not possible to identify physical cultural heritage, such as archaeological artifacts, until the construction of a project begins. Therefore, the assessment process may need to focus mainly on establishing the risk of the existence of physical cultural heritage at the project site and on the procedures to be followed if any cultural heritage resources are discovered.

It is good practice to identify possible physical heritage issues at the start of the process of identification of environmental and social risks and impacts through project screening or during feasibility studies. This is especially true for large infrastructure or resource extraction projects such as mines, hydroelectric dams, regional irrigation systems, highways, or any project that involves substantial earthworks, or large-scale changes in hydrological patterns. These studies should involve comparison of general project features against known or

anticipated physical cultural heritage baseline conditions in the proposed project area.

For projects with known or potential physical heritage issues, the assessment should usually include the following elements: (i) a detailed description of the proposed project including its alternatives; (ii) physical heritage baseline conditions in the project's area of influence; (iii) an analysis of project alternatives in relation to the baseline conditions to determine potential impacts; and (iv) proposed impact mitigation measures, which may include avoidance or reduction of impacts by project design changes and/or the introduction of special construction and operational procedures, and compensatory mitigations.

Where physical cultural heritage issues are identified, a competent heritage expert(s) will normally be needed on the assessment study team. While a particular type of heritage specialist (e.g., an expert on the Iron Age in Africa) may be needed to address certain finds or issues, an expert with a broad perspective (e.g., a cultural geographer) will normally be most suitable.

In most cases, physical cultural heritage assessment studies will need to be formally permitted by the appropriate national heritage authority. Further, because national heritage law often lacks detailed implementing regulations, required heritage protection measures may need to be formulated as a project-specific agreement that is negotiated and signed by a project representative and the heritage authority.

Since physical cultural heritage is not always documented, or protected by law, consultation is an important means of identifying it, documenting its presence and significance, assessing potential impacts, and exploring mitigation options. The following groups may be relevant for consultation:

- Historical or traditional users and owners of physical cultural heritage.
- Traditional communities embodying traditional lifestyles.
- Ministries of archaeology, culture, or similar national or heritage institutions.
- National and local museums, cultural institutes, and universities.
- Civil society concerned with cultural heritage or historical preservation, areas of environmental or scientific interest.

Early and detailed public disclosure of physical heritage data, including the methodology, findings and analyses

of the assessment heritage team, is integral to the assessment.

Management

Necessary avoidance and mitigation measures identified through the assessment process should be incorporated into the project's ESMP and executed in coordination with other required project management items. Unlike most other environmental resources, direct impact to heritage is typically localized to the area of project construction activity, making a project's area of influence more geographically limited than for other resources such as critical habitat, a natural water supply, or endangered species. Thus, it is often possible to avoid impacts to heritage by minor project design changes.

The borrower or client should engage a qualified specialist(s) to undertake a "walkover survey" immediately prior to ground clearance and disturbance to validate the impact assessment results, and to identify areas at a local scale that are most likely to contain physical cultural heritage resources. Potentially, these walkover surveys may locate cultural heritage which had not previously been identified, at a time when avoidance or mitigation could be deployed with the minimal effect on the project schedule.

Chance find procedures

For ground disturbing projects, depending on the project location, it may be appropriate to develop a "chance find procedure" that addresses and protects cultural heritage finds made during a project's construction and/or operation phases. A chance find procedure is a project-specific procedure that outlines what will happen if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. The procedure includes record keeping and expert verification procedures, chain of custody instructions for movable finds, cultural heritage awareness raising sessions for the construction workforce, and clear criteria for potential temporary work stoppages that could be required for rapid resolution of issues related to the finds. It is important that this procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority, as well as any agreed consultation procedures.

When in doubt about whether something is cultural heritage, the borrower or client should seek the knowledge and advice of local and/or international competent experts, government authorities, and members of local communities. Depending on the circumstances, it may be appropriate for the borrower to engage qualified specialists on an "on call"

retainer basis, to provide timely advice on the provenance of, and suitable protection or mitigation for, chance finds as they arise. The knowledge of local communities is particularly important for identifying cultural heritage that may be tied to the natural environment and not evident to outsiders.

Preservation in place

Because cultural heritage is non-renewable, its protection is best accomplished by “preservation-in-place.” This method is generally preferred over removal, which is an expensive and partially destructive process. Best international practice recommends that cultural heritage be left undisturbed if at all possible. If excavation in the course of the project cannot be avoided, competent cultural heritage professionals, local and/or international, should carry out excavations or other activities in accordance with internationally recognized practices, with the objective of documenting the cultural heritage in as much detail as is appropriate with respect to the assessment of its potential value.

Where the borrower or client has encountered physical cultural heritage that is replicable and not critical, the borrower or client will first seek to minimize or eliminate adverse impacts and to implement restoration measures that aim to maintain its value and functionality. If minimization of impacts and/or restoration are not possible in situ, then the borrower or client can consider restoration at a different site. In considering minimization and restoration, the borrower or client may engage international, national, and local expertise. Considerations around relocation of physical cultural heritage may also involve the host country government and other institutions (e.g. museums). In identifying local expertise, the recommendations of the Affected Communities with respect to recognized cultural heritage practitioners, such as elders, priests, mediums, and traditional healers should be given key consideration.

Removal of non-critical heritage

Where impact reduction and restoration are not feasible, the borrower or client must provide a justification for that

determination based on a competent expert’s review of the circumstances, and only then can compensation be considered as a way to address the impact on physical cultural heritage. Compensation is only paid to affected communities using physical cultural heritage for long standing cultural purposes. It should not be given for removal of archeological material from cultural horizons that pre-date the current affected communities or for other cultural heritage that has not been used within the living memory of the community.

Non-replicable heritage

Non-replicable cultural heritage is best protected by preservation in place, since removal of the cultural heritage will result in irreparable damage or destruction of the heritage. Examples of non-replicable cultural heritage may include an ancient city or temple, or a site unique in the period that it represents. Accordingly, projects should be designed to avoid any damage to cultural heritage through re-siting of project related activities, such as construction. Where avoidance is not feasible, no alternatives to removal exist, and the project benefits outweigh the loss of cultural heritage, the borrower or client should remove and preserve the cultural heritage according to the best available technique and make arrangements for it to be housed in the a suitable location (e.g. a museum). The best available technique proposed by the borrower or client or its competent expert will benefit from a peer review by international external experts to ensure that no better, feasible techniques are available. Best available technique is required because the removal of the cultural heritage will effectively mean its destruction. The cultural heritage should be fully documented in situ, before removal commences.

Projects in legally-protected areas (such as World Heritage Sites and nationally protected areas) may range from tourism projects that actually support the objectives of cultural heritage protection, to mining projects that disturb large areas and will need to be carried out with considerable sensitivity. Such projects are expected to provide additional assurances beyond meeting applicable national laws. All regulations and plans applicable to the protected area should be respected in project design and execution.

RESETTLEMENT ACTION PLANS

OS requirements on involuntary resettlement

Resettlement is considered involuntary when the project-affected people are not in a position to refuse the activities that result in their physical or economic displacement. This occurs in cases of lawful expropriation or temporary or permanent restrictions on land use, and in negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

The Bank's Policy on Involuntary Resettlement and OS 2 sets out the Bank's requirements for the involuntary displacement and resettlement of people as a result of Bank-financed projects. The Bank requires that, when people must be displaced, they are treated fairly, equitably, and in a socially and culturally sensitive manner. It also requires that they receive compensation and resettlement assistance so that their standards of living, income earning capacity, production levels and overall means of livelihood are improved, and that they share in the benefits of the project that involves their resettlement.

Above all, borrowers or clients are encouraged to avoid any project activities that result in the involuntary resettlement of people. This requires a meaningful analysis of all possible alternatives by the borrower or client; namely an alternatives assessment that centralizes the multiple social, economic, physical, environmental and cultural costs associated with involuntary resettlement, and that factors these costs into decision-making on project siting, routing, design etc. In cases where the involuntary resettlement impacts of a project appear to be particularly severe, the borrower or client shall seriously consider a complete down-sizing and / or replacement of the project, in order to ameliorate such impacts.

Where it has proved impossible for projects to avoid involuntary resettlement impacts, and any involuntary resettlement impacts have been minimized, the remaining key objectives of OS 2 are as follows:

- Ensure that displaced people are meaningfully consulted and given opportunities to participate in the planning and implementation of involuntary resettlement programmes.

- Ensure that displaced people receive significant resettlement assistance under the project, so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels.
- Develop appropriate measures that mitigate the negative impacts of involuntary resettlement, actively facilitate social development and establish a sustainable economy and society.
- Set up a mechanism for monitoring the performance of involuntary resettlement operations and remedying problems as they arise, so as to safeguard against ill-prepared and poorly implemented resettlement plans.

The Bank's Involuntary Resettlement Policy outlines, in considerable depth, how Bank-financed projects are expected to plan and implement their involuntary resettlement operations. The specific requirements to which projects involving involuntary resettlement need to adhere are then outlined in further detail in OS 2. OS 2 also provides considerable associated guidance in relation to each requirement that it outlines, and should thus be read in conjunction with this supplementary Guidance Note. Given the comprehensive nature of OS 2, the remainder of this Guidance Note focuses primarily on how to develop a Resettlement Action Plan (RAP), which OS 2 itself covers in less detail.

Preparation of resettlement action plans (RAP)

A RAP is a comprehensive planning document that specifies the procedures that an involuntary resettlement process shall follow, and the actions that shall be taken to compensate affected people and communities. The need to develop a RAP shall be established during the Environmental and Social Assessment process – specifically at the project screening phase of the project cycle, at which point the magnitude, strategy and timing of the involuntary resettlement should be determined.

In order to determine whether or not involuntary resettlement will be required, the following questions should be asked:

- Are there any people or communities residing within the project's area of influence?
- Are there any people or communities using the land within the project's area of influence for cultivation purposes?
- Are there any people or communities using the land within the project's area of influence for business or other economic purposes?
- Is there any private land or privately-owned assets within the project's area of influence?
- Are there any natural resources within the project's area of influence that are utilized by people/communities – such as forests (for construction materials and fuel wood), pastoral land (for livestock grazing) etc.?
- Are there any communal facilities situated within the project's area of influence – such as schools, hospitals etc.?
- Are there any sites of cultural value situated within the project's area of influence – such as religious buildings, graveyards, sacred areas etc.?

If the answer is “yes” to any of the questions above, then involuntary resettlement may be required and a RAP will need to be developed.

The borrower or client is required to prepare a Full Resettlement Action Plan (FRAP) for any project that involves a “significant number” of people or has adverse impacts on vulnerable groups, including Indigenous Peoples. A “significant number” is defined as 200 or more persons who will experience involuntary resettlement effects. In addition to this numerical guidance, project planners and the Bank shall also determine the “significance” of a project by evaluating the severity of adverse impacts on vulnerable groups, particularly on women and Indigenous Peoples. Any project that has adverse impacts on vulnerable groups shall be considered significant, and shall thus require a FRAP.

