

Integrated Safeguards Data Sheet (Updated)

Report No: AC327

Section I - Basic Information

Date ISDS Prepared/Updated: 10/03/2003

A. Basic Project Data (from PDS)

I.A.1. Project Statistics

Country: AFRICA	Project ID: P069258
Project: Southern African Power Market (APL1)	Task Team Leader: Ludmilla Butenko
Authorized to Appraise Date: June 3, 2003	IBRD Amount (\$m):
Bank Approval: October 21, 2003	IDA Amount (\$m): 178.60
Managing Unit: AFTEG	Sector: Power (80%); General energy sector (20%) Theme: Regional integration (P); Infrastructure services for private sector development (P); Export development and competitiveness (S)
Lending Instrument: Adaptable Program Loan (APL)	
Status: Lending	

I.A.2. Project Objectives (From PDS):

To facilitate the development of an efficient regional power market which would: (i) decelerate the increase of electricity prices in the Southern African Development Community countries through increased competition; (ii) increase industrial competitiveness of the region; (iii) create the conditions for accelerated investment in the power sector, including by the private sector; and (iv) foster regional integration.

I.A.3. Project Description (From PDS):

This regional program is intended to facilitate multi-country electricity trade in Southern Africa and support the operations of the Southern African Power Pool (SAPP) by providing technical assistance to the SAPP Coordination Center, strengthening regional transmission core and removing some of the physical bottlenecks that inhibit growth. The main sector issues to be addressed by the program are: (a) insufficient transmission capacity to maximize the benefits of regional power trade; (b) need to develop a fully functional Coordination Center of the SAPP; (c) need to increase trade on the short term energy market; (d) need to introduce clear rules of the game for private sector participation in the regional power operations; (e) harmonization of regulation affecting cross-border power trade as the national utilities embark on a reform process.

The program comprises the highest priority projects identified by the Integrated Regional Power Master Plan (Pool Plan) prepared by the SAPP. This subset of interventions has been adopted by NEPAD and SADC as priority areas in the energy sector. The program comprises three phases over a period of six years. The first phase is planned to last from 2003 through December 2007, the second from 2004 through 2008, and the third from 2006 through 2009.

The **first phase, APL1**, will improve electricity trading in the Pool by making the information available to all member utilities and improving the speed of transactions by providing technical assistance to the SAPP Coordination Center. It will also make a significant block of hydro energy from Inga, the DRC, available to the SAPP. This will have benefits both in avoiding the use of high cost thermal generation and will serve in improving the quality of electricity supply throughout the region. This infrastructure component involves rehabilitating and upgrading the converter and inverter stations on the DC transmission link from the Inga hydropower station to Kolwezi in the Democratic Republic of Congo; maintaining the DC transmission line from Inga to Kolwezi; rehabilitating and reinforcing the AC network from Kolwezi to Karavia substation near Lubumbashi, in the Katanga region of the DRC; constructing a 220 kV line transmission from Fungurume to Karavia and from Karavia to the DRC/Zambia border at Kasumbalesa; and constructing,

with private sector funds, a continuation of the new transmission line from Kasumbalesa to Luano substation near Kitwe in Zambia. The new line will run parallel to the existing 220 kV line and to a large degree within the existing right-of-way.

The **second phase, APL2**, will finance connection of Malawi to the regional electrical network through a transmission line from Mozambique. This initiative will benefit Malawi by increasing its power system security and avoiding higher electricity cost in the long run, and it will benefit Mozambique by the revenues it will earn from the use of the line.

The **third phase, APL3**, will make more hydro energy from the DRC available to the Pool and will improve the stability of the interconnected grid. If the feasibility study done in the first phase shows it to be economic, the third phase will also connect Zambian and Tanzanian grids which will facilitate the connection of Uganda and Kenya to the Pool in the more distant future. This would expand the market significantly and bring new trading opportunities to all members.

The ISDS is concerned only with the first phase of the program and is based on the studies of the alignment, and the requisite environmental and social assessments that have been carried out for APL1.

I.A.4. Project Location: (Geographic location, information about the key environmental and social characteristics of the area and population likely to be affected, and proximity to any protected areas, or sites or critical natural habitats, or any other culturally or socially sensitive areas.)

