PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 80.1 MILLION
(US$120 MILLION EQUIVALENT)

TO THE

FEDERAL REPUBLIC OF NIGERIA

FOR A

SUSTAINABLE MANAGEMENT OF MINERAL RESOURCES PROJECT

November 15, 2004

Mining Policy and Reform Division
Oil, Gas, Mining and Chemicals Department
Nigeria Country Unit
Africa Regional Office

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CURRENCY EQUIVALENTS

(Exchange Rate Effective: October 31, 2004)

Currency Unit = Naira
0.00770 (NGN) = US$1
US$1.498 = SDR 1

FISCAL YEAR.
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASM</td>
<td>Artisanal and Small-scale Mining</td>
</tr>
<tr>
<td>BPE</td>
<td>Bureau of Public Enterprises</td>
</tr>
<tr>
<td>CAP</td>
<td>Communities Affected by Project</td>
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<tr>
<td>CAS</td>
<td>Country Assistance Strategy</td>
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<tr>
<td>CASM</td>
<td>Communities And Small Scale Mining</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-Based Organization</td>
</tr>
<tr>
<td>CDD</td>
<td>Community Driven Development</td>
</tr>
<tr>
<td>CFAA</td>
<td>Country Financial Accountability Assessment</td>
</tr>
<tr>
<td>CPAR</td>
<td>Country Procurement Assessment Report</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Audit</td>
</tr>
<tr>
<td>EFCC</td>
<td>Economic and Financial Crimes Commission</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EIR</td>
<td>Extractive Industries Review</td>
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<tr>
<td>EITI</td>
<td>Extractive Industries Transparency Initiative</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FMOF</td>
<td>Federal Ministry of Finance</td>
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<tr>
<td>GIS</td>
<td>Geological Information System</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>GSNA</td>
<td>Geological Survey of Nigeria Agency</td>
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<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ICR</td>
<td>Implementation Completion Report</td>
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<tr>
<td>IDA</td>
<td>International Development Agency</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<tr>
<td>ISO</td>
<td>International Standards Organization</td>
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<td>JIS</td>
<td>Joint Interim Strategy</td>
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<td>LED</td>
<td>Local Economic Development</td>
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<tr>
<td>MCS</td>
<td>Mining Cadastre System</td>
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<td>MD</td>
<td>Mines Department</td>
</tr>
<tr>
<td>MEP</td>
<td>Mineral Economics and Promotion</td>
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<tr>
<td>MIGA</td>
<td>Multilateral Investment Guarantee Agency</td>
</tr>
<tr>
<td>MSMD</td>
<td>Ministry of Solid Minerals Development</td>
</tr>
<tr>
<td>NCC</td>
<td>Nigerian Coal Corporation</td>
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<tr>
<td>NEEDS</td>
<td>National Economic Empowerment and Development Strategy</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>NMC</td>
<td>Nigerian Mining Corporation</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>NSMIS</td>
<td>National Solid Minerals Information System</td>
</tr>
<tr>
<td>OED</td>
<td>Operations Evaluation Department</td>
</tr>
<tr>
<td>PAP</td>
<td>Persons Affected by Project</td>
</tr>
<tr>
<td>PDO</td>
<td>Project Development Objectives</td>
</tr>
<tr>
<td>PF</td>
<td>Process Framework</td>
</tr>
<tr>
<td>PIM</td>
<td>Project Implementation Manual</td>
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<tr>
<td>PMU</td>
<td>Project Management Unit</td>
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<tr>
<td>PPF</td>
<td>Project Preparation Facility</td>
</tr>
<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
</tr>
<tr>
<td>RPF</td>
<td>Resettlement Policy Framework</td>
</tr>
<tr>
<td>SDO</td>
<td>Social Development Objectives</td>
</tr>
<tr>
<td>SEEDS</td>
<td>State Economic Empowerment and Development Strategy</td>
</tr>
<tr>
<td>SESA</td>
<td>Sectoral Environmental and Social Assessment</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
</tr>
<tr>
<td>SMMRP</td>
<td>Sustainable Management of Mineral Resources Project</td>
</tr>
<tr>
<td>SOE</td>
<td>State Owned Enterprise</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>USTDA</td>
<td>United States Trade and Development Agency</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
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</tbody>
</table>

Vice President: Gobind T. Nankani  
Country Manager/Director: Hafez Ghanem  
Sector Manager: Peter van der Veen  
Co-Task Team Leaders: Jeffrey Davidson/Paulo de Sá

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<td>MAP IBRD 33691</td>
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FEDERAL REPUBLIC OF NIGERIA
SUSTAINABLE MANAGEMENT OF MINERAL RESOURCES PROJECT
PROJECT APPRAISAL DOCUMENT
Africa Region

COCPD

Date: November 15, 2004
Country Director: Hafez Ghanem
Sector Manager/Director: Peter van der Veen
Project ID: P086716
Lending instrument: Sector Investment Loan (SIL)

Co-Team Leaders: Jeffrey Davidson/Paulo de Sá
Sectors: Mining and other extractive (80%);
General public administration (20%)
Themes: Rural non-farm income generation (P);
Other environment and natural resources
management (S); Small and medium enterprise
support (S).
Environmental screening category: (B)
Safeguard screening category:

Project Financing Data:
[ ] Loan [X] Credit [ ] Grant [ ] Guarantee [ ] Other:
For Loans/Credits/Others:
Total Bank financing (US$120m.):
Proposed terms: Standard IDA Credit

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<tr>
<th>Financing Plan (US$m.)</th>
<th>Source</th>
<th>Local</th>
<th>Foreign</th>
<th>Total</th>
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<tr>
<td>Borrower</td>
<td>7.890</td>
<td>7.890</td>
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<td>IBRD/IDA</td>
<td>40.682</td>
<td>79.318</td>
<td>120.00</td>
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<tr>
<td>Others</td>
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<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>48.572</td>
<td>79.318</td>
<td>127.890</td>
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Borrower: Federal Republic of Nigeria
Government of the Federal Republic of Nigeria
Responsible agency: Ministry of Solid Minerals Development

Estimated disbursements (Bank FY/US$m)

<table>
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<tr>
<th>FY</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tr>
<td>Annual</td>
<td>5.00</td>
<td>25.00</td>
<td>30.00</td>
<td>25.00</td>
<td>20.00</td>
<td>15.00</td>
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<tr>
<td>Cumulative</td>
<td>5.00</td>
<td>30.00</td>
<td>60.00</td>
<td>85.00</td>
<td>105.00</td>
<td>120.00</td>
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</table>

Project implementation period: 5 years (2005-2009)
Expected effectiveness date: March 1, 2005
Expected closing date: December 31, 2009

Does the project depart from the CAS in content or other significant respects? o Yes o No
Ref. PAD A.3

Does the project require any exceptions from Bank policies? Ref. PAD D.7
Have these been approved by Bank management? o Yes o No
Is approval for any policy exception sought from the Board? o Yes o No
Does the project include any critical risks rated “substantial” or “high”? 

- Yes  ○ No

**REF. PAD C.5**

Does the project meet the Regional criteria for readiness for implementation? 

- Yes  ○ No

**Project development objective**  
*Ref. PAD B.2, Technical Annex 3*

(i) Increase the Government's long-term institutional and technical capacity to manage Nigeria's mineral resources in a sustainable way;  
(ii) Establish a basis for poverty reduction and rural economic renewal in selected areas of the country via the development of non-farm income generating opportunities through small-scale and artisanal mining and to diversify away from oil sources of income.

**Project description**  
*Ref. PAD B.3.a, Technical Annex 4*

**Component A - Economic Development and livelihood diversification in Artisanal and Small-scale Mining Areas;**  
Component B - Strengthening Governance and Transparency in Mining;  
Component C - Private Sector Development;  
Component D - Project Coordination and Management;

**Which safeguard policies are triggered, if any?**  
*Ref. PAD D.6, Technical Annex 10*

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment (OP/BP/GP 4.01)</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Pest Management (OP 4.09)</td>
<td></td>
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<tr>
<td>Cultural Property (OPN 11.03, being revised as OP 4.11)</td>
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<tr>
<td>Involuntary Resettlement (OP/BP 4.12)</td>
<td>✔️</td>
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<tr>
<td>Indigenous Peoples (OD 4.20, being revised as OP 4.10)</td>
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<td>✔️</td>
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<tr>
<td>Forests (OP/BP 4.36)</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Safety of Dams (OP/BP 4.37)</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Projects in Disputed Areas (OP/BP/GP 7.60)*</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Projects on International Waterways (OP/BP/GP 7.50)</td>
<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>

Significant, non-standard conditions, if any, for:  
*Ref. PAD C.6*

Board presentation/Loan/credit effectiveness/Covenants applicable to project implementation:

Only standard IDA conditions apply. Significant progress towards achieving sector strategic objectives was made during project preparation (under PPF financing). The preparation of Implementation Manuals for the Matching Grant Fund and the Resettlement Fund, acceptable to IDA, will be conditions of disbursement for these two categories.
A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

The President of the Federal Republic of Nigeria on July 26, 2002 constituted a Committee on the development of Solid Minerals under the auspices of the Ministry of Solid Minerals Development (MSMD). The Committee was mandated to draft a strategy for correcting the poor performance of the solid minerals sector and to improve its capacity to stimulate additional economic growth within the nation, and has recently published a seven-year strategic action plan to set the framework for sector renewal and growth. The Government has recognized that it must re-build capacity within government agencies to provide the necessary geo-scientific support and the improved and transparent administrative oversight that will be necessary to foster the development of a modern, market driven solid minerals sector. To this end, the Ministry has recently contracted with two private companies to initiate work on an airborne geophysical survey which will cover about 35% of the country’s land area of interest. The Government has also recognized that it must be prepared to offer a competitive fiscal regime and legal regulatory framework that are both equitable and manageable in order to attract new private sector investment. In response, the MSMD has begun the work of drafting a new Mining Code and fiscal regime which will integrate international best practice and establish an internationally competitive framework for the mining sector. More immediately, the Government has prioritized work with artisanal and small-scale miners as part of its broader emphasis on poverty reduction and rural economic renewal.

Nigeria’s solid mineral resources, responsibly developed, have the potential to contribute significantly to poverty reduction and the country’s long-term development. The Government of Nigeria has set its own agenda for the development of the solid minerals sector, which is fully outlined in the National Economic Empowerment and Development Strategy (NEEDS) document. Government’s strategy for the sector is based on the recognition that the development of solid minerals in a sustainable manner can not be achieved without a deep involvement of the affected communities. In concrete terms, this strategy calls for the definition of effective ways and means to empower and engage mining communities in the development process and to promote responsible behavior and social investment on the part of mining companies and entrepreneurs in those areas where mines are developed and operated. This means that both artisanal miners and mining communities will be enabled over time to deal directly with the problems they face and propose solutions to which public policy and private investments should accordingly respond.

Nigeria ranks low on the human development scale of the UNDP. Poverty remains widespread, with a higher percentage of the poverty concentrated in the rural, rather than urban areas. The country has experienced economic stagnation, and worsening poverty over the 1980s and 1990s. Per capita GDP in Nigeria is among the lowest in the world, at $300 a year, despite the country’s tremendous economic potential. Between 1999 and 2003, GDP grew at the rate of 2.2 percent per annum, but this growth rate is still less than required to induce development improvements in Nigeria. If past trends continue, Nigeria will not be able to meet the Millennium Development Goals by a wide margin.

There are many constraints to pro-poor growth in Nigeria, including an over-dependence on oil, poor governance of the country by an oversized and dysfunctional public sector, a hostile business environment, social conflict and insecurity, environmental degradation, etc. For more than two decades, Nigeria heavily depended on oil-driven growth. Despite earning $300 billion from oil exports since the mid-1970s, Nigeria’s per capita income dropped 20 percent since 1975. The stagnation of the non-oil part of the economy during the last two decades has been a principal factor in the persistence of poverty within Nigeria. The level of industrialization in Nigeria is one of the lowest for Africa. The contraction of export agriculture, low productivity subsistence agriculture, and the lack of non-farm income generating
activities in rural areas have meant that rural populations have had limited opportunities to secure, let alone improve livelihood. Nonetheless, the vast majority of the poorest Nigerians continue to depend directly on products and services generated by natural resources for their living.

Prior to the emergence of the petroleum industry 30 years ago, solid minerals and agriculture were key sectors of Nigeria's economy. Until the 1960s, coal and tin were mined and exported on a large scale. Poor management, changing economics and country circumstances, and poor management by state-owned enterprises led to a decline in existing operations and a situation in which little new investment in mineral exploration and development, neither foreign nor domestic, could be attracted. Currently, there are no medium- or large-scale mining operations in Nigeria. Most active mining in the country today is being undertaken by small entrepreneurs and artisans, working deposits of precious, semi-precious, construction and industrial minerals, that are not licensed or are operating outside of the parameters of the license they hold. The Government of Nigeria estimates that as many as 500,000 households (potentially 2-4 million people) depend directly or indirectly on informal mining for their sustenance. These mining operations adhere minimally or not at all to safety and environmental standards, and are carried out in an ad hoc manner with little or no supporting infrastructure (physical or institutional). For the vast majority, mining is undertaken as part-time activity in parallel with subsistence agriculture. Mining represents the only cash-generating activity in these rural areas and as such represents the most immediate means of poverty alleviation for the rural communities involved. Overall, artisanal mining is an integral part of rural societies and economies and operates within traditional village structures.

The mining sector continues to face governance issues in at least two areas: (a) integration of small-scale and artisanal mining into the formal economy; and (b) distribution of benefits (and rents). With formalization and more so with the beginning of larger-scale mineral development, revenue management will become more important. Issues and problem areas that can affect either positively or negatively the possibilities for income growth, poverty reduction and environmental sustainability from mineral exploitation include: (i) the definition and enforcement of property rights; (ii) sub-optimal levels of resource exploitation, and (iii) low rent capture by the government. While these problems are not specific to Nigeria, appropriate policies are required to maximize the overall benefits from mineral resource production in the country, by establishing an effective regulatory framework and strengthening the ability of government agencies to enforce it.

Government is convinced that its central objective of reducing poverty through accelerated growth can only be accomplished through institutional and administrative reforms that refocus the role of the State, remove inefficient and discretionary regulations, and build a strong partnership between Government, the private sector, and the civil society at large. The main goal of Government's policy for mining is to establish an attractive socio-economic, regulatory and fiscal environment favorable to the development of the national private sector, and of interest to foreign investors. The evolving Government minerals policy (1998-present) has shifted the role of the State from Producer to Promoter and Regulator of mining activities, leaving operational and implementation responsibilities to the private sector.

2. Rationale for Bank involvement

The World Bank Group has just concluded the Extractive Industries Review (EIR) process, and has issued the Management Response, which has been approved by the World Bank Board. The EIR process assessed whether projects in oil, gas, and mining were consistent with the World Bank Group’s overall objective of relieving poverty through sustainable development. The EIR process was initiated in July 2001, following criticism from the non-governmental community, expressed during the September 2000 Prague meetings. The EIR process was designed to engage all stakeholders – civil society, indigenous peoples’ organizations, affected communities, labor unions, the private sector, and multilateral organizations. The World Bank Management Response has affirmed that there is a legitimate role for the
World Bank Group in the oil, gas, and mining sectors, provided that these interventions allow extractive industries to contribute to poverty alleviation through sustainable development.

The World Bank Group is committed to implementing the Management Response to the EIR by focusing on governance, transparency, revenue-sharing schemes, pro-poor community development, stakeholder consultations, sustainable environmental management, and other safeguard policies. The World Bank Group Management Response stresses that the Group's future projects in the extractive industries will be selective, with greater focus on the needs of the poor, increased focus on governance and transparency, and on promoting environmentally and socially sustainable development.

The Sustainable Management of Mineral Resources Project (SMMRP) in Nigeria is the first project in the mining sector in Africa, prepared after the formulation of the EIR process and the adoption of the Management Response by the Board. The Project objectives and implementation are in full accordance with the main conclusions of the Management Response to the EIR and seek to apply sustainable development strategies to address poverty. The Project's focus on artisanal and small-scale mining (ASM) activities specifically addresses the EIR recommendation on stakeholder consultations, engaging the community, and pro-poor development issues. Building capacity of local small-scale mining populations and introduction of effective social and environmental policies are also part of the ASM component of the Project. Furthermore, public sector governance issues in the management of solid minerals will be addressed by the Project through formulation of transparent and traceable mechanisms for the transfer of fiscal revenues. The Project will assist in establishing environmental regulations and guidelines for the sustainable development of the sector and improved capacity at all levels for reinforcement.

The Project is also a part of Nigeria's Joint Interim Strategy (JIS), the World Bank's framework for assisting Nigeria approved on June 15, 2004, and responds to all three of its strategic goals: (a) improvement of economic governance; (b) creation of the conditions for rapid private sector-led, poverty-reducing growth; and (c) enablement of local communities to take charge of their own development. A full Country Assistance Strategy (CAS) is currently under preparation by the World Bank, and will be completed during FY'05.

The JIS highlights the deterioration of government institutions during the period of military rule, a condition which hampers at all levels the ability of the Government to deliver critical services. The project responds to this problem by working on improving institutional governance in the minerals sector, through the implementation of new legal and regulatory frameworks for the sector and of transparent, rules-based system for the administration of mining rights, as well as through the re-skilling and re-equipping of the relevant agencies themselves along with the rationalization of their operating procedures and responsibilities. Mining sector legislation currently in effect is the 1999 Minerals and Mining Decree, that replaced the 1946 Minerals Act. The legislation adopted in 1999 does not meet international best practice standards to address specific concerns to improve Nigeria's investment climate in the mining sector. The lack of an adequate legal framework has been a major factor deterring international operators from investing in Nigeria's mining sector. Moreover, the Mining licensing system, i.e. the Mining Cadastre, has not been functional. Currently, it is estimated that approximately five years of applications for mining licenses are in the pipeline, waiting to be processed. The impact of this is that 95% of small-scale and artisanal miners operate illegally, unable to secure a mining license. This arrangement must be changed to reflect international best-practice and to create a functional mining sector, which would generate rural employment and reduce poverty. In addition, the project will support long term processes of institutional development and capacity building in the areas of environmental and social management.

In Nigeria, the ownership and management of solid minerals are vested in the Federal Government. The MSMD has administrative and regulatory responsibility for minerals, and administration of mineral
licensing procedures is done by the Mines Department (MD). Improving the relationship among the federal government, the state governments and local government authorities is a challenge listed in the JIS. The proposed project will address this issue by fostering dialogue and working to build consensus among federal, state and local government authorities over roles and responsibilities regarding mineral development promotion, administration and oversight.

The World Bank supports the development of other non-oil sector activities in Nigeria to promote sustainable development and economic growth. The lack of growth in the non-oil private economy, with consequent little growth in overall employment or income, is an issue that must be overcome by Nigeria if the country wants to be successful in its transition to a vibrant market economy. Solid Minerals, together with agriculture, have been identified by the Government as offering some of the best prospects for accelerated and sustainable pro-poor growth in Nigeria.

Progress in privatization is a goal of the JIS, and the proposed project will respond to this goal by working with the Bureau of Public Enterprises (BPE), the Nigerian Mining Corporation (NMC), and National Coal Corporation (NCC) to clarify the final situation and prospects for these latter two companies given that their major mining and processing assets will be either privatized or shut down.

The Project is also responsive to the JIS in its support for the formalization and re-organization of artisanal and small-scale mining as legitimate non-farm income generating opportunities, while promoting more socially and environmentally responsible mining and processing practices. A major aim will be the identification and promotion of linked and alternative local economic development opportunities, and on the articulation of possibilities for diversified rural livelihood strategies that can reduce poverty locally and regionally and provide a more sustainable economic basis for community life.

3. Higher level objectives to which the project contributes

The Project contributes to all three of the higher level objectives articulated in the country’s National Economic Empowerment and Development Strategy (NEEDS) (2003-2007). The NEEDS agenda revolves around three poles – (i) empowering people; (ii) promoting private enterprise; and (iii) changing the way the government works - with the aim of coordinating a national effort to reduce poverty, build capacity, improve economic competitiveness and fight corruption. A full World Bank Country Assistance Strategy is under preparation based on the NEEDS for delivery in FY05.

The solid minerals sector has been selected by the Government of Nigeria as one of the six priority/key sectors to be targeted for special encouragement, support and development (the others are oil, gas, agriculture, manufacturing, and tourism). The Government of Nigeria views these sectors as instrumental for wealth generation, job creation, and overall development. According to the NEEDS, the reasoning behind targeting of the solid minerals sector is twofold – development of the sector will contribute to non-oil private sector growth and will improve the marginal living conditions of the estimated 500,000 households dependent on small-scale mining. The NEEDS stresses the lack of a complete geological survey of the country’s mineral deposits, and emphasizes the need for the formalization and improvement of viability of small-scale and artisanal mining, and for the provision of an enabling environment for private sector development.

The NEEDS document also emphasizes the local sourcing of Industrial Minerals to meet national demand. Due to the strong demand of the domestic oil industry for barite and bentonite, they are considered strategic to national development. Gypsum and phosphate are important inputs for the production of cement and fertilizers for agriculture.
In its focus on solid minerals sector development, the project directly responds to the higher-level poverty-reduction agenda in Nigeria, expressed in both, the NEEDS and the JIS. The legal protection and access to minerals of artisanal and small-scale miners will be improved, thus contributing to the increase of their living standards, responding to the Government's focus on poverty alleviation and capacity building. The output and efficiency of solid minerals operations in Nigeria and their competitiveness will be enhanced. The project will also support the updating of the country's geological database through the production of modern geological and geophysical maps that will locate Nigeria's mineral deposit-bearing areas and will rationalize operations of the Mining Cadastre, thus improving Nigeria's attractiveness to international mining sector investors, organizing all available mining rights, licenses, and leases, and streamlining the registration process. Furthermore, the proposed operation will update Nigeria's Mining Code, creating a new, international-standard legal framework for domestic and international investors.

The Project will immediately act to implement a series of measures within the first twelve to twenty four months, which address these objectives, including:

a) Critical steps to improve the governance in the management of solid minerals and facilitate transparent access to mineral resources:
   - New Mining Law and regulations;
   - Non-discretionary, transparent mining title registry and management system (Mining Cadastre);

b) Immediate responses to the President’s initiative to increase supply of strategic commodities to meet domestic demand:
   - Barite pilot project and organization of the links to the domestic oil drilling industry;
   - Organization of gypsum “supply-chain” for cement factories;
   - A pilot gemstone center for marketing and cutting of gemstones.

B. PROJECT DESCRIPTION

1. Lending instrument

   Sector Investment Loan (SIL)

2. Project development objective and key indicators

The development objectives of the proposed operation are to:

(i) Increase the Government's long-term institutional and technical capacity to manage Nigeria's mineral resources in a sustainable way;
(ii) Establish a basis for poverty reduction and rural economic renewal in selected areas of the country via the development of non-farm income generating opportunities through small-scale and artisanal mining and to diversify away from oil sources of income.

KEY INDICATORS

- Increased production of targeted and non-targeted solid minerals
- New private sector investment flows into the sector.
New Minerals Act and its Regulations adopted by Parliament (including environmental regulations for the sector).

Set-up and effective operation of the Mining Cadastre.

Clearance of backlog of pending title applications

New Mining titles issued in a transparent and efficient manner, as prescribed in the new Minerals Act.

Number of artisanal mining associations organized and operating in compliance with the law.

Formalization of 200,000 artisanal and small-scale miners during the life of the project.

Number of mining operators benefiting from financing and business development assistance

Number of mining communities or community associations using matching grants under the project.

Area covered by new geological maps (as % of total area of the country)

Sustainable environmental practices introduced and functioning in mining areas

Environmental Management Plans maintained after disengagement from the pilot projects

3. Project components

The proposed operation includes four components:

Component A - Economic Development and livelihood diversification in Artisanal and Small-scale Mining Areas. (US$48.90 million)

The objective of Component A is to contribute to increased production by artisanal and small-scale miners in an environmentally and socially sustainable way, which will be achieved through the empowerment of small-scale miners and surrounding communities that depend directly or indirectly on the exploitation of solid minerals to ensure their sustainability. The component will support activities aiming to: i) characterize the nature and extent of small-scale mining and its socio-economic, community, gender and health aspects through intensive profiling and baseline studies; ii) improve technical, environmental and social conditions of small-scale mining operations through community-driven pilot projects, including increased awareness and preventive action against HIV/AIDS and other infectious diseases; iii) strengthen the Jos School of Mines; iv) establish a SSM Unit at the Federal level with satellite field offices; v) improve access to credit and financing in the mining sector, in particular for medium and small-scale mining, and for community works; vi) support of the private sector institutions; and vii) foster development of small-scale mining for specific commodities with emphasis on import substitutions and sector development.

Component A will have a demand driven approach whereby cooperatives and associations of artisanal and small scale miners and the affected communities will be empowered to take charge of their own development agenda and define their own needs in the context of business plans and community
development plans, so that they can access, through participatory processes, services and matching financing offered by the Project.

