DEMOCRATIC REPUBLIC OF CONGO

AGRICULTURAL AND RURAL SECTOR REHABILITATION SUPPORT PROJECT IN BAS-CONGO AND BANDUNDU PROVINCES (PARSAR)

APPRAISAL REPORT

AGRICULTURAL AND RURAL DEVELOPMENT DEPARTMENT CENTRAL AND WEST REGIONS

OCAR MARCH 2004
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AFRICAN DEVELOPMENT FUND
TEMPORARY RELOCATION AGENCY
P.O.BOX 323 – 1002 TUNIS BELVEDERE - TUNISIA
Tel : (216) 71 333 511; Fax : (216) 71 351 933

PROJECT INFORMATION SHEET
Date : March 2004

The information given hereunder is intended to provide guidance to prospective suppliers, contractors, consultants and all persons interested in the procurement of goods and services for projects approved by the Boards of Directors of the Bank Group. More detailed information can be obtained from the Executing Agency of the Borrower.

1. COUNTRY : Democratic Republic of Congo

2. PROJECT TITLE : Agricultural and Rural Sector Rehabilitation Support Project in Bas-Congo and Bandundu Provinces (PARSAR)

3. PROJECT LOCATION : Bas-Congo and Bandundu Provinces

4. BORROWER : Democratic Republic of Congo

5. EXECUTING AGENCY : Project Implementation Unit (PIU) located at the Central Coordination Bureau (BCECO)
   Tel. : (243) 880 78 10 / 780 27 76
   Fax : (243) 880 15 86 / 88023 81

6. PROJECT DESCRIPTION :
   The project aims to strengthen food security by boosting agricultural production by the rural populations of Bas-Congo and Bandundu Provinces, building the capacities of supervisory structures and rehabilitating food production and marketing infrastructure.

7. TOTAL PROJECT COST : UA 28.01 million
   - Foreign exchange : UA 15.13 million
   - Local currency : UA 12.88 million

8. BANK GROUP LOAN AND GRANT :
   - Loan
     Foreign exchange : UA 9.30 million
     Local currency : UA 8.70 million
     Total Loan : UA 18.00 million
   - Grant
     Foreign exchange : UA 5.83 million
     Local currency : UA 1.17 million
     Total Grant : UA 7.00 million
   - Total Loan and Grant : UA 25.00 million
9. **OTHER SOURCES OF FINANCE**

   - Government / Beneficiaries : UA 3.01 million

10. **DATE OF APPROVAL**

    : May 2004

11. **PROBABLE DATE OF PROJECT START-UP AND DURATION**

    - Start-up : March 2005
    - Duration : 5 years

12. **PROCUREMENT OF GOODS, WORKS AND SERVICES**

    The procurement of goods, works and services will be done in conformity with ADF Rules of Procedure as follows :

    **Works** :
    - National competitive bidding (NCB) : road and waterway rehabilitation works, repair of buildings and food marketing infrastructure.
    - Community contracts : water sources and community infrastructure development works.

    **Goods** :
    - International competitive bidding : procurement of specific equipment, vehicles, office equipment and furniture, and data processing equipment.
    - Negotiated contract : procurement of basic seeds from INERA.

    **Services** :
    - Short list : procurement of services for training, studies and supervision of works, sensitization of beneficiaries, short-term consultancy services, technical assistance, and auditing.

13. **CONSULTANCY SERVICES REQUIRED**

    - Studies and monitoring of works ;
    - Short-term consultancies ;
    - Technical assistance; 
    - Training ;
    - Sensitization and organization of beneficiaries; and 
    - Annual audits.