The borrower or client is required to prepare an Abbreviated Resettlement Action Plan (ARAP) for any project in which the number of people to be displaced is “small” (fewer than 200 people), and the land acquisition and potential displacement and livelihood disruption impacts are deemed as less significant.

In the following section, the key sections of a FRAP are outlined, and associated guidance is provided on how to develop each of these sections. It is important to note

that the development of a FRAP is a complex and time-consuming process that will require significant borrower / client input.

Contents of a FRAP

• Description of the Project, Project Area and Area of Influence:

- first section of a FRAP should provide a general description of the project and its area of influence, and should include appropriate maps pictorially locating the project area.

• Potential Impacts:

- The second section of a FRAP should describe the project components or activities that would give rise to involuntary resettlement, the zone of impact of such activities, and the alternatives considered to avoid or minimize involuntary resettlement.
- This important need to avoid or minimize involuntary resettlement impacts through alterations to project design require significant planning, research and consultation activities to be carried out at an early stage. All too often, project design decisions are finalized prior to any consideration of potential involuntary resettlement impacts. This tends to result in serious implications further down the line, both in terms of negative social, economic, physical, environmental and cultural impacts on affected people, but also in terms of significantly increasing financial, schedule-related and reputational risks for the project itself. Accordingly, seeking to understand potential involuntary resettlement impacts at a very early stage, and working to avoid or minimize these as much as possible, is fundamental.
- The “avoid or minimize” process should be clearly and comprehensively demonstrated in the FRAP document.

• Organizational Responsibility / Institutional Framework:

- The institutional arrangements within the FRAP executing agency, and the provision of adequate resources to this agency, should be discussed as early as possible, and this institutional framework, together with all associated inter-agency coordination, should be described in the FRAP.
- The capacity of the executing agency to implement the FRAP should also be evaluated,

and the capacity building measures (with an associated timetable and budget) that will be taken to strengthen this executing agency should be laid out.

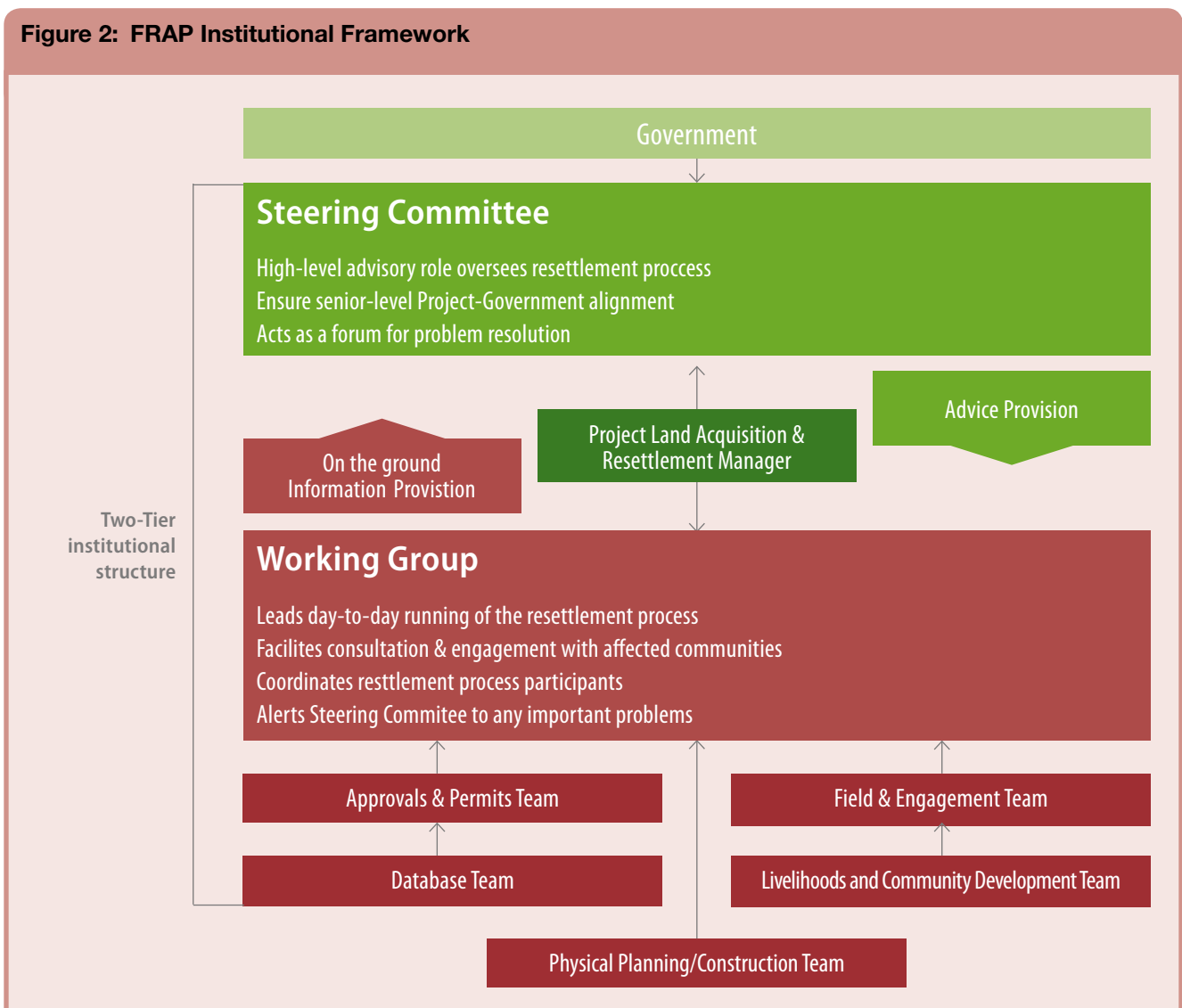
- While an institutional framework can take several different forms, there are certain features that are fundamental to success. Most importantly, it is recommended that two levels of management be established. These levels of management are often referred to as:
 - Steering Committee: the higher level, more supervisory, strategic body.
 - Working Group: the lower level, more hands-on, implementing body.
- This two-tier management system is preferable for governance reasons. The

bodies are separate from one another, but also interdependent. This form of governance is conducive to reciprocal monitoring, and accordingly tends to result in quality delivery and mutual attentiveness to operational and other issues and concerns, as and when these arise.

The figure below provides a pictorial representation of the fundamental components of an institutional framework.

- It is crucial that all stakeholders are, to varying degrees, incorporated into the institutional framework, including affected people, host communities, government representatives, project representatives etc.

Figure 2: FRAP Institutional Framework



- An appropriate NGO (with a detailed knowledge of the affected communities and with the capacity to provide support to these communities) should ideally sit on both the Steering Committee and the Working Group.
- Engaging a relevant NGO in the involuntary resettlement process can help to facilitate the participation of affected communities, enabling them to express their perspectives with ease and confidence.

Community participation

- OS 1 and 2 and the Guidance Note on Consultation both provide detailed accounts of the requirements for, and associated guidance related to, participation, consultation and Broad Community Support (BCS) in the context of Bank-financed involuntary resettlement operations in particular, and also in the context of Bank-financed projects more generally.
- The community participation section of the FRAP should describe how the participation requirements of OS 2 have been fulfilled, and specifically how the requirement for BCS has been accomplished in the project context.
- An explicitly written statement should be provided in the FRAP that embodies the agreements reached from the negotiations with affected people, as a guarantee that consultations were conducted in a meaningful way and that BCS was obtained for the involuntary resettlement process being carried out.
- The FRAP should demonstrate that all affected parties, including displaced persons, host communities, government representatives, NGOs and other stakeholders have been consulted in a regular manner, and at appropriate points in the resettlement process.
- The FRAP should also spell out the specific approach taken to consultation with vulnerable groups, including Indigenous Peoples and those affected by gender vulnerabilities.
- In order to demonstrate that consultation has been adequate in terms of stakeholder participation, regularity and scope of discussion, meeting minutes, focus group minutes, interview minutes and attendance records should be kept and appended to the FRAP. In addition, a summary of when and where the consultations took place

should be provided, together with a summary of what was discussed in each consultation, and how the outcomes of the consultations were fed into the resettlement planning process.

- The FRAP should demonstrate that the choices of displaced persons were taken into proper consideration in the resettlement planning process; specifically choices related to forms of compensation, livelihood improvement and resettlement assistance, to relocating as individual families or as part of pre-existing communities, to host site options, to retaining access to cultural property (e.g. places of worship, cemeteries etc.), and to proposed resettlement timings.
- Finally, this community participation section of the FRAP should demonstrate that the OS 2 requirements related to grievance redress have been fulfilled, by the provision of a detailed description of the grievance redress mechanism that has been developed and implemented, and how this is being continuously monitored and improved.

Integration with host communities

- Understanding the host communities, within which displaced communities may be integrated, is fundamental to effective resettlement planning. Conflicts between hosts and displaced persons may develop as increased demands are placed on land, water, forests, services etc., or if the displaced persons are provided with services and housing superior to that of the hosts.
- The FRAP should demonstrate that a meaningful host community capacity assessment has been carried out, and that potentially negative impacts on host communities and associated issues related to social, economic and cultural integration have been addressed by the project.
- The FRAP should present the outcomes of consultations with host communities, how negative host impacts will be mitigated and financed, and the conflict resolution mechanisms in place to resolve integration issues as they arise.
- The FRAP should also provide details of the measures being taken to augment public services (e.g. education, water, health and production) in host communities, in order to make them comparable to the services provided to those subject to displacement.

Socio-economic studies

- The project should carry out a detailed socio-economic survey in order to understand the baseline conditions in existence prior to the implementation of the involuntary resettlement process.
- The baseline survey should include a population census that covers 100% of those facing displacement impacts (including seasonal resource users that may not be present in the project area of influence during the time of the survey), and that gathers information on:
 - existing public infrastructure and services;
 - production and land tenure systems (including common property and non-title based land ownership or other local allocation systems);
 - household organization,
 - livelihoods (including natural assets upon which the affected people may depend for a portion of their livelihoods);
 - standards of living; and
 - gender and age disaggregated information pertaining to the economic, social and cultural conditions of the affected population.
- The baseline survey should also include a detailed asset inventory that covers 100% of those facing displacement impacts, and that seeks to assess the magnitude of the expected losses, both in terms of total and partial losses to individual as well as group assets.
- Finally, the baseline survey should identify and provide detailed information on disadvantaged or vulnerable individual and groups, for whom special provisions may need to be made.
- It is crucial that the FRAP presents both the data collection sheets used to gather the census and asset inventory data, as well as a write up of the aggregate baseline conditions in the affected area, using meaningful statistics and qualitative information to demonstrate these.
- This section of the FRAP should also come together with a detailed database that records, for each displaced individual / household, the data collected from them through the census and asset inventory process. This database is fundamental to the delineation of compensation and livelihood improvement provisions, and for the subsequent monitoring and evaluation of the resettlement process.

- Finally, this section of the FRAP should detail the project's approach to the cut-off date, how host government procedures have been adhered to in this regard, and how information pertaining to the cut-off date has been documented and disseminated throughout the project area prior to taking any action on clearing land or restricting local community access to land. Dissemination methods for the cut-off date may include local newspaper advertisements, declarations on the local radio and / or over loud speakers, leaflet distribution, the convening of community meetings etc.