While the SAPM program ultimately will involve all of the member countries, the activities under APL1, and thus this ISDS, focus on reinforcing the existing transmission corridor in the Democratic Republic of Congo and Zambia.

In the DRC, the transmission lines between the Inga hydropower station on the Congo River and Kasumbalesa on the border with Zambia will be maintained and transformers and other equipment will be upgraded. In addition, transmission lines will be rehabilitated between Fungurume and Panda (80 km) and Panda – Karavia (70 km). A new right-of-way has been selected for construction of the transmission line between Karavia and the border at Kasumbalesa. This new construction in the DRC will take place in southern Katanga province, southeast of Kolwezi. In this province of the DRC, rehabilitation and construction of transmission lines and related access roads will mostly take place in heavily degraded areas dominated by open woodland Zambezi forest. The scarcity of flora and fauna in this location is the result of intense pressure on available resources, due to cutting of trees for fuel and due to subsistence hunting. No major waterways will be crossed by the proposed route, other than the Lufira River. There are no protected areas near the power lines, no known critical natural habitats, nor any culturally or socially sensitive areas. A number of urban centers in the province - Lubumbashi, Kolwezi, Likasi, and Kasumbalesa, and several villages are located alongside the existing transmission lines. The population living in the area depends on subsistence farming, hunting, and fishing, although the copper mining industry was once the lifeblood of the economy.

In Zambia, a transmission line will be constructed by the Copperbelt Energy Corporation (CEC) and financed outside this project. The line, starting at the Zambia-DRC border at Kasumbalesa and going 45 km to the Luano substation, involves clearing a 45m width within the existing wayleave. The new line will be built alongside the existing 220kV line for which CEC has wayleave rights. The area is covered by a mix of Miombo woodland species, and vegetation clearing will be one of the major environmental impacts during construction. Due to farming activities and poaching for the past years, big fauna has disappeared, and only small animals remain. The proposed power line traverses two National Forest Reserves (Kamenza Forest reserve No.19 and Luano Forest Reserve No.12), which are legally protected areas,

classified as IUCN Category VI protected areas⁽¹⁾. The two Forest Reserves are critical natural habitats. The proposed line route is sparsely populated; hence few people will be affected in terms of relocation. Some settlers will be restricted from carrying out farming activities along the wayleave during construction, but alternative arrangements will be made for these people.

Both in the DRC and in Zambia non-critical natural habitats (wetlands, specific forest types) were identified in the environmental assessments.

Both in the DRC and in Zambia no known cultural property sites are going to be affected by construction and operation of the transmission lines. Construction crews will be instructed on how to handle chance finds of archaeological resources.

(1) Zambia's Forest Reserves are classified as IUCN Category VIII in WCMC/World Bank, 1993. *Ecologically sensitive sites in Africa. Vol. VI*. Washington, DC. The category no longer exists and was merged with current category VI.

B. Check Environmental Classification: A (Full Assessment)

Comments: The program was assigned an Environmental Category A due to its expected potential environmental and social impacts. The DRC component was classified as a category A initiative because, at the time, it appeared it might affect critical habitats and involve significant involuntary resettlement. The Zambia component, which is a private sector investment using only corporate funds, was similarly classified because it is viable only if the DRC segment of the lines, which is financed in part by the World Bank, is built. A field reconnaissance was undertaken later to determine land-use along the right of way, the need for land acquisition and, therefore, involuntary resettlement, and whether any (critical) natural habitats lie along the proposed alignments. A principal mitigation measure of the impact of the transmission lines consists of carefully siting transmission lines and access roads through low density development areas in order to minimize physical relocation while also avoiding significant natural habitats.