14. **ENVIRONMENTAL CATEGORY**

    The project is classified as environmental category 2.
CURRENCY EQUIVALENTS
(February 2004)

Currency Unit : Congolese Franc (CDF)
UA 1  = CDF 549.200
UA 1  = US$ 1.48131

FISCAL YEAR
January 1 - December 31

WEIGHTS AND MEASURES
Metric System

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB : African Development Bank
ADF : African Development Fund
AFMRD : Agricultural Feeder Roads Directorate
ARSRP : Agricultural and Rural Sector Rehabilitation Project
BCECO : Central Coordination Bureau
CAR : Central African Republic
CEP : Project Implementation Unit
CDF : Congolese Franc
COAIT : Community Options and Investment Tools
CSP : Country Strategy Paper
DRC : Democratic Republic of Congo
DWSS : Drinking Water Supply and Sanitation
EMRRP : Emergency Multisector Rehabilitation and Reconstruction Programme
EMSIRP : Emergency Multisector Socioeconomic Infrastructure Rehabilitation Project
ESMP : Environmental and Social Management Plan
EU : European Union
FAO : United Nations Food and Agricultural Organization
FE : Foreign Exchange
FOLECO : Federation of Laic and Economic NGOs in the DRC
GCO : Grassroots Community Organizations
GDP : Gross Domestic Product
GTZ : German Agency for Technical Cooperation
GVT : Government
ICB : International Competitive Bidding
IDA : International Development Agency
IITA : International Institute of Tropical Agriculture
IMF : International Monetary Fund
INERA : National Agricultural Research Institute
INIBAP : International Network for the Improvement of Banana and Plantain
I-PRSP : Interim Poverty Reduction Strategy Paper
IRM : Innovative Resources Management
Lkm : Linear Kilometre
LC : Local Currency
LDI : Local Development Initiative
LI : Labour Intensive
LRMC : Local Road Maintenance Committees
MINAGRI : Ministry of Agriculture, Livestock and Fisheries
MINDR : Ministry of Rural Development
NARSRP : National Agricultural and Rural Sector Recovery Programme
NASS : National Agricultural Statistics Service
NCB : National Competitive Bidding
CNONGD : National Council of Development NGOs
NES : National Extension Service
NGO : Non-Governmental Organization
NRWS : National Rural Water Supply Service
PIU : Projects Implementation Unit
PRGF : Poverty Reduction and Growth Facility
SECID : South-East Consortium for International Development
SECO : Steering Committee Secretariat
SENGSEM : National Seed Service
SME : Small and Medium-Scale Enterprises
STDs : Sexually Transmitted Diseases
TAF : Technical Assistance Fund
TOR : Terms of Reference
UA : ADB Unit of Account
UNDP : United Nations Development Program
UNICEF : United Nations Children’s Fund
UNOPS : United Nations Office for Project Services
USAID : United States Agency for International Development
#### COMPARATIVE SOCIO-ECONOMIC INDICATORS

<table>
<thead>
<tr>
<th>Year</th>
<th>Congo Dem. Rep.</th>
<th>Africa</th>
<th>Developed Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area (000 km²)</td>
<td>2,346</td>
<td>30,061</td>
<td>89,975</td>
</tr>
<tr>
<td>2002</td>
<td>Total Population (millions)</td>
<td>51.2</td>
<td>931.0</td>
<td>2,046.6</td>
</tr>
<tr>
<td>2002</td>
<td>Urban Population (% of Total)</td>
<td>53.6</td>
<td>34.8</td>
<td>42.1</td>
</tr>
<tr>
<td>2002</td>
<td>Population Density (per km²)</td>
<td>21.3</td>
<td>27.8</td>
<td>68.6</td>
</tr>
<tr>
<td>2002</td>
<td>GNI per Capita (US $)</td>
<td>990.0</td>
<td>6,550.0</td>
<td>11,154.0</td>
</tr>
<tr>
<td>2002</td>
<td>Labour Force Participation - Total (%)</td>
<td>41.1</td>
<td>45.1</td>
<td>45.6</td>
</tr>
<tr>
<td>2002</td>
<td>Labour Force Participation - Female (%)</td>
<td>43.3</td>
<td>50.8</td>
<td>59.7</td>
</tr>
<tr>
<td>2001</td>
<td>GNI Per Capita in Development Income Groups</td>
<td>1,063.0</td>
<td>4,084.0</td>
<td>6,655.0</td>
</tr>
<tr>
<td>2001</td>
<td>Infant Mortality Rate</td>
<td>167.0</td>
<td>11.6</td>
<td>11.6</td>
</tr>
<tr>
<td>1990</td>
<td>Poverty Living Below $1 a Day (% of Population)</td>
<td>48.7</td>
<td>22.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

