Safeguards Thematic Review of Decentralized Projects in the Philippines

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The Safeguard Dissemination Note Series of the East Asia and the Pacific Region’s Environment & Social Development Sector Department (EASES) seeks to share the results of our safeguard work, both completed or in progress. Through this series, we present “best practices” with regard to safeguards applied in the region’s World Bank projects. In most cases, these notes represent “work in progress” and as such have not been subject to either substantial internal review or editing. Therefore the findings, interpretations, and conclusions expressed in these notes are entirely those of the authors and should not be attributed to the World Bank, members of its Board of Executive Directors, or the countries they represent. Since one of the key objectives of these notes is to stimulate debate, we would encourage readers to contact the authors directly should they have any comments or suggestions on the paper.

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Director
Environment & Social Development Sector Department (EASES)
East Asia and the Pacific Region
The World Bank
ABBREVIATIONS AND ACRONYMS

ARCDP  Agrarian Reform Communities Development Project
CBRMP  Community Based Resource Management Project
CDD    Community-Driven Development
CIP    Communal Irrigation Project
CNC    Certificate of Non-Coverage
CPO    Central Project Office
DAR    Department of Agrarian Reform
DENR   Philippines’ Department of Environment and Natural Resources
EA     Environmental Assessment
EASES  East Asia Environment and Social Development Unit
ECC    Environmental Compliance Certificate
EMP    Environment Management Plan
FMR    Farm-to-Market Road
IPDP   Indigenous People Development Plan
LGU    Local Government Unit
LOGOFIND Local Government Unit Finance and Development Project
NCIP   National Commission on Indigenous Peoples
NRM    Natural Resource Management
RAP    Resettlement Action Plan
SWIP   Small Water Impoundment Project
Acknowledgments

The Thematic Review Team gratefully acknowledges the information provided and the field assistance extended by the following: Director Adelberto Baniqued, PCO staff and the Regional staff of Regions V and VIII of ARCDP; Mr. Vener Garcia and the Regional staff of Regions VII and VIII of CBRMP; Ms. Lanie Magdamo and staff of LOGOFIND; and Mr. Ray Penalba of the Land Bank of the Philippines, Third Rural Finance. The team also acknowledges the active participation, warm reception and assistance of concerned LGUs and stakeholders whom the team met and interacted with during the field visits. Finally, the team would like to thank the Task Team Leaders, Maria Theresa Quinones (ARCDP), Keith Oblitas (CBRMP), Ming Zhang (LOGOFIND), and Ari Chupak (Rural Finance III) for their cooperation and useful and relevant comments to make this report more usable to clients.
The thematic review was undertaken to assess the quality and consistency with which both the Bank’s and the client’s safeguard policies are being applied under field conditions during January to February 2003. The four Philippines decentralized projects selected include: Agrarian Reform Communities Development (ARCDP), Community Based Resource Management (CBRMP), Local Government Unit (LGU) Finance and Development (LOGOFIND), and Rural Finance III. All of these projects are locally implemented and three of them are rural. The sectors covered include water supply and sanitation, solid waste management, irrigation, agriculture, natural resource management, coastal resource management, watershed management, reforestation, fisheries, forestry, rural enterprise, farm-to-market roads, rural infrastructure, and natural resource management (NRM). The methodology applied followed standard desk review practices of project documentation and discussions were held in country at all administrative and stakeholder levels.

Within each project, many good procedures and initiatives for achieving the goals of the Bank’s safeguard policies are being implemented. The ARCDP and the CBRMP include rural infrastructure and natural resources management (NRM) subprojects and have strong similarities. Their design and implementation are consistent with World Bank community-driven development (CDD) projects. The central project offices (CPOs) exercise technical, financial, administrative, and management oversight. Successful promotion of NRM and environmental awareness is evident and is resulting in significant attitude changes at both political and community levels. The findings of this review are:

- Government regulations are generally followed, but the Department of Environment and Natural Resources’s (DENR) threshold criteria exempts most small-scale rural infrastructure and NRM subprojects from environmental assessment (EA) requirements, and hence
these do not completely adhere to the sustainability objectives of the Bank’s safeguard policies;
- Central and regional management and documentation have improved over the past two years;
- Subproject design and implementation include participatory and consultative processes consistent with World Bank safeguard policies;
- Existing screening criteria and technical specifications are not fully applied to subproject selection and design;
- Subproject indicators are not fully mainstreamed; and,
- Participation by Bank environmental and social development specialists in supervision is improving overall performance.

The following recommendations focus on improving project performance and environmental and social sustainability through risk reduction and quality enhancement:

- Develop practical screening and environmental assessment (EA) tools for rural infrastructure, NRM, and livelihoods subprojects;
- Develop simple technical guidelines and specifications based on World Bank experience in similar projects to improve implementation of environmental management plans (EMPs);
- Where feasible, revise operational manuals (OMs) for each project, streamlining them and making them practical;
- Assist the DENR in revising its environmental review and clearance procedures for rural infrastructure, NRM, and livelihoods subprojects;
- Work with project sponsors and management to improve EMP inclusion and costing;
- Improve safeguards evaluation and monitoring;
- Provide regular safeguards training for central, regional, and local staff, local government units, partner agencies, contractors, and beneficiaries; and,
- Ensure consistent participation by environmental and social development specialists in supervision.
INTRODUCTION

This thematic supervision report focuses on four decentralized projects in the World Bank country portfolio for the Philippines. In these projects (listed in Table 1), centralized agencies administer and allocate funds to organizations and institutions that operate at the regional or local level to implement subprojects. The central agencies are supervisors of the use of World Bank funds and are required to adhere to project objectives, loan agreements, and fiduciary, environmental, and social safeguard measures.