Legal framework including mechanisms for conflicts resolution and appeals

- The FRAP should contain a detailed description of the applicable legal and administrative procedures related to resettlement in the domestic context, including a description of the remedies available to displaced persons in the judicial process, the normal time frame for such procedures, and available alternative dispute resolution mechanisms that may be relevant to the project.
- This section of the FRAP should also outline any legal steps necessary to ensure the effective implementation of resettlement activities, including a process for recognizing claims to legal rights to land – including claims that derive from customary and traditional law and usage.
- In addition, this section of the FRAP should detail the international standards to which the resettlement operation is seeking to adhere, how these align with / differ from domestic legislative requirements, and how the gaps between the two are to be addressed in the project context.

Eligibility

- This section of the FRAP should provide a detailed outline of the eligibility criteria being used in the project context; namely eligibility criteria that define all affected people and outlines their eligibility (or lack thereof) for compensation and other resettlement assistance.
- Three groups of displaced people shall be entitled to compensation or resettlement assistance for loss of land or other assets taken for project purposes:
 - Those who have formal legal rights to land or other assets recognized under the laws of the country concerned.

- Those who may not have formal legal rights to land or other assets at the time of the census / asset survey but can prove that they have a claim that would be recognized under the customary laws of the country.
 - Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence, and who do not fall into either of the two categories described above, but are entitled to resettlement assistance in lieu of compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, improvements (structures and crops) etc.), provided that they themselves or witnesses can demonstrate that they occupied the project area of influence for a reasonable time (at least six months) prior to a cut-off date established by the borrower or client and acceptable to the Bank.
 - It is important to note that these tripartite eligibility criteria are very broad and are likely to be much more inclusive than the eligibility criteria designated in domestic legislation related to land acquisition and resettlement. Accordingly, it is important that the borrower or client engages domestic governments on this issue at an early stage, to make it clear that the compensation and livelihood restoration provisions to be provided by the project will go beyond those required in local legislation. While governments may be amenable to this, there may also be resistance, in light of the “precedent setting” that this approach may be perceived to create in the local context. Accordingly, the ways in which “top up” compensation amounts that go beyond local domestic legislative requirements are framed and administered need to be carefully considered, and an approach needs to be found that is acceptable to all parties. This approach should be documented in the FRAP, as part of this eligibility section.
- Valuation of, and compensation for, losses**
- This section of the FRAP should detail the methodology to be used in valuing losses to determine their full replacement cost.
 - This section of the FRAP should also describe the proposed types and levels of compensation under local laws and the supplementary measures required to achieve full replacement cost for lost assets.
 - It is crucial that a certified professional valuator is employed to value asset loss, at full replacement cost, and that such valuations are based upon a detailed local market evaluation study that is written up and justified appropriately in the FRAP.
 - This section of the FRAP should then describe in more detail the packages of compensation and other resettlement measures which will be provided to ensure that standards of living, income-earning capacity, production levels and overall means of livelihood for all categories of eligible group are improved beyond pre-project levels.
 - More specifically, the FRAP should demonstrate and justify, in a coherent a comprehensive manner, how key aspects of the compensation and resettlement assistance requirements outlined in OS 2 are being addressed and fulfilled in terms of the compensation packages being provided. This justification should include reference to the following:
 - Units entitled to compensation (e.g. family, household, and individual) and how they were decided.
 - Land-based resettlement strategies, and a focus on compensation-in-kind in lieu of cash compensation where feasible.
 - Livelihood improvement programs, how economic losses will be addressed both in the short-term and long-term, and how the resettlement will be managed as a development initiative (including the enhancement of livelihoods based on land or natural resources in the case of rural resettlement, and the enhancement of livelihoods based on wages or enterprises in the case of urban resettlement).
 - How security of tenure for physically displaced people will be provided.
 - How the issue of common property resource losses and public infrastructure and service losses will be addressed, and the importance of in-kind provisions in this regard.
 - The types of transitional support that will be provided and a justification for this in terms of the time required to re-establish standards of living, income earning capacity, production levels and overall means of livelihood.
 - How cultural and psychological issues and losses will be addressed; specifically in terms of losses of cultural, religious and archaeological sites and destruction to social structures and community networks.
 - Resettlement package options and how displaced persons were given the opportunity to decide upon their preferences.
 - Particular attention and support being provided to vulnerable groups, including Indigenous Peoples

and those affected by gender vulnerabilities. In this regard, and where relevant, a specific protocol shall be inserted into the FRAP specifying safeguards for the quality and quantity of land to be allocated for women, especially widows and divorcees, in order to ensure their means to achieve income generation and food security.

- The need to provide displaced persons with opportunities to derive appropriate development benefits from the project, including access to electricity, roads, sources of irrigation or domestic water supply etc.
 - The procedures for allocation of land plots to displaced persons.
 - The timings of compensation package provision; specifically before clearing of the right-of-way or starting project implementation on the ground.
 - Compensation payment procedures and how they will be documented and monitored.
- This section of the FRAP should then summarize the compensation packages developed, in the form of an entitlements matrix that identifies:
 - all categories of affected people;
 - all types of loss associated with each category; and
 - all options for the types of compensation and resettlement assistance to which each category is entitled.
 - Prior to the finalization of the FRAP, the entitlements matrix should be disclosed to the affected community and consulted on. Where relevant, changes should be made to the entitlements matrix to reflect the articulated views and concerns of the affected community, expressed during the entitlements matrix disclosure and consultation process.

Identification of alternative sites and selection of resettlement site(s), site preparation, and relocation

- This section of the FRAP should detail the institutional and technical arrangements for identifying and preparing resettlement sites that have a combination of productive potential, locational advantages, and other factors that are at least comparable to those being lost.
- This section of the FRAP should also detail the procedures for physical relocation, including timetables for site preparation and transfer, and the forms of support which will be provided by the

project to facilitate the physical relocation process (e.g. provision of trucks, boxes for packing etc.).

- Finally, this section should detail any measures being implemented to prevent influx of ineligible persons at the selected sites, together with the legal arrangements being put in place for regularizing tenure and transferring titles to the displaced persons.

Shelter, infrastructure, and social services

- This section should provide detailed plans to provide or finance housing, infrastructure (e.g. roads, water supply etc.) and social services (schools, health services), plans to ensure comparable services to host populations, and plans for any necessary additional site development.

Environmental protection

- This section should provide an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage these impacts.

Implementation Schedule

- This section should provide an implementation schedule covering all resettlement activities, from preparation through implementation, including target dates for achievement of expected benefits to displaced people and host communities, and target dates for terminating the various forms of assistance.
- The implementation schedule should be consistent with the overall project schedule, and should take into account key dates in local social, religious and economic calendars, in order to avoid interruptions to the school year, planting or harvesting seasons etc.

Costs and Budget

- This section should provide detailed tables indicating the breakdown of cost estimates for all resettlement activities, including allowances for inflation and other contingencies, a timetable for expenditures, sources of funds, and arrangements for the timely flow of funds.
- The actual costs of involuntary resettlement operations are commonly underestimated, which then tends to lead to delays in project

schedules, failure to disperse funds to affected people in a timely manner and a range of other problems. Accordingly, effective budgeting plans are fundamental to the successful planning and implementation of the involuntary resettlement process.

Monitoring and Evaluation

- This final section of the FRAP should include arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent third party monitors as appropriate.
- The section should lay out the timing of monitoring activities (including quarterly reviews, in-depth reviews of mid-term progress etc.) and should be consistent with overall project scheduling.
- This section should also describe how sufficient monitoring information will be obtained, what the performance monitoring indicators will be, and how the monitoring outcomes will be recorded and documented.
- In addition, this section should explain that an independent ex-post evaluation – in the form of a FRAP completion audit or FRAP implementation completion report – will be carried out by the borrower or client and the Bank.
- Finally, this section of the FRAP should make clear that, upon completion of the project, the borrower or client shall undertake an assessment of the success of the FRAP, and include relevant information in the Project Completion Report (PCR). It should be clarified that this PCR will be followed by the Bank's own PCR, and a commitment should be made in the FRAP that, if either of these assessments reveals that any key objectives of the FRAP were not achieved, follow-up measures shall be developed to remedy the situation.

Contents of an ARAP

An ARAP is essentially a shorter, more condensed version of a FRAP, and accordingly the guidance provided above should also ground the development of an ARAP. At a minimum though, an ARAP shall typically include:

- Socio-Economic Studies: the result of the census survey and asset inventory, an outline of the scale of the resettlement operation, and a description of the

socio-economic status of the displaced persons and their baseline conditions.

- Community Participation: a description of how the displaced persons and the host populations are being consulted about acceptable project alternatives, and informed about the project's potential impacts on them.
- Value of, and Compensation for, Losses: a description of the compensation options to be offered and other resettlement assistance to be provided to affected people.
- Organizational Responsibility / Institutional Framework: a description of the institutional responsibilities for implementation of the ARAP.
- Implementation Schedule, Costs and Budget: a description of the timing of the implementation process and associated costs and budget.

Reporting and Disclosing the FRAP / ARAP

Once the FRAP / ARAP has been developed, project planners shall work transparently to ensure that the affected people give their demonstrable acceptance to the FRAP / ARAP and that any necessary displacement is thus carried out in the context of negotiated settlements with those people, rather than with the use of force.

The FRAP / ARAP shall be submitted as a formal document to the relevant national, local and/or municipal agencies and to the Bank, and shall include an executive summary detailing the size of the affected populations, proposed resettlement measures and activities, the implementation timetable and outstanding issues, as well as dedicated financial resources for the implementation of resettlement-related activities.

The FRAP shall be finalized as a supplement document to the Environmental and Social Impact Assessment report, while the ARAP shall be finalized as a supplement document to the Environmental and Social Management Plan.

The FRAP / ARAP shall be posted in the Bank's public information center and the Bank's website for public review and comments, in accordance with the Bank's ESAPs. The FRAP shall be released to the public at least 120 days prior to board presentation. The ARAP shall be released to the public at least 30 days prior to board presentation.



BIODIVERSITY AND ECOSYSTEM SERVICES ASSESSMENT

OS requirements on biodiversity

OS 1 states that as part of an Environmental and Social Impact Assessment the borrower or client shall be responsible for conducting an assessment of the project's potential impacts on biodiversity and ecosystem services, and implementing appropriate mitigation and other management measures. The requirements are further elaborated in OS 3: Operational Safeguard on Biodiversity, Renewable Resources and Ecosystem Services.