#### Demographic Indicators

- Population Growth Rate - Total (%): 2002 2.8, 2003 2.3, 2004 2.0
- Population Growth Rate - Urban (%): 2002 4.0, 2003 3.5, 2004 3.0
- Population Annual Growth Rate: 2002 1.6, 2003 1.4, 2004 1.2
- Female Population 15-49 years (% of total population): 2002 42.4
- Life Expectancy at Birth - Total (years): 2002 60.2
- Life Expectancy at Birth - Female (years): 2002 62.8
- Crude Birth Rate (per 1,000): 2002 43.7
- Crude Death Rate (per 1,000): 2002 21.3
- Infant Mortality Rate (per 1,000): 2002 115.6
- Child Mortality Rate (per 1,000): 2002 219.0
- Neonatal Mortality Rate (per 100,000): 2001-05 153.0
- Total Fertility Rate (per woman): 2002 3.7
- Fertility Using contraception (%): 1997 3.0

#### Health & Nutrition Indicators

- Access to Health Services (% of Population): 2001 66.9
- Access to Maternal Care: 2000 100.0
- Access to Immunization: 2000 100.0
- Underweight Children (% of children under 5 years): 1995-96 34.4
- Daily Calorie Supply per Capita: 2001-05 2,444.4
- Upper Primary School Completion (% of GDP): 1995-99 6.8

#### Education Indicators

- Gross Enrolment Rate (%): 1998 46.3
- Primary School - Total: 1998 46.3
- Primary School - Male: 1998 41.6
- Primary School - Female: 1998 46.3
- Secondary School - Total: 1998 18.4
- Secondary School - Male: 1998 18.4
- Secondary School - Female: 1998 18.4
- Primary School - Female Teaching Staff (% of Total): 2000 22.8
- Adult Illiteracy Rate - Total (%): 2002 35.9
- Adult Illiteracy Rate - Male: 2002 24.4
- Adult Illiteracy Rate - Female: 2002 46.5
- Primary School Completion (% of Total Landed Area): 2002 0.1
- Annual Rate of Deforestation (%): 1995 0.7
- Annual Rate of Forest Cover (%): 1990 10.0
- Per Capita CO2 Emissions (metric tons): 1995 0.1

#### Environmental Indicators

Notes: n.a. Not Applicable; Data Not Available.
EXECUTIVE SUMMARY

1. **Project Background**

With the relaunch of the national reconciliation process and the payment of arrears owed donors, the Democratic Republic of Congo (DRC) has met the necessary conditions for the return of its development partners. Hence, in 2002, most donors, including the Bank, expressed their readiness to support the country’s economic recovery programme. It is in this context that the Agricultural and Rural Sector Rehabilitation Support Project (PARSAR) in Bas-Congo and Bandundu Provinces was identified in June 2003 during a Bank multisector identification mission to the DRC. In response to a request transmitted to the Bank by the Congolese authorities, a Bank mission went to the DRC in November 2003 and prepared this project. It was followed by an appraisal mission conducted in February 2004.

2. **Purpose of the Loan**

The overall ADF assistance amounting to UA 25 million (CDF 13 730.03 million) represents 89.20% of the total project cost. It will be used to finance 100% of foreign exchange costs and ADF financing of local currency costs which represent 35.20% of the total project cost. The ADF loan stands at UA 18.00 million and the ADF grant at UA 7.00 million.

3. **Sector Goal and Project Objective**

The sector goal of the project is to strengthen food security. Its specific objective is to boost agricultural production in Bas-Congo and Bandundu Provinces.