The subprojects covered by these four projects include: water supply and sanitation; solid waste management; irrigation; agriculture; natural resource management; coastal resource management; watershed management; reforestation; fisheries; forestry; rural enterprise; farm-to-market roads (FMR); rural infrastructure; and natural resource management (NRM). These subprojects have key characteristics as laid out in Box 1 below. The thematic supervision builds on a desk study of 12 Category A and B projects that was conducted in 2000.1

The East Asia Social and Environment Sector Unit (EASES) has undertaken several initiatives to improve project quality and the Region's safeguard performance by moving from compliance oversight to enhancement of project environmental and social quality. The aim is to reduce environmental risks and to ensure the social inclusiveness of the resettlement and indigenous safeguard policies. The study team comprising three safeguard country specialists (two environmental and one social) and two international environmental experts visited the four projects during January and February 2003.

Numerous national, regional and local government and NGO agencies and organizations are implementing the diverse sectoral range of subprojects reviewed in this report.
Most of the selected thematic supervision projects are rural, decentralized, locally implemented in which municipalities or other local government units, communities, or groups of beneficiaries are responsible for maintenance or operation.

As rural infrastructure projects the ARCDP and the CBRMP have strong similarities in subproject design and implementation; LOGOFIND and Rural Finance III have distinctive components.

The subprojects include a large number of rural infrastructure and NRM activities, including water supply systems, irrigation, farm-to-market roads, and watershed management.

The rural infrastructure, NRM, and livelihoods activities are very similar in their design, construction, and maintenance.

Efforts are being made at the grassroots level to achieve a high degree of awareness concerning NRM and environmental issues among targeted beneficiaries.

These subprojects fall within the growing set of community-driven development (CDD) projects.

### Table 1 Projects Reviewed in the Thematic Supervision

<table>
<thead>
<tr>
<th>Project name</th>
<th>Financing ($US million)</th>
<th>Effective date</th>
<th>Closing date</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian Reform Communities Development (ARCDP I and II)</td>
<td>50 (per project)</td>
<td>April 1997</td>
<td>Dec. 2003</td>
<td>Rural</td>
</tr>
<tr>
<td>Community Based Resource Management (CBRMP)</td>
<td>50</td>
<td>Oct. 1998</td>
<td>June 2004</td>
<td>Rural</td>
</tr>
<tr>
<td>Rural Finance III</td>
<td>150</td>
<td>May 1999</td>
<td>June 2005</td>
<td>Rural</td>
</tr>
</tbody>
</table>
OBJECTIVES AND METHODOLOGY

**Objectives** of the thematic reviews were to:

- Determine the extent to which environmental and social concerns are taken into account in project planning and design using, amongst other means, environmental screening tools;
- Review the extent to which agreed actions defined in environmental assessments (EAs), environmental management plans (EMPs), resettlement action plans (RAPs), and indigenous peoples development plans (IPDPs) are being implemented;
- Evaluate the practical utility of safeguard applications in the field and identify the problems encountered versus the issues listed in EAs and RAPs;
- Review practical experiences with public consultation and disclosure of information;
- Identify examples of good practice and make recommendations for improvement in current practices; and,
- Inform the client and Bank management regarding the status of safeguards implementation and serve as a catalyst for staff to improve subproject design and implementation at all levels.

**Methodology:** The thematic actions taken included:

**Desk review.** Staff appraisal, loan agreements, Aide Mémoire, back-to-office, project memos, and poverty status reports, were reviewed to determine environmental performance. Site engineering plans, EAs and other environmental and social reports, operational manuals, checklists, and guidance, were also reviewed.

**Capacity review.** The supervision team met with CPO staff, environmental and social specialists, to review the subproject preparation, appraisal, and approval process. This central per-
Safeguards Dissemination Note No. 1

Field visits. Selected subprojects were visited to review environmental protection and social implementation measures. Field trips were organized with the project offices so that as many subprojects, especially those that are in relatively close proximity, as possible could be visited. The team made short presentations to appropriate projects and counterpart staff, at the municipal, village, or community level including mayors, vice-mayors, barangay (village) kapitans, purok (household-cluster) leaders, community organizers, project officers, and beneficiaries. Field visits to 39 subprojects were undertaken in four regions (Table 2).

Evaluate practices. Field procedures followed during implementation were reviewed to ensure compliance with Bank safeguard policies.

Outcome focus. Discussions with local counterpart staff focused on the practical aspects of implementing subproject activities and on in-depth examination of the mechanisms for achieving outcomes. Unfortunately, the time available for assessing specific subprojects and gaining a clear picture of the often divergent viewpoints was limited. Furthermore, the team relied on the CPOs to identify and coordinate field visits, and it is probable that “better” subprojects were chosen. In many cases, it was apparent that the selected subprojects had been featured in previous World Bank supervision missions. Regional offices are responsible for maintaining the relevant documents and for acquiring appropriate permits and clearances. Each project has developed a set of forms and checklists that are part of the safeguards review and submission process. These forms were referred to in assessing specific subprojects. Discussions were held with project staff to clarify how the forms were used and to what extent they were used at the local level.