The main objective of the pilot projects will be to promote socially and environmentally responsible mining practice, and demonstrate the benefits of organization and formalization to small-scale and artisanal miners - for securing their livelihoods, improving working and living conditions, protecting and caring for their environmental and natural resource assets, and for the social and economic development of their families and communities. Potential pilot projects will be identified and selected with reference to:

- poverty alleviation and social and economic development in areas where they are sited;
- strategic importance of the commodity in Government’s development plans and contribution to the solution of supply chain and marketing problems;
- level of projected project impact on employment (the minimum participation in the pilot project shall be 1,000 people);
- communities’ capacity to participate and benefit from the project,
- improvement of livelihoods, social and human capital, and the social, economic and environmental sustainability of households and communities participating in the pilot project;
- diversification and expansion of livelihood, employment and commercial opportunities (both mining and non mining related) in the project’s area of influence;
- willingness and capability of State and Local Governments to support project implementation, and;
- improvement of conditions and practices that may be associated with artisanal and small-scale mining, such as rights of women and children, poor working and safety conditions, degradation of the local environment, spread of infectious diseases (e.g. HIV/AIDS and other infectious diseases , malaria); informality, ambiguous legal status and weak organization; access to appropriate technology, fair markets, and credit.

Moreover, project selection will also take into account the proposed projects’ degree of complexity (to be minimized), potential ease of implementation, and the ability to replicate successful experiences or to build up successful communication strategies on individual experiences, with the aim of maximizing the chances for success.

Given the complexity of the component, its implementation will be staged in three phases. An Evaluation Committee will be set-up by the Ministry of Solid Minerals Development, including representatives of the World Bank, the Ministry, civil society, academia, and the Communities and Small-scale Mining knowledge network, at project inception to evaluate results achieved during each phase and recommend the scale-up, consolidation or phase out of the activities. During the first phase, extending from project preparation to the first year of effectiveness, six baseline studies will be completed and three pilot projects launched. Intermediate indicators have been defined to measure progress of implementation of the individual pilot projects. A judgment by the Evaluation Committee that the specific targets have been achieved will trigger the second implementation phase, when the lessons of successful pilot projects will be replicated elsewhere in the country (scaled-up) and three new pilot projects will be launched. The Evaluation Committee will assess again at the Mid-Term Review progress in the implementation of the new pilot projects and recommend devolution of the successful ones to the private sector or the affected communities, and consolidation or phasing out of the least successful ones.

The component will also support the development of the private sector associations and professional support groups, as well as strengthening of the Jos School of Mines to become a regional and national pole of excellence for the training of technical staff for the government and the private sector, of
extension workers for small-scale miners, entrepreneurs and their communities, and for the updating and
upgrading of skill levels within the mining community as a whole.

The component also addresses constraints in access to financing by artisanal and small-scale miners
through: (i) contracting NGOs and private organizations to assist in the preparation of business plans,
support project implementation and provide advisory and technical services; (ii) contracting private
consultants to assist intermediary financial institutions to assess risk in lending to solid minerals
development and assist in the expansion of micro financing services to the solid minerals sector; and (iii)
promoting the acquisition of productive assets by artisanal and small scale miners through the set-up of a
matching grant mechanism.

A significant part of the matching grants scheme will address community interests and needs, by
providing technical assistance to communities and community groups for the preparation of community
development plans or special projects and by making funds available, through matching grant
mechanisms, for small scale social infrastructure projects that can be prepared, operated and maintained
by communities or their representative institutions.

Component B - Strengthening Governance and Transparency in Mining (US$33.28 million)

The main objectives of this component are to improve Nigeria's competitiveness to attract private
investment in mining, and the administration of mining rights and activities. The activities supported by
the Project include: i) Revision and modernization of the legal and fiscal frameworks for mining; ii)
Institutional capacity building to provide for efficient public mining institutions and transparent
management of the sector; iii) Development of a computerized registry and Mining Cadastre system in
accordance with international best practice; and iv) Development of good environmental and social
management practices within the mining sector.

Component C - Private Sector Development. (US$26.81 million)

The component will support the efforts of the Government to facilitate the development of a national
mining industry led by an efficient private sector and the restructuring of the State-owned mining
enterprises. Within this framework, the Project will support: i) Restructuring of State-owned mining
corporations (NMC and NCC); ii) Strengthening of the geological infrastructure (geophysical, geological
mapping and mineral assessments) as well as development of a national solid minerals information
system to promote investment in the mining sector. The component will allow for the compilation, and
completion of a large number of maps prepared by GSNA and ensure their dissemination in support of the
promotion of investments.

Component D - Project Coordination and Management. (US$6.91million)

MSMD has established and shall maintain, during the execution of the program, a Project Management
Unit (PMU) to coordinate project implementation, and to manage the following activities: (a)
procurement, including all contracting for works and purchases, and the hiring of consultants, (b) project
monitoring, reporting and evaluation, (c) the contractual relationship with IDA, and (d) financial record
keeping, the Special Account and disbursements. The PMU shall ensure the coordination among the
different agencies participating in the Project – i.e. other ministries and institutions at the Federal and
States levels, stakeholders from the public and private sectors, and civil society. The PMU will also liaise
closely with the management units of other projects in the World Bank Group's Nigeria portfolio to
maximize synergies in project implementation and build upon successful experiences of those projects.
The PMU shall be headed by a Project Coordinator and shall include specialized personnel for
accounting, procurement, environment and social impact monitoring, financial management, and project monitoring and evaluation.

4. Lessons learned and reflected in the project design

The SMMRP's focus on both, producers and communities in its ASM component closely corresponds to the Community-Driven Development (CDD) approach of several World Bank projects currently operational in Nigeria. The task team applied lessons learned from the CDD approaches taken by other operations in designing the SMMRP. Participatory development and community ownership, which are essential to achieving sustainability through the actualization of "solid minerals" community associations and the build-up of ownership at the State and Local Government levels, given the potential for economic diversification and revenue mobilization, have been emphasized in project design and plans for implementation. As in other World Bank projects incorporating CDD approaches, SMMRP will focus on social and economic inclusion – especially, on "formalizing" the traditional rights of "informal miners", as opposed to excluding "illegal" miners, and on giving vulnerable groups special attention. A participatory approach to monitoring and evaluation will be fostered to promote transparency and accountability of resource use on the community level. Capacity building will be done in a bottom-up manner, focusing on community-based institutions and organizations and on private providers of extension services to ensure sustainability.

In terms of design, the SMMRP has also benefited from linking with the Micro, Small, and Medium Enterprise Project (MSME), which has resulted in the following common elements:

- Design/modus operandi of the MSME project Performance Grant (matching grant) program - including pricing, eligibility and performance criteria etc;
- Experience with business membership organizations in Nigeria and also approaches for assessment and design of support operations;
- Details on the financial sector opportunities in the MSME project, including leasing.

These common points have been reflected in project design, and will impact project implementation – the PMU will coordinate with the MSME PMU to harmonize the matching grants program and the leasing component.

Furthermore, lessons have been learned from global initiatives as well as ongoing capacity building operations for the sustainable management of the mineral sector being implemented in other countries in the Africa Region (e.g. Burkina Faso, Ghana, Mali, Mauritania, Mozambique, Madagascar, and Tanzania), and in other regions (namely Latin America and Central Asia). The project benefits directly from the results of the Management Response to the Extractive Industries Review, in particular with reference to improving transparency and governance in the management of rents coming from extractive industries. With regards to artisanal and small scale mining, the project draws on international best practice promoted by the World Bank/DFID global CASM- Communities and Small Scale Mining initiative. In operational terms, lessons learned from small-scale mining approaches in other World Bank-assisted projects (namely in Mozambique and Madagascar) have been applied in project design of the proposed operation.

On the policy level, previous experience with project implementation has demonstrated that involving Government counterparts at an early stage of project preparation is an important factor in future project success. Government ownership is crucial for successful outcomes of World Bank-assisted projects. In

1 These projects are: FADAMA2, Community-Based Urban Development Project (CBUDP), Local Empowerment and Economic Management Project (LEEMP)
the case of the proposed operation, members of the Ministry of Solid Minerals Development (MSMD) have been regularly consulted since the project identification stage, and a Project Management Unit was established under the auspices of the Ministry to assist with the preparation of the Project. The fact that the MSMD was ready to dedicate its staff and resources before implementation clearly demonstrates the Ministry’s strong commitment to the Project. The Project has solicited and received feedback from the Ministry of Finance, the Ministry of Environment, the National Assembly, and the office of the President of the Federal Republic of Nigeria on project design, project components, and objectives to ensure that they fit with the national development objectives of Nigeria. During preparation, the World Bank team, with the assistance from the Ministry of Solid Minerals, has conducted workshops focused on National Policy Dialogue, legal reform and small-scale mining to lead to the formulation of project development objectives, a comprehensive Mining Code, and the piloting of ASM projects, respectively. The National Policy Dialogue had 700 stakeholders in attendance, gathering individuals from the private sector, Government (both, Federal and State), NGOs and civil society, building ownership.

5. Alternatives considered and reasons for rejection

The proposed operation consists of complex and targeted interventions, that will focus on promoting private sector operations and investment, reform of public Mining Institutions, and assistance to small-scale and artisanal mining. Although the project is planned as a Sector Investment Loan, which is a natural instrument for this type of operation, the following two alternatives have been considered.

a. Incorporation of the project as part of a component into another World Bank project currently under preparation – Governance and Economic Sector Reform.

The planned Governance and Economic Sector Reform project is a US$140 million operation, which includes reform of the Civil Service, State Governance work, the pension system, and strengthening the Government’s anti-corruption efforts through support to the Economic and Financial Crimes Commission (EFCC). There are strong linkages between the second component of the proposed operation, where the focus is on the reform of the existing public sector institutions, and the Governance and Economic Sector Reform project. However, inclusion of the first component, with its specific focus on ASM, requires a hands-on approach to improve livelihoods in rural areas. The approach has a strong community-based focus. These elements require an holistic and integrated approach that has best chances of success in a focused stand-alone operation. The implementation arrangements of the Governance and Economic Reform project are therefore not suited for the highly targeted and complex approach for ASM reform, with specific technical, environmental, and social issues that are being considered in the proposed operation. Furthermore, the planned geophysical and geological surveys are specialized technical operations, that are regarded as a priority by the Government of Nigeria, and adequate attention would not be given to them, if they are to be included as part of another large operation, and not as part of a stand-alone project. Overall, with the exception of parts of the second Component, the scope and focus of the Project would not fit logically under the Governance and Economic Sector Reform Project agenda.

b. Preparation of current project on a smaller scale (i.e. US$50 million rather than the current US$120 million)

A smaller operation would not allow implementation of the project on a scale which would adequately reflect the needs of the relevant stakeholders and strategic priorities of the Nigerian Government, as described in the NEEDS document. Considering the size of the country and the number of households supported by small-scale mining (estimated at 500,000), a smaller project size would not be adequate. A large-scale operation is able to build the critical mass required for an effective solid minerals sector reform. A smaller project would inevitably not be fully integrated, and would lead to the adoption of a
centralized approach to the delivery of technical assistance and extension services to small-scale miners, which would reduce the possibility of achieving Project development objectives in a sustainable way.

C. IMPLEMENTATION

1. Partnership arrangements

The Project will be implemented in conjunction with a large range of governmental and non-governmental partners (private sector and civil society). Wherever possible, its implementation will be coordinated with complimentary or parallel activities of other donors, for example, with DFID’s (Department for International Development, United Kingdom) Nigeria Pro-Poor Growth initiative. Possible partnership arrangements after Project effectiveness were discussed on various strategy points, especially regarding the CDD component and work with the ASM communities. This partnership will build on joint work already underway involving DFID and the Bank on the global CASM- Communities and Small Scale Mining knowledge sharing initiative.

The Project has already collaborated with the USTDA (United States Trade and Development Agency) on Nigeria’s coal sector development. With assistance from the World Bank SMMRP task team on TORs preparation, the USTDA is funding a study on rehabilitation of idle coal mines to meet potential demand from an anticipated increased use of coal for power generation. Results of the study have been incorporated into project design, and will be implemented after project effectiveness. Exploratory discussions have also been initiated with USAID funded projects in the micro-finance sector to identify ways in which the projects may complement the other’s efforts.

2. Institutional and implementation arrangements

The project would be implemented over the period of five years. The Project Completion date would be December 31, 2009, and the Credit closing date would be June 30, 2010.

The Ministry of Solid Minerals Development (MSMD) is responsible for the implementation of the project. The Ministry set up a Project Management Unit (PMU) that is fully operational. The unit is staffed by a Project Coordinator, Assistant Project Coordinator, Project Accountant, Procurement Specialist, Environmental and Social Specialist, Information technology Specialist, and Small-scale and Artisanal Mining Specialist. The project staff has received proper training (i.e. procurement, and financial management training). For the duration of the first twelve months of operation, the PMU has hired a Procurement Consultant, trained in World Bank procedures, who will provide advice and guidance on proper procedures for project preparation and implementation. The PMU has also hired a senior accountant to assist in the set-up of the financial management system in a timely fashion.

The financial section of the PMU will be responsible for financial management of the proposed project. The PMU will maintain accounts and payments of the proposed project. A summary financial report will be included in quarterly progress reports. Project accounts, the Special Account, all procurement and compliance with the financial and legal covenants of the Credit Agreement, and all procurement, including Statements of Expenditure will be audited annually by independent auditors satisfactory to IDA. The audit reports would be submitted to the Bank not later than six months after the end of each calendar year. The project will identify and hire external auditors to assess PMO compliance with fiduciary responsibilities and administration of proper disbursement arrangements. The relevant financial management and procurement assessments of the PMU have been conducted by the World Bank staff. The PMU will be equipped with the “Client Connection” software and accessibility, to allow for streamlined procurement and disbursement procedures.
In terms of implementation, CDD approaches in Nigeria have emphasized the bottom-up method, and the state vs. federal coordination. The SMMRP will create local implementation committees in areas where pilot projects will be undertaken, with the participation of State and Local Government representatives, plus NGOs. The CDD Officer of every relevant state would be a member of these committees. These committees will make an inventory of needs of the communities through social mobilization and sensitization and will select community projects prepared with the assistance of NGOs and based on their Community Development Plans. The retained projects would be sent to the PMU for a final check of consistency with Project criteria and guidelines, and the funds would be disbursed directly to the “Mining” Community Associations. This model is based on existing Bank project experience in the agricultural sector (FADAMA), and will use similar implementing arrangements. Throughout project implementation, the SMMRP will coordinate with other CDD operations in Nigeria on community selection approaches to avoid duplication of effort and to maximize synergies in the community work. The PMU will work with other CDD implementation units and organize joint supervision missions, and, whenever possible, seek to formalize these joint implementation effort through the creation of joint inter-ministerial committees.

The Finance Department of the Ministry will be responsible for overseeing the financial affairs of the Project. Assistance to the Department will be provided in terms of capacity building and equipment. Two staff with relevant professional qualification will be seconded to the PMU as Project Accountant and Assistant Project Accountant. They will report on their activities to the Project Coordinator.

Modern internal audit functions would be performed by the Internal Audit Unit of the Ministry. The Project Accountant will be responsible for ensuring compliance with the financial management requirements of the Bank and the Government, including forwarding the quarterly financial monitoring reports and audited annual financial statements to the Head PMU, the Ministry and to IDA. Project Accountant and the Head, PMU will jointly prepare budgets. Project Accountant will be responsible for preparing monthly financial reports, quarterly financial monitoring reports, and annual financial statements, as required.

The timetable for implementation has been divided into a number of phases and includes major decision points: at the end of the first year and at the mid-term review for formal consideration of implementation progress and incorporation of adjustments to the implementation plan as well as to program design and implementation methods. The approach involves ramping and scaling up as concepts are confirmed, and as capacity is built and consolidated at various levels. In this scenario, the first year is used to lay the foundation for scale up in the following years, focusing on baseline work, pilot projects, market analysis, basic capacity building of stakeholder groups, benchmarking project outcome indicators and monitoring mechanisms, enhanced preparation of follow-on work. Additional pilot projects and demonstration programs are rolled out over years 2 and 3, and their administration devolved to the private sector, local authorities and community based organizations, including producer associations from year 3 to 5. After the first year of implementation, the project will be either scaled up or down, depending on the outcomes/progress. A similar process will take place at mid-term review, approximately 30 months after project launch.

The monitoring and evaluation plan includes the incorporation of a monitoring team; benchmarking and tracking of selected indicators, establishment of requirements for up-scaling, and formal assessment of project progress during the project life. A key decision point is reached at the end of year one at which time it will be determined whether the requisites for scale up have been met, or whether scale-up should be deferred pending consolidation of existing initiatives and/or re-design of project components. Flexibility will be maintained at the level of individual projects and programs, but also in terms of the
component design as a whole, with both informal and formal reassessment of needs and readjustments to design as the project is implemented.

3. Monitoring and evaluation of outcomes/results

The Monitoring and Evaluation system for the Project has three components: (i) impact evaluation and beneficiary assessment (ii) assistance to the rehabilitation of the Mines Department’s statistics Unit to allow it to resume the preparation of key sector statistics; and (iii) monitoring of the Environmental Management Plan.

Lack of detailed baseline information and adequate institutional capacity make improving governance in the small-scale and artisanal mining areas a particularly difficult task. The Ministry of Solid Minerals Development is not in a position where it can tell with reasonable certitude what is the production of relevant mineral commodities in Nigeria. The Project will assist the Mines Department to rehabilitate its statistical database to track key data like production and investments. This will imply the set up of data collection mechanisms at the State and local levels.

Based on the results of the initial baseline studies, the project will identify and benchmark appropriate indicators and establish baseline data to monitor and evaluate impacts and beneficiary assessment at implementation launch.

Prior to start of project implementation, the World Bank will provide an external consultant to assess the suitability of the indicators suggested for tracking development impacts. The Consultant, who will be in contact with Monitoring and Evaluations specialists at the World Bank, will establish a poverty index to be benchmarked for each of the artisanal and small-scale mining areas targeted by the pilot projects and by the profiling and baseline study program. This will provide a basis for monitoring and periodic evaluation throughout project implementation. As part of this exercise, the Consultant would also recommend a set of monitorable and measurable indicators to track project outcomes and to serve as targets for development effectiveness. The performance indicators selected by the Consultant will be clear, relevant, economic, adequate and measurable. Proxy indicators will be used, where required (i.e. where precise indicators are not available). Further details on the indicators used to collect baseline data through Village Income surveys are provided in Annex 3. Once the indicators are established, they will be reviewed by the Evaluations Committee, set up especially to monitor project progress. The Evaluations Committee will be composed of key stakeholders (CASM, MSMD, World Bank, representatives of civil society and academia), which will convene on a regular basis to track implementation progress and evaluate performance (after year 1 and at the mid-term review).

The PMU will be responsible for monitoring and evaluation of the Project according to the indicators and benchmarks included in the Project Implementation Manual (PIM) and the Development Credit Agreement. Not later than 45 days after each quarter (60 days for the first quarter after effectiveness), the PMU will submit to the Bank quarterly progress reports covering all Project activities, including procurement and financial summary reports. Bi-annual reviews, the first one to take place not later than 6 months after effectiveness, would provide detailed analysis of implementation progress towards development objectives, and include an evaluation of financial management as well as a post-review of procurement matters.

During the ICR (Implementation Completion Report) process, the benchmarks originally established at preparation and the targets achieved at mid-term review, along with the quarterly progress reports and Evaluation Committee reports, will be used as inputs to evaluate project results.
4. Sustainability

Key parameters for the sustainability of the project outputs/results are Government commitment to support the reform agenda for the sector and the effectiveness of the cooperatives or other types of artisanal and small scale mining associations. The Government's commitment to this project is very high. Solid minerals sector is identified as one of strategic priority sectors in the NEEDS document. Under the auspices of the Ministry of Solid Mineral, with which World Bank liaised on a continuous basis throughout project preparation, a Project Management Unit was set up. In turn, the PMU has worked with the World Bank office in Abuja and received guidance in standard rules and procedures.

Involvement of different representatives/agencies of Nigeria's Government into discussion of project design at an early stage has contributed to a high level of ownership. This feature will ensure that the Government's commitment to the project remains high.

At the community level, the sustainability of Project outcomes will be supported by the positive changes fostered by the Project in the relationship between state and the communities dependent on solid minerals, i.e. by including communities in essential decision making processes. It will create permanent capacity with cooperatives, producer associations, enterprises and community-based groups to design, implement, operate, and maintain projects that can be drawn upon and replicated after the Project closes. And it will help to improve management of mineral resources, so that artisanal and small scale miners and affected communities are able to ensure a diversified sustainable livelihood over the long term.

It is expected, that, following completion of the operation, the sustainability of the solid minerals sector will be substantially improved through the development of new opportunities for large scale mining in the country and the establishment of viable, market-based service provision to both large and small-scale miners.

5. Critical risks and possible controversial aspects

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Mitigation Measure</th>
<th>Risk with Mitigation</th>
</tr>
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<tbody>
<tr>
<td>Artisanal and small scale mining cooperatives and associations are presently too weak to implement project activities, and need assistance to be able to comply with the Bank's environmental, social and fiduciary safeguards.</td>
<td>Substantial technical assistance and training will be given to cooperatives and other types of associations. Federal, state and local governments will be trained to provide guidance on the process and promote their participation in the Project.</td>
<td>High (until 2007)</td>
</tr>
<tr>
<td>Government does not sustain its commitment to sector reform and does not provide an adequate enabling policy environment.</td>
<td>The ongoing macroeconomic and sector policy dialogue will work to support alignment of sector reforms with Government efforts to keep appropriate policies. Risk is mitigated by Government commitment until 2007 elections.</td>
<td>Low (until 2007)</td>
</tr>
<tr>
<td>Government does not sustain its commitment to a decentralized, community based approach for the development of solid minerals.</td>
<td>The ongoing macroeconomic and sector policy dialogue will support alignment of sector reforms with Government efforts to keep appropriate policies. Risk is mitigated by Government commitment until 2007 elections.</td>
<td>Low (until 2007)</td>
</tr>
<tr>
<td>Government fails to pay its counterpart contributions.</td>
<td>Proper liaisons with Ministry of Finance have been established.</td>
<td>Medium</td>
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</tbody>
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Project benefits are captured by intermediaries | Monitoring and evaluation processes to identify problems as they emerge. Multiple layers of oversight at the local, state, and national levels to ensure that benefits are captured by target groups. | Medium

Foreign investors are not responsive to positive developments in sector reform. | Increased investment promotion will assist in establishing a track record. Demonstration effects will be publicized in investment promotion programs and applied to attract continuous foreign investment flow. | Medium

Output of primary commodities increases, but the lack of market outlets means that producers fail to benefit substantially. | Support to the Government’s efforts to rationalize markets and promote investment in market infrastructure. | Medium

Government efforts to formalize the solid minerals sector not successful because local population is not responsive. | Involvement of civil society in the organization of the sector, direct engagement with the communities, placement of government support units in pilot project areas. | Medium

Project financial management risk | Adequate supervision by Bank FMS, and external auditors. | Medium

Insufficient knowledge and experience with IDA’s procurement procedures causing substantial delays in project implementation | Experienced Procurement Consultant was hired for a period of 1 year to assist the PMU manage the procurement functions prior to proper training of PMU designated Procurement Officer. | High

Complexity of the ASM component delays project implementation | Project design incorporates triggers and a phased approach based on intermediate indicators that will lead to a decision regarding scaling up operations or exiting from an activity, depending on the outcome. | High

Overall Risk | | Medium

6. Loan/credit conditions and covenants

Only standard IDA conditions apply. Significant progress towards achieving sector strategic objectives was made during project preparation (under PPF financing). The preparation of Implementation Manuals for the Matching Grant Fund and the Resettlement Fund, acceptable to IDA, will be conditions of disbursement for these two categories.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

The Project is a technical assistance/capacity building operation and, as such, does not lend itself easily to quantitative investment analysis. However, a number of economic indicators can be projected and compared, such as the estimated value of mineral exports, fiscal revenues coming from the sector, and the amount of new investment in the near future.

Because the investment climate is not conducive to the security of private investments, mining in Nigeria has seldom reached the industrial stage and has created few opportunities for substantial backward and forward linkages. The great majority of operations being artisanal and semi-mechanized, the scale of the market required to develop backward linkages (equipment manufacturing, engineering and geological
services, etc.) has yet to be achieved. Finally, inadequate infrastructure, such as feeder roads, water supply, marketing logistics hamper sector development.