C. Safeguard Policies Triggered (from PDS)

(click on [☞](#) for a detailed description *or* click on the policy number for a brief description)

Policy	Triggered
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	<input checked="" type="radio"/> Yes <input type="radio"/> No
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	<input checked="" type="radio"/> Yes <input type="radio"/> No
Forestry (OP 4.36, GP 4.36)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Pest Management (OP 4.09)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Cultural Property (OPN 11.03)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Indigenous Peoples (OD 4.20)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Involuntary Resettlement (OP/BP 4.12)	<input checked="" type="radio"/> Yes <input type="radio"/> No
Safety of Dams (OP 4.37, BP 4.37)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	<input type="radio"/> Yes <input checked="" type="radio"/> No

Section II - Key Safeguard Issues and Their Management

D. Summary of Key Safeguard Issues. Please fill in all relevant questions. If information is not available, describe steps to be taken to obtain necessary data.

II.D.1a. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts.

In compliance with Safeguard OP 4.01 the major potential environmental and social impacts of the project have been identified by two stand-alone environmental assessments, one for the DRC and the other for the Zambia component of the project. These assessments have determined that two other key Safeguard Policies are invoked: Natural Habitats (OP 4.04) and Involuntary Resettlement (OP 4.12).

The major environmental issue in the DRC and Zambia is the management of natural habitats and, for Zambia in particular, the management of critical natural habitats (two forest reserves) (OP 4.04). In Zambia, the proposed power line traverses two National Forest Reserves (Kamenza Forest reserve No.19 and Luano Forest Reserve No.12), which are legally protected areas, classified as IUCN Category VI protected areas. The two Forest Reserves are critical natural habitats. Indications are that the conversion of the critical natural habitats for power line construction is not significant, as it does not threaten the integrity of the forests involved. The existing right-of-way will be used (land already converted) and the damage to the forest (which appears to be degraded) is expected to be very limited in extent.

The major social impact will be limited land acquisition for power lines and associated infrastructure (OP 4.12). The transmission lines generally have relatively limited impacts--productive trees must be removed from the right-of-way (but farmers can usually continue to grow crops under the lines) and some houses need to be relocated a few meters beyond the reserve. However, transmission lines usually do not affect people's livelihoods in a significant manner. Power substations, by contrast, require reasonably sized parcels of land, and can displace residents and other users, particularly if located near populated areas. For this reason, the siting of power substations at Fungurume and Karavia, and Luano, emphasizes minimization of impact, which means the substations are located far enough from populated centers to significantly reduce the extent of social impact.

II.D.1b. Describe any potential cumulative impacts due to application of more than one safeguard policy or due to multiple project component.

It is anticipated that there will be no cumulative adverse impacts.

II.D.1c Describe any potential long term impacts due to anticipated future activities in the project area. More efficient power distribution should induce local development, which would have potential long-term environmental and social impacts, both beneficial and adverse. The project monitoring program will track such changes so that major adverse long-term impacts can be mitigated in a timely fashion.

Long term environmental benefits will result from the increased use of existing hydropower over non-renewable energy (fossil fuels) in the SADC countries. Better exploitation of hydropower and increased efficiency in the use of existing generation plants will reduce the airborne emissions produced by coal-fired generation (NO_x, SO₂, CO₂, and SPM), as well as local damage associated with mining and transportation. Increased utilization of existing assets to defer the need for new generation development makes sound commercial and environmental sense.

The population of southern Africa will benefit from the improvement of quality, lower cost and expansion of electricity supply. Certain industries will become more competitive as the cost of electricity is held down by the economies of scale available through the electricity market. An additional direct benefit to the population of the DRC will be that offered by the integrated infrastructure inputs to communities along the route of the new transmission lines built by the project. The concept is based on a possibility to use the shield wire of the transmission line conductor for distribution of electricity along the transmission line route. This technique overcomes the high cost of transformation that made such a scheme impossible in the

past. It has been used successfully in Ghana and in parts of Latin America for the past 10 to 15 years.

Experience has shown that communities along the route can develop and poverty can be reduced if they are supplied with electricity, but they can benefit more if supplied simultaneously with other complementary infrastructure and health services. Such inputs will be modular and scalable. They will be based on a set of consultations with the beneficiary communities followed by a package of hardware and training designed to meet the needs and opportunities identified in the consultations. The consultations will seek to determine the day-to-day needs of the community such as water supply and treatment, communication, electricity, clinical care, etc. They will also identify the capability of the community to manage these inputs and possibly to set up some of them, such as the communication, including internet, as small businesses. The necessary hardware will be packaged in containers the size of shipping containers so that they can be shipped, brought by road using standard equipment and installed in a very short time. The packages can be scaled to the size necessary for the particular community. This would be followed by an intensive set of training, the formation of sustaining organizations (if necessary, with the help of NGOs), and monitoring. For the communities, it will represent an opportunity to start some economic activity that would help attack poverty; and for the utility owning the transmission line, it will result in reduced vandalism of the line since the communities will have a stake in continuity of service.