OS 3 recognises that the biodiversity of Africa is extremely rich and varied, that it is under threat from a range of sources including climate change, desertification, and pressures from a growing human population and from the gathering pace of economic development and natural resource exploitation. OS 3 also acknowledges that livelihoods based on biodiversity, natural resources and ecosystem services directly support a large proportion of Africa's human population and its welfare. OS 3 therefore requires borrowers or clients to identify and implement measures to conserve and sustainably use natural habitats and their biodiversity, and observe, implement, and respond to requirements for the conservation and sustainable management of priority ecosystem services. Ecosystem services are treated under a separate heading (see "Ecosystem Services Assessment" below) in recognition of the fact that they are defined as the benefits that people, including businesses and development activities more generally, derive from ecosystems. Ecosystem services assessment uses a similar but distinct series of assessment steps that draw extensively on data gathering and consultation amongst potentially affected communities.⁴ The objectives of OS 3 are to:

- Conserve biological diversity and ecosystem integrity by avoiding or, if not possible, reducing and minimizing potentially harmful impacts on biodiversity and associated ecosystems.
- Endeavour to reinstate or restore biodiversity including, where required, the implementation of biodiversity offsets to achieve "no net loss but net gain" of biodiversity in cases where some impacts are unavoidable.
- Protect natural, modified and critical habitats.
- Sustain the availability and productivity of priority ecosystem services to maintain benefits to the affected communities and to sustain the project's development objectives and overall performance.

OS 3 also sets out requirements relating to the release of Genetically Modified Organisms (GMOs) into the environment.

Definitions of biodiversity and ecosystem services

Biodiversity is defined as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species⁵, between species, and of ecosystems"⁶.

Ecosystem services are the benefits that people derive from ecosystems. Ecosystem services can be organized into four types:

- i. iProvisioning services, which are the products people obtain from ecosystems (food, fresh water, wood and fiber, fuel).
- ii. Regulating services, which are the benefits people obtain from the regulation of ecosystem processes (climate regulation, flood regulation, disease regulation, water purification).

⁴ OS 3's objectives reflect those of the Convention on Biological Diversity to conserve biological diversity and promote the sustainable management and use of natural resources. The OS also aligns with the Ramsar Convention on Wetlands, the Convention on the Conservation of Migratory Species of Wild Animals, the Convention on International Trade in Endangered Species of Wild Flora and Animals, the World Heritage Convention, the UN Convention to Combat Desertification and the Millennium Ecosystem Assessment.

⁵ Throughout this Guidance Note the term "species" is used as a shorthand for species, subspecies, varieties, and potential species that are new to science but have yet to be formally described.

⁶ Source: The Convention on Biological Diversity.

- iii. Cultural services, which are the nonmaterial benefits people obtain from ecosystems (aesthetic, spiritual, educational, recreational).
- iv. Supporting services, which are the natural processes that maintain the other services (nutrient cycling, soil formation, primary production).

Purpose of this guidance note

The Guidance Note sets out the stages within an ESIA where specific methods are required to assess impacts on biodiversity and ecosystem services, and to identify mitigation or other management measures to conserve biodiversity. It discusses options to carry out an assessment, and highlights challenging areas for the Bank and its borrowers and clients in seeking to avoid impacts on biodiversity and implement effective protective measures and mitigation. The Bank requires borrowers or clients to consult recognized specialist institutions and experts where this is necessary to determine the biodiversity impacts of a project. Apart from biological expertise covering various aspects of biodiversity, as appropriate, specialist inputs in other disciplines such as cultural heritage, socioeconomics, landscape planning, or hydrology, may be required to ensure proper consideration of impacts on both biodiversity and ecosystems services.

Assessment of adverse impacts on biodiversity should be undertaken with reference to the mitigation hierarchy (see Guidance Note on ESIA) to ensure that appropriate avoidance, minimization and restoration measures have been applied sequentially to protect biodiversity and achieve “not net loss but net gain”, before options to design and implement biodiversity offsets are considered.

The information presented in the Guidance Note is set out under the following headings: (i) habitats; (ii) assessment of biodiversity; (iii) offsets; (iv) ecosystems services assessment; and (v) OS requirements on GMOs.

Habitats

OS 3 defines the following types of habitat: natural, modified and critical, where critical habitats can be either modified or natural habitats which have been determined to have a high biodiversity value. Consequently, the determination of a critical habitat is not based on the extent of human intervention in the habitat. Rather, it is determined with

reference to criteria such as whether the habitat supports species which have been defined as high value (e.g. Critically Endangered or Endangered, endemic and restricted range species⁷), and/or whether the habitat is an example of a globally/nationally/regionally significant, highly threatened or unique ecosystem, or the habitat is important to migratory or congregatory species. Additionally, the borrower or client should identify features of biodiversity value within all types of habitat, regardless of the recent state or future likelihood of significant conversion or degradation. This information should be used to inform the development of mitigation measures according to the mitigation hierarchy, with the objective of achieving “not net loss but net gain”. The importance of a habitat to ecosystem services should also be considered (see “Ecosystem Services Assessment” below). These broad definitions of habitats as geographical units (which can be terrestrial, aquatic or marine, and can also include migratory passages) are different from current ecological definitions, and are extremely important to determining the nature and extent of the mitigation measures to be implemented by the borrower or client as part of the project.

The habitats within the project's area of influence (see “Biodiversity baseline studies” below and Guidance Note on ESIA) should be described in the biodiversity baseline section of the ESIA, and each should be identified as either natural or modified. There is no clear, definitive methodology for establishing whether a habitat is natural or modified: this should be based on robust analysis using the best available information, according to a well-described methods and a clear set of criteria. Whilst bearing in mind that the ecological context of every project will be different, the results of the analysis should differentiate between:

- *Natural habitats*, i.e. areas composed of viable assemblages of plants and/or animals that are predominantly of natural origin; human activity may have been, or is, taking place, but only to a degree such that the fundamental ecological functions of the habitat have not been modified.
- *Modified habitats*, which are areas that may contain a large proportion of non-native plant or animal species (such as farmland, or a plantation of exotic tree species); also areas where ecological functions have been significantly altered, sometimes in conjunction with changes in species composition, e.g. reclaimed wetlands and coastal areas, artificial waterways.

æDependent on the type of project and its location and area of influence, a variety of detailed methods may be

⁷ These species designations are defined according to the IUCN Red List of Threatened Species <http://www.iucnredlist.org/>

used to undertake a critical habitat assessment. These should be identified and developed with assistance from qualified biodiversity specialists. Overall, the critical habitat assessment will be carried out in three stages:

- **Stakeholder Consultation/Initial Literature Review:** this exercise involves understanding the extent and nature of biodiversity within the landscape, taking account of the views of relevant stakeholders and using available information sources via in-country consultation and desk-based literature research. It is most useful if it is undertaken as part of ESIA scoping activities.
- **Field Data Collection and Verification of Information:** in this stage the required field data will be collected, and the data obtained from all sources (including the stakeholder consultation / initial literature review) will be integrated and validated, with inputs from specialists covering relevant biodiversity topic areas. If possible, it should be carried out as part of broader ESIA baseline data collection and reporting, and may need an extended period to collect data across seasons, or to capture periodic or infrequent events (e.g. migrations).
- **Critical Habitat Analysis:** this will use the information generated in the preceding stages to assess whether the project is situated within critical habitat, or whether it may affect critical habitats which are not at or adjacent to the project site and its area of influence, including associated projects (e.g. if the effect on critical habitat is via impacts arising from associated facilities, or from activities associated with construction of the project such as sourcing of raw materials). The assessment will use information collected and apply critical habitat criteria or thresholds (see below) to determine whether the project likelihood of impacting on critical habitat, based on identified high biodiversity values. Where, for justifiable reasons, there is still a lack of sufficient data (or data of sufficient quality) to provide assurance of a robust critical habitat assessment, the borrower or client should call on expert opinion and professional judgment to determine the status of a habitat with respect to criteria and thresholds (especially important where these are more qualitative, as described below).

The criteria and thresholds which the borrower or client should consider in the critical habitat assessment include:

- Quantitative criteria, such as:
 - Habitat required to sustain at least 10 percent of the global population of a Critically Endangered or Endangered species, and where that species is known to occur on a regular basis.
 - Habitat known to sustain more than 95 percent of the global population of a migratory or congregatory species, on a cyclical/regular basis.
 - Restricted range, for example defined for a terrestrial vertebrates as a species occurring in a range of less than 50,000 km², and for marine species an area of less than 100,000 km².
- Qualitative criteria, which in the case of highly threatened and/or unique ecosystems would require that a habitat be determined against the following considerations:
 - At risk of decreasing in area or quality.
 - Having a small spatial extent.
 - Containing unique assemblages of species, including assemblages or concentrations of species that occur in a limited range of ecological conditions.

Assessment of impacts on biodiversity

Baseline Biodiversity Studies

An accurate and robust assessment of the impacts of a project on biodiversity, and the development of mitigation measures, will require accurate information and data. The borrower or client should synthesize available knowledge of biodiversity in the project area of influence, and potentially a wider area⁸. As described above for critical habitat assessment, the collection of biodiversity information to inform the ESIA should commence during ESIA scoping, by collecting the views of relevant stakeholders and using available information sources via in-country consultation and desk-based literature research. The borrower or client should work with national and local (and if appropriate international) biodiversity specialists to synthesize available knowledge of the biodiversity study area that has been identified.

⁸ Including International Union for the Conservation of Nature (IUCN) Protected Areas Management Categories Ia, Ib and II (and potentially Categories III–VI, depending on the biodiversity present); UNESCO Natural World Heritage Sites; Most Key Biodiversity Areas (KBAs) which include inter alia Ramsar Sites, Important Bird Areas (IBAs), Important Plant Areas (IPAs) and Alliance for Zero Extinction sites (AZEs); and areas defined as being of high biodiversity priority or significance or to be irreplaceable following systematic conservation planning studies by national or international institutions and/or other relevant and qualified bodies such as internationally recognized NGOs.

This will assist in defining the scope of the biodiversity assessment and identifying potentially significant impacts (see “Scoping of Impacts on Biodiversity” below), and identifying knowledge gaps that will require collection of baseline data through field surveys. Close coordination with other technical disciplines involved in the ESIA will be necessary, the choice being dependent on the type and scale of the project and the biodiversity context: e.g. socio-economic specialists should be involved in all cases: hydrology and limnology for hydropower and other water/air resources development projects; air quality experts for projects in which significant effluents/emissions are anticipated.

The time and resources invested in designing the terms of reference for biodiversity baseline studies will ensure the efficient use of resources and application of effort such that the studies are focused on the most relevant ecological features and potential impacts, and will avoid amassing information of little relevance to preparation of a robust and appropriate biodiversity assessment. Field survey methods should be developed with inputs from biodiversity experts, with the methods considered including inter alia:

- Direct observation.
- Census.
- Identification of tracks, nests, droppings, vocalizations and other signs.
- Netting and other forms of live trapping.
- Camera traps.
- consultation with communities, especially those with a significant dependence on biodiversity for their livelihoods or the ecosystem services they use, to ensure that the importance placed on biodiversity and ecosystem services by communities can be fully recognized within the biodiversity and ecosystem services assessments, and also used by other specialists (e.g. to assess impacts on livelihoods).

Field surveys should include methods to capture information on specific topic areas important within the ESIA, e.g. invasive alien species and habitats or species which consultation has identified as being potentially important sources of ecosystem services to communities.

Early identification of significant impacts upon biodiversity, and information on its type, scale and distribution, will also provide timely inputs to site selection and preliminary design of the borrower or client's project, thus facilitating inputs on biodiversity and ecosystem services into a comprehensive analysis of alternatives in the ESIA, and any subsequent design iterations.