Small-scale mining can contribute to creating job opportunities for local people, encourage local businesses development, and facilitate the provision of vital infrastructure for remote communities that do influence development positively, such as roads, education and health care facilities. However, unlike other sectors where benefits are dispersed throughout society in a “bottom-up” approach, benefits from mining often take the form of revenues channeled through central governments. The challenge is to ensure that the expected benefits from the activity - especially for the poor - are sufficiently higher than the estimated costs, including environmental and social costs. There is a risk however that benefits and costs arising from mining are distributed unevenly. Although local communities bear the negative social and environmental impacts of extractive industry activities, they may not receive much of the revenues. And they may not be given full opportunity to participate in discussions on proposed projects. Benefits to society are enhanced if mining contributes to the development of much-needed infrastructure and help communities through employment and the provision of health care and education, all the while safeguarding the environment. Local communities bearing those costs should clearly also benefit from such activities.

This disappointing trend could be reversed once the new Minerals Act under preparation is enacted, providing for effective mechanisms to share revenues of mining with affected communities, and an efficient Mining Cadastre is created, facilitating the access to mineral resources and ensuring the security of tenure for mining titles, both being pré-requisite for investments in the sector. It is expected that, as a result of the project, solid minerals annual gross production value from artisanal and small scale mining could reach about US$75-125 million by 2010. Given an adequate investment climate, foreign direct investment in large scale mining could boost solid mineral production to US$500-700 million by 2015.

In addition to an increase in mineral production, and potential impacts on poverty alleviation and local economic development in rural areas (see component 1 of the project), the impact of the projected sector development on fiscal revenues as a result of the new sector policy, can be estimated in the range of US$10 to US$20 million per year.

2. Technical

The projects builds on a comprehensive consultative process for solid minerals sector reform. Workshops and consultations were held in Nigeria during project preparation and appraisal on the issues concerning project design and implementation (i.e. ASM, fiscal reform, legal and regulatory issues) to build in-country ownership of sector reform.

Introduction of state-of-the-art technology for the geological mineral mapping, data processing, and information management will increase Nigeria’s technical capacity in mining sector management to the highest international level. International experts will provide technical assistance to manage the mining title system and to reform the existing Mining Cadastre in order to streamline its operations. As a result, the issue of the current five-year backlog of mining title applications will be addressed. Environmental permits and monitoring, and the geological information infrastructure will be managed with the use of information technology to achieve the highest level of capacity.

The project will also focus on knowledge transfer and upgrading of professional skills in all technical areas.

3. Fiduciary
The procurement system in Nigeria is in the process of being reformed at all levels. The government procurement reform program was fashioned in line with the recommendations of the year 2000 Nigeria Country Procurement Assessment Report (CPAR). All the three tiers of governments are operating under the Financial Regulations (FR), which are essentially an internal set of rules for economic controls. The CPAR identified major weaknesses in the procurement polices and practices in Nigeria and made appropriate short-, medium- and long-term recommendations. Based on the short-term recommendations of the 2000 Nigeria CPAR, the procurement procedures section of the FR at the federal government level was revised on June 27, 2001, to ensure clarity and transparency by incorporating details of the various procurement methods and their applications for goods, works and services among others. For instance, the ineffective Federal and Departmental Tender Boards have been abolished while the Ministerial Tender Boards have been strengthened with powers to approve contract awards. The Budget Monitoring and Price Intelligent Unit (BMPI) set up in the Presidency currently carries out prior review of contracts above $500,000 to ensure compliance with existing regulations.

Until government takes major steps to reform the procurement policies and practices in the country and from the conclusion of the FY2000 CPAR, procurement risk for doing business in Nigeria is assessed as high.

The PMU will have the overall responsibility for coordination of procurement activities for the project and will manage implementation of procurement activities of this project. The already concluded procurement capacity assessment of the implementing agency revealed that, the PMU does not have adequate experience in implementing World Bank financed projects. Therefore there is grossly lack of procurement capacity at the implementing agency.

To ensure that the appropriate procurement capacity is in place, there is the need for significant capacity strengthening and building at the PMU. To strengthen these required procurement capacity, a variety of measures are envisaged and planned under the project as enumerated in Annex 8. Since it will take some time to build this capacity, the PMU has engaged Procurement Consultants to assist and mentor the PMU designated Procurement Officer for a period of one year. The consultants’ contracts shall make adequate provision for capacity building and transfer of knowledge to relevant project staff. There is no existing procurement manual at the PMU. Therefore the project will adopt the Generic Procurement Manual already developed for Bank assisted projects in Nigeria. There is also the need to computerize store records and provide necessary capacity building for the store officers.

Financial Management Arrangements.

The Finance Department of the Ministry will be responsible for managing the financial affairs of the Project. However, 2 staff with relevant professional qualification will be seconded to the PMU as Project Accountant and Assistant Project Accountant. In addition, the project has engaged a professionally qualified and experienced Financial Management Consultant with relevant experience to assist in setting up and implementing the financial management arrangements of the project. They will report on their activities to the Project Coordinator in the PMU. Modern internal audit functions would be performed by the Internal Audit Unit of the Ministry. This will be complemented by an internal auditor who will be posted from the Office of the Auditor General of the Federation and located in the PMU. The Project Accountant will be responsible for ensuring compliance with the financial management requirements of the Bank and the Government, including forwarding the quarterly financial monitoring reports and audited annual financial statements to the Head PMU, the Ministry and to IDA. The Project Accountant and the Head, PMU will jointly prepare budgets. The Project Accountant will maintain adequate FM arrangements to support the deployment of Project resources in an economic, efficient and effective manner to achieve the stated development objectives.
With respect to the funds flow for the project, IDA will disburse the credit through a Special Account, which will be managed by the PMU. The PMU will open and maintain the following bank accounts: (a) A Special Account in US Dollars in a commercial bank to which the initial deposit and replenishments from IDA will be lodged; (b) A Current (Draw-down) Account in Naira in a commercial bank to which draw-downs from the Special Account will be credited once or twice per month in respect of incurred eligible expenditures. Following the immediate payments in respect of those eligible expenditures, the balance on this account should be zero; (c) A Current (Project) Account in Naira in a commercial bank to which Counterpart Funds will be deposited; (d) A Current (Naira Interest) Account in Naira in a commercial bank to which interests on Counterpart Funds will be credited; and (e) A Current (US$ Interest) Account in a commercial bank to which interests on the Special Account will be credited.

Noticeable defects in the existing FM arrangements in the implementing ministry includes manual accounting system. Also, the PMU has just been set up and will have to set up the accounts Unit. The risk arising from the outside environment, based on a dated CFAA, is regarded as high. Given such an environment, strong internal control is required and this will be achieved by implementing the financial management action plan in Annex 7.

4. Social

4.1 Summarize key issues relevant to the project objectives, and specify the project's social development outcomes.

Important social issues have been identified in the social assessment (SESA) and in previous studies related to the problems of the mining sector in Nigeria. These issues include:

a. Artisanal mining and poverty
b. Conflict over natural resource use and management, e.g., over access to natural resources, over degradation of the natural resource base, over distribution of costs and benefits, over control and decision taking with respect to use and management
c. Social and economic inclusion, e.g. exclusion of specific groups (women, children, aged; certain ethnic groups), increasing social and economic stratification vs the creation of new opportunities for inclusion
d. Public and occupational health, e.g. infectious disease prevention and control; public health and safety hazards and their control or elimination
e. Communication and consultation with direct stakeholders

These issues are generic to the mining sector, but their scope and intensity will be site specific in relation to individual project activities, such as the small-scale mining pilot projects.

Issues are addressed at various project levels, and a key criteria for program design, especially in the artisanal and small-scale mining component of the project, is the extension of opportunity to disadvantaged groups and its social and economic inclusivity. All program activities become vehicles for building capacity within beneficiary and target groups to learn how to manage situations, to organize their social and economic affairs and interactions in more productive ways with the local level subprojects, and to become more sensitive to and responsible for the environmental, health and social impacts of their own extractive activities. The development and strengthening of human and social capital in rural areas for the sustainable management of natural assets is both a means and key outcome. Particular attention will be paid to ways of mitigating any adverse impacts of mining on vulnerable groups, and of extending economic opportunity and benefits to disadvantaged groups.
Criteria and procedures for selecting pilot project communities will be transparent, involving an analysis of access to basic infrastructure, the potential for positive project impact and improved natural resource management, and a balancing of potential benefits and impacts on a candidate community. Furthermore, artisanal mining may be seasonal or permanent; the mode of production and the degree of success achieved by various program elements to formalize and upgrade its practice as well as its human resource base will determine the extent to the contribution to poverty reduction and economic renewal. Project areas will be selected not only on the basis of the organizational and mining issues involved, but also on the economic situation of the area and of the local communities.

4.2 Participatory Approach: How are key stakeholders participating in the project?

Before sites of project activities are finalized, participatory stakeholder analyses will be completed and key stakeholder groups/representatives invited to participate in a process of project concept validation and design, as well as in the monitoring of its implementation, and evaluation of its outcomes. The project recognizes the importance of involving stakeholders from the earliest moments of project conceptualization, through its implementation and monitoring, to its final evaluation. Communities involved in or affected by project activities will be engaged in a process to identify precautionary measures for safeguarding existing livelihoods while ensuring that opportunities for enterprise expansion or development and for the creation of new livelihoods and income generating activities will be socially inclusive. The mechanics of engagement and participation may vary between sites, taking into account the findings of baseline surveys and sensitive to differing cultural norms, ethnicities, communal social, economic and political relationships, and to existing community practices or indigenous knowledge systems. Local practices will only be adapted to the extent that they are contrary to the project objectives of participation, social inclusion and community empowerment.

Those primary stakeholders, who may be disadvantaged by a project activity or program, due to an unavoidable loss of access to resources upon which their livelihood depends, will be qualified as project affected people and their numbers determined via a Participatory Rural Appraisal (PRA) process, as indicated in the Resettlement Policy and Process Frameworks prepared for the project. In cases where compensatory measures will be needed, affected peoples will participate in the design and implementation of those measures.

An integral part of any participatory process will be capacity building for effective participation, including the strengthening of traditional organizations and associations. This will assist in the creation of new skills for community organization and planning, but will also contribute to the development of social capital and strengthening of participation and governance within communities.

Contact has already been made with the Nigerian Women in Mining network with a view to identifying appropriate participation for designing projects and programs that are gender sensitive and inclusive.

4.3 How does the project involve consultations or collaboration with CBOs?

Community-Based Organizations (CBOs) will be actively involved in various phases of program delivery, monitoring and evaluation. At the outset, they will be engaged to facilitate consultative processes where necessary and to strengthen the capacity of primary stakeholders to participate in such processes more effectively. Beyond this, qualified CBOs will be considered potential candidates for the execution of certain programs and provision of certain services depending on their available specializations, e.g. in areas related to environmental and public health; informal education, community organization and planning, small business development, etc. It is envisaged that the CBOs engagement processes will strengthen communities’ capacity to plan their own development in a more equitable and productive manner.
There will also be opportunities to develop tri-sector alliances, involving government, civil society and the private sector to carry out parts of the project agenda.

4.4 How will the project monitor performance in terms of social development outcomes?

Artisanal and small-scale mining provides economic opportunities, both directly and indirectly. It has a significant multiplier effect; it is currently estimated that around 200,000 Nigerians are directly employed in artisanal and small-scale mining activities, while another 300,000 people indirectly derive their livelihoods from related activities. This translates into some measure of livelihood support or security for at least 500,000 families. A fundamental project objective is to rationalize and expand economic opportunity and income generating activity in rural areas based on formalized artisanal and small-scale mining. Situations can occur where artisanal extractive activity exceeds the “carrying capacity” of the mineral deposit, and instead of the activity securing a reasonable return, mining incomes are depressed and poverty in both its income and non-income dimensions, extended. Reducing poverty via artisanal and small-scale mining will require interventions that not only “regularize” and improve mining productivity and practice, but also provide for the development of linked economic activities as well as alternative livelihood opportunities. This all must happen in a supportive regulatory and institutional environment, under which distortions and dysfunctions though out the market supply chain can be rectified. Furthermore since artisanal and small-scale mining is as much a social phenomenon as a mode for providing a livelihood, effective programs of intervention must take an integrated approach to development, addressing the range of issues – social, economic, health, environmental, management and governance – frustrating the realization of its positive developmental potential.

As a pre-requisite to detailed design and execution, baseline surveys and social-economic profiles of target area populations will be completed, based on a modified sustainable livelihoods approach developed for use with artisanal and small-scale mining communities in Africa by the Mining Policy and Reform Division of the World Bank. This work will identify potentially problematic issues before implementation, and provide the baseline against which to evaluate the project’s developmental impacts in selected areas. In particular, certain measurable indicators that can represent the state of an area’s natural, physical, social, human and financial capital asset base will be measured and described, to be monitored over the life of the project. Part of the monitoring will be community based and participatory; the Project Management Unit and Ministry of Solid Minerals Development will have their own internal monitoring group and program, but both will be supplemented and reinforced with other third party independent monitoring and evaluation programs including the use of social and technical experts from the Communities and Small-scale Mining network, that will be undertaken on a scheduled basis, thus allowing for systematic readjustments and improvements to project design and implementation.

A formal final evaluation, involving the re-surveying of selected sites and areas, will provide a more comprehensive picture of the project’s impacts over its life. The project will have three major socio-economic goals by which to monitor SDOs:

- Affected individuals, households, and communities are able to improve their pre-project standard of living,
- Local communities remain supportive of the project.
- There is a visible increase in opportunity for community members, especially women, youth, and identified vulnerable of marginalized groups.

In order to assess whether these goals are met, the monitoring plan will indicate all parameters to be monitored, institute monitoring milestones and provide resources necessary to carry out the monitoring activities.
5. Environment

The proposed Project is a capacity building operation which will not involve direct investments in mining activities and, consequently, will not generate direct environmental and social impacts. However, if successful, the project will induce development of mining activities in Nigeria. In that sense the potential environmental and social impacts of such a development need to be assessed and an Environmental Management Plan (EMP) designed to ensure that regulatory, institutional and monitoring measures and mechanisms are in place to properly protect the environment and communities. The framework for the drafting of an EMP has been defined in the Sectoral Environmental and Social Assessment.

The project is categorized as ‘B’, and a Sectoral Environmental and Social Assessment (SESA) was prepared in accordance with Environmental Assessment (OP 4.01) requirements. It is anticipated that project activities will not lead to land acquisition, or the displacement of people. However, the project may result in the prevention of small-scale mining in parks or protected areas, and subsequently an initial decline in incomes due to the restricted access. Therefore, as a precautionary measure, a Resettlement Policy Framework (RPF) and a Process Framework (PF) have been prepared and approved, to address such situations with a view to identifying alternative sources of income and restoring incomes, while at the same time supporting the environmental preservation of parks and protected areas.

The SESA outlines the institutional and technical arrangements for environmental and social impact management of all potential project activities. In particular, it focuses on:

(i) baseline data and Environmental Conditions in Nigeria
(ii) review of the present status of the environmental legal, regulatory and institutional frameworks;
(iii) evolution of the mining sector, including a description of most of the mining projects in operation or under development;
(iv) potential physical and socio-economic impacts of sector activities on the environment and on the communities;
(v) analysis of Alternatives;
(vi) preparation of pilot socio-economic baseline studies aiming at the definition and implementation of consultation procedures, training requirements and programs, ad hoc institutional strengthening, alternatives for revenue sharing with local communities, and other related measures;
(vii) Environmental and Social Management Plan;
(viii) framework for EMP for Potential ASM Pilot Projects;
(ix) public consultation; and
(x) action plan and implementation.

Issues identified by the SESA regarding environmental and social management by public mining authorities include:

(i) Government is having problems in the implementation of the environmental regulations applicable to mining, especially with regards to small scale and artisanal activities;
(ii) inadequacy of staffing and budget for effective operation of the existing Environmental Unit of the Mines Department;
(iii) inadequacy of environmental baseline data for key mining areas thereby limiting the ability to monitor the development impact of mining activities or to provide adequate information to the private sector for the preparation of environmental assessment (EA) studies;
(iv) embryonic public participation in mining projects;
(v) limited experience in evaluating socio-economic impacts of mining projects.
The SESA outlines the capacity building initiatives needed to ensure that an adequate regulatory framework is effectively set up and properly enforced, and the measures required to bring small scale and artisanal miners into the regulatory mainstream. The report identified a certain number of recommendations which include:

(i) The setting up and training of an environmental management unit at the Mines Department working in collaboration with the EIA division of the Federal Ministry of Environment for the review and approval of EIAs presented by mining operators;
(ii) The setting up of an Environmental Management and Information System (EMIS);
(iii) Completion of Environmental and social baseline studies over selected mining areas in Nigeria.

The recommendations will contribute to increase awareness and improve the interface between operators and government in order to facilitate the preparation of EIAs and audits according to the regulations, including consultation processes, and their timely presentation and assessment. They will aim at improving the coordination between the different authorities responsible for environmental permitting and monitoring, and facilitating and improving the participation of civil society in the monitoring of the sector environmental performance.

The main features of the Environmental Management Plan (EMP) in the SESA document is an outline of the potential environmental and social impacts of induced development of mining activities that will be occasioned by the success of the project; the mitigation measures required, management responsibilities, and the cost associated with its implementation. Institutional strengthening will be provided to participating government agencies, CBOs/NGOs, and the Project Management Unit (PMU) to build capacities for identification, monitoring, and managing social and environmental impacts associated with sustainable mining development.

Project impacts on the environment will be monitored during implementation using indicators that reflect the objectives and the results of the project. Responsibility for the implementation of the EMP resides with the PMU and this will be coordinated by the newly recruited environmentalist (who will sometimes be assisted by short term social/environmental consultants as and when the need arises). In addition to the consultation procedures already in place, monitoring mechanisms involving various stakeholders - - small scale miners, NGOs/CBOs, Federal, State and Local authorities, as well as private companies will be developed and implemented during the proposed project.

### 6. Safeguard policies

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP/GP 4.01)</td>
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<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Pest Management (OP 4.09)</td>
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<tr>
<td>Cultural Property (OPN 11.03, being revised as OP 4.11)</td>
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<td>Involuntary Resettlement (OP/BP 4.12)</td>
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<td>Indigenous Peoples (OD 4.20, being revised as OP 4.10)</td>
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<td>Forests (OP/BP 4.36)</td>
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<td>Safety of Dams (OP/BP 4.37)</td>
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<tr>
<td>Projects in Disputed Areas (OP/BP/GP 7.60)</td>
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<td>Projects on International Waterways (OP/BP/GP 7.50)</td>
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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.
7. Policy Exceptions and Readiness

No need for policy exceptions. The project is in full compliance with World Bank procedures and guidelines.

The project benefited from a Project Preparation Facility (PPF) to speed up preparation arrangements:

The Project Management Unit has been established and staffed (Director, financial management, procurement, social & environment, and monitoring and evaluation officers). The PMU Organigram has been agreed upon. The recruitment of external senior procurement and financial management consultants has already been completed.

Procurement and Financial Management assessments have been conducted and the relevant organizational and procedural arrangements have been agreed, so that they will be in place on time for implementation.

A special account has been opened as part of the disbursement arrangements for the PPF and is being regularly operated, with more than US$ 0.5 million already disbursed.

A draft Manual of Procedures (for financial management and procurement) has been prepared and will be finalized prior to Project effectiveness; a draft Procurement Plan has also been prepared and was approved during negotiations. Arrangements have been concluded with the assistance of the Financial Management Specialist to launch the procedures for the recruitment of external auditors;

A draft Project Implementation Manual has been prepared during appraisal. A final version of the Plan, with the Terms of Reference and action program for the first year of implementation, will be submitted to the Bank for review in February 2005.

An Institutional Assessment has been completed for the Geological Survey of Nigeria Agency and another one is underway for the Mines Department. Findings from both audits have been incorporated into project design and costs;

A Sectoral Environmental and Social Assessment (SESA), a Project Resettlement Framework, and a Process Framework has been prepared and incorporated in the Project design and reflected in Project costs.
Annex 1: Country and Sector or Program Background
NIGERIA: Sustainable Management of Mineral Resources

Political and Economic Context

Nigeria is Africa’s most populous country, with a total population numbering approximately 133 million people. Nigeria has a land area of 924, 000 km², the largest in West Africa. The rate of population growth in Nigeria is 2.6% annually. With 80-90 million people living in poverty, on less than one dollar a day, only India and China have more poor people. Per capita income is currently US$320, despite the fact that Nigeria is the second largest economy in Sub-Saharan Africa (after South Africa). Most of the poverty is rural (an estimated 67% of population live in dire economic conditions, below the poverty line), although urban poverty is also on the rise.

International development assistance in Nigeria, despite the number of the poor people living in the country, is $1-2 per capita, compared with the average of $21 per capita in the rest of sub-Saharan Africa. One of the reasons for the low development assistance has been the rich oil resources, which give Nigeria an image of wealth and abundance. Nigeria is highly dependent on oil – it is the 6th largest exporter of oil, which provides about 75 percent of the Government’s revenues, 95 percent of the export earnings and represents about 30 percent of GDP. More than twenty years of dependence on oil have caused Nigeria to suffer the effects of “Dutch disease”, with its non-oil sectors suffering from losing competitiveness over time. Non-oil sector suffered from macroeconomic mismanagement and oil price volatility. Weak governance and corruption led to unproductive public investment, while an unsustainable external debt paralyzed the economy. Capital flight (70% of private wealth was taken out of Nigeria by 1998) contributed to the decline in the non-oil sector given the general scarcity of investment.

The poorest Nigerians depend heavily on natural resources. Poverty is strongly influenced by the performance of agriculture and the solid minerals sector, the main sources of livelihood among the rural poor.

In April 2003, Nigeria successfully held its second consecutive elections, securing the transition from military to civilian rule, which was achieved in 1999. President Obasanjo, in his second administration, pulled together a highly competent team of reform-minded professionals. In May 2004 President Obasanjo unveiled the National Economic and Development Strategy (NEEDS) as Nigeria’s home-grown poverty reduction strategy (the process for NEEDS preparation began in 2001). The strategy was welcomed by the international donor community, which has accepted the NEEDS as the poverty reduction strategy to guide Nigerian development. The areas of focus of the NEEDS are on the following: (i) Government reform and institutional capacity building, including fighting corruption; (ii) improving private sector growth and competitiveness; (iii) empowerment of the people, including access to health, education, welfare, employment and security. If implemented, the NEEDS will have significant benefits for the poor, as the document acknowledges the multi-dimensional nature of poverty in Nigeria. The future development strategy of Nigeria opens the door to broad-based participation in policy-making processes, including members of civil society, and pursues reform on several levels – fighting corruption, carrying out political reform, improving service delivery, and streamlining state-government relations.

The NEEDS agenda features full ownership on all levels of Government and has strong political backing from the President. The next election in Nigeria is scheduled for 2007, presenting a narrow window of opportunity to implement reform under the present administration.
NEEDS Focus on Solid Minerals Sector Development

The solid minerals sector is identified in the NEEDS document as one of six priority sectors crucial for diversification of the economy away from oil dependence. The Government of Nigeria plans to adopt a nationally coordinated strategy for the solid minerals sector, along with the other key sectors that drive growth (agriculture, SMEs, manufacturing, oil and gas, and services). Maximization of their potential for poverty reduction and economic growth will guide the process. Nigeria has abundant solid mineral deposits. The NEEDS document implies that, according to some sources, income, employment and foreign exchange earned from the solid minerals sector could potentially exceed those from the oil and gas sector. Constraints plaguing the sector are the following: absence of a comprehensive geological survey, the lack of adequate proven deposits, an unfavorable fiscal regime, and an uncompetitive legal and fiscal regulatory framework.

A short-term strategy for the sector will be put in place, focusing on priority industrial minerals – barites, limestone, gypsum and kaolin. Currently, these minerals are on the import restriction list. Under the NEEDS the Government will actively promote the exploitation and exploration of solid minerals to provide inputs for local industries, and for export generation and growth.

Another area of focus of the NEEDS document strategy for the solid minerals sector is ASM. The problems, associated with ASM, cited in the NEEDS are as follows: (i) environmental degradation; (ii) social problems, including child labor and poor working conditions; (iii) national security risk due to migrations of cross-boarder labor; (iv) low productivity and waste of minerals due to inefficient mining methods; (v) poor health and safety conditions; (vi) high level of smuggling and loss of Government revenue. Formalization of the sector would bring significant benefits and would potentially create stable employment conditions for an estimated 500,000 Nigerian households. Revenue payments to the Government would increase, and problems with the spread of HIV/AIDS, child labor, environmental degradation, and health and safety would be addressed.