II.D.2. In light of 1, describe the proposed treatment of alternatives (if required)

The determination of the Kolwezi-Kasumbalesa line in the DRC and the Kasumbalesa-Luano line in Zambia has examined not only the alternative of no-action but also the possibility of alternative alignments and of alternative technologies. The present proposal has, in other words, been accepted only after careful study to minimize resettlement and environmental damage, while also taking into account technical and economic factors.

The alternative of no-action was rejected because prolongation of the current situation of insecure, inefficient and expensive power impedes economic development and poverty alleviation efforts. The proposed project components reflect actual priorities identified by the region for the development of the interconnected power network and specified in the Integrated Regional Power Masterplan, which has considered a full range of alternatives. They are a result of a collective effort of all member countries.

DRC. Determination of the alignment of the new transmission lines underwent an extensive study in order to determine the optimal route from the technical, environmental, social and economic perspectives. The original planning study for SNEL identified six options for delivering electrical power to southern Africa:

- Option 1: reconstruct the existing 220kV Karavia – Luano line;
- Option 2 : construct a new single-circuit 220kV line between Karavia and Luano;
- Option 3: construct two new 220kV lines between Karavia and Luano;
- Option 4: construct a new double-circuit 220 kV line between Karavia and Luano;
- Option 4a: construct a new double-circuit 220 kV line between Karavia and the border and a new single-circuit 220 kV line from the border to Luano;
- Option 5: construct a new 330kV line between Karavia and Luano;
- Option 6: construct a new 330kV line between Kolwezi-Karavia-Luano.

Option 2, which proposes a new 44 km long 220 kV line (with additional 45km in Zambia) line with an optic cable communication system, between Karavia at Lubumbashi and the border near Kasumbalesa, was selected for several reasons. This option links two substations with the same voltage, thus reducing the investment cost substantially. It also enables SNEL to realize a long-term goal of electrifying certain rural communities along the line route. Option 2, in short, is the simplest plan that resolves the various considerations, including environmental and social concerns, as well as technical and economic matters, at

reasonable cost.

The proposed alignment of the transmission line required verification because significant shifts in population had occurred since the time of the original study. Consequently, the consultant, in addition to the usual documentary research, undertook helicopter inspections of the proposed alignment and of alternative alignments. The aerial reconnaissance trips were complemented by field visits to the originally proposed and alternative alignments in order to verify the initial findings. This work determined that the original alignment would require extensive physical relocation of populations, while an alternative alignment between Fungurume and Kasumbalesa would greatly reduce the extent of the social impact of the project. For this reason, SNEL accepted the recommendation of the consultant, and shifted the alignment to the new routing that would avoid most of the physical relocation of people without greatly increasing the distance to be traversed by the lines.

SNEL, and its consultant, considered four factors in this decision.

- Minimize the distance required because, in homogeneous areas, costs rise proportionately with distance;
 - Take advantage of existing infrastructure and equipment to the fullest extent possible;
 - Parallel existing routes in order to facilitate access and limit the appearance of new enterprises for in order to minimize adverse environmental impacts;
 - Avoid zones where conditions might put the feasibility and security of the investment at risk (e.g., flood zones, erosion areas, landslide areas, rocky slopes). Reduce any environmental and social disturbance to an absolute minimum;
 - Avoid built and densely populated areas on the ground that such occupation is incompatible with electric transmission lines;
 - Avoid isolated areas where vandalism and theft could threaten the integrity of the investment
- As a result, the present alignment significantly reduces social, and environmental, concerns to a bare minimum, while taking into account technical and economic considerations. Notably, only a dozen structures will now be affected by the alignment, in contrast to the several hundreds of structures that would have been lost under the original planning. Also, the extent of permanent and temporary land taking is basically the same now that SNEL and CEC have agreed to allow farmers to continue subsistence farming of low-level crops under their lines once construction is complete.