4. **Project Description**

The project will focus on four components: (i) institutional support and capacity building; (ii) agricultural production support; (iii) rehabilitation of basic socioeconomic infrastructure; and (iv) project management. The main project outcomes are: (i) building of the capacities of Ministries in charge of rural development and the National Studies and Agricultural Research Institute (INERA); (ii) rehabilitation of agricultural feeder roads; (iii) rehabilitation of marketing infrastructure; (iv) multiplication and dissemination of improved seeds; and (v) training and organization of rural populations.

5. **Project Cost**

The total project cost net of duties and taxes is estimated at CDF 15 384.61 million, or UA 28.01 million. This cost is broken down into CDF 8 311.30 million in foreign exchange costs, that is UA 15.13 million, and CDF 7 073.30 million in local currency costs, or UA 12.88 million.

6. **Sources of Finance**

The project will be financed by the ADF to the tune of UA 25 million. This amount comprises a loan of UA 18.00 million and a grant of UA 7.00 million.
7. **Project Implementation**

Implementation of the project will be the responsibility of the ADB Projects Implementation Unit (PIU) established within the Central Coordination Bureau (BCECO). This Unit, which is based in Kinshasa, will be strengthened, in order to take account of the specific needs of the project, by an operational team and will be assisted by two provincial branch units in charge of implementing the project activities on the ground. One branch unit will be located at Mbanzu-Ngungu in Bas-Congo Province and the other at Kikwit in Bandundu Province.