Discussions with team leaders. For rural infrastructure subprojects (ARCDP and CBRMP), a local, regional engineer, and other technical staff were able to clarify procedures and construction decisions and answer specific questions regarding interpretation of environmental, social, and other technical issues. For LOGOFIND, the technical municipal staff (e.g. engineer, chief medical officer, health specialist etc.) were available for consultations during the site visits. An environmental staff member from the government financial intermediary and a regional account officer from the re-lending bank, as well as representatives of the borrower, were present for the Rural Finance III visits.
<table>
<thead>
<tr>
<th>Project, province, and subproject</th>
<th>Type of subproject specific features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Agricultural Reform Communities Development (ARCDP) - 10 subprojects</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Albay –Bicol</strong></td>
<td></td>
</tr>
<tr>
<td>Legazpi –Banquerohan</td>
<td>Community irrigation project, Farm-to-market roads, Community water system, Multipurpose center, Small water impoundment project, Multipurpose center</td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
</tr>
<tr>
<td><strong>Leyte</strong></td>
<td></td>
</tr>
<tr>
<td>Palompon ARC</td>
<td>Farm-to-market road, Liberty–Mabini, phase I and 2, Farm-to-market roads - Liberty–Santiago</td>
</tr>
<tr>
<td>Palo ARC</td>
<td>and San Agustin–Tahaw–Cabarasan</td>
</tr>
<tr>
<td><strong>2. Community Based Resource Management (CBRMP) - 24 subprojects</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cebu</strong></td>
<td></td>
</tr>
<tr>
<td>Balamban–Luca Upland NRM</td>
<td>Upland NRM. Reforestation, agroforestry, parceling survey, FMR</td>
</tr>
<tr>
<td>Sibonga –Baracay</td>
<td>Coastal NRM. Mangrove reforestation, fish sanctuary, coastal patrol, community coastal resource management</td>
</tr>
<tr>
<td><strong>Bohol</strong></td>
<td></td>
</tr>
<tr>
<td>Inabanga–Coastal Resource</td>
<td>Coastal NRM. Mangrove reforestation, fish sanctuary, coastal patrol, community coastal resource management</td>
</tr>
<tr>
<td>Inabanga–Sua Upland NRM</td>
<td>Upland NRM. Reforestation, agroforestry, FMR, water system, livelihood</td>
</tr>
<tr>
<td><strong>Leyte</strong></td>
<td></td>
</tr>
<tr>
<td>Palompon–Coastal Resource</td>
<td>Coastal NRM. Mangrove reforestation, fish sanctuary, coastal patrol, community coastal resource management</td>
</tr>
<tr>
<td>Palompon–Santiago Upland NRM</td>
<td>Upland NRM. Reforestation, agroforestry, livelihood</td>
</tr>
<tr>
<td><strong>3. LGU Finance and Development (LOGOFIND) - 3 subprojects</strong></td>
<td></td>
</tr>
<tr>
<td><strong>La Union</strong></td>
<td></td>
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<tr>
<td>San Fernando Landfill</td>
<td>Sanitary landfill</td>
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<tr>
<td>Poro Lying-in Health Clinic</td>
<td>Health clinic</td>
</tr>
<tr>
<td><strong>Cebu</strong></td>
<td></td>
</tr>
<tr>
<td>Dalaguete and Siquijor Markets*</td>
<td>Public market</td>
</tr>
<tr>
<td><strong>4. Rural Finance III - 2 subprojects</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bohol</strong></td>
<td></td>
</tr>
<tr>
<td>Marcela Farms</td>
<td>7 piggery houses</td>
</tr>
<tr>
<td><strong>Tarlac</strong></td>
<td></td>
</tr>
<tr>
<td>Commercial Mall</td>
<td>Shopping mall with waste treatment process</td>
</tr>
</tbody>
</table>

Note: FMR, farm-to-market road; NRM, natural resource management.
a. Reviewed by the Manila safeguard staff independently in 2002 and included in the results of this thematic supervision.
In these subprojects, the central project offices (CPOs) exercise technical, financial, administrative, and management oversight but delegate operations to regional and local government authorities. Among the CPOs’ responsibilities are provision of leadership and guidance, accountability to donors, coordination with the Department of Finance, and tracking of project progress.

The ARCDP and the CBRMP have strong similarities in their subproject components, which include a large number of rural infrastructure and NRM activities. Successful promotion of awareness of natural resource management and environmental matters is evident, resulting in significant attitude changes at the political and community levels where the projects operate. There is clear evidence that in the past two years these projects have undertaken a number of measures to improve attention to environmental and social issues.

Good procedures are applied within each project to achieve the goals of Bank and Country policies. However, these schemes could be improved by incorporating specific design, construction and operational provisions as discussed below. Institutional, social, and environmental findings of this thematic review are summarized below.

Institutional

Central and regional project management and documentation have improved over the past two years. All projects require the local implementing authority or beneficiary to obtain the necessary permits and clearances, including DENR clearance. In all cases, adequate paper trails and records are maintained at the various administrative levels to substantiate that there is appropriate compliance.
Monitoring and post-construction evaluation in several of the projects are good, and in several others there is a shift toward more acceptable standards. Most schemes show high-quality results, achieve their outcome targets, and are integrated with social and environmental management goals at the community or local government level.