Valuation of Biodiversity

It is very important for the biodiversity assessment to assign values to biodiversity attributes (including ecosystem components), both to inform a robust impact assessment and to ensure that mitigation focuses primarily on the attributes of the most importance, with appropriate justification that this will include “umbrella” or “keystone” species through which lesser impacts on lower value species will also be mitigated¹⁰. Habitats and species should be assigned to broad categories of ‘value’ based on vulnerability and irreplaceability (see below). In many parts of the Bank's area of operations the quality of data that are available, even when supplemented by information collected by the borrower or client to inform the ESIA, may not facilitate a systematic valuation. In such cases, interpretation using clearly defined assumptions may be necessary, as described below.

For habitats, in situations where there is no systematic assessment of habitat threat status at the global or national level (currently the case in many regions of Africa), the habitat values assessment should be based on expert consultation and interpretation of the scientific literature. The assessment should consider irreplaceability (measured by the total area covered by a particular vegetation type globally) and vulnerability (measured inter alia by the proportion of the total distribution of a particular habitat type that is included within protected areas). In cases where insufficient information is available to apply the vulnerability criterion for one or more vegetation communities, a provisional assessment of conservation value should be made for each habitat type, based on expert judgment and the principles of vulnerability and irreplaceability, with a rationale given in each case. In line with standard ESIA practice, a ‘negligible’ category should also be included to classify habitats with little or no conservation value (e.g. built-up areas).

Plant and animal species should be assessed in terms of vulnerability (e.g. level of extinction risk) and irreplaceability (e.g. if the species has a restricted range). The assessment of extinction risk should be based on the IUCN Red List of

9 The biodiversity study area may extend beyond the area of influence of the project. The study area may include sites that serve as controls or references for monitoring project impacts, sites to investigate whether the distribution of a high value species that may be affected negatively by the project in the area of influence, or sites beyond the area of influence that provide a broader regional context on habitat distribution and condition.

10 Further specific mitigation measures may also be required to address specific impacts on lower value species.

Threatened Species, expert opinion on the level of threat in the region and, if it exists, any official classification of biodiversity its status available nationally or regionally, and whether it has a restricted range. Categories of value can be defined as shown in Box 2.

BOX 3: Example value categories for habitat

Negligible: Habitats not globally, regionally or nationally protected or listed. Habitats which have negligible value for biodiversity.

Low: Habitats not globally, regionally or nationally protected or listed. Habitats which are very common and widespread regionally or habitats generally modified or degraded by anthropogenic activities, or land with low conservation significance in expert opinion.

Medium: Habitats locally rare, small or scattered; habitats which include sets of species uncommon nationally; habitats supporting species which have specific adaptations to that habitat; and habitats with significant richness in biodiversity. Includes any low value habitats used by medium value species as important feeding or breeding areas (or migration routes).

High: Habitats supporting a set of unique or important species; habitats already threatened within the region; habitats with a limited global extent. Also includes habitats used by high value species as important feeding or breeding areas (or migration routes).

BOX 4: Example value categories for species

Negligible: No specific value or importance attached to the species

Low: Species not protected, listed as widespread or abundant and does not meet criteria for high or medium value.

Medium: Species included on the IUCN Red List of Threatened Species as Vulnerable (VU), Near Threatened (NT), or Data Deficient (DD) (IUCN 2011). Not meeting the criteria for high value species.

High: Species included on the IUCN Red List of Threatened Species as Critically Endangered (CR) or Endangered (EN) species (IUCN 2011), Species having a particularly Restricted Range (i.e. plants endemic to a site or found globally at fewer than 10 sites, terrestrial fauna having a distribution range (or global breeding range for bird species) of less than 50,000 km², marine fauna having a distribution range of less than 100,000 km²).

The valuation of biodiversity attributes should be carried out as part of baseline studies, analysis and reporting, and the value of each habitat type and species (typically High and Medium species, rather than an exhaustive list) accurately reported (with its rationale) in the baseline descriptions contained in the ESIA.

Scoping Impacts on Biodiversity

Table 1 summarizes each of the major types of direct and indirect impacts on biodiversity likely to occur within

the Bank's sphere of operations. Potential additive (or synergistic) effects arising from the impact of several individual impacts should also be considered, as should any cumulative impacts arising from other projects if they are apparent at this stage.

This should not be considered an exhaustive list, however, or necessarily the appropriate basis upon which impacts on biodiversity should be assessed in all cases. The borrower or client should identify which impacts might occur as a result of the siting, construction, operation and ultimately decommissioning of the project, in consultation with biodiversity specialists and other experts as necessary and also taking into account the views of communities. For any impact types that are not considered relevant to the project, a clear rationale should be stated. The significance of the remaining impacts that are relevant should then be assessed, following the rationale described in "Determining the significance of impacts on biodiversity" below.

Determining the Significance of Impacts on Biodiversity

Using the methodological framework for determining significance outlined in the "Guidance note on ESIA", significance matrices should be developed for habitats and for species, using appropriate criteria for value (see Boxes 1 and 2 above) and magnitude. The evaluation of impact significance should then be carried out through consideration of the assigned value and predicted magnitude of each direct and indirect impact type (e.g. those listed in Table 1), for each habitat for which they are relevant (see Box 3 for magnitude criteria).

BOX 5: Example criteria for magnitude of impacts on habitats

Negligible: Impact is within the normal range of variation.

Small: Affects a small area of habitat, but without the loss of viability / function of the habitat.

Medium: Affects a sufficient proportion of the habitat that the viability / function of part of the habitat or the entire habitat is reduced, but does not threaten the long-term viability of the habitat or species dependent on it.

Large: Affects the entire habitat or a significant proportion of the habitat, where the viability / function of the entire habitat is reduced and the long-term viability of the habitat and the species dependent on it are threatened.

For species, a more focused approach will be required in many cases, by assessing higher taxonomic groups (e.g. mammals, birds), with if appropriate the most endangered and/or most important species being

assessed individually (e.g. iconic species such as elephant, lion and chimpanzee might fall into this “important” category). Example criteria for magnitude are provided in Box 6.

Table 3: Principal types of direct and indirect impacts on biodiversity

	Impact	Characteristics
DIRECT	Direct habitat loss.	Direct habitat loss as a result of vegetation, soil or substrate clearance for construction and operations, and habitat lost for reasons such as inundation for a water resources project. Includes direct mortality of animals during events such as land clearance, inundation, or outbreaks fire.
	Hydrological impacts.	Reduction or change of flow in rivers and streams leading to changes in freshwater ecology and potential decline in populations of species reliant on freshwater habitats. Reduction or loss of dry season drinking sources for terrestrial species. A potential increase in sediment load and other pollutants adversely affecting sensitive species and freshwater habitats. Erosion and deposition of sediments altering and degrading freshwater habitats resulting in potential decline of aquatic species associated with these habitats (for example, degradation of fish spawning sites).
	Air pollutants and dust.	Air pollutants and dust causing respiratory problems for a range of taxa and resulting in mortality or reduced viability and fecundity if air pollution and dust levels are high. Air pollution potentially reducing respiration and photosynthesis in plants at high levels. Dust causing smothering of plants at high levels preventing photosynthesis and reducing growth. Sensitive habitats affected by acidification from high air pollution levels if pollutants are absorbed into the environment locally.
	Noise, vibration, light spill and other human disturbance.	Noise and vibration adversely affecting animal species that may avoid noisy areas (many animal species are known to be affected by noise). Light causing changes in reproductive and migratory behaviour of animal species if artificial lights are lit during the breeding season (amphibians are known to be impacted by this). Some species, particularly large mammals and some birds, may be directly disturbed by human presence. The presence of project personnel or vehicles causing large mammals and birds to avoid areas with people or excessive noise, bright lights, etc, thus reducing the quality and extent of habitat available for them.
	Mortality and injury from collisions and entrapment in machinery.	Direct mortality or injuries to wildlife from interactions with construction or operational vehicles and equipment.
INDIRECT	Habitat fragmentation and edge effects.	Project components, especially roads and other linear infrastructure, causing habitat fragmentation. Edge effects from: (1) changes to the abiotic, environmental parameters including increased temperature variability, increased light intensity, increased wind disturbance, reduced humidity and reduced soil moisture content; (2) effects on forest communities specialised for the humid, dark interior of a forest (there may be increases in rates of tree mortality and damage); and (3) changes in ecological processes including increased frequency or intensity of fires due to the accumulating dead material (particularly leaf litter) and increased temperatures and aridity. In addition, the changing environment may also facilitate establishment of invasive plants. Potential barrier effect of roads and other infrastructure: restriction of range of species unable to cross barrier or with difficulties in crossing barrier. Potential deleterious genetic effects resulting from increased isolation. An increase in stochastic effects on populations from reduction in connectivity and effective habitat area.
	Induced access and in-migration.	Increased human access to areas previously subject to less (or no) disturbance will result in habitat loss from conversion of natural areas to cultivated land and other consequences including habitat degradation and fragmentation, increased erosion and sedimentation, and water pollution. Induced access will also facilitate commercial bushmeat hunting in little disturbed areas, so reducing areas available for traditional subsistence hunting and gathering of produce. In-migration by project staff and families, job-seekers and service providers increasing pressure on local resources such as fuel (i.e. wood or charcoal) and food (e.g. bushmeat) for direct consumption or for commercialisation. Increased monetary supply from staff salaries, and also the pressures resulting from in-migration, causing local inflation and contributing to increased commercialisation of local resources.
	Hunting, bushmeat and wildlife trade.	Improved access to previously remote areas enabling bushmeat hunting on a larger and more commercial scale. Increased money circulating in the local and regional economy, and potentially better access to markets, stimulating demand and increase pressure on wildlife species hunted for bushmeat, causing population decline in those species. Additionally, re-directing bushmeat trade from local markets to the more lucrative regional/national market and potential for development of trade nationally and internationally in live animals and wildlife parts.
	Invasive species and pathogens.	Introduction of invasive alien species that out-compete native species will lead to changes in species composition and degradation of habitat, which will affect species supported by those habitats. Introduced predators may cause declines in native animal species. Closer proximity / more interactions between humans and animals (particularly primates and other mammals, also birds and others) increasing the likelihood of pathogen transmission to wildlife populations. Risk of introduction of animal and plant diseases/pathogens.

BOX 6: Example criteria for magnitude of impacts on species

Negligible: Impact is within the normal range of variation.

Small: Affects a small proportion of a population, but does not substantially affect other species dependent on it, or the population of the species itself.

Medium: Affects a sufficient proportion of a species' population that it may bring about a substantial change in abundance and / or a reduction in the distribution over one or more generations, but does not threaten the long-term viability of that population or any population dependent on it. The size and cumulative effect is also important such that a medium magnitude impact multiplied over a wide area would be regarded as a large magnitude impact.

Large: Affects an entire population or species in sufficient scale to cause a substantial decline in abundance and / or change in distribution beyond which natural recruitment (reproduction, immigration from unaffected areas) may not return that population or species, or any population or species dependent upon it, to its former level with several generations, or when there is no possibility of recovery.