8. **Conclusions**

The agricultural and rural sector which is the basis of the country’s economy and the main source of income for the majority of the rural population is seriously affected by the socioeconomic consequences of the war. Considering the precarious situation of rural infrastructure and the sharp drop in agricultural production in Bas-Congo and Bandundu Provinces, the actions planned under the Agricultural and Rural Sector Rehabilitation Project are perfectly justified. They will make it possible to rehabilitate and strengthen the capacities of the various stakeholders in the sector, rehabilitate and restore the normal functioning of basic infrastructure and stimulate agricultural production. The project aims to contribute to the improvement of the living conditions and reduction of the poverty of the populations in these two provinces.
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<tr>
<th>Narrative Summary</th>
<th>Objectively Verifiable Indicators</th>
<th>Means of Verification</th>
<th>Assumptions and Critical Risk Factors</th>
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</thead>
<tbody>
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<td><strong>Sector goal :</strong></td>
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<tr>
<td>1. Strengthening of food security</td>
<td>1.1 Reduction of the food deficit in the project area from 25% at present to 15% from project year 5</td>
<td>1.1 National statistics</td>
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<td></td>
<td>1.2 Socioeconomic surveys</td>
<td></td>
<td>1.1 Stable socio-political situation</td>
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<tr>
<td><strong>Project objectives :</strong></td>
<td></td>
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<tr>
<td>1. Stimulation of agricultural production in Bas-Congo and Bandundu Provinces</td>
<td>1.1 Increase in agricultural production in the project area from 5.7 million tonnes at present to 6.7 million tonnes from project year 5</td>
<td>1.1 Agricultural statistics</td>
<td>1.1 Continuation of ongoing macroeconomic reform programme</td>
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<td></td>
<td>1.2 Stable socio-political situation</td>
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<td>1.2 Favourable climatic conditions</td>
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<tr>
<td><strong>Outcomes</strong></td>
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<tr>
<td>1. Improved seeds produced and disseminated</td>
<td>1.1 – 2,600 agri-growers trained and operational by project year 5</td>
<td>- Project progress reports</td>
<td>1.1 Continuation of ongoing macroeconomic reform programme</td>
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<td></td>
<td>1.2 – 395 tonnes of food seeds, 9.3 million ml of cassava cuttings and 2 million banana shoots disseminated by project year 5</td>
<td>- ADF supervision reports</td>
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<td></td>
<td>1.3 – 500 various farm demonstrations carried out by project year 5</td>
<td>- Monitoring and evaluation reports</td>
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<td></td>
<td>1.4 – 2,600 seed growers trained by project year 5</td>
<td>- Audit reports and PCR</td>
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<tr>
<td>2. New production techniques identified and disseminated.</td>
<td>2.1 – 350 Bas-Congo and Bandundu extension and community development workers trained and equipped with means of transport by project year 5.</td>
<td>2.1-2.3 Idem</td>
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<td></td>
<td>2.2 – 10 technical packages covering production, processing and storage aspects identified and disseminated by project year 5.</td>
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<td></td>
<td>2.3 – 133,000 producers, 50% of whom are women, trained and provided with improved seeds by project year</td>
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<td>3. Organization and training of groups ensured</td>
<td>3.1 – 250 producer and trader groups and association, 50% of which belong to women, structured and trained by project year 5.</td>
<td>3.1 – 3.5 Idem</td>
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<td>3.2 – 50 artisanal-type groups trained by project year 5.</td>
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<td>3.3 - 2 NGOs specialized in rural promotion and MFIs supported by project year 5.</td>
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<td>3.4 – 20 demonstration facilities built and equipped by project year 5.</td>
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<td>3.5 – 2 rural radio stations equipped by project year 5.</td>
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<td>4. Rural access roads and waterways rehabilitated</td>
<td>4.1 – 1000 km of roads rehabilitated by project year 5.</td>
<td>4.1-4.2 Idem</td>
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<td></td>
<td>4.2 - 600 km of waterways rehabilitated by project year 5.</td>
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<td>5. Storage and marketing infrastructure built</td>
<td>5.1 - 20 community markets and 35 warehouses built by project year 5.</td>
<td>5.1 Idem</td>
<td></td>
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<tr>
<td>Activities</td>
<td>Objectively Verifiable Indicators</td>
<td>Means of Verification</td>
<td>Assumptions and Critical Risk Factors</td>
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<td>----------------------------------------------------------------------------</td>
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<tr>
<td>1. Putting in place of the CEP</td>
<td></td>
<td></td>
<td>1.1 Available financial resources.</td>
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<tr>
<td>2. Preparation of bidding documents (BD), recruitment of the TA and procurement of CEP equipment</td>
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<tr>
<td>3. Putting in place of the TA</td>
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<tr>
<td>4. Preparation of TD, agreements and recruitment of operators involved in the implementation of the project (NGOs and others)</td>
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<tr>
<td>5. Preparation of engineering designs and issue of invitations to bid for construction of infrastructure.</td>
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<td>6. Sensitization and structuring of beneficiaries</td>
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<td>7. Multiplication of seeds and seedlings</td>
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<tr>
<td>8. Construction of marketing infrastructure and supervision of works</td>
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<tr>
<td>9. Rehabilitation of roads and supervision of works</td>
<td></td>
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<tr>
<td>10. Programming and conduct of training sessions and workshops</td>
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<tr>
<td>11. Monitoring and supervision of implementation of project activities.</td>
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</tbody>
</table>

**Resources:**

- **ADF:** UA 18 million
- **Gvt/Benef.:** UA 1.98 million
- **Total:** UA 19.98 million