Overall, the projects have developed procedures for reporting on the status of environmental and social issues, as defined by the DENR and the Bank. Monthly reports submitted to the Bank summarize issues of concern and provide indicators of the status of compliance measures according to DENR requirements. Both the ARCDP and the CBRMP are identifying outstanding issues of concern, such as pending land agreements, compensation reviews, and community consultations. Rural Finance III has a monthly reporting and tracking system that is maintained at the regional offices for reference by the loan processing officer.

Subproject design and implementation include participatory and consultative processes that are consistent with World Bank safeguards. The participatory and consultative approach undertaken by LGU proponents and beneficiary associations for the identification, design, and implementation of subprojects is evident in all subprojects visited (see Box 2 for examples).

Existing screening criteria and technical specifications are not fully applied subproject selection and design. Where an EMP is completed, specific provisions are not followed and used in the project cycle because EMPs are not included in the total project cost. The thematic supervision team noted that many of the provisions in the EMPs, as generic guidelines, if used properly, would lead to improved subprojects. These observations also apply to post construction maintenance, which is integral to the sustainability of FMRs, irrigation and water supply works, health centers, public markets, and several aspects of NRM activities.

### Box 2 Examples of Consultation Processes in Projects Supplied

**ARCDP.** The process starts with barangay workshops, using the farm systems development approach. In these workshops, potential subprojects are identified, prioritized, and assessed by the community itself, with guidance from DAR development facilitators and the LGU. A barangay implementation team (BIT), composed of representatives from the barangay council, agrarian reform beneficiaries, and partner-peoples’ organizations, assesses the feasibility of the subprojects. When impact issues are identified, they are incorporated into the barangay and municipal development plans to ensure that community considerations are taken into account.

**CBRMP.** Similar processes were observed in the CBRMP, where a series of consultations was held by the partner LGUs to develop appropriate and acceptable measures for environmental enhancement. This approach provides for multiple stakeholder input for delineation of fish sanctuaries, mangrove reforestation sites, farming zones, and protected slopes. Such processes have created a strong sense of ownership on the part of both the LGU and local communities.

**LOGOFIND.** Project appraisal and screening procedures require that LGUs conduct stakeholder consultations and submit agreements and proof of social acceptability of the proposed subprojects, especially among people affected by the project. These processes are validated in the field by an appraisal team composed of engineers and environmental and social specialists from the LOGOFIND project management office. Both the mini–resettlement action plans (those involving fewer than 100 project-affected persons or 50 families) and the full-scale resettlement action plans (those involving more than 100 persons) are submitted to the Bank for review. Project-affected persons interviewed in two LOGOFIND public market subprojects in Dalaguete and Siquijor confirmed that the process was being carried out. The team identified, however, a need for improved records to facilitate verification and documentation of lessons learned.

Subproject indicators are not fully mainstreamed. All the projects reviewed have varying forms of EA checklists and EMPs. Although auditing ac-
tivities are carried out in all cases, the following short falls were found:

- Lack of auditing capacity;
- No specific mitigations measures in the EMPs for addressing identified environmental issues;
- Lack of capacity for addressing identified issues;
- No independent ex-post EMP assessment; and,
- Auditing target not always achieved.

Only recently have World Bank safeguard specialists been incorporated into the supervision process (see Box 3 for a detailed evaluation of each project).

Participation by Bank safeguard specialists in supervision missions, as well as the addition of new safeguard staff to the country office, is having a positive effect on overall performance. Several projects are now adequately supervised by safeguard specialists, and safeguard provisions are sufficiently documented through back-to-office reports and associated technical memorandums. There are still some situations where the safeguard staff is over committed and has difficulty providing adequate support to visiting missions.

Social

Land Acquisition and Resettlement. Mitigation, compensation, and land acquisition were discussed with households or groups that might be affected, in community- and LGU-led consultations. The consultations were carried out through barangay workshops (the ARCDP and the CBRMP practice), public hearings and dialogues (LOGOFIND), or small-group discussions. In certain instances, concerned community associations initiated visits to individual beneficiaries. Appropriate documentation, such as deeds of donation, quitclaims, voluntary undertakings, and deeds of sale, were executed between the affected parties and the community or LGU. In other cases, special arrangements (for example, shares in the service utilization fees, preferential employ-

<table>
<thead>
<tr>
<th>Box 3 Evaluation of Environment Monitoring Activities Carried Out in Each Project</th>
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<tbody>
<tr>
<td><strong>ARCDP</strong>'s auditing processes have improved over the past two years, and the CPO has designed EA checklists and EMPs. An audit program was recently undertaken by the interagency provincial inspectorate teams (PITs), but environmental issues are not explicitly addressed. Identification of specific shortcomings regarding the mitigation measures as listed in the EMP are not included and there is little evidence that the PITs have the capacity to address these issues. The project management office verifies the PIT results by sending senior evaluation staff into the field with the audit forms to assess each subproject audit.</td>
</tr>
<tr>
<td><strong>CBRMP</strong> bundles its subprojects under an overarching transfer of funds to the LGU. It relies on generic EMPs that it files with the DENR, but no specific EA is conducted. In addition, there is no independent ex-post EMP assessment, with the exception of some participation by World Bank safeguard specialists in standard supervision.</td>
</tr>
<tr>
<td><strong>LOGOFIND</strong> has created within the project management office thematic clusters composed of specialists who assist specific clients with the planning and implementation of the subproject. EAs are prepared by the LGUs, which are responsible for securing the required ECCs. The EMPs are generic and often lack specific mitigation measures. The World Bank safeguard specialists have only recently been incorporated into the supervision process.</td>
</tr>
<tr>
<td><strong>Rural Finance III</strong> has for several years been using a set of measures to promote environmental considerations, with documentation at the project management office and regional offices. Specific checklists identifying environmental and social issues of concern are used for each loan when necessary. Random environmental auditing has been undertaken annually, but the 10 percent target is not always achieved.</td>
</tr>
</tbody>
</table>
ment, resource utilization agreements, and sub-project management arrangements) were made with the affected individuals or groups to compensate for income and improvement losses.