Zambia. The selection of the most appropriate routing for the construction of a new transmission line was an iterative process that tried to secure the most environmentally acceptable route that is both technically and economically feasible. The process commenced with the identification of constraints and then looked at finding a route that avoided those constraints as much as possible.

The starting point was to investigate the route that provided a direct line between the points to be connected and then identified reasons why this option could not be selected. The major constraint was the need to avoid completely any sites with a high amenity value such as:

- Areas of outstanding natural beauty
- Heritage sites
- Sites of special scientific interest
- National parks
- Recreational areas

In addition, for technical considerations, as well as to reduce the visual impact of any proposed lines, heavily developed and residential areas were to be avoided as much as possible.

Placing of transmission lines within an existing route corridor provided significant advantages both in terms of reducing visual impact but more importantly in reducing the environmental impact of the project. This decision was based on the understanding that a wayleave carrying two lines requires less ground area than two wayleaves each carrying one line. Therefore, the next stage of the iterative process involved looking at existing lines and wayleaves to see if these can be included for some or all of the proposed new line. Finally, the process concluded with a detailed analysis of a variety of options to ensure that the best compromise of all the above factors was adopted.

Line Routing Options Considered. After a detailed desktop review of the possible line routing options, three potential routes were considered sufficiently viable to warrant a further detailed investigation.

Option A – The Direct Route: This route was identified simply by creating a straight line between the terminal substations of Luano (Zambia) and Karavia (DRC) and modifying the route of the line to avoid any significant constraints. This option, therefore, identified the shortest possible theoretical distance that could be adopted by the Project and was a useful means of identifying the constraints that exist in selecting an appropriate line route.

Option B – Use of Existing Wayleave: This routing option utilized the space provided within the CEC wayleave for the existing 220kV Zambia-DRC interconnector. The circuit runs adjacent to the existing circuit from Luano to the DRC border.

Option C – Southern Routing: Recognizing the reduction of environmental impact arising from the use of an existing wayleave, this option initially followed the route of the existing wayleaves for the 66kV transmission line from Luano to Solwezi. After looping round the south of the city of Chingola, the line route then headed approximately north in a relatively straight direction towards the border on its way to Karavia.

Findings. Option A was considered not to be feasible due to the fact that the route would run very close to the town center of Chililabombwe, as well as a tailings dam associated with Konkola mine. In addition, it would need to cross existing Copperbelt Energy Corporation transmission lines. The visual impact due to the proximity to residential areas would be much higher, and the line would require several large angle deviations, as well as a crossing over the main road to Kasumbalesa. A high number of river crossings would also be required for this route, and the generally wetter ground conditions could lead to increased environmental damage during the construction phase.

Option B represented an increase in route length of only 2km over the most direct route, and followed the sparsely populated route of the existing 220kV line. This route would require ground clearing to be undertaken within the existing wayleave rights of the existing circuit, and would have a low visual impact due to the terrain covered. This route is least onerous in terms of both river and road crossings, and has suffered only a minor encroachment of farming activities within the present wayleave.

Option C again used existing wayleaves for part of its route, but represented an increased route distance of 20km over option B. While this route generally runs through sparsely populated areas, it would require a higher number of road and river crossings than Option B. In addition, this route required a completely new wayleave to be cleared for a distance of about 40km and an extension of the existing wayleave by about 45m for some 25km. Near the border, this route would traverse a number of farming plots.

In conclusion, route option B mitigated the environmental impact of the project significantly. The route is efficient to the extent that it is less than 5 percent longer in distance than the direct route from Luano to the

border crossing. In addition, the siting of the line within the boundaries of an existing wayleave significantly provides the following benefits:

- the line is constructed in an area that has not been significantly developed;
- the visual impact of the line is reduced;
- land clearance requirements to accommodate a line within an existing wayleave are significantly lower than if a completely new wayleave had to be established;
- the extent of physical relocation and other social impacts were significantly reduced to minimal levels.