The NEEDS strategy aims to vigorously support exploration of base metals and precious and semi-precious stones. Formalization of ASM is another priority. The following activities are outlined in the action plan – (i) implementing a formalization process for ASM; (ii) Empowering the Geological Survey Agency to become industry regulator; (iii) upgrading of Mining Cadastre; (iv) codification of system of incentives to attract private sector to invest into solid minerals; (v) simplifying licensing process; (vi) reviewing and upgrading the Land Use Act. Furthermore, specific measures are outlined in the NEEDS:

- Geological survey of the entire territory of Nigeria and immediate digitalization of existing maps
- Establishment of licensed buying centers as the procurement interface between the mineral producers on one side and export markets on the other.
- Creation of extension services (especially to ASM to enhance and sustain their operations)
- Review of current legislation through a consultative process with all concerned stakeholders
- Inventory of miners, their organization, market structure, etc
- Promotion of mining cooperatives and central processing units
- Promotion of environmental awareness and rehabilitation of mine sites
- Training in environmentally acceptable mining and processing methods
- Development of basic infrastructure services in mining communities
- Financial assistance to ASM communities
- Transparency and Government participation on all levels in ASM
- Enforcement of environmental standards and consultation on all levels of natural resources stakeholders
Mining Industry in Nigeria

Artisanal and Small-scale Mining operations now dominate mining in Nigeria. In particular, the focus was on tin mining, from around 1903 to 1940s, when commercial larger ventures were first set up. After independence in the 1970s, there was a re-emergence of ASM for metals and gemstones, mostly due to declining tin prices and the civil war (1967-1970), massive devaluation of the Naira, labor movement and retrenchments. Increased global demand for mineral commodities combined with the collapse of the tin market and the introduction of the Structural Adjustment Program in Nigeria in the 1980s again created the perfect environment for a flourishing ASM industry, combined with a growing proportion of intermediate traders and mineral smugglers. Today, the NEEDS document estimates that the ASM sector provides rural livelihood to over 500,000 informal artisanal miners in Nigeria. Their precise number is difficult to estimate, however, since many of them engage in ASM on the seasonal basis, some are also migrant workers, changing their location on a regular basis. The informal mining situation deteriorated with the influx of migrants from neighboring countries, including Burkina Faso, Cameroon, Chad, Benin, Niger, and Togo. According to some experts, the number of these migrants is expected to possibly triple over the next ten years. Sudden rushes into certain regions, such as the recent rush for coltan (columbite-tantalite) in Plateau, Nasawara, and Zamfara states, are also disruptive to Nigeria’s economic development.

Mining Sector Governance

The solid minerals industry is governed by the MSMD, Ministry of Solid Minerals Development. Currently, the Ministry has offices in the thirty-six States of the Federation, and is structured into five (5) Departments; four (4) Units; and three (3) Parastatals, and two (2) Projects:
During Project preparation, and through extensive consultation with the private sector, it has been agreed to reorganize the Mines Department so that its internal organization is adapted to the key functions that it is expected to perform in accordance with the new Minerals Act, and in order to enhance the department's capacity to deliver services to private investors and artisanal miners. A new Unit for the Mining Cadastre will be established as an independent entity under the Minister, while a special artisanal mining extension services unit will be created inside MSMD.

**Governance in the Mining Sector**

The Ministry of Solid Minerals Development (MSMD) defined in 2002 a “blueprint plan” for the formalization and promotion of small-scale mining. The plan was established on the basis of accumulated experience and anecdotal knowledge of MSMD field officers. However, little documented information is presently available on small-scale mining in Nigeria. The first activity will aim to acquire better knowledge of the social and economical impacts of small-scale mining on local and regional development. The proposed activity will survey the total number of population involved, the importance of small-scale mining to the local economy as a subsistence activity complementary to agriculture or other sources of revenues, or as a stand-alone source of income, possible cultural or occupational conflicts generated by small-scale mining, etc. Moreover, gender issues in mining and especially in small-scale mining and the use of women and children as part of the workforce will be assessed. Management of these issues will guide Project activities.
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

NIGERIA: Sustainable Management of Mineral Resources

The World Bank has recently supported a follow-up operation to a previously successful project, FADAMA-2, Second National Famada Project. The FADAMA-2 project’s focus is on empowering communities of farmers, pastoralists, fishers, hunters, gatherers, and service providers. The FADAMA-2 project follows a demand-driven approach and will seek to increase revenues in rural communities, will improve small-scale infrastructure and work on increasing access to finance. Project implementation includes work with NGOs and associations, and matching grants to facilitate small infrastructure investments for fadama communities. Capacity building, training, and advisory services are also part of the operation. Overall, the approach of FADAMA-2 is similar to the ASM component of SMMRF, especially to the pilot projects operations, matching grants, and the focus on rural poor small-scale and artisanal miners in SMMRF Component 1. Project implementation has only recently begun, with Board approval received in December, 2003. Project effectiveness was very quick, with full ownership from State and Federal Government counterparts. The latest PSR rates the procurement documents for FADAMA-2 as “best practice” and procurement is therefore proceeding satisfactorily. Summary IP (Implementation Progress) rating is “S” for Satisfactory, with Project Management, Compliance, Financial Management and Procurement receiving this rating.

Currently under preparation is the Economic Reform and Governance Project, which will focus on governance changes on the Federal level in Nigeria. The operation will seek to augment Government capacity by introducing Civil Service restructuring and by training relevant staff, to increase Government accountability, and to address corruption on all levels of the public sector. The Project’s objectives directly focus on the Government’s NEEDS agenda, especially on the pillar, which tackles “the way Government works.” Project implementation will lead to higher capacity in the Federal Government of Nigeria and to an improved investment climate, which will, in turn, stimulate private sector growth. Economic Reform and Governance Project, like the SMMRP’s second component, focuses on strengthening governance and increasing transparency. The SMMRP has a more focused approach, directing its efforts on the solid minerals sector, while the Governance project aims to cover a broader scope of all levels of the Federal Government. The Governance Project is scheduled to go to the Board before the end of the calendar year, and has not yet received PSR ratings.

Another World Bank operation in Nigeria with linkages to the SMMRP is the Micro, Small, and Medium Enterprise Project, which was approved by the Board on November 18, 2003. The US$60 million operation seeks to increase employment in the micro, small, and medium enterprises in three selected States in the non-oil sector. To achieve its objectives, the project seeks to reduce investment climate barriers, strengthen capacity of local intermediaries, and mobilize investment into the sector. The Micro, Small, and Medium Project approach responds to the NEEDS objective of diversifying Nigeria’s private sector away from oil dependence, and also to the Government of Nigeria’s focus on building capacity on the local level as a tool of targeting poverty. The Micro, Small and Medium Enterprise Project progress has been rated as “S” for Satisfactory. Project Management, Compliance, and Project Procurement have all been rated as “S.” Since the Project has become effective only in September 2004, the Development Objectives progress has not yet been rated. In its approach, the Micro, Small and Medium Enterprise Project corresponds to the SMMRP Component 1, the ASM operations, which views the local artisanal and small-scale mining community as a vehicle for diversification of economic activities in rural areas, building capacity and raising income of the rural poor. The ASM pilot projects, like the Micro, Small, and Medium Enterprise Project components, also seek to build local capacity, to improve technical skills and to increase access to finance in the rural areas, although in the case of the SMMRP the focus is targeted specifically on the solid minerals sector.
DFID's Nigeria Pro-Poor Growth (PPG) team is currently in the process of preparation of its Pro-Poor Growth Programme. The Program will last for five years, and will be implemented in two phases, to accommodate the 2007 Presidential elections. The total amount of the program will be an estimated £90 million, with an average annual spending of £15 million. The goal of the Program is to promote sustainable and diversified pro-poor growth in Nigeria. The four main priorities identified by the PPG, namely: (i) improving the international and regional environment for growth; (ii) supporting improvement of economic management at federal and state levels; (iii) strengthening the business environment and investment climate; and (iv) making markets work for the poor. Linkages between the two projects are seen mostly in the focus on the improvement of the enabling environment for private sector investment. SMMRP focus on the Mining Law, the Mining Cadastre, and Mining taxation addresses issues, similar to those, described in the PPG document, as having “particular focus on business regulation” (component 3 of PPG) and “reforms aimed at redefining the role of government vis-à-vis the private sector” (component 2 of PPG).
## Annex 3: Results Framework and Monitoring

**NGERIA: Sustainable Management of Mineral Resources**

### Results Framework

<table>
<thead>
<tr>
<th><strong>PDO</strong></th>
<th><strong>Outcome Indicators</strong></th>
<th><strong>Use of Outcome Information</strong></th>
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<tbody>
<tr>
<td>(i) Improve governance and technical capacity in the solid minerals sector to enable the Government to manage Nigeria’s mineral resources in a sustainable way;</td>
<td>* New Mining Law and regulations; * Mining Cadastre and ASM directorates staffed, fully equipped and operational by mid-term review; * Backlog of mining titles applications at the Mining Cadastre cleared;</td>
<td>Promote private sector investment in solid minerals sector; Protect legal rights of domestic and international investors; Implement recommendations of the SESA; Strengthen and monitor progress and capacity-building of public mining institutions Contribute to achievement of MDGs in rural ASM communities; Empower communities to prepare community development plans</td>
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<tr>
<td>(ii) Establish a basis for poverty reduction and rural economic renewal in selected areas of the country via the development of non-farm income generating opportunities through small-scale and artisanal mining and to diversify away from oil sources of income.</td>
<td>* Number of ASM associations and enterprises established and fully operational under a legal license; * By project end, 50% increase in per capita income in pilot project areas, as measured by village income surveys (which will set the baseline);</td>
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</table>

### Intermediate Results

**One per Component**

<table>
<thead>
<tr>
<th><strong>Component One:</strong> Improved livelihoods in pilot project rural areas</th>
<th><strong>Component One:</strong></th>
<th><strong>Component Two:</strong> Enhanced regulatory and legal framework for solid minerals</th>
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</thead>
<tbody>
<tr>
<td><strong>Results Indicators for Each Component</strong></td>
<td><strong>Use of Results Monitoring</strong></td>
<td><strong>Use of Results Monitoring</strong></td>
</tr>
<tr>
<td>Number of jobs formalized, including self-employment in number of communities using matching grants</td>
<td>Measure of income and progress in income changes in pilot project areas</td>
<td>Improvement of the investment climate and attraction of foreign investors</td>
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<tr>
<td>Increase in income (%) in pilot project communities (baseline established by village income surveys)</td>
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The development objectives of the proposed operation are to:

(i) Improve governance and technical capacity in the solid minerals sector to enable the Government to manage Nigeria's mineral resources in a sustainable way;
(ii) Establish a basis for poverty reduction and rural economic renewal in selected areas of the country via the development of non-farm income generating opportunities through small-scale and artisanal mining and to diversify away from oil sources of income.

KEY INDICATORS

- Increased production of targeted and non-targeted solid minerals
- New private sector investment flows into the sector.
- New Minerals Act and its Regulations adopted by Parliament (including environmental regulations for the sector).
- Set-up and effective operation of the Mining Cadastre.
- Clearance of backlog of pending title applications
- New Mining titles issued in a transparent and efficient manner, as prescribed in the new Minerals Act.
- Number of artisanal mining associations organized and operating in compliance with the law.
- Formalization of 200,000 artisanal and small-scale miners during the life of the project.
- Number of mining operators benefiting from financing and business development assistance.
• Number of mining communities or community associations using matching grants under the project.

• Area covered by new geological maps (as % of total area of the country)

• Sustainable environmental practices introduced and functioning in mining areas

• Environmental Management Plans maintained after disengagement from the pilot projects

**Intermediate indicators:**

Decisions will be made on the basis of specified indicators and quantitative and qualitative measures of success. The triggering criteria upon which decisions will be made are indicated in the Table below.

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</thead>
<tbody>
<tr>
<td>Decision</td>
<td>Scale Up</td>
<td>Partial Scale Up</td>
<td>Consolidate and Adjust</td>
<td>Redesign and scale back</td>
<td>Exit activity</td>
<td></td>
</tr>
<tr>
<td>Follow Up</td>
<td></td>
<td></td>
<td>Reassess for scale up after 6 months</td>
<td>If no improvement after 6 mo, exit activity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:  
S – fully successful  
P - partially successful  
F - not successful

The proposed intermediate indicators to trigger the scale-up, consolidation or phase-out of the pilot projects are as follows:

Pilot 1 and 2 (Gypsum and Barite):

Number of people organized into associations  
S - 30 % or more  
P – 10-30%  
F - < 10%

Increase in reported commodity production:  
S - 20% or more  
P - 0.1-20%  
F - 0%

Effectiveness of field support units  
S – Operational and deemed effective by local stakeholders  
P – Established and working, but not effective  
F - Not even set up
Pilot 3 (Gemstone Village)

Number of repeat buyers using facility during the year
S – at least 100
P - 11-99
F - <10

Number of rough stone repeat sellers

Increase in reported production
S – 20% or more
P – 1-20%
F - 0%

VILLAGE INCOME SURVEY BENCHMARK INDICATORS

Technical note

Natural capital indicators
Arable land: includes land under temporary crops, temporary meadows for mowing or for pasture, land under market and kitchen gardens, and land temporary fallow.
Permanent cropland: is land cultivated crops that occupy the land for long periods and need not be replanted after each harvest, including land under flowering shrubs, fruit trees, nut trees, and vines, excluding land under trees grown for wood and timber.
Freshwater resources: refer to total renewable resources, including internal flows of rivers, and groundwater from rainfall in the country and river flows from other countries.
Forest area: is land under natural or planted stands of trees, whether productive or not.
Average annual deforestation: refers to the permanent conversion of natural forest area to other uses. Negative numbers indicate an increase forest area.
Higher plants: refer to native vascular plant species (only flowering plants).
Mammals: exclude whales and porpoises.
Birds: are listed for countries included within their breeding or wintering ranges.
Household: includes ASM and non-ASM households.
ASM household: refers to households which derive more than 50% of their cash income from mining.

Human capital indicators
Physicians: are defined as graduates of any faculty or school of medicine who are working in the country in any medical field (practice, teaching, research).
Life expectancy at birth: is the number of years a newborn infant would live if patterns of mortality prevailing at the time of its birth were to stay the same throughout its life.
Under-five mortality rate: is the probability that a new-born baby will die before reaching age five, if subject to current age-specific mortality rates.
Prevalence of child malnutrition: is the percentage of children under five whose weight for age and height for age are less than minus 2 standard deviations from the median for the international reference population ages 0-59 months. The reference population is based on children from the United States, who are assumed to be well nourished.
Prevalence of HIV: refers to the number of people who are infected with HIV among the adult population.
Adult illiteracy rate: is the percentage of the people ages 15 and over who cannot, with understanding, read and write a short, simple statement about their everyday life.
Primary completion rate: is the total number of students successfully completing the last year of primary school in a given year divided by the total number of children of official graduation age in the population.

Average years of schooling: are the years of formal schooling received, on average, by adults age 15 and over.

Total population: includes all residents, regardless of legal status or citizenship, except for refugees not permanently settled in their country of asylum, who are generally considered part of the population of their country of origin.

Target area: is the geographical area under investigation to be defined by the researchers conducting the survey.

ASM population in target area: ASM includes all persons engaged in artisanal and small-scale mining and related peripheral production activities as defined by the researchers conducting the survey.

Share of migrants in ASM population: is the percentage of people active in ASM who are not indigenous and do not intend to permanently settle in the target community.

Females as percentage of labor force: show the extent to which women are active in the labor force.

Children 10-14 in labor force: refer to the share of that age group active in the labor force.

Children below 10 in labor force: refer to the share of that age group active in the labor force.

Financial capital indicators

Rural poverty rate: is the percentage of the rural population living below the national rural poverty line.

Urban poverty rate: is the percentage of the urban population living below the national urban poverty line.

Population on $1 a day and population on $2 a day: is the percentage of the population living on less than $1.08 a day and $2.15 a day at 1993 international prices. Poverty rates are comparable across countries.

Gross national income (GNI) per capita: GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipt of primary income (compensation of employees and property income) from abroad. GNI per capita is GNI divided by midyear population.

PPP gross national income per capita: is GNI converted to international dollars using purchasing power parity rates divided by midyear population.

Deposit interest rate: is the rate paid by commercial or similar banks for demand, time, or savings deposits.

Lending interest rate: is the rate charged by banks on loans to prime customers.

Average household cash income from paid work: refers to cash income earned by all members of the household from paid labor or from the sale of own production and services.

Average household non-cash income from food production: refers to the cash equivalent of agricultural products produced by household members for own consumption.

Total average income per person: is the total average household cash plus non-cash income divided by the number of persons per household.

Average household cash expenditures for food: includes money spent on the purchase of food and beverages.

Average household cash expenditures for non-food: includes money on the purchase of non-food products and services.

Total average household cash expenditures: includes household expenditures on food and non-food purchases.

Share of cash food budget in household income: is the percentage of household cash expenditures on food related to total household cash income.

Share of households owning savings in cash assets: is the percentage of households with savings in cash, bank deposits or securities.

Household savings rate: refers to the percentage of household income not spent on consumption and saved.
Social capital indicators

Public expenditures on pensions: includes all government expenditures on cash transfers to the elderly, the disabled, and survivors, and the administrative costs of these programs.

Average pension: is estimated by dividing total pension expenditure by the number of pensioners.

Public expenditure on health: consists of recurrent and capital spending from government (central and local) budgets and social (or compulsory) health insurance funds.

Violent offenses: refers to the number of violent crimes (murder, attempted murder, robbery, forcible rape, and aggravated assault) as defined in national legislation recorded by law enforcement authorities.

Property offenses: refers to the number of property-related crimes (burglary, larceny, motor vehicle theft, arson) as defined in national legislation recorded by law enforcement authorities.

Physical capital indicators

Hospital beds: includes inpatient beds available in public, private, general and specialized hospitals and rehabilitation centers.

Access to an improved water source: refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source (household connection, public standpipe, borehole, protected well or spring, and rainwater collection). Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one km of dwelling.

Access to improved sanitation facilities: refers to the percentage of population with at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with sewerage connection.

Households with access to services: are the percentage of households in formal settlements with access potable water (drinking water within 200 meters of the dwelling) and connections to sewerage, electricity, and telephone.

Passenger cars: refer to road motor vehicles other than two-wheelers, intended for carriage of passengers and designed to seat not more than 9 people, including driver.

Two-wheelers: refers to mopeds and motor cycles.

Radios: refer to radio receivers in use for broadcasts to the general public.

Television sets: refer to those in use.

ASM operation level indicators

Mineral production: refers to the annual production of marketable mineral products by ASM operations measured in units of weight.

Production unit: refers to any formal or informal operation in which minerals are extracted and processed by one person or a related group of people typical for the target area.

Share of production units organized as: is the percentage of the number of mining operations organized in the form of ad-hoc groups, single proprietorship firms, co-operatives or registered partnerships.

Average duration of licensing process: is the time passed from submitting the application to the mining authority until the issuance of the license.

Licensing costs: is the USS equivalent payable for a mining license and related documentation.

Number of pending license applications: is the total number of license applications submitted to the mining authority for processing not settled.

Mine site inspections: refers to the number of visits by officials from the competent authority (mines inspectorate) responsible for the ASM district per year and production unit.

Number of conflicts: refers to the number of conflicts between ASM and large-scale mining companies and ASM and communities reported to law enforcement authorities per year.

Lost workdays/days due to illness: Lost workdays/days due to illness refers to the total number of days in the reference period in which a person is unable to perform his/her duties due to illness.
Protective equipment: refers to any equipment or device used by mine workers to protect them from injury and occupational diseases (safety hat, safety boots, goggles, protective gloves, protective respiratory device, hearing protection, first aid kit).

Lethal accident: all accidents at mine sites causing loss of life within a period of 30 days or as specified in national regulations.

Lost workdays due to mine accidents: include days away from work and days of restricted work activity resulting from occupational injuries to mine workers which occur at a mining operation and cause an inability to perform all work duties on any day after the injury.

Labor productivity: is the ratio of the average output of the marketable end product of ASM per person per day worked (e.g. grams of gold/day).

Mineral recovery: is the ratio of marketable end product recovered and available for sale to the quantity of mineral containing ore extracted and processed.

Share of miners with membership in ASM association: refers to the percentage miners who are members in a registered mining association.

Share of miners with membership in labor union: is the percentage of miners who are members in a registered labor union.

Share of production units with mining licence: is the percentage of ASM production units holding a valid prospecting or mining licence, or working on a property for which a mining licence has been granted to a title holder.

Share of production units with proven mineral reserves: is the percentage of ASM production units exploiting a mineral deposit for which reserves in terms of tonnage and grade have been established through detailed geological investigations.

Area affected by ASM: is the total land area in which artisanal and small-scale mining is currently active plus the land area of abandoned ASM mine sites not rehabilitated.

Annual land degradation: refers to the area of previously undisturbed land affected by ASM per year.

Annual land rehabilitation: includes the area of land affected by ASM restored in accordance with the reclamation requirements specified by the mining/environmental authorities.

Use of mercury in ASM: refers to mercury consumed in the amalgamation of gold ores.

Mine assets owned per production unit: refers to the estimated book value (initial investment less depreciation) of the purchased equipment in use.

Average income from mining: refers to the estimated amount of money earned in the mining activity less related expenses (for equipment, consumables and royalties).

Share of production units with bank loan: refers to the percentage of mining operations with a loan from a commercial bank or a registered financial institution.
## Arrangements for results monitoring

<table>
<thead>
<tr>
<th>Outcome Indicators</th>
<th>Target Values</th>
<th>Data Collection and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlog of mining titles applications at the Mining Cadastre cleared;</td>
<td>Baseline: 3,000 pending</td>
<td>Frequency and Reports:</td>
</tr>
<tr>
<td></td>
<td>YR1: 1,000</td>
<td>YR2: 200</td>
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<tr>
<td>Mining Cadastre and ASM field offices staffed, fully equipped and operational;</td>
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<td>YR2: 5</td>
<td>YR3: 8</td>
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<tr>
<td>Number of ASM associations and enterprises established and fully operational under a legal license;</td>
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<td>YR2: 10</td>
<td>YR3: 35</td>
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<tr>
<td>50% increase in per capita income in pilot project areas, as measured by village income surveys (which will set the baseline);</td>
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<td></td>
<td>YR2: 0%</td>
<td>YR3: 5%</td>
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</tbody>
</table>

### Results Indicators for Each Component

**Component One:**

- Economic Development and livelihood diversification in ASM
  - Number of jobs formalized, including

<table>
<thead>
<tr>
<th>Baseline</th>
<th>YR1</th>
<th>YR2</th>
<th>YR3</th>
<th>YR4</th>
<th>YR5</th>
<th>Frequency and Reports</th>
<th>Data Collection Instruments</th>
<th>Responsibility for Data Collection</th>
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<tr>
<td>0</td>
<td>10,000</td>
<td>35,000</td>
<td>85,000</td>
<td>157,000</td>
<td>200,000</td>
<td>Once baseline established, semi-annual updates</td>
<td>Village income survey and baseline studies in pilot project areas</td>
<td>External consultant managed by PMU</td>
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<tr>
<td>Component Two: Strengthening Governance and Transparency in Mining</td>
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<td><strong>- Number of foreign investors operating in Nigeria</strong></td>
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<td><strong>- Investment in mineral exploration</strong></td>
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<td><strong>- Number of new licenses issued by Mining Cadastre</strong></td>
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<td>Component Three: Private Sector Development</td>
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<tr>
<td><strong>- Number of geological maps published in digital format (at 1:250,000), cumulative</strong></td>
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<tr>
<td><strong>- Number of mineral inventory maps (for each state), cumulative</strong></td>
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<td><strong>- % of country covered by geophysical survey</strong></td>
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<td>Component Four: Project Coordination and Management</td>
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<td><strong>Staff continuity (at least 2-year assignments)</strong></td>
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<tbody>
<tr>
<td><strong>- Number foreign investors operating in Nigeria</strong></td>
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<td>quarterly</td>
<td>Legal documents approval</td>
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<td><strong>- Investment in mineral exploration</strong></td>
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<td>US$20M</td>
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<td><strong>- Number of new licenses issued by Mining Cadastre</strong></td>
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<td>quarterly</td>
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<td>PMU reports to task team and supervision missions (quarterly updates)</td>
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<tr>
<td><strong>- Number of mineral inventory maps (for each state), cumulative</strong></td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>25</td>
<td>68</td>
<td>100</td>
<td>0</td>
<td>3</td>
<td>10</td>
<td>20</td>
<td>28</td>
<td>36</td>
<td>quarterly</td>
<td>Legal documents approval</td>
<td>PMU reports to task team and supervision missions (quarterly updates)</td>
</tr>
<tr>
<td><strong>- % of country covered by geophysical survey</strong></td>
<td>20%</td>
<td>35%</td>
<td>70%</td>
<td>100%</td>
<td>20%</td>
<td>35%</td>
<td>70%</td>
<td>100%</td>
<td>20%</td>
<td>35%</td>
<td>70%</td>
<td>100%</td>
<td>quarterly</td>
<td>Legal documents approval</td>
<td>PMU reports to task team and supervision missions (quarterly updates)</td>
</tr>
</tbody>
</table>

**Component Four: Project Coordination and Management**

**Staff continuity (at least 2-year assignments)**

No re-assignments for at least the first two years of implementation

Quarterly updates

Task team supervision missions and external auditors

Task team
Annex 4: Detailed Project Description
NIGERIA: Sustainable Management of Mineral Resources

Project component A - Economic Development and livelihood diversification in Artisanal and Small-scale Mining Areas (US$48.90)

A.1 Sustainability of small scale mining and livelihood diversification – US$30.16 million

This sub-component deals mainly with improving the sustainability of livelihoods and communities engaged in artisanal and small-scale mining activities. It also focuses on expanding economic and social opportunities for income and employment generation and the reduction of poverty within the stagnating rural economy of Nigeria. It will necessarily involve a restructuring, re-orientation and re-making of both the institutional support system and legal frameworks pertinent to the mining sector, and the design and implementation of more appropriate and effective assistance delivery and regulatory mechanisms at local, state and regional levels.