**Indigenous Peoples.** In cases where there were indigenous people (IP) involved, separate consultations were conducted with these groups on the proposed interventions, and agreements documented in the form of minutes of meetings, formal endorsements, or memorandums of agreement. Consultations with IP households and communities were coordinated with the regional offices of the National Commission on Indigenous Peoples (NCIP).

IP land acquisition and resettlement documentation process for some agreements need improvements. In some cases, annotations in titles and updating of tax declarations to reflect donated portions of the affected properties are still awaiting the completion of parcellary surveys by the LGU. Land acquisition and resettlement monitoring reports reflect undocumented arrangements for compensation for loss of income and improvements.

**Environment**

**Rural Roads.** There are inconsistencies in the quality of road construction specifically in regard to drainage works. In some roads (ranging in length from 1–2 kms to 4 kms) traversing steep inclines lacked sufficient drainage works such as side trenches or culverts, while in some other cases culverts design is inadequate to sustain high velocity stream runoff.

The inadequacies of drainage works were due to funding reductions from the costs specified in the original feasibility and design submissions to the ARCDP. EMP costs for soil and slope stabilization, runoff control, and revegetation were not regarded as project costs. These would have to be absorbed by the beneficiaries which they had not anticipated in their maintenance costs.

In other cases roads were of excellent construction along the entire length, with provision at critical locations for drainage, including well-designed culverts with adequate allowance for peak-flow runoff. The drainage works may have been over built on existing drainage channels. In all the

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**Figure 1**

*Sheet erosion and gullyng carrying off road cap and substrate on long slope which will eventually lead to Farm-to-Market road bed collapse and/or sink holes if not maintained properly.*

*Farm to Market Road cut with vegetation to reduce erosion, good drainage and concrete cap—all good practice for road sustainability.*
cases, beneficiaries have no technical understanding of how to incorporate mitigation measures into subprojects. Local LGU engineers have limited awareness of how to cost and use simple materials as mitigation measures.

**Enhancement Measures.** Incorporation of physical structures, such as riprap, ledges, and barriers, to divert and break runoff, using inexpensive local materials. Early planting of native shrubs, local grasses, palm fronds, bamboo fencing, and burlap covers for erosion control. Technical assistance and capacity building for LGU staff and local users.

**Community Water Supply.** The quality of water system structures, including water source protection and pumping stations, was high. At the end of the pipe, water spigots, stanchions, and hand-pumps were found to be constructed with appropriate sanitation provisions. The observed measures included concrete slabs, drainage channels, aggregate to absorb unused water, and riprap to reduce runoff and pooling.

Spring and underground water source protection from contamination requires establishment of minimum standards that prohibit certain activities within 50 to 100 meters (or more depending on the subsurface hydrology) of the water source. The potential source of contamination include latrines, animal breeding sites, and crop production using agrochemicals.

**Enhancement Measures.** Protection against contamination of water sources (see Box 4); concrete block construction for water stand; fenced enclosure of service area; sanitation awareness measures for beneficiaries; and assurance of adequate access by users.

**Irrigation Projects.** The Banquerohan Communal Irrigation Project (CIP), which has a 20-hectare service area, was designed to provide irrigation to 39 members of the local irrigation association through a river diversion system. Since the service area is less than 300 hectares, DENR

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*Figure 2*

Small Water Supply fenced water stand, preventing access by animals, slab and rocks to keep mud from pooling with drainage channel. However, channel not lined with stones to reduce flow and soil runoff to lower households.

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*Box 4  Example from Bohol Province of the Need for Planning and Follow-up in Basic Community Subprojects*

Two water supply facilities in Lawis and Inabanga, Bohol Province, were inspected. A rainwater collector with concrete tank had been built, but the exterior walls remained unfinished, and several plumbing fixtures had not yet been installed. Exposed reinforcing steel bars showed heavy erosion. A level 1 hand-pump was found to supply murky and saline water unsuitable for drinking or for washing clothes. The supervision team was informed that poor water quality was a common problem in the area because of close proximity to the sea and that only 1 out of 4 hand-pumps built by the CBRMP yields potable water.

EA requirements do not apply. Observed impacts include environmental impacts of concern. Use of heavy construction equipment to move boulders, dig deep trenches, and cut back vegetated slopes. No siltation fencing or screening was used during excavation and earth movement to reduce erosion and runoff into the adjacent stream.

The weir diversion consisting of a temporary piled boulders was regarded as highly unstable during peak rainfall and high volume flows. No information was available regarding crop production methods such as manual weed control or the potential increased agrochemical inputs.

The Hacienda, Tabaco City, small water impoundment project (SWIP) in Albay Province was also designed with a service area of 90 hectares for 72 owners (costing US$206,193). This scheme consists of an impoundment structure (of concrete, compacted earth, or a variation depending on the height, width, and volume of the retained water), a spillway, a reservoir, and canal networks. The outflows of the reservoir are located several meters below the upper ledge of the impoundment.