The assessment may, if appropriate and agreed by the Bank, justify a focus principally on high value habitats and species, with lower value habitats and species considered in less detail. Additionally, and if appropriate, the assessment of impacts on plant species may be included within the discussion of the habitats with which they are associated. For projects of greater spatial extent such as linear infrastructure, variations in the significance of an impact over different parts of the biodiversity study area should be identified where there is information to indicate that such differences exist.

After evaluating the options for mitigation and selecting the most appropriate, the residual¹¹ impacts should be assessed, based on the assumption that the mitigation has been implemented as per the commitments made by the project and set out in the Environmental and Social Management Plan (ESMP: see "Guidance Note on ESMPs") and the suite of topic-specific management plans which should be developed to turn the commitments into series of implementable actions. Where appropriate, the management plans should also outline additional conservation actions¹². The direct impact of loss of habitat resulting from land acquisition should be quantified wherever possible; other residual impacts will in the majority of cases be described qualitatively, so that ongoing monitoring can document and analyze the effectiveness of mitigation, according to an agreed reporting schedule, and provide information to modify or correct mitigation measures as necessary. It is very important that the residual impacts are assessed with as much precision as possible, since where critical habitat (and also natural habitat, in some cases) is unavoidably lost or significantly affected by the project this information will be used in developing offset measures (see "Offsets" below).

Offsets

The requirements that the Bank places on borrowers or clients to minimize and try to avoid impacts on natural and critical habitats are set out in OS 3. However, projects may be permitted within natural or critical habitats, with implementation of appropriate biodiversity offsets, if the borrower or client can demonstrate that:

- All other elements of the mitigation hierarchy have been implemented to the extent feasible before an offset program was developed.
- The project-related activities will not have adverse effects on the criteria for which the critical habitat was designated.
- The borrower or client can demonstrate that the project will not have negative effects on Critically Endangered or Endangered species.
- A biodiversity monitoring program has been established, with results feeding into adaptive management of biodiversity impacts, and into the offsets program.

Under circumstances where development of biodiversity offsets is permitted by the Bank, this should be done in accordance with the principles of the Business and Biodiversity Offsets Program (BBOP)¹³ and with reference to offset design guidance which should be used by borrowers or clients to inform the design of biodiversity offsets (which is available from sources such as BBOP). The steps within an offset program will usually include:

- Residual impact assessment.

¹¹ Impacts remaining after mitigation has been applied.

¹² Additional conservation actions are activities that will be undertaken by the project, that have the aim of benefitting biodiversity but which are not direct mitigation for project impacts. They may include activities implemented in support of offsetting.

- Evaluation of potential offset sites.
- Engagement with government.
- Scoping of candidate offset sites and interventions.
- Engagement of partners, donors and implementers.
- Offset program development.
- The offset program implementation phase, which will take place over an extended period, perhaps many years.

The overarching objective of offsetting is to achieve “not net loss but net gain” of biodiversity within the project’s area of influence, over timescales appropriate and relevant to the habitats and species for which the offset is being implemented, such that the gains generated by offsets will be greater than the residual losses from project impacts.

In cases where the primary objective of the project is not biodiversity conservation, the borrower or client should develop a Biodiversity Action Plan (BAP) detailing the project’s offsetting principles and the actions, timescales, responsibilities and resources required. Additional conservation actions should also be included in the BAP. Borrowers or clients should always take a project-wide approach to offset planning and implementation, taking into account the type and magnitude of impacts on biodiversity for the whole project with the explicit objective of “not net loss but net gain” of biodiversity.

Biodiversity offset plans should be developed in alignment with the existing plans of the government and other relevant agencies such as national and international conservation NGOs, and should be designed to support the national biodiversity strategy. The project should also work with local communities in the project area of influence to develop biodiversity offset projects that promote sustainable use of natural resources, making full use of local and indigenous knowledge in land management and establishing appropriate collaborative arrangements with community-based organizations as well as with government institutions. The establishment of partnerships with institutions and communities will contribute to ensuring the long-term sustainability of offsets (which be designed to continue after the project has ceased to operate), since even if the client or borrower has sufficient control over the land to influence conservation decisions, sustainable land management will in most cases

be required after the project has ceased to operate. At the local level, governance structures should be designed according to the specific context of each offset site, and long-term sustainable funding arrangements should be developed that: (i) are not reliant on the project’s annual operational budget; and (ii) are sufficient to ensure offset conservation objectives are met in the long term.

Ecosystem services assessment

Ecosystem services are organized into four types: provisioning services, regulating services, cultural services and supporting services, and OS 3 requires that they are assessed, and the mitigation hierarchy applied to mitigate impacts on priority services (see below). This assessment should be done as an integral part of the ESIA, and ecosystem services are important for ESIA for several reasons, as they:

- Facilitate a systematic integration of environmental and socio-economic issues within the impact assessment.
- Consider impacts at a range of spatial and temporal scales.
- Allow explicit analysis of a number of regulating services and their connection to social impacts that are otherwise difficult to identify and assess (e.g. shoreline protection, pest control and pollination services, and erosion control).
- Provide a framework for consideration of project dependencies on ecosystem services which may affect the project’s efficiency and/or viability.

The requirement to assess ecosystem services is specified in OS 3, but ecosystem services are cross-cutting throughout all five Operational Safeguards. OS 3 requires that mitigation should focus on “priority ecosystem services” (see description of prioritization below), which should cover both project impacts and dependencies, taking into account the requirements for resource efficiency in OS 4: Operational Safeguard on Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency. Critical considerations in meeting the requirement to assess ecosystem services are: that affected communities should participate (via consultation and survey) in the determination of priority ecosystem services; and that achieving a robust assessment needs an extremely clear, transparent, stepwise approach.

13 See <http://bbop.forest-trends.org/>

Approach to Ecosystem Services Assessment

Ecosystems services identification (screening): what ecosystem services are potentially present in the project area of influence?

This exercise is almost always desk-based, and will be used to plan fieldwork as part of baseline data collection, and for stakeholder engagement planning. It will identify (often provisionally at this stage): (a) landscape units/land use types in the study area; and (b) the ecosystem services likely to be provided by each habitat in the project area of influence. The results of ecosystem service identification can be clearly and systematically presented in tabular format that should list each ecosystem service potentially present and identify whether: (a) it is known to be present; (b) its presence cannot at this stage be

determined (and so it should be screened in for further data collection and consideration during the next stage (scoping); or (c) it is not likely to be present. An example of an ecosystem services screening table is shown in Table 2 below.

Ecosystem services scoping: which of the ecosystem services present are likely to be potentially impacts or depended on by the project?

This step builds on screening by incorporating further field data that have been collected to describe specific examples of ecosystem services, and determine whether communities and/or the project benefits from or is dependent on the service. For services where a dependency is identified, it is “scoped in” to the assessment. Again, the results can be systematically and clearly presented in a table: see Table 3).

Table 4: Example of ecosystem services screening table (provisioning services)

Ecosystem Service	Description, Examples	Natural Landscape Component			
		Forest	River	Grass-land	etc.
Provisioning Services					
Food: fish and shellfish (wild-caught and/or aquaculture)	Fish caught for subsistence or commercial sale; Fish, shellfish, and/or plants that are bred and reared in ponds, enclosures, and other forms of fresh- or salt-water confinement for harvesting.		√		
Food: wild plants, nuts, mushrooms, fruit,	Fruit, nuts, wild plants, etc collected in natural areas for consumption or sale	√		√	
Food: wild meat	Animals hunted for primarily for food (recreational hunting covered under cultural services)	√			
Food: cultivated crops	Annual and permanent crops grown for subsistence use and commercial sale	?			
Livestock farming	Sedentary and nomadic livestock farming			√	
Biomass fuel	Wood, dung and plant matter collected for charcoal, fuel	√		?	
Timber and wood products	Wood collected for local use or for sale as timber, wood pulp, paper	√			
Non- wood fibres and resins	For example, cane, palm, straw, cotton, hemp, twine and rope, natural rubber			√	
Freshwater	Freshwater for bathing, drinking, irrigation, laundry, household and industrial use		√		
Biochemicals, natural medicines, pharmaceuticals	Natural medicines, biocides, food additives, pharmaceuticals and other biological material for commercial or domestic use.	?			
Ornamental resources	For example, pelts, carved or decorative animal products, live animal trade				
Genetic resources	Genes and genetic information used for animal breeding, plant improvement, and biotechnology				

Table 5: Example of ecosystem services scoping table (provisioning services)

Service	Description and Examples	Potential Beneficiaries (incl. Project if appropriate)	Sources of Impact	Scoped in or Scoped out?	Reasoning
Provisioning Services					
Livestock farming	Many households in villages along the river own a few cows for subsistence use and as a source of supplemental income through sale of dairy products. Livestock drink water from the river and commonly graze in the seasonally flooded areas along the river bank.	Local communities	Livestock farming could be impacted by changes in water flow (impacting grazing land) or water quality as a result of dredging activities or non-routine events.	Scoped in	Local beneficiaries. Importance TBC Potentially impacted by the Project.
Biofuel (firewood and charcoal)	Local communities use fuel wood and charcoal for domestic and economic purposes. Forests along much of the rail route are fragmented and / or degraded.	Local communities	Fuel wood collection could be impacted by vegetation clearance, restriction of access, and in-migration (increased demand).	Scoped in	Local beneficiaries. Potentially impacted by the Project.
Natural drainage and flood control	Natural water drainage regimes help to maintain flow rates and minimize the number of damaging flooding events during peak flows. Villages, crops and rail infrastructure could be impacted by flood events.	Local communities Downstream villages? Project	Vegetation clearance could destabilize banks; river crossings by infrastructure (e.g. roads, railway) could impact river flow.	Scoped in	Project dependence Local beneficiaries Potential impacts

Ecosystems services prioritization: what is the importance and replaceability of potentially affected services for beneficiaries?

Prioritization aims to identify those services for which project impacts would be most likely to result in adverse impacts on communities or project efficiency. It uses baseline data and findings of stakeholder engagement to prioritize services in terms of their importance and replaceability (see below).

- *The importance of ecosystem services to beneficiaries, assessed against the following criteria and assigned a rating from low – essential:*
 - Intensity of use (e.g. daily, weekly or seasonal);
 - Scope of use (e.g. household versus village level, subsistence and/or commercial use);
 - Degree of dependence (e.g. proportion of protein

intake from wild-caught fish, contribution of fishing to employment in community); and

- Importance expressed by beneficiaries (including cultural importance).

Stakeholder values should take precedence over other criteria where the rating is not clear, and if the ecosystem service is of differing importance to two or several stakeholder groups, separate ratings should be assigned for each group so that the impacts on these groups can be assessed individually.

- *The replaceability of an ecosystem service, assessed according to the following criteria and assigned a rating from low – high:*
 - Existence of spatial alternatives, including both natural alternatives (e.g. a different type of wild food) and man-made substitutes (e.g. availability

of man-made drugs as an alternative to medicinal plants);

- The accessibility, cost and sustainability of potential alternatives (taking into consideration other existing users, and the existing status and threats to the resource(s) providing natural alternatives to the service); and
- Cultural preferences for, and acceptability of, the alternatives.