Alternative Technologies: Overhead lines versus underground cables. Further, the advantages of different technologies, specifically, overhead transmission lines versus underground cables, were examined. Each option offers distinct advantages, but suffers from distinct disadvantages. While overhead lines impact on the landscape in rural settings and affect scenery in tourist centers, their impact is more pronounced in urban settings. Underground cables, by contrast, show impacts only at sealing end points, as well as at points where cable cooling systems are sited. For overhead lines the only land and habitat really lost is the land around the tower base and the access routes for construction, whereas the cable option affects the 15-30 m width of the entire cable route. A greater degree of land will be sterilized with an underground cable due to the restrictions that would need to be placed upon all sub-soil activities as well as the planting of trees and bushes along the entire route length for safety purposes. An underground option would also require large areas of land to be set aside to accommodate cable joint bays, and could cause pollution from cable fluid leaks. Finally, as has been experienced throughout the whole of Africa, the economic case for the utilization of an underground circuit cannot be normally justified at this voltage level, and this is certainly the case for this project, as the cost of 220kV underground cable is 15 to 20 times higher than the equivalent capacity of overhead line. For all of these reasons, the overhead transmission system is environmentally, socially and economically a better choice.

II.D.3. Describe arrangement for the borrower to address safeguard issues

Environmental and social safeguard measures will be put in place by each country in the South African Power Market program. Specifically, in the DRC, the environmental unit within the project management unit in SNEL will be responsible for implementation of both the environmental management plan and the resettlement action plan. In Zambia, the Copperbelt Energy Corporation (CEC) will take direct responsibility for both of these instruments. Overseeing activities in both countries will be the Environmental Subcommittee of SAPP, which has recently issued specific EIA guidelines for transmission lines to be followed by the SAPP members.

Environmental Safeguard Issues. Each of the two agencies responsible for implementing the respective environmental management plans, including specific environmental safeguard issues related to natural habitat management, will implement some of the measures themselves or will instruct contractors working on the transmission line to carry out instructions as defined in the respective environmental assessments. The periodic reports on the implementation of the EMPs will be submitted to the World Bank for review.

Social Safeguard Issues. SNEL in DRC and CEC in Zambia have each adopted a Resettlement Action Plan (RAP) to guide implementation of any necessary land acquisition and resettlement. Each RAP has been developed in close consultation with the affected populations. At the discretion of the World Bank, the status reports on the implementation of the RAPs will be submitted to the World Bank for review.

II.D.4. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders include those proposing the project, those benefiting from the project, and those affected by the project.

The project proponents include: the Governments of the countries involved in the interconnection, the SADC national power utilities organized in the SAPP, and independent power producers. These proponents are in constant communication over the design and implementation of the program and its sequencing. The power utilities, through the SAPP Subcommittees (including Environmental Subcommittee) and Working Groups, have directed project design and preparation. Subsequently, the SAPP Coordination Center will be actively involved in implementation, monitoring and evaluation of the project, including safeguard issues.

The project beneficiaries, the customers who will benefit from improved power supply, are regularly canvassed by their utility companies. The customers include both household consumers and industrial consumers, who are represented by their trade groups. The utility companies thus receive the views of consumers through individual and organized contacts, and can represent these views in regional forums.

The third group of stakeholders, the people affected by the project initiative, is the group of most concern here. Their views and assistance have been -- and will be -- solicited throughout the project. During the initial field reconnaissance, project teams contacted local leaders, and organized community meetings with people along the proposed alignment in order to determine the optimal alignment and to identify owners and users of affected parcels of land. In addition, people adversely affected by the project (PAPs) have been -- and will be -- advised regularly and in a timely manner of project developments, e.g. the sequencing of construction, the negotiation of compensation, the lodging of complaints.

In the DRC, project preparation involved, first, contacting local authorities to inform them about the project and to obtain certain general information about their areas. These initial meetings took place between 31 January and 3 February 2003. Subsequently, in the second phase of the consultations, the village populations themselves were convened for open meetings in order to determine their concerns and hopes. These general meetings were followed by individual meetings with particular affected persons in order to determine their particular concerns. These more substantive consultations took place between 12 and 22 March 2003.