The distribution works included two primary open concrete canals with an elevated plume. The implementing agency, the Bureau of Soils and Water Management (BSWM), was responsible for the hydrological studies, engineering design, and cost estimates. LGU and ARCDP engineers reviewed the design and queried whether the projected water volume and reservoir height were appropriate for this scheme. They were assured that there was ample evidence to support the design and configuration of the outlets and canals.

The original design for primary and secondary canal construction will not be completed because of funding cuts serving less area and fewer people than originally designed. At the time of the field visit, LGU stated that the un-built irrigation structures could be constructed using their additional funds. The extent of land use and land ownership planning was not clear. No management plan was in place for land cover, slope, soil type, and crop type.

The members of the irrigation association seemed pleased with the progress of the project and with the promised outcomes. However, they were not aware of the situation on the ground as described.
above. Although, there was regular support by institutional development staff from the Department of Agrarian Reform (DAR) and the LGU, partnership with BSWM should have been better integrated for realistic and practical design and delivery.

World Bank environmental safeguards require environmental screening and identification of provisions for pesticide use in such schemes (OP 4.09, Pest Management). OP 4.37 (Dam Safety) requires that for all dams 15 meters or higher, an expert safety panel is to review the design and ensure that construction meets safety standards. Because of its height and construction method, this impoundment should be subject to dam expert to ensure (a) validation of the integrity of the design and construction, and (b) periodic safety inspections of the dam after completion. Fortunately, the subproject does not pose any threat to homesteads of a dam failure, since the farmers live outside the service area.

Enhancement Measures. Design of water diversion system with cost-effective distribution and canal systems; sediment control during construction—spoils and backfill remediation; agricultural production plans with agrochemical inputs, crop rotation, integrated pest management (IPM) measures, agricultural extension services; dam safety for impoundments; micro-watershed management and siltation control measures.

Natural Resource and Watershed Management. Putting public lands in the hands of locals for use as community forest plantations, as part of the upland CBRMP activities, is proactive, conservation oriented, and environmentally beneficial. Unfortunately, some of these projects appear to promote planting on already vegetated fragile slopes without a clear, well-defined forest management plan. DENR's promotes mahogany planting without providing sufficient explanation of silviculture practices to local technical and management staff. There was no firm estimate of the length of time required for the trees to reach a girth and height sufficient for marketing. It is not clear in the upland CBRMP subproject activities that planting mahogany seedlings on patchy parcels of public lands is the most judicious action with respect to biodiversity, ecological balance, and wise land use planning. It would be desirable to have a management plan that is based on good practice derived from experience with already harvested mahogany trees grown under similar soil and elevation conditions. There were questions raised regarding economic return on this investment.

As DENR has no protected area management plan for the highlands of Cebu Province. There are hundreds of poor people in this area, and the current status of the government land tenure program remains unclear. If non-participating farmers are excluded from land tenure arrangements, potential resettlement issues may arise triggering the Bank's resettlement policy. There may be reputational risk to the World Bank in supporting agricultural activities in such unzoned protected areas.

Enhancement Measures. Practical resource utilization plan; reforestation with endemic, fast-growing species; dam safety for impoundments; micro-watershed management and siltation control measures.

Figure 4

Health Clinic, Porac, La Union, with septic tank to left front of building. Adjacent area to Health Unit is low lying area vulnerable to flooding and tube wells within 50 meters of septic tank are used for drinking water that may potentially be contaminated.
growing trees and plants; minimal disturbance of natural secondary vegetation on steep and fragile slopes; inclusion of all land users in microwatershed; reconsideration of activities in protected areas, including revision of mixed-use and buffer zone demarcation; guidance on economic rates of return for reforestation with cash crop trees.

**Health Units.** The following issues regarding the handling of health care waste (HCW) at health units were found:

*Waste management.* There was no indication of efforts to separate solid or liquid contaminate waste, such as blood, sharps, body fluids, and tissues, from other waste.

*Sewage disposal.* The septic tanks at the clinic visited are located near the mouth of a river with potential risk of flooding during rainy season. In these circumstances, the septic tanks are subject to hydrostatic pressure that could cause mixing of the groundwater with medical and human waste. At least two hand-pumps were observed within 50 meters of the septic tank, resulting in human health risk concerns regarding drinking water tube wells.

**Enhancement Measures.** Waste management plans, including health care waste separation; HCW guidance for health care workers; safe handling and disposal of contaminate; marking labels for HCW; provision of containers for sharps, needles, and the like; labeling of HCW; appropriate design specifications for septic tanks; potential use of concrete-lined placenta pits.

**Public Markets.** Basic designs include multilevel concrete structures with drainage and sanitation facilities. A review of engineering drawings and field validation of two completed public markets led to the following observations:

- **Drainage and sewerage systems.** The drainage system is designed to receive liquid wastes (containing animal blood, entrails, and body parts) from the various vendor stalls, as well as effluent from a sewerage system that is connected to a small, single-chambered septic tank. The tank discharges to the nearest water body without further treatment.

- **Waste management.** The market designs did not include proper solid waste management systems such as receptacles for handling the large volumes of organic and inorganic wastes.

- **Market administration facilities, slaughterhouses, roads, and vehicle terminals.** The slaughterhouses do not have adequate waste collection and treatment systems. Proper traffic management and delivery facilities are lacking.