By using these criteria in a version of the significance matrix described in OS 1, and developed for biodiversity assessment in “Determining the significance of impacts on biodiversity” above, each service can be assigned a low, medium, high or critical priority rating, with priority ecosystem services usually being deemed those services rated high or critical. An additional consideration is that in identifying priority ecosystem services, local users should be prioritized.

The detailed rationale for the determination of priority ecosystem services should be clearly set out in the ecosystem services assessment.

Impact assessment and mitigation: what is the significance of potential impacts on priority services? What mitigation and management measures are required to maintain the value and functionality of these services?

In most cases, the results of the ecosystem services assessment will contribute to development and optimization of mitigation measures that have already been identified to address impacts under other topic headings (e.g. water resources, biodiversity, soils, etc.). Mitigation measures specifically and solely targeted at ecosystem services will be rare. In either case, the measures should be developed within the ESMP.

Guidance has been developed by institutions such as the World Resources Institute¹⁴, but borrowers and clients should be aware that methods in this relatively new topic area of ESIA are continuing to develop. Ongoing challenges to effective ecosystem services assessment within ESIA include: making good use of a spatial approach (i.e. GIS and remote sensing) to identify the location and extent of ecosystem services and beneficiaries; early and full integration of ecosystem services into stakeholder consultation; mainstreaming ecosystem services into ESIA chapters (i.e. not a stand-alone ecosystem services chapter); and addressing trade-offs with biodiversity (e.g. bushmeat

and the wildlife trade, and other unsustainable uses of ecosystem services).

OS requirements on GMOS

The Bank's OS 3 states that “GMOs shall only be intentionally released into the environment or introduced if national regulations allow this. Under such circumstances, an appropriate risk-assessment shall be carried out, including an analysis of the GMOs' competitive advantage over native species, and the potential for introducing ‘foreign’ genes into the gene pool by cross-contamination or unplanned genetic transfer.” In cases where there is any possibility that the borrower or client's project has the potential to introduce GMOs, risk assessment methods should be used (see below for description).

Guidance on risk assessment

The following is based upon the guidance associated with the Cartagena Protocol on Biosafety (under the Convention on Biological Diversity) covering risk assessment undertaken to identify and evaluate the potential adverse effects of living modified organisms (LMOs)¹⁵ on the conservation and sustainable use of biological diversity in the likely potential receiving environment, also taking into account risks to human health.

General Principles

Risk assessment should be carried out in a scientifically sound and transparent manner, and can take into account expert advice of, and guidelines developed by, relevant international organizations.

Lack of scientific knowledge or scientific consensus should not necessarily be interpreted as indicating a particular level of risk, an absence of risk, or an acceptable risk.

Risks associated with LMOs or products thereof, namely, processed materials that are of LMO origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology, should be considered in the context of the risks posed by the non-modified recipients or parental organisms in the likely potential receiving environment.

¹⁴ www.wri.org/publication/ecosystem-services-review-for-impact-assessment

¹⁵ The term LMO is used below in line with the Cartagena Protocol material. LMOs resulting from modern biotechnology are broadly equivalent to GMOs. The difference between an LMO and a GMO is that a LMO means any biological entity capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids and typically refers to agricultural crops. GMOs include both LMOs and organisms that are not capable of growing, i.e. are dead.

Risk assessment should be carried out on a case-by-case basis. The required information may vary in nature and level of detail from case to case, depending on the living modified organism concerned, its intended use and the likely potential receiving environment.

Methodology

The process of risk assessment may on the one hand give rise to a need for further information about specific subjects, which may be identified and requested during the assessment process, while on the other hand information on other subjects may not be relevant in some instances.

To fulfil its objective, risk assessment entails, as appropriate, the following steps:

- a. An identification of any novel genotypic and phenotypic characteristics associated with the LMO that may have adverse effects on biological diversity in the likely potential receiving environment, taking also into account risks to human health.
- b. An evaluation of the likelihood of these adverse effects being realized, taking into account the level and kind of exposure of the likely potential receiving environment to the living modified organism.
- c. An evaluation of the consequences should these adverse effects be realized.
- d. An estimation of the overall risk posed by the LMO based on the evaluation of the likelihood and consequences of the identified adverse effects being realized.
- e. A recommendation as to whether or not the risks are acceptable or manageable, including, where necessary, identification of strategies to manage these risks.
- f. Where there is uncertainty regarding the level of risk, it may be addressed by requesting further information on the specific issues of concern or by implementing appropriate risk management strategies and/or monitoring the living modified organism in the receiving environment.

Points to Consider

Depending on the case, risk assessment should take into account the relevant technical and scientific details regarding the characteristics of the following subjects:

- a. **Recipient organism or parental organisms.** The biological characteristics of the recipient organism or parental organisms, including information on taxonomic status, common name, origin, centres of origin and centres of genetic diversity, if known, and a description of the habitat where the organisms may persist or proliferate.
- b. **Donor organism or organisms.** Taxonomic status and common name, source, and the relevant biological characteristics of the donor organisms.
- c. **Vector.** Characteristics of the vector, including its identity, if any, and its source or origin, and its host range.
- d. **Insert or inserts and/or characteristics of modification.** Genetic characteristics of the inserted nucleic acid and the function it specifies, and/or characteristics of the modification introduced.
- e. **LMO.** Identity of the LMO, and the differences between the biological characteristics of the living modified organism and those of the recipient organism or parental organisms.
- f. **Detection and identification of the LMO.** Suggested detection and identification methods and their specificity, sensitivity and reliability.
- g. **Information relating to the intended use.** Information relating to the intended use of the LMO, including new or changed use compared to the recipient organism or parental organisms.
- h. **Receiving environment.** Information on the location, geographical, climatic and ecological characteristics, including relevant information on biological diversity and centres of origin of the likely potential receiving environment.

POLLUTION PREVENTION AND CONTROL AND RESOURCE EFFICIENCY

OS requirements on pollution prevention and control, greenhouse gas monitoring and reporting, and resource efficiency

OS 4 sets out the main requirements for pollution prevention and control and resource efficiency. Specific requirements include:

- The borrower or client shall apply pollution prevention and control measures consistent with national legislation and standards, applicable international conventions, and internationally recognized standards and good practice – particularly the World Bank Group Environmental, Health and Safety (EHS) Guidelines.
- Borrowers or clients shall evaluate and, if appropriate, implement financially feasible and cost-effective measures for improving efficiency in the project's consumption of resources such as energy, water, raw materials, and other resources.

Pollution prevention and control

Sources of pollution include hazardous or non-hazardous chemicals in the solid, liquid or gaseous phases, and other forms, such as pests, pathogens, thermal discharge to water, nuisance odors, noise, vibration, radiation, electromagnetic energy and the creation of potential visual impacts including light.

The borrower or client's responsibility is to prevent the discharge of pollutants into the air, surface and groundwater, land and soil. If total prevention is not feasible, the borrower or client shall take specific actions to reduce or minimize the effluents or volume of discharges. This applies to the release of pollutants during planned activities as well as unplanned events or emergencies that may result in local, regional, and transboundary impacts.

The borrower shall evaluate and if appropriate implement pollution prevention options having considered their technical and financial feasibility and cost-effectiveness. Technical feasibility is determined on the basis of whether the proposed measures and actions can be implemented with commercially viable skills, equipment and materials, taking into consideration prevailing local factors such as climate, geography, demography, infrastructure, security, governance, capacity and operational reliability. Financial feasibility is based on the ability to apply sufficient financial resources to install the measures and maintain them in operation in the long term. Cost-effectiveness is determined according to the capital and operational cost and also financial benefits of the measure considered over the life of the measure.

Considerations should include background ambient conditions (that may occur due to natural and/or anthropogenic causes not related to the project), the presence of local communities, environmentally sensitive receptors (such as potable water supplies or protected areas), the expected project demand for water, and the availability of waste disposal facilities.

In line with MDB best practice, the Bank requires that the borrower or client shall refer to the World Bank Group EHS Guidelines. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable at reasonable cost by commercially available technology. The discharged effluent, air emissions, and other numerical guidelines and performance indicators as well as other prevention and control approaches included in the EHS Guidelines are considered to be default values applicable to new projects, though the application of alternative performance levels and measures may be considered.

The General EHS Guidelines include guidance on a comprehensive range of environmental, occupational health and safety, community health and safety and construction and decommissioning topics. They should be used in parallel with the accompanying Industry Sector EHS Guidelines.

General EHS Guidelines: Contents

1. Environmental

- 1.1 Air Emissions and Ambient Air Quality.
- 1.2 Energy Conservation.
- 1.3 Wastewater and Ambient Water Quality.
- 1.4 Water Conservation.
- 1.5 Hazardous Materials Management.
- 1.6 Waste Management.
- 1.7 Noise.
- 1.8 Contaminated Land.

2. Occupational Health and Safety

- 2.1 General Facility Design and Operation.
- 2.2 Communication and Training.
- 2.3 Physical Hazards.
- 2.4 Chemical Hazards.
- 2.5 Biological Hazards.
- 2.6 Radiological Hazards.

- 2.7 Personal Protective Equipment (PPE).
- 2.8 Special Hazard Environments.
- 2.9 Monitoring.

3. Community Health and Safety

- 3.1 Water Quality and Availability.
- 3.2 Structural Safety of Project Infrastructure.
- 3.3 Life and Fire Safety (L&FS).
- 3.4 Traffic Safety.
- 3.5 Transport of Hazardous Materials.
- 3.6 Disease Prevention.
- 3.7 Emergency Preparedness and Response.

4. Construction and Decommissioning

- 4.1 Environment.
- 4.2 Occupational Health & Safety.
- 4.3 Community Health & Safety.

GHG emissions monitoring and reporting

The major International Financial Institutions (IFIs) are developing a harmonized approach to project-level greenhouse gas (GHG) accounting to be applied during project preparation – to achieve consistency and comparability across the operations of the IFIs.

The methodology proposed is as follows:

- Use of established methodologies for ex-ante GHG accounting including the greenhouse gas emission calculation approaches as per, inter alia, the GHG Protocol, the Clean Development Mechanism methodology, Verified Carbon Standard, Gold Standard and the EU Emissions Trading Scheme, ISO 14064 (Part 1 and 2), or other international standards.
- Definitions, assumptions and methodologies shall be recorded and made available to decision makers and to external stakeholders as appropriate.
- The results of the GHG accounting shall be expressed in tonnes of CO₂-equivalent, using the global warming potential of greenhouse gases as defined by the UNFCCC.
- During project appraisal, GHG emissions of a project will be accounted for as follows:
- Estimate the gross (or absolute) GHG emissions that

a project is expected to produce on an annual basis for a representative year once it is complete and at normal operating capacity. The project boundary for GHG accounting should include all activities, facilities or infrastructure being financed.

- Gross emissions from construction may be included in the assessment of annual emissions using reasonable assumptions about the project lifetime.
- GHG accounting will include Scope 1 and Scope 2 emissions (as defined in the GHG Accounting Protocol). The IFI may choose to include Scope 3 emissions attributable to a project, but this should be clearly stated in relevant policies, procedures, and results.
- Gross emissions are to be estimated for existing and greenfield projects.