In Nigeria, mining activities are predominantly undertaken on a small scale, with virtually no medium or large-scale industrial mines operating in the country. The vast majority of extractive operations are carried out on a labor intensive basis, using simple hand tools and manual (artisanal) methods of mining. Much of the activity is unlicensed, and occurs either wholly or partly within an informal economy that is tied to parallel markets and is organized on the basis of customary or traditional social and political institutions and relationships. Very little valued added processing occurs within country. Most of the country’s mineral production as well as its economic and commercial costs and benefits are unrecorded and unknown.

Nonetheless, small-scale mining activity is spread throughout the country, involving the extraction of more than 20 different minerals, including industrial minerals and construction materials, such as gypsum, barite, clay, and granite, and high value, exportable minerals, such as gold, precious and semi-precious gemstones, and columbite-tantalite. At least 200,000 people are directly involved in primary production activities, and another 300,000 are engaged in ancillary service, supply, marketing and processing activities. This means that as many as half a million households derive all or part of their cash income from artisanal and small-scale mining or related activities. In remote, rural parts of the country, it is often the only non-farm means available for generating cash income. In many areas of the country, mining forms part of a diversified livelihood strategy that complements more traditional subsistence activities like farming, hunting and gathering, fishing, and/or herding, lending permanence to local communities and economies. But in other places, mining has taken on the characteristics of the classical “mineral rush” scenario, with all of its negative attributes – chaotic and unsafe ore extraction, large influxes of “foreigners”, temporary “slum: encampments, social disorder and a legacy of abandoned pits, damaged environments and at times disrupted local communities. The situation on the ground is further complicated by the presence of undocumented migrant workers from neighboring countries, including Chad, Benin, Niger, Togo and Cameroon, who are involved in both production and marketing activities.
### Organizational Characteristics of Small-Scale Mining in Nigeria

<table>
<thead>
<tr>
<th>Workforce Organization</th>
<th>Unit of production</th>
<th>Labor Commitment</th>
<th>Technology</th>
<th>Legal Status</th>
<th>Residential Status of Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent (self employed)</td>
<td>Individuals, family and small work units</td>
<td>Occasional, Seasonal, Year round</td>
<td>Manual</td>
<td>Usually not licensed</td>
<td>Community based</td>
</tr>
<tr>
<td>Tributor system</td>
<td>Small independent units working on lease of and under the supervision of a mining company, provided with some equipment &amp; technical assistance and obligated to sell all or part of production to the company.</td>
<td>Year round</td>
<td>Manual or Semi-mechanized</td>
<td>Licensed</td>
<td>Community based</td>
</tr>
<tr>
<td>Master system (variant of tributor system)</td>
<td>Small work unit(s) reporting to financial backer</td>
<td>Occasional, Seasonal, Year round</td>
<td>Usually manual</td>
<td>Unlicensed</td>
<td>Migrant or community based</td>
</tr>
<tr>
<td>Contractual arrangement</td>
<td>Work teams contracted by a mine operator to do a specific job.</td>
<td>Occasional</td>
<td>Manual Semi-mechanized</td>
<td>Licensed or unlicensed</td>
<td>Migrant or community based</td>
</tr>
</tbody>
</table>

The Federal Government of Nigeria recognizes that if properly organized, these activities have the potential to become more effective platforms for non-farm income and employment generation and a major contributor to poverty reduction, economic renewal, and community sustainability in rural areas. As well, for a number of commodities, regularized production and appropriate enabling frameworks can provide a basis for the development of new value adding and employment generating activities, and create a reliable and more sustainable supply chain of essential mineral based inputs for construction, agricultural, power generation and other allied industries in both rural and urban areas. At the mine site and community levels, an organized situation provides the best chance for more productive mines, for safer work environments, for more socially and environmentally responsible mining operations, and for a more equitable distribution of its economic benefits among mineworkers, owners, traders/processors, local communities and government authorities.

**Component Design and Implementation Issues**

Because successful implementation will require considerable attention to detail and the coordination of many activities in parallel, a phased approach to design and implementation will be taken. Both output and outcome indicators will be identified and benchmarked at the outset of the project and systematically monitored to track progress and catch any critical implementation problems as they may emerge. This approach will also allow for a formal review of implementation progress on a periodic basis, and provide windows of opportunity to shift focus, re-think approaches, adjust and modify programs and to exit from
activities that are clearly not succeeding but otherwise would continue to drain limited resources. At the end of the first year and at the mid-term review, decisions will be taken as to whether particular activities may be scaled up, need further consolidation before scale-up, or should be terminated.

Within this sub-component, the Project will invest initially on building the infrastructure needed for sustainability of outcomes and on nurturing the individual, collective and institutional capacity needed to enable local stakeholders to be able to fully participate in and drive their own development processes in the mining areas. In its final phase, the Project will focus on embedding results and reinforcing the institutional and community based arrangements which are necessary for sustaining the Project’s outcomes.

The work-plan for this subcomponent is comprised of four main activities:

- livelihood assessments and socio-economic profiling.
- design and implementation of pilot projects at particular sites and of pilot programs.
- establishment of effective and sustainable frameworks for knowledge and technology transfer, skill development and technical competence among mining stakeholder groups (informal miners and mineworkers, mine and mill operators and entrepreneurs, mineral traders, government officials (local, state and federal), mining community based and other civil society organizations).
- creation of small-scale mining technical support capacity both in the countryside and within MSMD federal offices.

A.1.1 Baseline studies (US$1.32 million)

Because most of the available information about the social, economic and technological character of artisanal and small-scale mining in Nigeria, as well as its scope and extent, is anecdotal and experiential in nature, an extensive program of socio-economic profiling and baseline assessments will be undertaken during the first year of the project. This will allow the Project to build up a comprehensive picture of artisanal and small scale mining in Nigeria. The studies will cover sites representative of different organizational, socio-cultural, political-economic, community and livelihood situations in the country (such as tributor mining, migratory rush situations, mixed mode mining and farming). The methodology that will be used is being adapted from a toolkit created explicitly for profiling artisanal and small-scale mining in Africa. The toolkit is itself based on a modified sustainable livelihoods approach.

The methodology is currently being field tested and adapted for use in Nigeria. Indicators for describing and monitoring changes in socio-economic and production conditions and relationships are also being selected and checked for ease and accuracy of collection and use. The development of an analytical framework for understanding how the situations being studied relate to the broader macro-context of poverty and poverty reduction policies in Nigeria will also be completed under the Project. Based on the field experience, a guidebook or manual for data collection and analysis will be drafted.

These studies will be used to enhance the design and implementation of pilot demonstration projects, of delivery systems for knowledge transfer and capacity building at the local level, and of other support services targeting the miners and affected communities. The information generated and the issues

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2 Program for Improvements to the Profiling of Artisanal and Small-Scale Mining Activities in Africa and the Implementation of Baseline Surveys: Final Report, March 2004, prepared for Communities and Small Scale Mining (CASM) and the World Bank by R. Noetstaller et al.
3 Toolkit authors are working with a research team from Ahmadu Bello University, Zaria at mining community sites in north-central Kaduna State.
4 Drawn from the list of survey indicators (Annex 3)
identified will also allow for the targeting of smaller and more specific interventions, introducing more flexibility and responsiveness to program implementation.

A.1.2 Pilot demonstration projects for artisanal and small-scale mining (US$24.75 million)

The pilot projects will be used to check and verify the local impacts and effects of the macro institutional and legal changes carried out under the Project at the national level. This will provide important results oriented information, that can be used to improve the effectiveness of these institutional and legal arrangements over the life of the project.

During the first year, three pilot projects will be initiated. A monitoring committee will be set up from the outset to track and evaluate each pilot’s progress over the year. The committee will be composed of international experts gathered from the World Bank and DFID Community and Small Scale Mining (CASM) global initiative, representatives of the Quality Insurance Group of the World Bank Africa Region, and independent Nigerian experts. The same committee will recommend an appropriate course of action for each project, based on its evaluation. After the first year, the experience gained in the successful pilot(s) may be scaled up and rolled out to other similar mining areas and situations. Project(s), if any, that are only partially successful, will be consolidated and the experience reevaluated later in the year for possible scale up. If a project is unsuccessful, additional investment in the project will be wound down and any further investment in the pilot terminated.

Provided this evaluation is positive, three new pilots will be started during the second year. Specific sites will be identified and finalized during year one, based on the criteria above and the results of the baseline studies. As well, the experience and lessons learned from successful year one projects will be applied at other sites. The new pilots will be subject to the same monitoring and evaluation procedures as year one projects. After the mid-term review, any additional “new” pilots undertaken will reflect an explicitly pro-poor approach, focusing on improving the situation of the most vulnerable groups involved in or impacted by artisanal and small-scale mining activities. Successful year one and two pilot experiences will be turned over to community based and/or private sector organizations to manage and maintain.

Program initiatives with nation-wide implementation possibilities, such as equipment loan-to-buy matching grant programs, will also be tried out at all operating pilot sites.

Overall responsibility for pilot project implementation and supervision will be vested in the SSM-Unit of the MSMD, whose efforts will also be supported by an international expert consultant(s) contracted under the Project, as well as by expertise drawn from the Communities And Small-Scale Mining (CASM) knowledge sharing network. However, the pilot projects will be set up and executed initially by project engineering and management consultants with the capacity to coordinate design work, procurement, civil works, and program implementation. They would be contracted by the Ministry through the PMU.

A.1.3 Strengthening of the Jos School of Mines (US$2.75 million)

The Jos School of Mines was set up in 1958 by the Mines Department of the then Ministry of Mines and Power. A two year training syllabus and program was instituted having as its main objective, to familiarize new employees with the basics of mining practice. Enrolment fluctuated from year to year, depending on the manpower training needs of the Mines Department; however, about one-half of the

5 Projects being tentatively considered for the first year of implementation are: (i) Nafada gypsum, Gombe State; (ii) Azara barites, Nassarawa State; and (iii) Gemstone trading village, Federal Capital Territory.
enrolment was made up of self-paying students or those sponsored by mining companies. During the past few years, the balance of Ministry to non-Ministry students has shifted dramatically, with private students (self-funded or sponsored by the private sector) now accounting for over 80% of the enrolment.

Because of its central location and its history of service, the Jos School of Mines provides an ideal base for renewing the technical capacity of the mining sector in Nigeria. Improvement of the quality of mining instruction is essential to promoting solid minerals exploitations and developing the skills of small and medium-scale miners.

**The Renewal Program – Physical Rehabilitation**

Under the Project, the School will be physically rehabilitated. Classrooms and laboratories will be refurbished, and the physical facility cleaned up and restored. Computer and internet facilities will be installed, an information resource centre set up to service both the student body and the mining community at large. In the case of the School’s mill, an assessment will be undertaken to determine whether there is a sufficient market niche for its services, whether the service should and could be provided by the private sector, and in the end whether its rehabilitation is justified, and on what basis.

**The Renewal Program – Pedagogical Rehabilitation**

The main emphasis will be on the pedagogical rehabilitation of the School’s programs and teaching capacity. In its current state, teaching materials and the syllabus are dated, as are the teaching methods. In order to meet new performance expectation, higher quality trained manpower and service needs of a revitalized and reorganized mining sector, the School’s curriculum and pedagogical approach will have to be redesigned and updated, and its teaching staff upgraded.

The School will focus on producing three quality outputs:

1. skilled and practiced mining technicians for formal small and medium scale mining enterprises, who are conversant with current technical mining and milling practices; and also with the social, health, environmental, and business aspects of the business
2. trainers and extension officers to work with both formal and informal miners in the field, capacitated to be able to deliver appropriate forms of technical assistance and training to different types of “client” communities and groups
3. informed mine operators and owners, mining service companies, civil servants, local politicians, and civil society organizations, with updated knowledge and a more comprehensive understanding of the issues and operational challenges faced by the industry in Nigeria today.

Consequently, the School will continue to run its two year diploma program, but with an updated curriculum, information centre, computing and laboratory facilities. Trainees will be exposed to current social, environmental and business management issues; to new mining and milling technologies, and offered opportunities for field internships. Diploma holders will also have the possibility of extending their studies for another 6-12 months to gain specialized knowledge in one or another key area, like environmental management of mining operations, or occupational and community health and safety. New outreach services will be designed and coordinated out of the School, including a program to train extension officers, and a continuing education and professional development program for businessmen, state and local government officials, service companies, mining association and community leaders, which based on both need and demand will cover areas like business administration, book-keeping,
budgeting and planning skills; environmental scoping and assessment; environmental management, compliance requirements of new mining and tax laws, etc.

Under the Project, technical assistance will be provided to revise and update the teaching curriculum of the diploma program, based on a training needs assessment of the formal sector, and to identify and procure new equipment and educational materials for the classrooms, laboratories and information resource center. Master teachers will be contracted to work with the staff and students of the Jos School over the first two years — to upgrade local teaching staff skills, to introduce new teaching methods and the new curriculum, to set up the labs and train technicians in their upkeep and maintenance. Opportunities will be arranged for teaching staff to also upgrade their training abroad (3-9 month attachments and training modules), and on site during the vacation periods and on the job.

Assistance will also be provided to design and implement the new programs, including continuing education and training of extension workers programs. Management support will also be provided to work with the School’s principal and chief administrator to implement the School business plan (developed during project preparation). Services will need to provided on a user-pay basis, although the Project will underwrite a scholarship program to promote education of worthy students, without sponsorship, especially from the mining and pilot project areas.

As small-scale and artisanal miners have generally limited financial resources and would not be able to travel to Jos for a course, the Project will support on a pilot basis the extension of training and educational support services to the main areas of small-scale mining activity. This will be one of the pilot programs with potential for national implementation which would be undertaken on a private basis but financed initially by the Project.

A.1.4 Establishment of SSM Unit (Federal and field offices) (US$1.34 million)

At the present time, the MSMD is not equipped to assist in the development and improvement of livelihood conditions within small-scale mining areas, which will require an extension of services and attention to mining areas dispersed throughout the whole country. With this in mind, the Project will start by establishing field support units at pilot project sites, to participate in project design, to learn how to work and liaise with local stakeholders and facilitate stakeholder involvement in MSMD programs, and to learn how to plan, facilitate, support and monitor project implementation. These field units will be attached to a new small-scale mining unit (SSM-Unit) to be created as part of the regional Project. Eventually, some of the field units may operate as satellite units attached to local state or federal regional offices of the MSMD.

The SSM-Unit would include a central office in Abuja, whose principal mandate will be to facilitate the entry of miners and their operation within the new legal framework, via the implementation of various support and capacity building programs financed both by the Project and by the MSMD’s own budget (the blueprint program for small-scale mining). The Unit will include a monitoring and support group, which will be responsible for monitoring the effectiveness of the Unit’s programs, for providing technical support to the field units involved in their local oversight, and for recommending improvements to programs based on the experience accumulated during the first year of implementation. The organizational structure of the SSM-Unit will be more clearly defined as part of the institutional reform of Mines Department.

The new SSM-Unit would be staffed by MSMD personnel, but the Project will finance additional personnel as short-term consultants for a maximum period of three years, mainly for staffing the field support units, although permanent staff of the Ministry will for the backbone of these field teams. The total staffing of the SSM-Unit should not exceed 30 persons, with about 21 professionals and 6
technicians. The Project will also finance 9 vehicles for the field units, and cover their operating costs as well as additional operating costs related to Project program activities.

A.2 Financing Programs for Business Development in Mining (US$16.54 million)

MSMD plans for mining sector development envision a private-sector led initiative. Creating a substantial role for private sector participation in mining would require business development, corporate development, and improved access to financing. In terms of economic and environmental sustainability, private business development in the mining sector will be a major contribution of the Project.

This sub-component comprises three activities: i) Improvement of access to credit; ii) Support to private sector institutions, professional and trade associations; and iii) Targeted programs to foster development of specific commodities.

A.2.1 Improvement of access to credit and financing (US$14.40 million)

Nigeria’s banking system has little experience with the mining sector. The domestic mining sector has historically been unable to meet normal bank requirements for borrowing money, as mining leases/title rights are not considered collateral by the banking system. This lack of access to credit or financing is a serious limitation in the development of the national private sector in mining, and has been the source of much frustration among domestic mining entrepreneurs, especially for those trying to work within the existing legal framework.

Under such circumstances, small-scale and artisanal miners have no access to capital except through private arrangements. This has in fact contributed to the maintenance of tributor systems of mining, whereby mine workings are financed by private money (businessmen) with little technical knowledge of mining, and mine workers sell all or most of their product to the financier. An alternative arrangement allows for the miner to become part of a work team, whose operations are financed by an entrepreneur and the production is shared among them according to a customary split. Under these arrangements, the mine financier may take as much as 50% of the production, with the rest being divided between the pit boss and the mine workers. These alternative types of financing and economic welfare arrangements, which have evolved over generations allow artisanal operations to continue throughout the country, but frustrate any serious efforts to mechanize or scale up operations (i.e. move up the technology ladder) or break out of a subsistence mode of production and a subsistence level return to the mineworkers.

Project activities will be directed towards improving possibilities at the different levels. Under this sub-component an analytical study of the commercial lending sector and existing obstacles and constraints to lending to the mining sector (medium and small companies) will be undertaken with a view to identifying ways of improving access to formal credit facilities for the organized mining sector, including a review of legal or regulatory changes that might be required. The study would also assess the capacity needs of existing financing institutions that might be willing to service the sector. Options for developing access to capital financing will be outlined, and capacity building needs of both lenders and borrowers identified.

Based on this assessment, programs for developing the technical capacities of lending institutions to evaluate and monitor mining projects (small, medium, and large scale) would be designed and offered. For the potential borrowers, especially in the case of the small-scale miners who have no capacity to formulate a business plan or bankable feasibility study and loan application, training and outreach programs would focus on developing business planning skills, and providing technical assistance and training for the preparation of bankable documents. In addition, skill building for financial management,
including record keeping and for compliance with loan and debt repayment obligations, will be included in the training program.

Apart from technical assistance and training, the Project will finance a matching grants scheme that will enable smaller producers to access mining and other production equipment, technical assistance (private providers), and mined production promotion and marketing.

The Project will engage a local NGO to administer the matching grants component, which will, in turn, create local area multi-stakeholder committees to select and monitor matching grants projects, (based on FADAMA and community forestry experiences). To qualify for the matching grant, applicants would have to provide a matching in-kind or cash contribution. The program will assist with the financing of community-based initiatives to improve local social and physical infrastructure, community health conditions and help create alternative livelihood opportunities. Community groups, local governments, miners’ associations, and other civil society organizations will have access to the funding. The Project will contract with NGOs and private sector representatives to provide technical support to applicants, for project concept and proposal development and for training on project implementation and management skills. The program will be pilot-tested initially in the pilot project areas of influence and then extended to other locations outside of these areas.

As part of this activity area, technical assistance to help micro credits providers understand the financial dynamics of small-scale mining and to evaluate the feasibility of extending micro-lending to small-scale miners and mining area entrepreneurs will be financed under the Project. A similar initiative will be mounted to educate potential equipment suppliers to the mining sector and to assist in the evaluation of possibilities for establishing equipment leasing-to-buy programs. While this will address needs of small and medium mining companies for access to equipment, it will not address the needs of subsistence miners and mineworkers. As part of an incentive program to promote organization and registration, a pilot scheme to foster local entrepreneurship in the supply of hand tools and small motors and pumps on a direct sale or rent-to-buy basis will be funded.

A.2.2 Support to private sector institutions, professional and trade associations, State and Local Government institutions (US$2.14 million)

Development of the private sector in mining will require strengthening of its institutional framework – i.e. professional and trade associations, chamber of mines, etc. This activity will be mainly led by the private sector, and Project participation will be essentially limited to partial support for organizational efforts, publications, and promotional activities. The subcomponent will rely on previous experience developed by IFC in the creation and strengthening of trade associations. Its main emphasis will be on training and capacity building of the different members of the private sector associations, and of State and Local Government staff.

A consultant shall be engaged to define, coordinate and assist in the execution of the training program. Regular monitoring of the impact of this program on the development of Nigeria’s private mining sector is integrated into this component. The Project will also support promotional activities, such as the participation of the local mining associations in the national and regional trade shows.

A.2.3 Targeted programs to foster development of specific commodities (industrial minerals, ornamental rocks, bentonite, barite, gypsum, etc.) (US$2.20 million)

Nigeria has rich potential in several industrial minerals and construction materials whose development could be easily fostered to satisfy domestic demand and tap into export opportunities in niche markets.
Industrial minerals and ornamental stones are a promising sector, opportune for the development of national private companies. Development of this sector has the potential to substitute part of the imports for the oil industry. However, industrial minerals have to comply with strict quality norms (ISO norms) to have access to the market and to compete with imports.

The Project would support the organization of technical assistance programs for domestic entrepreneurs to develop internal production and marketing of barite, bentonite, gemstones, and would bear in mind the organizational and marketing issues associated with quarrying aggregate and dimension stone, and other quarry-able minerals.

Consultant studies targeted to specific minerals whose development is considered as priority for the country and susceptible to fostering development of the Nigerian private sector are proposed. These studies would cover all – from identification and characterization of mineral resources, quality requirements of the national and international markets, to identification of market niche opportunities.

**Project component B - Strengthening Governance and Transparency in Mining (US$33.28 million)**

The objective of this component is to improve the legal and regulatory framework and the capacity of the sector public mining institutions to enforce the laws and to provide efficient services to the mining community in order to establish an enabling environment for private investments into mining.

The main activities of the component include: i) Legal and Fiscal Reform; ii) Institutional Capacity Building; iii) Establishment of a Computerized Mining Cadastre and Registry System; and iv) Development of Environmental and Social Management in the Mining Sector.

**B.1 Legal and Fiscal Reform (US$2.17 million)**

A modern regulatory framework is an essential condition to enable private investments, national or international, in the mining sector, as it is determinant for the security of investments and the country risk rating. Most of the successful countries in promoting development of their mining sector through private investments have achieved this goal primarily by the enactment of a modern and competitive Mining Law, fiscal regime and regulations.

Promotion of a competitive minerals industry in Nigeria requires review and update of the legal, fiscal and regulatory frameworks for the sector, as well as a clear statement of the Government’s objectives and policy to promote mineral development at both smaller and larger scales, as appropriate. The Government of Nigeria fully understands this need and is currently revising the 1999 Mining Code, which was itself an effort to update the 1945 Mining Law, promulgated under British colonial rule. The Presidential Committee has issued a proposed draft of subsidiary legislation to regulate the activities of artisanal and small-scale miners.

The revised framework, along with the proposed subsidiary legislation, will be circulated for additional comment from a wide circle of stakeholders, including diverse members of the Government institutions, the private sector and civil society. Particular attention will be paid to the roles and responsibilities of federal and state authorities, transparency and simplification of registration procedures, sharing and management of benefit streams derived from mining activities with both local governments and the affected communities, and measures to ensure responsible closure and reclamation of new mines, both large and small.
The present activity would also support timely legal assistance to the PMU for Project implementation not directly related to the sub-component objectives.

B.1.1 Modernisation of Mining Law and regulations (US$0.880 million)

The broad lines of legal framework reform have been defined during Project preparation (under PPF financing), with the draft Mining Law and its regulations having been drafted.

The Project will mainly support a consensus building process around the new Mining Law and regulations, including environmental conventions. Lack of a consensus and ownership of the proposed text would seriously hinder Parliamentary approval, enactment and application of the new legal framework.

The consensus-building process will be carried out mainly through workshops and seminars with different stakeholders of the mining sector in attendance. National mining lawyers and international experts will provide technical assistance in terms of international best practices in mining and investment promotion.

The objective of the present activity is the preparation and presentation to the Parliament of the new Mining Law draft and regulations.

B.1.2 Revision of the fiscal regime, decentralization of revenues, and revenues management from the mining sector (US$0.88 million)

Establishment of a competitive fiscal regime is a major factor for private investment promotion, as the fiscal regime directly affects economical feasibility of mining projects. Increased levels of investment in the mining sector activities will also require the review of revenues management and decentralization of revenues to ensure increased extent of the sector economic impact.

A strategy similar to that for the legal framework will be used by the Project to develop a new competitive fiscal regime for mining, ensuring full consensus and ownership among the different ministries and on state and federal levels.