In Zambia, an initial scoping of study issues was conducted with stakeholders. The project then undertook a baseline survey to establish the existing ecological and socio-economic situation in the project area. The Institute of Environmental Management was active in the study area from November 2002 to January 2003 in order to carry out this work. IEM collected primary data on the social and economic factors through visits to the project area, and conducted interviews with the various stakeholders including council officials, government departments, the affected farmers or individuals within the project area. This general study of environmental and social conditions was followed by a comprehensive baseline survey of the project area in February and March 2003 in order to determine environmental and social impacts, such as the exact extent of physical relocation required.

Similarly, PAPs will have the opportunity to participate fully in the implementation of the program. For example, they will be able to negotiate compensation rates for their lost assets and may file grievances if they are unsatisfied, including compensation for unanticipated damages during construction.

Finally, prior to appraisal, the Environmental Assessment, Environmental Management Plan, and Resettlement Action Plan for each activity has been disclosed publicly at the World Bank InfoShop and

made available at locales convenient to the affected population and NGOs, with at least the executive summary translated into local language so that everyone may be appraised of, and comment on, the proposed initiatives. Moreover, each RAP contains provisions that stipulate local populations are to be consulted throughout the program, that compensation rates are to be published and made available, that PAPs can negotiate the estimated values of their lost assets and have the right to lodge grievances with impartial parties, and that payment to the PAPs will be made in a convenient and transparent manner to them.

E. Safeguards Classification (*select in SAP*). Category is determined by the highest impact in any policy. Or on basis of cumulative impacts from multiple safeguards. Whenever an individual safeguard policy is triggered the provisions of that policy apply.

- S1. – Significant, cumulative and/or irreversible impacts; or significant technical and institutional risks in management of one or more safeguard areas
- S2. – One or more safeguard policies are triggered, but effects are limited in their impact and are technically and institutionally manageable
- S3. – No safeguard issues
- SF. – Financial intermediary projects, social development funds, community driven development or similar projects which require a safeguard framework or programmatic approach to address safeguard issues.

F. Disclosure Requirements

<i>Environmental Assessment/Analysis/Management Plan:</i>	<i>Expected</i>	<i>Actual</i>
Date of receipt by the Bank		5/6/2003
Date of “in-country” disclosure		5/13/2003
Date of submission to InfoShop		5/13/2003
Date of distributing the Exec. Summary of the EA to the Executive Directors (<i>For category A projects</i>)		6/4/2003
<i>Resettlement Action Plan/Framework:</i>	<i>Expected</i>	<i>Actual</i>
Date of receipt by the Bank		4/16/2003
Date of “in-country” disclosure		5/13/2003
Date of submission to InfoShop		5/13/2003
<i>Indigenous Peoples Development Plan/Framework:</i>	<i>Expected</i>	<i>Actual</i>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Pest Management Plan:</i>	<i>Expected</i>	<i>Actual</i>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Dam Safety Management Plan:</i>	<i>Expected</i>	<i>Actual</i>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable

If in-country disclosure of any of the above documents is not expected, please explain why. Due to

technical limitations of the system, the table above contains only the dates for the Zambian EIA, EMP and RAP. The dates of review and disclosure for the DRC EIA, EMP and RAP are provided below. All dates are actual.

Environmental Assessment and Environmental Management Plan

Date of receipt by the Bank	05/05/2003
Date of in-country disclosure	06/02/2003
Date of submission to InfoShop	06/02/2003
Date of distributing the Exec. Summary of the EA to the Executive Directors	06/04/2003

Resettlement Action Plan

Date of receipt by the Bank	05/05/2003
Date of in-country disclosure	06/02/2003
Date of submission to InfoShop	06/02/2003

<u>Signed and submitted by</u>	<u>Name</u>	<u>Date</u>
Task Team Leader:	Ludmilla Butenko	09/30/2003
Project Safeguards Specialists 1:	John A. Boyle	10/01/2003
Project Safeguards Specialists 2:		
Project Safeguards Specialists 3:		

<u>Approved by:</u>	<u>Name</u>	<u>Date</u>
Regional Safeguards Coordinator:	Serigne Omar Fye	10/01/2003
Sector Manager	Yusupha B. Crookes	09/30/2003