- **Enhancement Measures.** Waste management systems, including proper segregation, treatment, and disposal, food traps, oil-water separators, and bins for segregated wastes; design of drainage and sewerage systems; treatment of effluents and sludge; trained market administrators; and proper traffic management.
The ultimate objective of this review is to develop recommendations derived from the findings that can improve safeguard performance through risk reduction and quality enhancement. In the discussion of findings above, there has already been mention of several enhancement measures. On the basis of the assessment discussed above, a broader set of action items are prescribed.

Develop practical screening and EA tools for rural environment, NRM, and livelihoods subprojects.

Practical screening and EA checklists and guidelines have proved to be valuable tools for the types of World Bank subproject reviewed here. The suggested tools include a set of user-friendly instructions or logical questions (with flow charts, diagrams, and illustrations) that will enable the administrative officer, technical specialist, contractor, supervisor, or local government representative to understand the key issues associated with potential impacts and the choice of mitigation measures.

In general, the tools take into account the size, scope, and area of influence of the proposed scheme and identify, on the basis of field reconnaissance, impact-reducing measures. It is important to note that screening also identifies those schemes that have no issues of concern, which then require no further EA measures. In these cases, there would be no need to complete CNCs or EMPs, and no DENR review would be required. The tools will also provide better-quality schemes to the beneficiaries. A learning curve is anticipated among staff members in the application of these procedures.

The thematic supervision team also works on many other CDD-type projects in the country portfolio, and the principles of World Bank safeguard applications observed in this thematic supervision can be applied to these programs.
Develop simple technical guidelines and specifications based on World Bank experience in similar projects to improve implementation of EMPs.

The Bank can help borrowers identify common design, EMP, and evaluation provisions so that experiences and lessons can be shared across projects (see Box 5). Such actions will contribute to streamlining World Bank safeguard measures and enhancing subproject quality.

There are two key approaches:
- Share knowledge and information. Similar subprojects in other EAP countries, as well as other regions, offer numerous examples of safeguard screening tools, and identification and sharing of these tools will enhance counterpart activities.
- Develop overviews of good practice. There is a growing body of information on good safeguard practice in similar projects within the World Bank. However, this information is scattered and difficult to find. It is recommended that four to six of these projects be identified and made available as a set of good practice experience overviews.

Where feasible, revise operational manuals (OMs) for each project, streamlining them and making them practical.

The OMs’ section on safeguard policies should provide comprehensive guidance that covers the overall policy framework and the safeguard compliance requirements for each subproject type. The safeguards section should be revised to reflect emerging trends on the ground, simplified for procedural requirements, and shortened for processing time of small, multiple subprojects.

Assist the DENR in revising its environmental review and clearance procedures, particularly for rural infrastructure, NRM, and livelihoods subprojects.

The DENR should be consulted about these types of subproject to convey that although they are exempted from their regulations, World Bank safeguard requirements do apply. Screening and mitigation features should be pointed out so that a programmatic approach may be applied for each project management office. An early EA scoping or environmental screening should be encouraged to ensure that the DENR recognizes the limitations of its current requirements for such projects. The project management unit should also establish a general approach and framework to simplify its screening requirements for these subprojects and eliminate unnecessary paperwork and delays in their approval.

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Box 5 Elements of Good Safeguard Provisions as Observed in the Field and Drawn from Experience

Screening procedures
- Environmental screening procedures
- Use of environmental review checklist
- Ex-ante preparation of EMPs (mitigation plans)
- Procedures for consultation with affected households and groups

Institutional capacity
- Presence of environmental and social experts within the central management unit
- Existence of an established environmental unit
- Training for staff in environmental and social safeguards
- Contract specialists for undertaking environmental assessment procedures

Support to beneficiaries
- Field support to sponsors, contractors, etc.
- Technical assistance and training
- Incentives and sanctions
- Funds for incorporating mitigation measures

Monitoring and evaluation (M&E)
- Regular monitoring of subprojects requiring mitigation
- Ex post corrective action for problems
- Development and use of indicators
- Management action based on M&E feedback
- M&E training for staff
- Hiring of experts to conduct evaluations
- Training of beneficiaries in simple monitoring
- Environmental monitoring guidance and tools
- Work with project sponsors and management to improve EMP inclusion and costing.
Work with project sponsors and management to improve EMP inclusion and costing.

The EMP process can contribute to better projects by outlining clear, subproject-specific mitigation measures for reducing environmental impacts that are identified during the design stage. This process should then be incorporated into contract specifications, with reasonable allowance for the cost of mitigation measures so that these measures become part of the required work order.

LGUs need support to better identify mitigation measures and the associated costs, and communities need better understanding of the measures. Simple examples, worksheets, and contract specification outlines can be helpful. The information also needs to be provided to the beneficiaries and communities to improve their understanding of the types of civil works that may be needed for their projects and of the costs of operation and maintenance.

Improve safeguard evaluation and monitoring.

For adequate evaluation and appropriate mitigating action to occur, monitoring results concerning environmental and social performance and risks must be regularly reported. More effort needs to be invested to make safeguard indicators part of the audit and evaluation process.

Provide regular safeguard training by experienced professionals, with hands-on experience for central, regional, and local staff, local government units, partner agencies, contractors, and beneficiaries.