The Project will mainly finance technical assistance from national and international experts and the logistics and cost of seminars and workshops for consensus-building. International expertise will analyze the competitiveness of existing mining projects and propose a favorable fiscal regime.

This assistance should also be oriented towards the management of revenues from the mining sector to ensure that the mineral sector effectively contributes to the social and economic development of the country and communities affected by the mining activities. The revenues management need to be improved in order to ensure a fair division of the economical benefits of the sector and an effective contribution of the mining sector to national, regional and local economies. A standard form of fixed-term stability agreement for large investments in the mineral sector will be included.

The new fiscal regime will provide a competitive fiscal package of income tax, royalty and custom duty.

B.2 Institutional Capacity Building (US$16.10 million)

Effective mining institutions are indispensable to creating an enabling environment for the development of a private sector-led mining industry. Within this framework, the core mandates of the private mining institutions are: (i) the establishment of Sector Policy including strategic directions and goals; (ii)
definition and enforcement of norms and regulations; (iii) administration of mining rights; and (iv) establishment of reliable information regarding the basic geological knowledge and the mineral potential of Nigeria.

An institutional audit of the Mines Department will be carried out during Project’s preparation (under PPF financing) and GSNA institutional organization has been recently approved as part of the 2002 Strategic Action Plan for Solid Minerals Development. The capacity building activities of the Project will thus be focused on implementation of the audit findings for MD and the Strategic Action Plan for GSNA. International best practice will guide the process.

Specific actions to be implemented for capacity building and strengthening of infrastructure and technological capabilities of the MSMD’s agencies are detailed below:

**B.2.1 Mines Department (US$1.01 million)**

Capacity building of the Mines Department will be focused on the implementation of the institutional audit recommendations and the zonal offices structure.

An international consultant will be engaged to assist the MD in the implementation of the new structure, and to train its staff in performing their new functions and responsibilities. The implementation of the new structure will be preceded by an adjustment phase, and a participatory process involving the staff and management of MD.

As part of the MD capacity building, the Project will finance the establishment of a modern documentation centre at Jos to ensure conservation of historical information on mining in Nigeria. The latter activity will include technical assistance for the classification and cataloguing of the information, indexing in a database system, and purchase of furniture and computer equipment for the documentation centre at Jos.

The Project will also finance additional operating costs related to specific capacity building activities.

**B.2.2 Geological Survey of Nigeria Agency (US$1.21 million)**

Activities for GSNA will be focused on: (i) implementation of the structure and institutional organization of GSNA, as defined in the seven year Strategic Plan for Solid Minerals Development and (ii) improvement according to International Best Practices and evolution of geological surveys.

The definition and adjustment of GSNA new organization will be done with the assistance of a foreign geological survey within a twining contract for supervision of geological activities of the Project (see C.2.4). Most of capacity building of GSNA will be implemented with the assistance of a supervisor.

Special assistance and equipment will be provided to restore basic laboratory capacity at Kaduna central chemical laboratory in the form of replacement of basic instruments and technical assistance to train the laboratory’s staff.

As for the MD, the Project will finance additional operating costs related to Project activities in GSNA reform.
B.2.3 Intranet network MSMD (US$0.84 million)

Availability of accurate and timely information is essential for the administration and regulation of the mining sector for the MSMD, including regulations, enforcement of legal rules and the fiscal regime, and investment promotion.

The Project will finance the establishment of several information systems (Mining Cadastre System (MCS), the National Solid Minerals Information System (NSMIS), MSMD's Website) to ensure proper collection, storage and retrieval of technical information from the minerals sector. These information systems will form independent networks under the responsibility of different technical units and thus will not be able to provide complete information on the sector. To get a complete synthesis of sector conditions at any given point in time, the Minister would need to consult several units. In order to avoid such problems, organizational issues and the flow of information issues will be addressed.

The computer technology presently available allows data sharing within an organization, and among a number of organizations under the concept of intranet and extranet networks. Modern intranet technology provides everything from document management (allowing users to post and manage documents on a corporate intranet), internal Email system and software that allows users to access information and services from any part of the institution. The shift from stand-alone PCs and mainframes to networked computers essentially transformed the capabilities of information technology. Through the intranet, users have the ability to instantly share all kinds of critical information across diverse computer systems, resulting in new ways to add value to the information across the institution.

The intranet technology demands new definitions and frameworks for thinking about information sharing, transforming the piles of papers and books into a virtual documentation centre accessible from the desk of all staff members. The intranet will allow the head of the Ministry to get the latest statistics in an instant. The intranet can be in turn connected to the Internet supporting a dialogue with all relevant stakeholders.

The Project will finance the consulting services, hardware and software needed for the establishment of an intranet network throughout MSMD central and zonal/regional offices. A consulting firm shall be engaged at an early stage of Project implementation to carry out the task and to procure the required hardware and software and to program the intranet applications. The intranet network will be connected by cables within Abuja and by the Internet between Abuja and zonal/regional offices.

B.2.4 Mineral Investment Promotion (US$0.550 million)

A new mineral Investment Promotion Directorate has been created within the MSMD to promote private investments in the mining sector. The Project shall support the development of this new directorate with market studies for mineral production in Nigeria and the preparation and publication of promotion materials, in particular for circulation and distribution within Nigerian Embassies and economic missions around the world. The directorate will also house the Ministry’s Website.

B.2.5 Office renovation (US$2.640 million)

The project would finance office facilities improvement for the Mines Department and zonal offices, and for the GSNA and regional offices.
The institutional audit, carried out during Project preparation (PPF financing) will identify the needs of each agency of the MSMD and will suggest a schedule to carrying out civil works within the allocated budget, which will be modified by the MSMD according to its priorities.

At the beginning of the Project, an architect will be hired to prepare plans and technical specifications according to the priorities set by MSMD, in agreement with World Bank.

The office renovation sub-component will provide adequate office facilities for the implementation of the new institutional model and redesigned work procedures.

**B.2.6 Equipment (US$6.70 million)**

Equipment purchase, as part of the capacity building component, will include: office and computer equipment, vehicles for field work (4 WD double cabin pick-ups) and office furniture.

The need for computer equipment (hardware and software) will be determined by the institutional audit of the MD and zonal offices, while office computer for GSNA will be determined according to activities planned (e.g. digital cartographic unit, etc). Most of the activities related to the installation of computer systems and information systems include within their budget, provisions for hardware and software acquisition as part of the consultant contract for the design and installation of the system.

Due to deficiencies in the electric power supply, institutions cannot function only on the national power grid, and to ensure institutional efficiency, the Project will purchase electricity generators for its MS zonal offices and GSNA regional offices. The Project will also provide funding for the operating costs (fuel) of key agencies and the PMU.

**B.2.7 Training Institutional Capacity Building (US$3.15 million)**

Human resources are a crucial part of institutional capacity building and the viability of the new institutional organization. Building capacity of an institution’s staff is best achieved through appropriate training:

- **Training in Nigeria by international experts**, which is the most efficient way to allow a major number of national staff to participate and partners (e.g. private sector, institutions).

- **Training at national education facilities**, in order to familiarize staff with technical subjects, such as GIS and computer sciences. Qualified personnel will thus be trained in a cost-effective way.

- **Participation in international congresses and workshops** is an important part of promotion of private investments in the minerals sector, allowing an international diffusion of the mineral potential of the country. This activity will allow Nigeria to access an international circle of investors.

- **Short-term training abroad**, although not as cost efficient as training in Nigeria, is nevertheless an important tool to exposing national professionals to the international trends in mining development through study tours and short-term courses in international institutions.
B.3 Mining Cadastre (US$5.31 million)

A priority objective of the mineral sector development policy is to establish a well-organized, uniform, and interactive cadastral system. A reliable and transparent Mining Cadastre represents an essential component for the promotion of investments in the sector as it provides the technical security of the mining titles tenure.

The Project includes support for the transformation of the physical registries of the MSMD cadastre into a computerized Mining Cadastre. The Cadastre will be decentralized under the responsibility of the regional cadastre offices, but will be centrally coordinated by the MSMD in Abuja.

Moreover, there will be a States Cadastre office in every State of the Federation with the authority to deliver mining titles for building material quarries. These offices, however, will not process applications for metallic mining titles. The States Cadastre office will have online access to the Central Mining Cadastre, and will be able to inform interested parties on available ground for application.

The Mining Cadastre will be a separate and autonomous agency (similar to the GSNA), completely separated from the MD but reporting to the MSMD.

The Cadastre procedures will be transparent, publicly available, non-discretionary, and respectful of priority of the first application presented. Moreover, the cadastral procedures will have stages, instances and resources to allow mining rights owners to adequately defend their rights in accordance with the provisions of the new Mining Law.

Implementation of the new Mining Cadastre will require several preparatory actions in order to establish the appropriate technical base. Evaluation of the Nigerian Mining Cadastre, carried out as part of the preparation of the Project showed that: i) accurate and representative statistical data about the status of cadastral information are lacking, and the Central Federal Administration lacks access to reliable and representative information about the licensing situation in Nigeria; ii) a significant backlog of pending applications exists, and numerous dormant mining titles may need to be cancelled for incompliance with the legal dispositions; iii) the geodetic triangulation network of Nigeria is not satisfactory for Mining Cadastre purposes (accurate positioning of mining titles); iv) gaps exist in the available topographic map sheets, hindering the graphical positioning of the mining titles. These problems will have to be addressed before the establishment of the new Mining Cadastre and registry system.

The objectives of the Mining Cadastre sub-component include: i) re-organization of the Mining Cadastre offices, in Abuja and the geopolitical regions; ii) re-definition of the functions and establishment of the working procedures of the Mining Cadastre, including interaction between cadastral offices and the central Cadastre in Abuja; iii) design of the Mining Cadastre System (MCS), a modern computerized system for administration of the mining titles, including the supply of the hardware and software and programming of the system; iv) computerization of the working procedures of the mining cadastras, as defined above, in accordance with the dispositions of the enacted new Mining Act, including the digitalization of the actual analogical information; v) training of the staff in technical and legal aspects of the mining titles administration and operation of the MCS; vi) strengthening of the technical capacity of the Mining Cadastres in terms of computer, topographical and office equipment.

The conceptual and organizational bases for the new Mining Cadastre have been set up during project preparation and should include a technical unit, responsible for cartographic control of the geographical location and time validity of mining rights, and an Administrative and Statistics Unit, responsible for all legal aspects related to granting or cancellation of mineral rights – control of payments of exploration/mining fees, and development and administration of the mining statistics database.
Adjustment and establishment of the new institutional model for the Mining Cadastres will be carried out with assistance of an international consulting firm. The consulting firm will define the detailed functions of each post of the organization, following workshops and stakeholder consultations. Working procedures in accordance to the enacted Mining Law will be included in the process. These procedures will describe in detail all the operations related to the granting, conservation, and extinction of mining titles.

Each work procedure shall be documented in a the manual of procedures guiding the application of the Provincial Concession Rules in order to guarantee the homogeneous application of the legal framework. The existence of clear and public rules of the game has a major impact on the transparency of the process, and as a result, on the establishment of favorable climate to promote private investments.

A computerized Mining Cadastre System (MCS) will allow correct positioning of the mining titles, and storage of historical records of the granted mining titles in a GIS software. All procedures will be computerized, including fees paid, validity dates, and the pending applications. The MCS will interact with the databases of mines safety and environment department of the MD.

Training will include several activities: i) on the job training carried out by the engaged consultants; ii) formal training at a national institution in basic GIS theory and applications; and iii) study trips and training abroad. Courses in cadastre management, and trips to countries, that have recently reformed their cadastre systems will be included.

A consulting firm will be engaged to assist the MSMD in coordination and supervision of the these activities, as well as the training of the staff to ensure the highest technical standards.

**B.4 Environmental and Social Management (US$ 9.70 million)**

Establishment of the environmental regulations for mining are a part of this sub-component. This activity must be synchronized with the preparation of the new Mining Act and regulations in order to ensure compatibility between the tasks. An international Mining Legal expert will be engaged to facilitate this activity.

Nigeria has no medium or large-scale industrial mining operations and the sector is dominated by small-scale mining operations that generally have no financial or technical capacity to restore the environment at the end of exploitation. An inventory and evaluation of all abandoned mining sites to identify the environmental legacy of past mining is a high priority for environmental management of the solid minerals sector. Some information has been collected already during the Sector Environmental and Social assessment of the mining sector carried out under the PPF, and could serve as a basis for more detailed work.

A consulting firm will be engaged to prepare a remediation plan on the basis of the inventory and eventual complementary field works. The plan will establish a list of priorities for remediation on a cost-benefit basis and national environmental priorities, and will provide terms of reference and technical specifications for the top priority remediation works that the project will finance.

As part of the sub-component activities, the environmental units of the MD and zonal offices will be created and trained in environmental management of mining activities. Field equipment and technical assistance will also be financed. Consulting services for the preparation of a social management plan for the mining sector are also a part of this sub-component. The social management plan will aim at
improving capacity of the involved central and states administrations regarding social management in relation to mining sector development.

Considering the highly specialized activities of the sub-component and the lack of experience with respect to environmental management in the Nigeria's solid minerals sector, the Project will finance external technical assistance to assist the MSMD in supervising and coordinating the activities. A reputable international consulting firm will be engaged ("the supervisor") to supervise the component through periodical short-term missions in Nigeria.

As recommended by the SESA, the Project will finance the setting up and training of an environmental management unit at the Mines Department working in collaboration with the EIA division of the Federal Ministry of Environment for the review and approval of EIAs presented by mining operators. It will also support the design and set up of an Environmental Management and Information System (EMIS); and provide appropriate opportunities for skill enhancement and training for government officials and units which have been mandated to work in this area.

**Project component C- Private Sector Development (US$ 26.81 million)**

The component will support private-sector-led development of the mining sector through restructuring of public mining companies (NMC and NCC).

The Project will also support the provision and diffusion of basic geological information to broadcast the mineral resource and mining potential of the country and promote private investments in the mining sector.

The objectives of the Project regarding private sector development are centered around two main lines of action: i) the withdrawal of the State from the productive sector, and elimination of unfair competition with the private sector for the mineral resources; ii) availability of basic geological information to establish Nigeria mining potential at the international level and foster national and international private investments in the sector.

**C.1 Restructuring of Solid Minerals State-owned Enterprises (US$1.10 million)**

The Government has decided that the Nigerian Mining Corporation (NMC) should be restructured and withdraw from mining. The Bureau of Public Enterprises is currently selling off a part of the NMC mining assets. An assessment of the potential for self-financing of the future NMC needs to be conducted to better define the future profile of its remaining activities. On the other hand, the Nigeria Coal Corporation (NCC) has ceased production and is virtually bankrupt. Considering the importance of the role that coal could play in Nigeria's energy matrix, a special task force mandated by the President is reviewing the options for the NCC.

The Project will support the restructuring of state-owned mining enterprises by providing technical assistance for the different steps of the evaluation of the NMC and the NCC. The Project shall finance technical assistance for the evaluation of NMC assets, books value, establishment of the restructuring plan and assistance to the Government for the promotion of private participation in the new NMC. A consulting firm will furnish this assistance and leads the promotion of NMC assets to ensure a private participation and management. The consulting firm shall be a reputable technical and financial firm specialized in technical and financial evaluation of mining assets and business having a good knowledge of possible interested national/international investors.
In parallel, the Project will finance the establishment of a social plan for both, the NMC and the NCC to mitigate the social cost of restructuring both enterprises and, in particular, closure of operations. The social plan will consider the need of training for the switch to new activities and reinsertion of affected work force. It is estimated, that approximately 1,500 workers will be laid off, and will be in need of retraining/safety net. The Project does not include funding for the retrenchments, but will focus on training and social mitigation.

C.2 Strengthening of the Geological Infrastructure (US$25.71 million)

The main objective of this sub-component is to provide basic and reliable geological information necessary to facilitate promotion of private investments in the mining sector and to support the planning of the social-economical development of the country.

The GSNA contributed effectively in the past to the geological knowledge of the country and a significant amount of material is already available. However, the major part of the maps and the data is not published and is under a great risk of dispersion and loss. Moreover, most of the previous mapping, although of good quality, did not consider the new development of geological sciences mainly regarding the metallurgical implications of the different geological environment and need to be re-interpreted in the light of the recent developments mainly regarding the need to support the development of the mining sector through improving knowledge of the mineral resources.

Geological infrastructure is necessary primarily to put in evidence, publicize the mineral potential of the country, and attract investments for exploration and development of mineral resources. Knowledge of the basic regional geological framework greatly diminishes the risk of exploration and constitutes an important motivation for the investments with respect to competition within the world capital market. Geological information is not limited to the mining sector, also forming a basis for infrastructure development (roads, etc.), land use planning, urban development, and environmental resources management.

The sub-component’s activities include geophysical, geological mapping and mineral assessments as well as development of the national solid minerals information system in support to investment promotion in the mining sector. The present sub-component will also allow the compilation, actualization of the large amount of data detained by the GSNA and ensure its diffusion in support of the promotion of investments.

C2.1 Airborne geophysics (US$ 10.10 million)

Airborne geophysical data form an essential component of the national geological infrastructure, since it provides objective information on spatial distribution of the geological formations and tectonics. Airborne geophysical methods, specifically magnetism, provide information on composition of the substratum, even in areas with dense vegetation or quaternary cover, and therefore constitute a major tool for geological mapping and mineral exploration. Airborne geophysics is also the ideal reconnaissance tool in areas of difficult access.

Conscious of the value of airborne geophysics for solid minerals development, the MSMD already started an ambitious airborne geophysical program under Government financing. This program covers approximately 40% of the national territory with airborne magnetic and radiometry and limited areas, surveyed with electromagnetic methods. Stressing the importance of airborne geophysical surveys, the Minister of Solid Minerals intends to cover 100% of Nigeria’s territory. The Project shall assist the
Government in this endeavour by financing additional regional geophysical surveys (magnetism and radiometry) and electromagnetism over selected areas of high mineral potential.

The Project would finance approximately 300,000 line kilometers of regional geophysical airborne surveys and 15,000 line kilometers of electromagnetic survey. The areas of geophysical surveys will be chosen on the basis of the results of the Government-financed survey already under implementation. The Project will also finance the compilation and interpretation of all the surveys realized including the recovery and digitalization of older analogue data from the oil exploration.

C2.2 Geological mapping (US$ 11.20 million)

The GSNA has already performed geological mapping over extensive areas of Nigeria. Most of this work has not been published and is actually in the form of draft paper maps, not readily available to potential investors. Moreover, despite good field work quality, this mapping needs to be re-interpreted mainly in the light of new airborne geophysical information and the new concepts in geology and metallogeny.

Revision and completion of geological mapping will be carried out over selected areas on the basis of their mineral resources and environmental characteristics priority. Geological mapping will be carried out at the scale of 1:50,000 and published on the scales of 1:100,000 and 1,250,000. Modern geological concepts and on-the-job training for GSNA staff will be ensured by hiring of an international consultant firm. The international consultants will be responsible for the logistics of the fieldwork, and the quality of the final mapping under the supervision of a council engineer. Moreover, the consultants will assist the GSNA in establishing a digital cartographic unit in Kaduna and will provide equipment and training for this purpose.

The output of the sub-component will be modern and actualized geological maps 1:250,000 and 1:100,000 over the main areas of mineral potential of the country. On the basis of the new geological mapping, the 1:2,000,000 geological map of the country will be updated and published.

Geological mapping will be complemented through realization of mineral inventories of the States to document the mineral potential of Nigeria, and to document national mineral occurrences. This task will be performed by the international consultants engaged for the geological mapping in collaboration with the GSNA staff and geologists.

In addition to geological mapping, specific metallogenetical studies, studies of known mineral occurrences (identified during the mineral inventories of the States or the geological mapping) sites will be performed. The specific metallogenetical studies will document the mineral potential of Nigeria and the type of deposits that may be expected.

This latter activity will produce a series of targets that can effectively promote the solid mineral development of Nigeria at medium term.

C2.3 National Solid Minerals Information System (NSMIS) (US$ 2.21 million)

Basic geological information is essential for the development of the mining sector and the promotion of investment into high-risk exploration activities. However, the applicability of this information will depend primarily on its accessibility. The GSNA has a wealth of information that is, unfortunately, not used optimally because of lack of accessibility. Most of the information is kept in paper format. Moreover, potential investors are not aware of the availability of this information.
The MSMD will not achieve its objectives if an appropriate mineral information system is not established to facilitate search, diffusion, and commercialization of the information.

Conscious of this limitation, the MSMD plans to include the establishment of the National Solid Minerals Information System (NSMIS), a computerized information system based on GIS technology and relational databases. The NSMIS will also provide access to information through the Internet to customers in Nigeria and abroad through e-commerce facilities.

The establishment of the NSMIS is to be preceded by an audit of all available information. The Project will finance technical assistance (consulting services) for the audit of available information within the MSMD institutions, as well as the selection of the useful information to be stored in the NSMIS, followed by capture (digitalization) and storage in the NMIS.

Storage of analogue information will be systematized in three well-organized documentation centers (Abuja, Kaduna and South). The Project will finance the technical assistance for the establishment of the documentation centers, the equipment (computers and furniture) as well as the purchase of processed documentation. The Project will also finance additional operating costs related to operations during the initial stage of the establishment of the documentation centers.

The main computer centre of the NSMIS will be based in Kaduna and connected via Internet to Abuja and GSNA zonal offices.

The project shall will finance within the geological mapping sub component the establishment of a digital cartographic unit in Kaduna for the preparation and publication of digital maps. The establishment of the cartographic unit (including equipment and training of the GSNA staff) will be included in the contracts of the international consultants engaged for the geological mapping. The digital cartographic unit will be responsible for the preparation and publication of digital geological maps to be included in the NSMIS.

C.2.4 Supervision of geological activities and GSNA capacity building (US$2.20 million)

A consulting firm will be engaged for this highly complex and technologically advanced activity. The consulting firm will assist the Project for the procurement of the services, work and equipment required to carry out the planned activities, the coordination and supervision of the activities, the evaluation of the delivered products as well as the follow up of the training activities. The firm will serve as the scientific authority for the component, and will be the GSNA adviser.

An audit of the GSNA will be performed. The firm will coordinate and supervise the training program of the Project for the GSNA. The firm will also continuously advise the GSNA on institutional strengthening and capacity building.

The NSMIS conceptual design, format standards, and data validity and homogeneity will be assessed. Functionality tests of the system will be carried out. Another part of this component will focus on the publication and dissemination of results – all the products of the Component will be delivered in digital format and only a selection of products (maps, etc.) will be printed. The firm will assist the GSNA in addressing the technical specifications for the printing work, evaluating the bidding documents and offers, and in negotiating the respective contracts.

The consulting firm will also work with the GSNA on the preparation of synthesis and compilation of the 1:2,000,000 geological map, and the mineral assessment of Nigeria. On the basis of the results of the sub
component, the consulting firm will prepare the synthesis and the presentation of the mineral potential of Nigeria under in the form of publications to be used for the promotion of private investments.