In order to capture the development and mitigation contribution of projects, **net (or “relative”) GHG emissions** against a **baseline** will be assessed as follows:

- Estimate the net GHG emissions contribution that a project is expected to achieve on an annual basis for a representative year once it is complete and at normal operating capacity.
- Calculate net emissions as compared to a baseline scenario. This reference scenario may be either a “without project” scenario or an “alternative scenario” that reflects the most likely alternative

The GHG Protocol defines direct and indirect emissions as follows:

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity.
- Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.
- The GHG Protocol further categorizes these direct and indirect emissions into three broad scopes:
 - Scope 1: All direct GHG emissions.
 - Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam.
 - Scope 3: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

means of achieving the same project outcomes or level of service.

- As net GHG emissions may be a subcomponent of a larger project, the boundary of the net GHG accounting can be limited to the single activity, facility, or infrastructure resulting in net GHG emissions.
- Any net GHG accounting should include all Scope 1, Scope 2, and, as with gross emissions, Scope 3 where applicable. Leakage in Scope 3 emissions should be included in sectors where this is identified as an issue.

energy and water efficiency measures are key examples, can be highly cost-effective and often have a higher internal rate of return than the larger project to which they are applied.

The client should keep up to date on resource efficiency techniques applicable to its project sector and apply them to the design of the project when technically and financially feasible and cost-effective. Additional guidance is provided in the General and Industry Sector EHS Guidelines. In existing facilities it may be appropriate for clients to commission external experts to undertake Resource Efficiency studies. Such studies frequently identify no cost and low cost savings that exceed the cost of the study, as well as other highly cost-effective measures.

Resource efficiency

The term “Resource Efficiency” refers to the concept of integrating pollution reduction into the design of a product and associated production processes, or adopting an alternative production process. This involves continuous application of an integrated preventive environmental strategy to products, processes, and services in order to increase overall efficiency and reduce risks to humans and the environment by conserving raw materials, the use of water and energy, and reducing or eliminating the use of toxic and hazardous raw materials, and is considered to be good international industry practice. Well designed and implemented resource efficient innovations, of which

Resource conservation, especially water and energy efficiency, are best achieved by including the most appropriate technology and processes in project design. The decision to include such measures will be partly based on the costs and returns of different options. Resource conservation can also be indirectly achieved by a project by utilizing renewable energy such as hydro, wind, solar, certain types of geothermal, and biomass. Opportunities for demand-side energy savings with financial benefits are commonly found in all industry sectors. Where benchmarking data is available, it is recommended that the borrower/client should make a comparison with other industry practices to establish the relative level of project energy or water efficiency.

APPLYING INTERNATIONAL LABOR STANDARDS

International labor standards

The Bank's OS 5 refers to a body of international labor standards derived principally from a set of International Labor Organisation (ILO) and UN Conventions. The OS focuses on requirements stemming from these international standards relating to:

- Human resource policies and procedures.
- Working conditions and terms of employment.
- Worker's organisations.
- Non-discrimination and equal opportunity.
- Retrenchment.
- Grievance and redress mechanisms.
- Child labor.
- Forced labor.
- Third party workers.
- Supply chain workers.

At the heart of these international standards is the 1998 ILO Declaration on Fundamental Principles and Rights at Work. This Declaration covers four fundamental principles and rights at work:

- Freedom of Association and the effective recognition to collective bargaining.
- Elimination of all forms of forced or compulsory labor.
- Effective abolition of child labor.
- Elimination of discrimination in respect of employment and occupation.
- Supporting this Declaration are a number of ILO and UN Conventions, including:

- ILO Convention 87 on Freedom of Association and Protection of the Right to Organize.
- ILO Convention 98 on the Right to Organize and Collective Bargaining.
- ILO Convention 29 on Forced Labor.
- ILO Convention 105 on the Abolition of Forced Labor.
- ILO Convention 138 on Minimum Age (of Employment).
- ILO Convention 182 on the Worst Forms of Child Labor.
- ILO Convention 100 on Equal Remuneration.
- ILO Convention 111 on Discrimination (Employment and Occupation).
- UN Convention on the Rights of the Child, Article 32.1.
- UN Convention on the Protection of the Rights of all Migrant Workers and Members of their Families.

Applying international labor standards

The OS requires the borrower or client to apply the international labor standards to a number of specific elements of a Bank-supported operation that involves the employment of a workforce.

The Borrower or Client's Human Resources Policy, Including Avoidance of Child Labor and Forced Labor

It is clear that management systems are the key to improving labor standards performance in a borrower or client organization and, at the most basic level management systems consist of policies and procedures. Therefore, the client or borrower shall adopt a human resources policy appropriate to its size and workforce that

sets out its approach to managing workers consistent with the requirements of this OS. The human resources policy should be clear about avoidance of child labor, referring to national legislation for specific regulations if appropriate, or forced labor.

This policy should be clear and understandable to workers and be explained or made accessible to each worker upon taking employment. The borrower or client shall provide all employees with documents that contain information on their employment terms, conditions and rights, including those set out in national employment law. It is recognized that employment terms and conditions will vary depending on whether employees are permanent or short-term and other factors. These documents should, as appropriate, include information on (but not limited to):

- working hours.
- wages and benefits.
- rest periods.
- overtime arrangements.
- leave entitlement for illness and maternity/paternity.
- grievance mechanisms.

Company human resources policy can be monitored through a review of all policies and procedures and by a review of management-worker committee meeting minutes or communications (memos, letters, etc.) to workers. In addition, the status of policy can be determined through interviews with management and workers and interviews with external stakeholders.

If shortcomings are evident, improvements can be made through organizing the responsibility for implementing and monitoring all policies and procedures centrally, the identification of responsible persons and annual review of all policies and procedures. In addition, the policies and procedures should be prominently displayed in all local languages.

Workers' Terms of Employment and Working Conditions

It is essential for creating a productive working environment to foster a shared, clear understanding between the borrower or client and its workers. All workers should have a right to know their contract terms, including how their pay is calculated and what

benefits they will earn. They have a right to understand the company's rules about working hours and overtime.

Therefore the borrower or client should document and communicate to all employees and workers directly contracted by the client their working conditions and terms of employment, including their entitlement to wages and any benefits, in a language the workers can understand.

Reasonable terms of employment can be assessed by reference to (i) conditions established for work of the same character in the trade or industry concerned in the area/region where the work is carried out; (ii) collective agreement or other recognized negotiation between other organizations of employers and workers' representatives in the trade or industry concerned; (iii) arbitration award; or (iv) conditions established by national law. Reviewing contracts and payroll details as well as interviews with workers can establish compliance.

The OS also states that where the client or other third parties directly or indirectly provide residential or temporary accommodation to workers, facilities shall provide all basic services, including water and sanitation, in certain cases, medical care should also be provided. The services shall be provided in a manner consistent with the principles of non-discrimination and equal opportunity.

"Basic services" may include: security arrangements, appropriate work temperature, safe food, drinking water, access to safe exit in emergency conditions, segregated toilets, washing facilities and sleeping areas for women and men, and access to means of communication with areas outside the project boundary.

Permitting Workers to Organize

The OS requires that the borrower or client shall allow workers to form, join, and participate in workers' organizations, such as trade unions or alternative organizations of their own choosing, to express their joint requests and grievances and protect their rights regarding working conditions and terms of employment. The borrower or client shall not seek to exert influence or try to control these workers' organizations.

In addition, the borrower or client shall allow workers to freely elect their own representatives and to engage in collective bargaining. Within the employment relationship, the borrower or client shall engage with workers' representatives and workers' organizations, and provide them with the information needed for meaningful negotiation in a timely manner. The borrower or client shall not discriminate

or retaliate against workers who participate, or seek to participate, in such organizations and engage in collective bargaining.

The borrower or client should at a minimum comply with local legislation that recognizes workers' rights to form and to join workers' organizations. If national law restricts the right to organize, the client should enable the means for workers to bargain collectively and organize. If national law restricts workers' organizations, the company should establish an alternative way for workers to file grievances.

In cases where clients do not have a clear policy allowing collective bargaining or if workers' organizations are not recognized in good faith, the client should be required to provide clear communication to workers on their rights to participate in workers organizations and collective bargaining. The client should also hold regular meetings with workers' representatives and offer training in worker-management communication.

Non-discrimination and Equal Opportunity

The OS requires the borrower or client to not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements, including race, gender, nationality, ethnic, social and indigenous origin, religion or belief, disability, age, or sexual orientation. The borrower or client shall base the employment relationship on the principle of equal opportunity and fair treatment, and shall not exclude or discriminate with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and disciplinary practices. The principles of non-discrimination apply to migrant workers.

The borrower or client shall also take special measures to address harassment, intimidation, and/or exploitation, especially in relation to women. The client shall also prevent social exclusion or employment inequalities to women and workers with family responsibilities and, to the extent possible, allow employment not to conflict with family responsibilities.

When national laws are silent on non-discrimination in employment, the borrower or client shall meet the requirements of this OS. In circumstances where national law is inconsistent with this OS, the borrower or client should endeavour to carry out its operations consistent with this OS, without contravening applicable laws.

The client's compliance with the principles of non-discrimination can be monitored through a focus on recruitment processes, practices and outcomes as well as interviews with workers and their representatives.

Implementing Retrenchment

The OS requires the borrower or client to implement any necessary workforce retrenchment in a manner that mitigates the adverse impacts on workers and according to principles of non-discrimination. The borrower or client shall comply with national laws on severance payments and benefits.

Retrenchment means the elimination of a number of work positions or the dismissal or layoff of a number of workers by an employer, generally by reason of plant closing or for cost savings. Retrenchment does not cover isolated cases of termination of employment for cause or voluntary departure. Retrenchment is often a consequence of adverse economic circumstances or as a result of a reorganization or restructuring.

The borrower or client can take steps to engage workers early in discussions about workforce reduction and can explore alternatives. It can provide meaningful communication to workers about timing and terms. It can engage with community organizations to discuss minimizing adverse impacts on the community.

Enforcing Labor Standards for Third Party Employers, such as Sub-Contractors or Suppliers

The OS requires the borrower or client to ensure that contractors, sub-contractors and key suppliers are reputable and legitimate enterprises that have appropriate policies and management capacities to operate in a manner consistent with the specific requirements of the OS and with local laws.

The borrower or client therefore needs to establish the compliance by such third party employers as one of its labor standard policies and ensure that it has the management capacity to build these requirements into contracts and to monitor and enforce their compliance.

In cases where third parties are small and medium enterprises or have limited resources and capacity, the client will assess the type of support it can provide to improve such third party performance, which may include the use or extension of the client's systems or services to supplement those of the third party. If third party performance cannot be improved over a reasonable

timeframe, the client will need to evaluate alternative sources to these services.

The borrower or client should develop and implement procedures to manage and monitor performance of third parties. These procedures should be integrated in the day-to-day operations of the company and requirements

should be clearly communicated to third parties, and if possible to workers engaged by these third parties. Compliance can be monitored through contracts with contractors (or agencies) and their sub-contractors, and with suppliers through employment contracts and payment records of third party employers, and interviews with contracted workers.



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