Guidance instruments need to be disseminated to project staff in conjunction with field-tested training modules (see Table 3). Creating better appreciation and understanding of the environmental evaluation and review process must begin at the top, with the senior management of the project, and extend along the line to implementation staff. General environmental awareness training should be provided for all staff, with more specific training for individuals who deal directly with environmental issues.

Institutional strengthening for staff requires a special effort to convey the message of improved environmental planning so that staff members can appreciate how environmental issues relate to their existing work assignments and responsibilities. Training must be planned with a solid appreciation of current workflows. In projects that operate through decentralized regional offices, there is a need to focus on regional training in order to integrate central administrative and technical staff with their counterparts in the field. If training is contracted out, careful oversight is required to ensure that training is provided by experienced trainers who are familiar with the subproject schemes.

Ensure consistent participation by safeguard specialists in project supervision.

Although participation of safeguard specialists is not necessary for every supervision mission, it should be mandatory for midterm reviews. The frequency of participation by a safeguard specialist should be determined early in project preparation and specified in the supervision plan. Projects that have more screening requirements will require more supervision of environmental performance. Task managers can work with EASES and the country team to obtain funding from alternative sources, such as trust funds, for expanding this participation.

To relieve the growing demand placed upon the in-country safeguards staff, several options could be explored such as continuation of support to task teams with a mix of other regional safeguard experts, or the use of local consultants, who would, in addition, gain better understanding of World Bank safeguards through field training.
### Table 3  Workshops and Training Modules for Improving Safeguard Performance

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Activities and contents</th>
<th>Target participants</th>
<th>Format and schedule</th>
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</table>
| **Workshop: Supervision and safeguards in World Bank projects** | - Strategies for improving supervision  
- Resources for including environmental specialists for supervision missions  
- Linking loan conditions to supervision  
- Making the poverty status report reflect practical environmental targets  
- Incentives for improving environmental supervision  
- Development of best management practices | Legal Department staff  
Task team leaders  
Technical team support staff  
Consultants  
Country project environmental and social staff | Workshops to be held in Manila and in regions with World Bank projects, beginning in late 2003 and continuing at six-month intervals for two years |

**Training modules**

| Subproject screening and use of checklists | - Effective subproject screening  
- Impact assessment tools  
- Desk review  
- Field assessment  
- Beneficiary assistance | Task team leaders  
Technical task team support staff  
Consultants  
Country project environmental and social staff | Development of technical dissemination notes |

| Environmental management plan (EMP) | - Why develop an EMP?  
- EMP components  
- Establishing a schedule of activities  
- Identifying roles and responsibilities  
- Cost requirements |  |

| Practical mitigation actions | - Practical design criteria  
- Construction  
- Operation  
- Cost implications  
- Training considerations |  |

| Effective monitoring and evaluation (M&E) | - Developing practical indicators  
- Monitoring program  
- Link to M&E management information system  
- Feedback to mitigation measures |  |

| Supervision techniques | - What to supervise  
- How to incorporate environmental considerations into project supervision  
- Subproject visits—what to look for  
- Feedback to project management |  |
1. According to the World Bank’s operational policy on environmental assessment, OP 4.01 a project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the project site itself. A Category B project is likely to have adverse environmental impacts on human populations or environmentally important areas are site-specific; few, if any, of them are irreversible.

2. In the ARCDP, CBRMP, and LOGOFIND projects, this task is carried out by the LGU, with the regional DENR office issuing certificates of non-coverage (CNCs) or environmental compliance certificates (ECCs). In most cases, CNCs are required, but ECCs are not. In the Rural Finance III project, the borrower must obtain the required permits from the DENR, and the loan officers at the regional and local levels verify the procedures.

3. Overall construction costs range from US$ 40,000 to US$ 200,000 per FMR, and unit costs, from US$ 28,000 to US$ 45,000 per kilometer. The unit cost is highly variable, depending on excavation, embankment, aggregate sub-base, gradient soil types, type and length of drainage ditches, number and type of culverts and bridges, and road cap type.

4. From the inflow box, a conveyor of 24-inch-diameter prefabricated concrete culverts ran for 150 meters below grade.

5. Field observations indicate that the overall considerations of livelihood activities, ecological diversity, habitat restoration, and protected area management are difficult and challenging and thus require greater attention. In addition, the Bank’s natural habitats safeguard policy (OP 4.04) raises issues associated with the ecological implications of promoting reforestation with cash crop trees, like mahogany, rather than native tree species.

6. A common misconception about the economic rate of return in tree plantation schemes is illustrated by the following extract from the newsletter of the Central Visayas CBRMP.
office: "A medium-sized harvestable tree (6–10 inches in diameter and 15–20 ft. tall) would cost P500/tree, times 1,200 per hectare (at 70% recovery), would amount to P 6000,000.00 per hectare. If harvesting is staggered in seven years, then the owner would earn at least P 85,000.00 a year" ("Buenavista's NRM Project, Ten Years Hence," Visayan Connection, vol. 1, issue 2). But according to discussions with staff in the field, this sum represents gross potential revenue. The net proceeds for the owner, after deducting inputs, fees, tariffs, and other expenses, would be considerably less.

7. Shallow, concrete-lined placenta pits with secure tops can be built for disposal of tissues and sharps for a modest cost. This will reduce the volume of waste materials flowing into the septic tanks and minimize contamination. No standard design from the Ministry of Health is available for these structures.

Safeguards Thematic Review of Decentralized Projects in the Philippines

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