**Project component D - Project Coordination and Management (US$6.91 million)**

A PMU (Project Management Unit) has been established for SMMRP preparation and implementation. The PMU, currently staffed by a Project Coordinator, Assistant Project Coordinator, a Staff Accountant, a Procurement Officer and an Internal Auditor, is currently in the process of recruiting additional staff before SMMRP effectiveness, Procurement assistant (2), an ASM expert, a Community Development Officer and an Environmental and Social expert. In addition, for the duration of twelve months, the PMU has hired a local Procurement consultant and a Senior Accountant to advise and train its staff in best practice World Bank procedures and to streamline operations. The PMU, throughout SMMRP implementation, will be responsible for the following: (a) procurement, including all contracting for works and purchases, and the hiring of consultants; (b) project monitoring, reporting and evaluation, including progress towards achieving project development objectives and regular consultations with the World Bank task team; (c) the contractual relationship with IDA; (d) financial record keeping, the Special Account and disbursements. The Project will finance recurrent costs, external auditing and accounting assistance (consultants), short term consultants for the assistance to the PMU for the supervision of the Project, equipment and vehicles, and training for PMU staff in World Bank procedures. The PMU will ensure the coordination among the different institutions participating in the SMMRP, including members of the State and Federal Governments, private sector and NGOs.
## Annex 5: Project Costs

**NIGERIA: Sustainable Management of Mineral Resources**

<table>
<thead>
<tr>
<th>Project Cost By Component and/or Activity</th>
<th>Local US $million</th>
<th>Foreign US $million</th>
<th>Total US $million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Economic Development and Livelihood</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversification in Artisanal and Small-scale Mining Areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1 Sustainability of Small-scale Mining and Livelihoods Diversification</td>
<td>23.72</td>
<td>6.44</td>
<td>30.16</td>
</tr>
<tr>
<td>A.2 Financing Programs for Business Development in Mining</td>
<td>15.81</td>
<td>0.726</td>
<td>16.54</td>
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<tr>
<td><strong>B. Strengthening Governance and Transparency in Mining</strong></td>
<td>17.10</td>
<td>16.18</td>
<td>33.28</td>
</tr>
<tr>
<td>B.1 Legal and Fiscal Reform</td>
<td>1.40</td>
<td>0.770</td>
<td>2.17</td>
</tr>
<tr>
<td>B.2 Institutional Capacity Building</td>
<td>7.41</td>
<td>8.68</td>
<td>16.10</td>
</tr>
<tr>
<td>B.3 Mining Cadastre</td>
<td>1.91</td>
<td>3.40</td>
<td>5.31</td>
</tr>
<tr>
<td>B.4 Environmental and Social Management</td>
<td>6.38</td>
<td>3.32</td>
<td>9.70</td>
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<tr>
<td><strong>C. Private Sector Development</strong></td>
<td>11.40</td>
<td>15.41</td>
<td>26.81</td>
</tr>
<tr>
<td>C.1 Restructuring of Solid Minerals State-owned Enterprises</td>
<td>0.330</td>
<td>0.770</td>
<td>1.10</td>
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<tr>
<td>C.2 Strengthening of the Geological Infrastructure</td>
<td>11.07</td>
<td>14.64</td>
<td>25.71</td>
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<td><strong>D. Project Coordination and Management</strong></td>
<td>6.54</td>
<td>0.375</td>
<td>6.91</td>
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<tr>
<td>E.PPF</td>
<td>1.80</td>
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<tr>
<th></th>
<th>75.22</th>
<th>42.47</th>
<th>117.69</th>
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<tr>
<td>Total Baseline Cost</td>
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<td></td>
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<tr>
<td>Physical Contingencies</td>
<td>1.96</td>
<td>1.10</td>
<td>3.060</td>
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<tr>
<td>Price Contingencies</td>
<td>2.14</td>
<td>4.99</td>
<td>7.140</td>
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<tr>
<td><strong>Total Project Costs</strong></td>
<td>79.32</td>
<td>48.57</td>
<td>127.890</td>
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<tr>
<td>Interest during construction</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Front-end Fee</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total Financing Required</strong></td>
<td>79.32</td>
<td>48.57</td>
<td>127.890</td>
</tr>
</tbody>
</table>
Annex 6: Implementation Arrangements

NIGERIA: Sustainable Management of Mineral Resources

A project management structure has been established in order to administer and supervise the Project activities. For this purpose, MSMD has established and shall maintain, during the execution of the Project, a Project Management Unit (PMU) to coordinate project implementation, and to manage the following: (a) procurement, including all contracting for works and purchases, and the hiring of consultants, (b) project monitoring, reporting and evaluation, (c) follow-up of the Credit Agreement covenants by the MSMD, and (d) financial record keeping, the Special Account and disbursements.

The PMU will be responsible for the preparation of the work program and the supervision of the execution of the Project, including:

- Supervision of the different components to ensure consistency with the Project’s objectives;
- Preparation of the annual budget, work program and time schedule, and verification of the availability of the human, material and financial resources required for timely implementation of the work program;
- Administration of the procurement procedures including coordination among the MSMD, the Ministry of Finance and other State agencies for initiation of the bidding procedures, reception and evaluation of offers and signature of contracts;
- Follow-up of the contracts signed within the Project and fulfillment of contractual obligations by all counterparts;
- Administration of the Project’s financial resources, disbursements and accounting procedures;
- Timely execution of external auditing of project accounts and financial statements;
- Preparation of progress reports in relation to the execution of the Project;
- Communications with MSMD and the World Bank regarding the execution of the Project.

The Project shall finance the additional recurrent costs of the PMU, external auditing and accounting assistance (consultants), short-term consultants to assist in Project coordination and supervision, equipment, vehicles, office maintenance and training of staff in World Bank procedures. Adequate operation of the PMU is a key factor for successful Project’s implementation.

The PMU will ensure coordination between the different institutions of the MSMD participating in the Project, as well as other state and private institutions stakeholders in the Project’s objectives. The PMU will be directly linked with the World Bank on all issues concerning Project implementation.

The PMU will have the overall responsibility for coordination and management of procurement activities of the project. The unit will be staffed by a Project Coordinator, Assistant Project Coordinator, Project Accountant, Procurement Officer, Environmental Specialist, Community Development Officer, and Small-scale and Artisanal Mining Specialist. The project staff has received proper training (i.e. procurement, and financial management training). Staff of the Ministry of Solid Minerals has been assigned as the project Procurement Officer. The assigned staff does not have relevant experienced in Bank procurement procedures. Therefore, the project has hired a qualified Procurement Consultant with vast experience in World Bank procurement procedures for the duration of the first year of project implementation. The procurement Consultant will assist with the implementation of their procurement activities.
activities. Part of the TOR of the Procurement Consultant will include training and development of the PMU designated Procurement Officer and other relevant project staff’s skills in Bank procurement procedures. The PMU will be equipped with the “Client Connection” software and accessibility, to allow for streamlined procurement and disbursement procedures.

All goods works and services financed under the Credit would be procured in accordance with appropriate IDA procurement Guidelines. Bank’s standard bidding document for goods and works and standard Request for Proposals for Consultants as well as standard evaluation forms will be used throughout project implementation.

The PMU will administer the Project’s financial resources in close collaboration with the MSMD accounting department. The PMU will ensure timely engagement of external auditors under terms of reference acceptable to the Bank for the auditing of the Project’s accounting. The PMU will assist the external auditors by furnishing the required documentation and information.

The PMU will be headed by a Project Coordinator, with the rest of the staff including an assistant director (monitoring and evaluation specialist), several technical coordinators (responsible of the supervision and coordination of activities for small scale mining, environment, community development, information systems and IT development, a procurement specialist and an accountant. The Project’s Coordinator will report directly to the MSMD’s Permanent Secretary who shall be permanently informed Project implementation progress.

The PMU staff are all assigned to work on the SMMRP by the Ministry of Solid Minerals. In order to achieve continuity and to build local capacity in a sustainable way, it is important to have Ministry employees work on the Project for the duration of at least two years. During Negotiations, reassurances from the MMSD were sought to guarantee appointments of a minimum of two years, renewable, for all staff assigned to work on the Project. The PMU organizational chart is illustrated below:

![PMU Organizational Chart](image-url)
Annex 7: Financial Management and Disbursement Arrangements

NIGERIA: Sustainable Management of Mineral Resources

1. Summary of the Financial Management Assessment

Objective of the FM System

1. The objective of the Financial Management systems is to support the Executing Agency and implementing unit in deploying project resources to produce the required outputs and with attention to economy, efficiency and effectiveness. Specifically, the FM systems must be capable of producing timely, understandable, relevant and reliable financial information to enable the implementing units to plan, coordinate, monitor and appraise the Project's overall progress towards the achievement of its objectives, as well as ensuring that funds provided will be used for the purposes intended.

Implementing Entities

2. The Ministry of Solid Minerals (MSMD) is the executing agency for the project but it will delegate the day to day implementation of the project to a Project Management Unit (PMU). The ministry will serve as the oversight body.

3. The Finance Department of the Ministry will be responsible for managing the financial affairs of the Project. However, 2 staff with relevant professional qualification will be seconded to the PMU as Project Accountant and Assistant Project Accountant. In addition, the project will engage a professionally qualified and experienced Financial Management Consultant with relevant experience to assist in setting up and implementing the financial management arrangements of the project. They will report on their activities to the Project Coordinator in the PMU. Modern internal audit functions would be performed by the Internal Audit Unit of the Ministry. This will be supported by an internal auditor who will be located in the PMU. The Project Accountant will be responsible for ensuring compliance with the financial management requirements of the Bank and the Government, including forwarding the quarterly financial monitoring reports and audited annual financial statements to the Head PMU, the Ministry and to IDA. Project Accountant and the Head, PMU will jointly prepare budgets. Project Accountant will be responsible for preparing monthly financial reports, quarterly financial monitoring reports, and annual financial statements, as required.

4. All accounts personnel will be sufficiently trained in Bank procedures, computer applications and financial management skills.

Risk Analysis

Inherent Risks

5. The Country Financial Accountability Assessment (CFAA), which was conducted in CY 2000, revealed that the systems for planning, budgeting, monitoring and controlling public resources in Nigeria have deteriorated to a level that they do not provide any reasonable assurance that funds are used for the purpose intended. Risk of waste, diversion and misuse of funds was highly rated until such a time as the CFAA recommendations have been implemented. Some of the CFAA recommendations have been implemented and some are being implemented. An update of the CFAA, which is due before CY 2006 will be required to confirm the current level of risk.

6. To minimize the aforementioned risks and ensure that appropriate financial management capacity is in place prior to Project effectiveness, an assessment of the financial management capacity of the MSMD has been undertaken.
Control Risks
7. The overall Project risk from a financial management perspective is considered moderate, provided: (a) the weaknesses described in paragraph 9 are satisfactorily addressed; (b) the financial management action plan described in paragraph 37 is fully implemented; and (c) the conditions for Board are met.

Strengths and Weaknesses
8. Strengths: MSMD has an internal audit unit which has as acting head, a professionally qualified chartered accountant.
9. Weaknesses: The main weaknesses are: (a) the Accounts Division operates a manual accounting system; and (b) that MSMD does not have any experience in implementing IDA-assisted projects

Financial Management Systems

Financial Procedures Manual
10. A generic FPM has been prepared by the Bank and this will be reviewed and made specific to the project. The FPM will include institutional arrangements; chart of accounts; basis of accounting adopted; planning and budgeting, including cash-flow management; procurement procedures for goods, works and services; disbursements; banking activities; staff, wages and salaries; fixed assets register; financial reporting, auditing; legal covenants and records management

FUNDS FLOW AND BANKING ARRANGEMENTS
11. The overall project funding will be from the IDA credit and government counterpart funding. IDA will disburse the credit through a Special Account, which will be managed by the PMU.
12. The following accounts will be opened and maintained by the PMU:
   - A Special Account in US Dollars in a commercial bank to which the initial deposit and replenishments from IDA will be lodged.
   - A Current (Draw-down) Account in Naira in a commercial bank to which draw-downs from the Special Account will be credited once or twice per month in respect of incurred eligible expenditures. Following the immediate payments in respect of those eligible expenditures, the balance on this account should be zero.
   - A Current (Project) Account in Naira in a commercial bank to which Counterpart Funds will be deposited.
   - A Current (Naira Interest) Account in Naira in a commercial bank to which interests on Counterpart Funds will be credited.
   - A Current (US$ Interest) Account in a commercial bank to which interests on the Special Account will be credited.
13. The PMU will maintain an IDA Ledger Loan Account (Washington) in US Dollars/Naira/SDR to keep track of draw downs from the IDA credit. The account will show (a) deposits made into a bank by IDA, (b) drawn downs by MSMD, (c) direct payments by IDA, and (d) opening and closing balances.
14. All bank accounts will be reconciled with bank statements on a monthly basis. The bank reconciliation statements will be reviewed by designated officials, and identified differences will be expeditiously investigated. Also, the project will reconcile monthly the IDA Ledger Loan Account with the Disbursement Summary provided by the IDA.
15. The PMU will be responsible for preparing and submitting to the World Bank applications for withdrawal, as appropriate. Appropriate procedures and controls will be instituted to ensure disbursements and flow of funds are carried out in an efficient and effective manner. A cumulative record of draw-downs from the Credit will be maintained and reconciled monthly with the Disbursement Summary provided by the Bank. Detailed banking arrangements, including control procedures over all bank transactions (e.g. check signatories, transfers, etc.), will be documented by the project as described in the financial procedures manual (FPM).

**Disbursement Arrangements**

16. By effectiveness, the Project will not be ready for report-based disbursements. Thus, at the initial stage, the transaction-based disbursement procedures (as described in the World Bank Disbursement Handbook) will be followed, i.e. direct payment, reimbursement, and special commitments.

17. When project implementation begins, the quarterly Financial Monitoring Reports (FMRs) produced by the project will be reviewed. Where the reports are adequate and produced on a timely basis, and the borrower requests conversion to report-based disbursements, a review will be undertaken by the Task Team Leader (TTL) to determine if the project is eligible. The adoption of report-based disbursements by the project will enable it to move away from time-consuming voucher-by-voucher (transaction-based) disbursement methods to quarterly disbursements to the Project’s Special Account, based on FMRs.

18. Detailed disbursement procedures will be documented in the FPM.

**Planning and Budgeting**

19. Cash Budget preparation will reflect financial projections or forecasts for the life of the project (analyzed by year) and will be prepared on an annual basis. On an annual basis, PA in collaboration with the PMU will prepare the cash budget for the coming period based on the work program. The cash budget should include the figures for the year, analyzed by quarter. The cash budget for each quarter will reflect the detailed specifications for project activities, schedules (including procurement plan), and expenditure on project activities scheduled respectively for the quarter. (Guidance on the preparation of budgets is available in the Bank publication entitled "Financial Monitoring Reports: Guidelines to Borrowers"). The annual cash budget will be sent to the Task Team Leader at least two months before the beginning of the project fiscal year.

20. Detailed procedures for planning and budgeting will be documented in the Financial Procedures Manual (FPM).

**Fixed Assets and Contracts Registers**

21. At the PMU, a Fixed Assets Register will be prepared, regularly updated and checked. A Contracts Register will also be maintained in respect of all contracts with consultants and suppliers. Also, a quarterly Contract Status Reports will be prepared. Control procedures over fixed assets and contracts with consultants and suppliers/vendors for the States and federal levels will be documented in the FPM.

**Information Systems**

22. MSMD will hire a financial management consultant who will, among other things, select and install a computerized accounting package to be used by Pas and internal auditors in the PMU and by the Accounts Division and Internal Audit Unit of the Ministry, and train PA staff in the use of the software in compliance with the FPM.
Financial Reporting and Monitoring

23. Monthly, quarterly and annual reports will be prepared to allow monitoring of project implementation. The reports will be submitted to the PMU, FMOF and IDA. On a monthly basis, the PA will prepare and submit the following reports to the aforementioned:

- A Bank Reconciliation Statement for each bank account;
- Monthly Statement of Cash Position for project funds from all sources, taking into consideration significant reconciling items;
- A monthly Statement of Expenditure classified by project components, disbursement categories, and comparison with budgets, or a variance analysis; and
- Statement of Sources and Uses of Funds (by Credit Category/Activity showing IDA and Counterpart Funds separately);

24. The following financial monitoring reports will be prepared by PMU on a quarterly basis and submitted to IDA and FMOF:

- Financial Reports which include a Statement showing for the period and cumulatively (project life or year to date) inflows by sources and outflows by main expenditure classifications; beginning and ending cash balances of the project; and supporting schedules comparing actual and planned expenditures. The reports will also include cash forecast for the next two quarters.
- Physical Progress Reports, which include narrative information and output indicators (agreed during project preparation) linking financial information with physical progress, and highlight issues that require attention.
- Procurement Reports, which provide information on the procurement of goods, works, and related services, and the selection of consultants, and on compliance with agreed procurement methods. The reports will compare procurement performance against the plan agreed at negotiations or subsequently updated, and highlight key procurement issues such as staffing and building Borrower capacity.
- SOE Withdrawal Schedule listing individual withdrawal applications relating to disbursements by the SOE method, by reference number, date and amount.
- The annual project financial statements, which will be prepared by PMU and submitted to IDA, MSMD and FMOF will include the following:

  o A Statement of Sources and Uses of Funds (by Credit Category/Activity showing IDA and Counterpart Funds separately);
  o Statement of Cash Position for Project Funds from all sources;
  o Statements reconciling the balances on the various bank accounts (including IDA Special Account) to the bank balances shown on the Statement of Sources and Uses of funds;
  o SOE Withdrawal Schedules listing individual withdrawal applications relating to disbursements by the SOE Method, by reference number, date and amount;

  o Notes to the Financial Statements.

25. Indicative formats for the reports are outlined in two Bank publications: (a) Financial Monitoring Reports: Guidelines to Borrowers-Quarterly FMRs, and (b) Financial Accounting, Reporting and Auditing Handbook (FARAH) - monthly and annual reports.
**Accounting Policies and Procedures**

26. All project Funds will be accounted for by the Project on a cash basis. This will be augmented with appropriate records and procedures to track commitments and to safeguard assets. Also, accounting records will be maintained in dual currencies (i.e. Naira and US dollars).

27. The Chart of Accounts will facilitate the preparation of relevant monthly, quarterly and annual financial Statements, including information on the following:

- Total project expenditures
- Total financial contribution from each financier
- Total expenditure on each project component/activity, and
- Analysis of that total expenditure into civil works, various categories of goods, training, consultants and other procurement and disbursement categories.

28. Annual financial Statements will be prepared in accordance with International Accounting Standards (IAS).

29. All accounting and control procedures will be documented in the FPM, a living document that will be regularly updated by the Project Accountants.

**Audit Arrangements**

**Internal Audit**

30. The Internal Audit Unit of MSMD (IAU/MSMD) will perform internal audit activities for the project. This will be complemented by the work of the internal auditor posted to the project from the Office of the Auditor General. MSMD will strengthen the Unit by appointing a professionally qualified internal auditor to head the Unit. Regular internal audit reports will be submitted to the MSMD, IDA, Accountant General of the Federation and the Auditor General of the Federation.

**External Audit**

31. Audited Project Financial Statements for the project will be submitted to IDA within six months after year-end. Relevantly qualified external auditors will be appointed based on Terms of Reference acceptable to the Bank to perform these audits.

32. Besides expressing an opinion on the Project Financial Statements in accordance with International Standards on Auditing (ISAs), the auditors will be required to comment on whether counterpart funds have been provided regularly and used in accordance with the financing agreement.

33. In addition to the audit report, the external auditors will be expected to prepare Management Letters giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the IDA agreement.

**Use of Statement of Expenditures (SOEs)**

34. All applications for the withdrawal of proceeds from the credit will be fully documented, except for: (i) expenditures of contracts with an estimated value of US$150,000 each or less for goods, (ii) $200,000 or less for consulting firms; (iii) US$50,000 or less for individual consultants, and (iv) $15,000 or less for training, workshops and incremental operating costs; (v) $100,000 or less for payments on account of Performance Grants. Documentation supporting all expenditures claimed against SOEs will be retained by the PMU, and will be available for review when requested by IDA supervision missions and
project auditors. All disbursements are subject to the conditions of the Development Credit Agreement and the procedures defined in the Disbursement Letter.

**Special Accounts**

35. To facilitate disbursements for eligible expenditures for goods and services, the flow-of-funds mechanism has been designed with the following guiding principles: (a) the PMU controls and accounts for project funds; (b) bottlenecks in the transfer of funds are minimized via adequate Financial Procedures Manual, including service standards; and (c) implementation transparency and accountability. The PMU will open a special account (SA) in a commercial bank to cover part of IDA’s share of eligible expenditures to be managed and administered by the PMU. The initial deposit into the special account would be US$4 million, covering an estimated four months of eligible expenditures financed by IDA. The allocation would be increased to US$7.5 million once eligible disbursements and actual commitments under the IDA Credit exceed US$24 million equivalent. The PMU will be responsible for submitting monthly replenishment applications with appropriate supporting documents for expenditures. To the extent possible, all of IDA’s share of expenditures should be paid through the SA.

36. The Special Account will be replenished through the submission of Withdrawal Applications on a monthly basis and will include reconciled bank statements and other documents as may be required until such time as the Borrower may choose to convert to report-based disbursement. All disbursements will be channeled through the SA.
Action Plan

37. The following activities will be executed on or before First Disbursement:

<table>
<thead>
<tr>
<th>Action</th>
<th>Completed by</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A FMC hired to: (a) select/install a computerized FMS; December 31, 2004 and (b) train staff in the operation of the system.</td>
<td>December 31, 2004</td>
<td>PIU/ Ministry</td>
</tr>
<tr>
<td>2. Appropriately qualified Project Accountants and Internal December 31, 2004 Auditors with support staff assigned to manage the respective project's financial affairs and review project activities, records and accounts.</td>
<td>December 31, 2004</td>
<td>PIU/ Ministry</td>
</tr>
<tr>
<td>3. FPM developed for PIU and adopted</td>
<td>December 31, 2004</td>
<td>PIU/ Ministry</td>
</tr>
<tr>
<td>4. Appropriate bank accounts opened;</td>
<td>Credit Effectiveness</td>
<td>PIU/ Ministry</td>
</tr>
<tr>
<td>5. Initial amounts deposited equivalent to 4 months of First Disbursement counterpart funding requirement; Annual counterpart funding payment secured based on Government budget. IDA advised of authorized bank signatories/specimen signatures.</td>
<td>December 31, 2004</td>
<td>PIU/ Ministry</td>
</tr>
<tr>
<td>6. Relevant project staff trained in Bank FM, procurement and January 15 disbursement procedures.</td>
<td>PIU/ Ministry</td>
<td></td>
</tr>
<tr>
<td>7. External auditors appointed for the project on TORs December 31, 2004 acceptable to IDA.</td>
<td>PIU</td>
<td></td>
</tr>
</tbody>
</table>

Supervision Plan

38. Supervision activities will include a review of quarterly FMRs; review of annual audited financial statements and management letters as well as timely follow-up of issues arising during implementation; annual SOE reviews; participation in project supervision missions as appropriate; and updating the FM rating in the Project Status Report (PSR).
Annex 8: Procurement

NIGERIA: Sustainable Management of Mineral Resources

A. General

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement of Goods: Goods procured under this project would include: project vehicles, computers and accessories, software, communication and Office equipment, and Publications, etc. The procurement will be done using the Bank's SBD for all ICB and National SBD agreed with or satisfactory to the Bank. Procurement for readily available off-the-shelf goods that cannot be grouped or standard specification commodities for individual contracts of less than US$50,000 equivalent, may be procured under Shopping procedures as detailed in paragraph 3.5 and 3.6 of the "Guidelines: Procurement under IBRD Loans and IDA Credits" and June 9, 2000 Memorandum "Guidance on Shopping" issued by the Bank.

Selection of Consultants: Consultancy services which includes Baseline Studies on Artisanal & Small Mining, Sectoral Environment & Social Assessment, Resettlement and Policy framework, process framework, Mining Prospective & Quarrying external audit etc., from firms and individuals would be selected using Requests for Expressions for Interest, short lists and the Bank's SRFPs, where required by the Bank' Guidelines. Short lists of consultants for services estimated to cost less than $200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. The recruitment of consulting services will includes hiring of Research Institutes and Universities, and individuals from these entities, will also be contracted to carry out various studies, data collection, and monitoring and evaluation. The appropriate selection method for each consulting contract would be established in the Procurement Plan.

Operating Costs: The operating costs shall include local contractual support staff salaries, employment benefits, travel expenditures and other travel-related allowances; equipment rental and maintenance; vehicle operation, maintenance and repair; office rental and maintenance, materials and supplies; and utilities and communications' expenses; and bank charges.

The procurement procedures and SBDs to be used for each procurement method, as well as model contracts for works and goods procured, will be presented in the Sustainable Management of Mineral Resources Project Implementation Manual that shall be submitted to the Bank in February 2005.

B. Assessment of the agency's capacity to implement procurement

A formal assessment of the capacity of the PMU located in the Federal Ministry of Solid Minerals was conducted in September, 2004 in accordance with Procurement Services Policy Group (OCSPR) guidelines dated August 11, 1998. The assessment reviewed the organizational structure for implementing the project, the institutional arrangement and project's staff responsible for procurement.
The assessment revealed that, the PMU has already identified a Procurement Officer who is qualified but lack experienced in Bank procurement experience.

The key issues and risks concerning procurement for implementation of the project have been identified and include: (i) lack of appropriate Regulation (bidding documents, Standard Evaluation formats, etc.); (ii) lack of Project Implementation Manual including Procurement and Financial Management Manuals; (iii) frequent change of staff mid-stream; (iv) Lack of adequate record keeping; (v) lack of procurement planning; (vi) inadequate contract management systems and techniques as commonly exist in the civil service; and (vii) frequent and undue political interference in procurement decisions.

The corrective measures which have been agreed upon with the Borrower during appraisal are; (i) preparation and finalization of procurement plan by negotiation; (ii) preparation of Project Implementation Manual prior to negotiations; (iii) adoption of the Generic Procurement Manual for Bank assisted projects in Nigeria by Negotiation; (iv) training of relevant project staff especially Procurement officer in Bank procurement procedures before project effectiveness and on the job training to be provided by the Procurement Consultant on a continuous basis for a period of six months during project implementation (v) establishment of electronic filling system for project records; (vi) conduct of contract management training for relevant project staffs; (vii) adoption of Bank's Standard bidding documents for NCB in lieu of National Standard document ; and computerization of stores records.

The PMU will be equipped with the “Client Connection” software and accessibility, to allow for streamlined procurement and disbursement procedures.

The project overall risk for procurement is rated as high.

C. Procurement Plan

The Borrower, has developed a procurement plan for project implementation which provides the basis for the procurement methods. This plan has been agreed between the Borrower and the Project Team during negotiations. The finalized plan will also be available in the project’s database and in the Bank’s external website. The finalized, Procurement Plan will be updated in agreement with the Bank annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Publication of Results and Debriefing: Publication of contract awards would be required for all ICB, NCB, Direct Contracting and the Selection of Consultants for contracts exceeding a value of USD 200,000. In addition, where prequalification has taken place, the list of pre-qualified bidders will be published. With regard to ICB, and large-value consulting contracts, the Borrowers would be required to assure publication of contract awards as soon as the Bank has issued its ‘no objection’ notice to the recommended award. With regard to Direct Contracting and NCB, publication of contract awards could be in aggregate form on a quarterly basis and local. All consultants competing for an assignment involving the submission of separate technical and financial proposals, irrespective of its estimated contract value, should be informed of the result of the technical evaluation (number of points that each firm received), before the opening of the financial proposals. The implementing agencies of Borrowers would be required to offer debriefings to unsuccessful bidders and consultants.

Fraud, Coercion and Corruption: All procuring entities as well as bidders, suppliers and contractors shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.15 & 1.16 of the Procurement Guidelines and paragraphs 1.25 & 1.26 of the Consultants Guidelines.
D. Frequency of Procurement Supervision

In addition to the prior review supervision to be carried out from Bank offices, the capacity assessment of the Implementing Agency has recommended two supervision missions to visit the field to carry out post review of procurement actions.

E. Details of the Procurement Arrangements Involving International Competition

The project detail activities for the first 18 months of implementation are as detailed in the procurement plan attached as Appendix I. The plan has been discussed and agreed with IDA.

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Amount in US$ million</th>
<th>Financing Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Works</td>
<td>18.40</td>
<td>100% of foreign and 80% of local expenditure</td>
</tr>
<tr>
<td>2. Goods</td>
<td>10.80</td>
<td>100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 90% of local expenditures for other items procured locally</td>
</tr>
<tr>
<td>3. Consultants Services</td>
<td>51.10</td>
<td>90%</td>
</tr>
<tr>
<td>4. Training</td>
<td>5.10</td>
<td>100%</td>
</tr>
<tr>
<td>5. Subproject grants</td>
<td>10.00</td>
<td>100%</td>
</tr>
<tr>
<td>6. Resettlement Fund</td>
<td>2.00</td>
<td>100%</td>
</tr>
<tr>
<td>7. Operating Costs</td>
<td>10.60</td>
<td>85%</td>
</tr>
<tr>
<td>8. PPF</td>
<td>1.80</td>
<td></td>
</tr>
<tr>
<td>9. Unallocated</td>
<td>10.20</td>
<td></td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>120.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Table B: Thresholds for Procurement Methods and Prior Review**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contract Value Threshold (US$ thousands)</th>
<th>Procurement Method</th>
<th>Contracts Subject to Prior Review (US$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Works</td>
<td>&gt;500</td>
<td>ICB</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>&lt;500</td>
<td>NCB</td>
<td>None</td>
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<tr>
<td></td>
<td>&lt;50</td>
<td>Shopping</td>
<td>None</td>
</tr>
<tr>
<td>2. Goods</td>
<td>&gt;250</td>
<td>ICB</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>&lt;250</td>
<td>NCB</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>&lt;50</td>
<td>Shopping</td>
<td>None</td>
</tr>
<tr>
<td>Expenditure Category</td>
<td>Contract Value Threshold (US$ thousands)</td>
<td>Procurement Method</td>
<td>Contracts Subject to Prior Review (US$ millions)</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>3. Services Firms</td>
<td>&gt;200</td>
<td>QCBS, CQ, Other</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>&lt;100</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>&gt;50</td>
<td>IC</td>
<td>All</td>
</tr>
<tr>
<td>Individuals</td>
<td>&lt;50</td>
<td>IC</td>
<td>None</td>
</tr>
</tbody>
</table>

Overall Procurement Risk Assessment: High

Frequency of procurement supervision missions proposed: Two every calendar year (includes special procurement supervision for post-review/audits)
Annex 9: Economic and Financial Analysis

NIGERIA: Sustainable Management of Mineral Resources

The Project is a technical/capacity building operation and, as such, does not lend itself easily to quantitative investment analysis. However, a number of economic indicators can be projected and compared, such as the estimated value of mineral exports, fiscal revenues from the sector, and the amount of new investment in the near future.

The Project will produce several important benefits. It will raise solid minerals output and exports, and is expected to have a substantial net positive fiscal impact. At the grassroots level, the Project will help to raise the incomes of artisanal and small scale miners. Direct potential beneficiaries are estimated at 200,000 artisanal and small scale miners with another 300,000 people living on the supply of goods and services to this group of people directly affected. Indirect potential beneficiaries in the affected communities are estimated at 2 million people.

The value of Nigeria’s minerals production is very difficult to estimate. Statistics are unreliable, showing very wide fluctuations from year to year (see table below). Nigeria is currently trying to expand and diversify its sources of economic growth through the promotion of new mining activities. In addition to industrial minerals, tin and gold, there is a good potential for minerals such as gemstones, barite, and tantalite, among others. No big foreign mining companies are currently operating in Nigeria. Moreover, it is estimated that most of the production of export oriented commodities like gold and tin leave the country unreported.

Reported minerals production in Nigeria today consists mostly of industrials minerals and construction materials. Traditional export commodities like cassiterite (tin ore) and columbite have seen their reported production decline to very low levels, while minerals produced by state-owned companies like coal and iron ore have been discontinued or are performing unsatisfactorily and well below capacity. Gemstone are increasingly appearing as an area of great development potential, but unfortunately most of the production goes unreported. Total formal production in recent years is estimated at US$ 2-3 million per year. Average annual investment in the mining sector are estimated to be the same. The direct fiscal impact of the sector is negligible, as royalties are not properly collected and most of the mining companies do not pay income taxes.

This disappointing trend could be reversed once the new Minerals Act under preparation is enacted, providing for effective mechanisms to share revenues of mining with affected communities, and an efficient Mining Cadastre is created, facilitating the access to mineral resources and ensuring the security of tenure for mining titles, both being pre-requisite for investments in the sector. It is expected that, as a result of the project, solid minerals annual gross production value from artisanal and small scale mining could reach about US$75-125 million by 2010. Given an adequate investment climate, foreign direct investment in large scale mining could boost solid mineral production to US$500-700 million by 2015.

In addition to an increase in mineral production, and potential impacts on poverty alleviation and local economic development in rural areas, the impact of the projected sector development on fiscal revenues as a result of the new sector policy, can be estimated in the range of US$10 to US$20 million per year.
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</tr>
</thead>
<tbody>
<tr>
<td>Cassiterite</td>
<td>3,964</td>
<td>2,648.28</td>
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NOTE: Measurement is in metric tonnes, except where otherwise stated.

Source - MINES DEPARTMENT, STATISTICS SECTION.
Annex 10: Safeguard Policy Issues

NIGERIA: Sustainable Management of Mineral Resources

Potential Long Term Impacts

This project falls into Environmental Category B because no adverse long term impacts are anticipated. No long term adverse impacts were identified in the Environmental and Social Sector Assessment. The project, generally a capacity building effort, is considered benign given that all activities are designed to have no significant environmental or social impacts. The SESA, RPF and the PF carried out during project preparation has provided mechanisms to identify impacts beyond the generic ones for which standard mitigation measures are built and to be applied during the implementation phase.

As such, the Project does not itself involve any direct or even indirect mining and quarrying activity, which might have environmental and social consequences. However, if successful the project will result in a significant, hopefully substantial, increase in the activities of the solid minerals sector. The resulting mining and quarrying activity will have major implications for environmental and social consequences in the country.

Having recognized these consequences, the Project includes extensive measures and components to deal with them and ensure that the future activities of the solid minerals sector are environmentally and socially sustainable.

Project Location and Salient Physical Characteristics Relevant to the Safeguard Analysis

<table>
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<tr>
<th>Main components</th>
<th>Actions &amp; activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory requirements and adjustments</td>
<td>Provision in the new Mining Act for specific environmental requirements, with appropriate Regulations and Guidelines for:</td>
</tr>
<tr>
<td></td>
<td>• restoration of prospecting areas;</td>
</tr>
<tr>
<td></td>
<td>• mine closure and reclamation plans;</td>
</tr>
<tr>
<td></td>
<td>• closure bonds and guarantees;</td>
</tr>
<tr>
<td></td>
<td>• environmental and social management and monitoring plan;</td>
</tr>
<tr>
<td></td>
<td>• waste management and disposal plan.</td>
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<tr>
<td></td>
<td>Scope of activities covered by the Act to include closely related mineral processing, activities.</td>
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<tr>
<td></td>
<td>Requirement for the Minister to undertake strategic mineral planning in each State for regional and local supply of construction aggregates.</td>
</tr>
<tr>
<td></td>
<td>Changes to the EIA Decree to improve the screening criteria for mineral sector projects that should be subject to EIA.</td>
</tr>
<tr>
<td></td>
<td>Guidance and procedures on linkage of the processing of mineral rights by MSMD with the processing of EIA by FMEnv.</td>
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<tr>
<td></td>
<td>Additional guidelines on procedures and best practice for environmental and social management, including a simple roadmap of Nigerian environmental requirements.</td>
</tr>
<tr>
<td>Capacity building within MSMD and</td>
<td>Clear division of roles and responsibilities between MSMD and FMEnv in advising, supporting, regulating and enforcing environmental and social issues in the mining sector.</td>
</tr>
</tbody>
</table>
Establishment and training of an Environmental Management Unit in MSMD, comprising:

- Head of Unit;
- 4 senior advisors covering: EIA/SIA; environmental compliance & monitoring; mine closure & reclamation; and Health & Safety.
- 2 senior social advisors. One for policy work on the social impacts of mining, ASM and legacy planning, implementation and monitoring. The other for resettlement planning, implementation and resettlement process monitoring and planning
- 5 junior and support administrative staff;
- 6 Zonal Environmental Officers;
- 6 Zonal Reclamation Officers;
- vehicles, ICT & GIS equipment, testing equipment and budget for laboratory testing.

Establishment and training of a Mining Sector adviser in FMEnv.

Setting up a framework for strategic minerals planning, with guidelines.

Undertaking and supervising the preparation of a Mineral Plan in one selected State, as a Pilot study and model.

Setting up the inventory framework and procedures, including training of staff. The scope of an inventory would include:

- identifying and assessing the legacy sites;
- risk assessment and prioritization of the sites, using a source-pathway-target approach;
- defining an action plan with program;
- implementing the high priority remediation and reclamation works.

Preparing and undertaking pilot and model inventories in the selected States

Define and delineate the environmental liabilities of the Parastatals NMC and NCC.

Implement the preparation of the plans in accordance with the framework presented.

Building capacity at local government level, involving assisting the Environmental Officers in the zonal offices to engage with and train the local communities.

Develop effective community participation, with a number of studies to review and establish linkages and activities, develop uniform norms and strategies for compensation, investigate the extent of child labor help to bring together local stakeholders, NGOs, MSMD and the mining companies.

Develop effective local revenue sharing mechanisms, by analyzing household survey data and mining data (particularly for the ASM sector) by socio-economic variables to gain further insight into likely income and multiplier effects. This will also link into other economic development mechanisms such as NEEDS.

Measures Taken by the Borrower to Address Safeguard Issues

As part of project preparation activities, the Environmental and Social Sector Assessment, Resettlement Process Framework and Process Framework have been prepared, approved by the World Bank Safeguards specialists and disclosed, following standard procedures in Nigeria and through the Infoshop. The World Bank appraisal team included a Safeguards/Environmental Specialist and a Social Sector expert, who advised the team on specific issues relevant to project preparation and implementation.

The MSMD and the Federal Ministry of Environment have adequate capacity to implement the measures described in the Safeguards documents.

The PMU will be responsible for the implementation of the EMP and SESA, RPF and PF recommendations. Consultants will be engaged to prepare Resettlement Action Plans and Plan of Action as and when necessary. The PMU is staffed with one Environmentalist (who participated in the just
concluded involuntary resettlement workshop in Lagos) and will be complemented with short-term national social/environmental safeguards consultants as and when the need arises. The PMU will also hire a Community Development Officer to engage on social safeguards issues.
Annex 11: Project Preparation and Supervision
NIGERIA: Sustainable Management of Mineral Resources

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<td>Initial ISDS to PIC</td>
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Key institutions responsible for preparation of the project:

Ministry of Solid Minerals
The World Bank Oil, Gas, Mining and Chemicals Department

Bank staff and consultants who worked on the project included:

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Jeffrey Davidson</td>
<td>Co-Task Team Leader</td>
<td>COCPD</td>
</tr>
<tr>
<td>Paulo De Sá</td>
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<tr>
<td>Alexandra Pugachevsky</td>
<td>Operations Analyst</td>
<td>COCPD</td>
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<tr>
<td>Sameena Dost</td>
<td>Counsel</td>
<td>LEGAF</td>
</tr>
<tr>
<td>Karen Alexandra Hudes</td>
<td>Senior Counsel</td>
<td>LEGAF</td>
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<tr>
<td>Bayo Awosemusi</td>
<td>Senior Procurement Specialist</td>
<td>AFTPC</td>
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<tr>
<td>Mary Asanato</td>
<td>Procurement Analyst</td>
<td>AFTPC</td>
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<tr>
<td>Africa Eshogba Olojoba</td>
<td>Senior Environmental Officer</td>
<td>AFTS3</td>
</tr>
<tr>
<td>Chukwudi H. Okafor</td>
<td>Senior Social Development Specialist</td>
<td>AFTS3</td>
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<tr>
<td>Edward Olowo-Okere</td>
<td>Lead Financial Management Specialist</td>
<td>AFTFM</td>
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<tr>
<td>Adenike Sherifat Mustafa</td>
<td>Financial Management Specialist</td>
<td>AFTFM</td>
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<tr>
<td>Chau-Ching Shen</td>
<td>Senior Finance Officer</td>
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<tr>
<td>Comfort Ede</td>
<td>Office Assistant</td>
<td>AFC12</td>
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<td>James Orehmie Monday</td>
<td>Consultant</td>
<td>EASEN</td>
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<tr>
<td>Paul Francis</td>
<td>Senior Social Scientist (peer reviewer)</td>
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<tr>
<td>Dan Aronson</td>
<td>Consultant (peer reviewer)</td>
<td>AFTEG</td>
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<tr>
<td>Clive Armstrong</td>
<td>Lead Economist (peer reviewer)</td>
<td>COCDR</td>
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Bank funds expended to date on project preparation (as of 10/30/04):
1. Bank resources: US$277,378
2. Trust funds: PPF $US612,822
3. Total: US$890,201

Estimated Approval and Supervision costs:
1. Remaining costs to approval: US$45,000 (Bank resources); US$1,187,178 (PPF)
2. Estimated annual supervision cost: $100,000
Annex 12: Documents in the Project File

NIGERIA: Sustainable Management of Mineral Resources


Annex 13: Statement of Loans and Credits

NIGERIA: Sustainable Management of Mineral Resources

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Total: | 0.00 | 1,113.30 | 0.00 | 0.00 | 0.00 | 1,147.28 | 298.96 | 51.64 |

NIGERIA
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

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<tr>
<td></td>
<td></td>
<td>IFC</td>
<td>IFC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan</td>
<td>Equity</td>
</tr>
<tr>
<td>1998</td>
<td>AEF Ansbby</td>
<td>0.10</td>
<td>0.00</td>
</tr>
<tr>
<td>1997</td>
<td>AEF Ikoses</td>
<td>0.04</td>
<td>0.00</td>
</tr>
<tr>
<td>1999</td>
<td>AEF Global Fabri</td>
<td>0.32</td>
<td>0.00</td>
</tr>
<tr>
<td>1999</td>
<td>AEF Hercules</td>
<td>1.30</td>
<td>0.00</td>
</tr>
<tr>
<td>1999</td>
<td>AEF Hygeia</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>1996</td>
<td>AEF Mid-East</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>1997</td>
<td>AEF Moorhouse</td>
<td>0.79</td>
<td>0.00</td>
</tr>
<tr>
<td>2000</td>
<td>AEF Oha Motors</td>
<td>0.84</td>
<td>0.00</td>
</tr>
<tr>
<td>1997</td>
<td>AEF Radmed</td>
<td>0.25</td>
<td>0.00</td>
</tr>
<tr>
<td>2000</td>
<td>AEF SafetyCenter</td>
<td>0.50</td>
<td>0.06</td>
</tr>
<tr>
<td>1997</td>
<td>AEF Telipoint</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>1995</td>
<td>AEF Vinfesen</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>1994</td>
<td>Abuja Intl</td>
<td>1.75</td>
<td>0.71</td>
</tr>
</tbody>
</table>

81
<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>MTNN</td>
<td>0.08</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>2002</td>
<td>NTEF-SCB</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2004</td>
<td>UBA Sub-Loan</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total pending committment:</strong></td>
<td><strong>0.11</strong></td>
<td><strong>0.02</strong></td>
<td><strong>0.01</strong></td>
<td><strong>0.00</strong></td>
</tr>
</tbody>
</table>

**Total portfolio:** 122.44 8.71 7.62 15.00 89.50 6.61 1.62 6.94 6.94
Annex 14: Country at a Glance

NIGERIA: Sustainable Management of Mineral Resources

### POVERTY and SOCIAL

<table>
<thead>
<tr>
<th>Year</th>
<th>Nigeria</th>
<th>Sub-Saharan Africa</th>
<th>Low-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2.8</td>
<td>658</td>
<td>2,406</td>
</tr>
</tbody>
</table>

#### Average annual growth, 1998-2002

<table>
<thead>
<tr>
<th>Component</th>
<th>1998-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (%)</td>
<td>2.5</td>
</tr>
<tr>
<td>Labor force (%)</td>
<td>2.6</td>
</tr>
</tbody>
</table>

#### Most recent estimate (latest year available, 1998-2002)

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty (%) of population below national poverty line</td>
<td>46</td>
</tr>
<tr>
<td>Urban population (%) of total population</td>
<td>33</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>45</td>
</tr>
<tr>
<td>Infant mortality (per 1000 live births)</td>
<td>100</td>
</tr>
<tr>
<td>Child malnutrition (% of children under 5)</td>
<td>31</td>
</tr>
<tr>
<td>Access to an improved water source (%)</td>
<td>62</td>
</tr>
<tr>
<td>Literacy (% of population age 5+)</td>
<td>33</td>
</tr>
<tr>
<td>Gross primary enrollment (% of school-age population)</td>
<td>82</td>
</tr>
</tbody>
</table>

### KEY ECONOMIC RATIOS and LONG-TERM TRENDS

#### GDP (US$ billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>1982</th>
<th>1992</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>49.7</td>
<td>32.7</td>
<td>42.5</td>
<td>43.4</td>
</tr>
</tbody>
</table>

#### Economic ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Nigeria</th>
<th>Low-income group</th>
</tr>
</thead>
</table>

#### Development diamond

- Life expectancy
- GNI per capita
- Gross primary enrollment
- Access to improved water source

<table>
<thead>
<tr>
<th>Year</th>
<th>1982-92</th>
<th>1992-02</th>
<th>2001</th>
<th>2002-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>1.2</td>
<td>-0.4</td>
<td>0.8</td>
<td>-3.1</td>
</tr>
</tbody>
</table>

### STRUCTURE of the ECONOMY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>30.8</td>
<td>23.8</td>
<td>34.6</td>
<td>37.4</td>
</tr>
<tr>
<td>Industry</td>
<td>33.3</td>
<td>58.3</td>
<td>36.5</td>
<td>28.9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.6</td>
<td>4.3</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>35.8</td>
<td>17.9</td>
<td>29.9</td>
<td>33.8</td>
</tr>
</tbody>
</table>

#### Growth of investment and GDP

- Non-oil GDP
- Oil GDP

#### Growth of exports and imports

- Exports: 2002
- Imports: 2002

---

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## Prices and Government Finance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer prices (% change)</td>
<td>7.7</td>
<td>44.6</td>
<td>15.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Implicit GDP deflator</td>
<td>2.6</td>
<td>8.8</td>
<td>7.8</td>
<td>11.6</td>
</tr>
<tr>
<td><strong>Government finance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% of GDP, includes current grants)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current revenue</td>
<td>...</td>
<td>35.1</td>
<td>46.8</td>
<td>40.2</td>
</tr>
<tr>
<td>Current budget balance</td>
<td>7.8</td>
<td>15.7</td>
<td>7.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Overall surplus/deficit</td>
<td>...</td>
<td>-3.3</td>
<td>-5.8</td>
<td></td>
</tr>
</tbody>
</table>

## Trade

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total exports (fob)</td>
<td>12,644</td>
<td>16,686</td>
<td>17,949</td>
<td>14,912</td>
</tr>
<tr>
<td>Crude petroleum</td>
<td>10,888</td>
<td>11,842</td>
<td>15,574</td>
<td>13,306</td>
</tr>
<tr>
<td>Liquefied natural gas</td>
<td>...</td>
<td>708</td>
<td>866</td>
<td></td>
</tr>
<tr>
<td>Manufactures</td>
<td>38</td>
<td>88</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Total imports (cif)</td>
<td>17,730</td>
<td>9,842</td>
<td>13,819</td>
<td>14,752</td>
</tr>
<tr>
<td>Food</td>
<td>2,890</td>
<td>807</td>
<td>1,790</td>
<td>1,917</td>
</tr>
<tr>
<td>Fuel and energy</td>
<td>...</td>
<td>-2,757</td>
<td>3,470</td>
<td></td>
</tr>
<tr>
<td>Capital goods</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Export price index (W95=10)</td>
<td>106</td>
<td>110</td>
<td>148</td>
<td>152</td>
</tr>
<tr>
<td>Import price index (W95=10)</td>
<td>63</td>
<td>89</td>
<td>85</td>
<td>84</td>
</tr>
<tr>
<td>Terms of trade (W95=10)</td>
<td>293</td>
<td>223</td>
<td>175</td>
<td>111</td>
</tr>
</tbody>
</table>

## Balance of Payments

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of goods and services</td>
<td>12,607</td>
<td>12,034</td>
<td>11,943</td>
<td>12,932</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>7,220</td>
<td>11,539</td>
<td>17,041</td>
<td>15,455</td>
</tr>
<tr>
<td>Resource balance</td>
<td>-4,602</td>
<td>495</td>
<td>1002</td>
<td>2,523</td>
</tr>
<tr>
<td>Net income</td>
<td>-1,001</td>
<td>-2,589</td>
<td>-2,432</td>
<td>-2,956</td>
</tr>
<tr>
<td>Net current transfers</td>
<td>...</td>
<td>776</td>
<td>1,773</td>
<td>1,892</td>
</tr>
<tr>
<td>Current account balance</td>
<td>-8,003</td>
<td>-1,206</td>
<td>-1,933</td>
<td>-3,867</td>
</tr>
<tr>
<td>Financing items (net)</td>
<td>4,226</td>
<td>-7.17</td>
<td>-170</td>
<td>876</td>
</tr>
<tr>
<td>Changes in net reserves</td>
<td>2,367</td>
<td>2,016</td>
<td>-1,023</td>
<td>2,991</td>
</tr>
</tbody>
</table>

**Memo:**
- Reserves including gold (US$ millions) | 1839 | 2,035 | 13,423 | 7,233 |
- Conversion rate (DEC, local/US$) | 10 | 9.0 | 11.8 | 12.0 |

## External Debt and Resource Flows

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt outstanding and disbursed</td>
<td>11,972</td>
<td>20,699</td>
<td>31,198</td>
<td>30,185</td>
</tr>
<tr>
<td>IBRD</td>
<td>674</td>
<td>3,174</td>
<td>1,337</td>
<td>1,275</td>
</tr>
<tr>
<td>IDA</td>
<td>37</td>
<td>80</td>
<td>621</td>
<td>876</td>
</tr>
<tr>
<td>Total debt service</td>
<td>2,087</td>
<td>3,750</td>
<td>3,859</td>
<td>2,933</td>
</tr>
<tr>
<td>IBRD</td>
<td>85</td>
<td>555</td>
<td>285</td>
<td>251</td>
</tr>
<tr>
<td>IDA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Composition of 2002 debt (US$ millions):**

- A: IBRD
- B: IDA
- C: IMF
- D: Other multilateral
- E: Bilateral
- F: Private
- G: Short-term
- H: Other

**World Bank program:**
- Commitments | 100 | 581 | 305 | 438 |
- Disbursements | 144 | 296 | 27 | 20 |
- Principal repayments | 33 | 285 | 21 | 19 |

**Memo:**
- Inflation (%)
- GDP deflator
- CPI
- Export and import levels (US$ millions)
- Current account balance to GDP (%)
- Conversion rate (DEC, local/US$)
- Reserve including gold (US$ millions)
- Composition of 2002 debt (US$ millions)
MAP SECTION