1.1 Allocation orders
2.1 BD and goods and services procurement contracts
3.1 Employment contract.
4.1 Collaboration agreements and contracts.
5.1 Bid analysis reports, procurement contracts.
6.1 Service contracts and progress reports.
7.1 INERA and NGO and nursery men service contracts, employment report.
7.2 Seeds and plants reception report, number of beneficiaries
8.1 Works progress reports
9.1 Works progress reports and acceptance report
10.1 Project progress report and acceptance report.
11. Project progress and monitoring and evaluation report.
<table>
<thead>
<tr>
<th>Narrative Summary</th>
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<tbody>
<tr>
<td><strong>Sector goal:</strong></td>
<td>1. Strengthening of food security.</td>
<td>1.1 National statistics. 1.2 Socio-economic surveys.</td>
<td></td>
</tr>
<tr>
<td><strong>Project objectives:</strong></td>
<td>1. Reduction of the food deficit in the project area from 25% at present to 15% from project year 5.</td>
<td>1.1 Agricultural statistics. 1.1 Stable socio-political situation.</td>
<td></td>
</tr>
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<td>1. Stimulation of agricultural production in Bas-Congo and Bandundu Provinces</td>
<td>1.1 Increase in agricultural production in the project area from 5.7 million tonnes at present to 6.7 million tonnes by project year 5.</td>
<td></td>
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</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>1.1 - 300 cadres and workers in Kinshasa and in the provinces concerned trained by project year 5.</td>
<td>- Project progress reports. - ADF supervision reports. - Monitoring and evaluation reports - Audit reports and PCR.</td>
<td>1.1 Continuation of ongoing macro-economic reform programme. 1.2 Favourable climatic conditions</td>
</tr>
<tr>
<td>1. Institutional support and building of the capacities of MINAGRI ensured</td>
<td>1.2- 35 workshops, training courses and seminars organized by project year 5.</td>
<td>2.1- 2.3 Idem 3.1 – 3.9 Idem 4.1- 4.2 Idem 5.1- 5.2 Idem 6.1 Idem 7.1 Idem</td>
<td></td>
</tr>
<tr>
<td>2. Institutional support and building of the capacities of INERA ensured</td>
<td>1.3 - 20 offices and 2 seed control laboratories rehabilitated and equipped by project year 5.</td>
<td></td>
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<tr>
<td>3. Institutional support and building of the capacities of the Ministry of Rural Development ensured</td>
<td>1.4 Data processing equipment procured by project year 5. 2.1 – 40 researchers and workers trained and/or retrained by project year 5.</td>
<td></td>
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</tr>
<tr>
<td>3.3 – 22 sets of office furniture procured by project year 5.</td>
<td>3.3.1 – 3.9 Idem 4.1- 4.2 Idem 5.1- 5.2 Idem 6.1 Idem 7.1 Idem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 – 450 cadres and technicians retained by project year 5.</td>
<td>4.1 – 10 offices rehabilitated and equipped with furniture and data processing equipment by project year 5.</td>
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<td>3.7 – 200 beneficiaries trained in LI techniques project year 5.</td>
<td>4.2 – 30 persons trained in various environmental themes by project year 5.</td>
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<td>3.8 – 350 infrastructure management committees trained by project year 5.</td>
<td>5.1 – 5 offices rehabilitated and equipped with furniture and data processing equipment by project year 5.</td>
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<td>3.9 – 150 team leaders and site leaders trained in LI technique and site management by project year 5.</td>
<td>5.2 – 80 persons trained in data processing, literacy education, gender approach and IGR management by project year 5.</td>
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<td>4. Institutional support and building of the capacities of the Ministry of Environment ensured.</td>
<td>4.1 – 10 offices rehabilitated and equipped with furniture and data processing equipment by project year 5.</td>
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<td>1.1 Continuation of ongoing macro-economic reform programme. 1.2 Favourable climatic conditions</td>
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<td>5. Institutional support and building of the capacities of Women’s Affairs carried out</td>
<td>4.2 – 30 persons trained in various environmental themes by project year 5.</td>
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<td>5.1 – 5 offices rehabilitated and equipped with furniture and data processing equipment by project year 5.</td>
<td>5.2 – 80 persons trained in data processing, literacy education, gender approach and IGR management by project year 5.</td>
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<td>6. Drinking water points developed.</td>
<td>6.1 – 160 drinking water sources and 60 collective latrines developed by project year 5.</td>
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<td>7. Building of the capacities of MFIs carried out.</td>
<td>7.1 – 4 MFIs strengthened and functional by project year 5.</td>
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### Narrative Summary

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| 2. Preparation of the BD, recruitment of TA and procurement of CEP equipment. | ADF grant: UA 7 million  
GVT: UA 1.02 million  
Total: UA 8.02 million | 2.1 TD and goods and services procurement contracts. | |
| 3. Putting in place of the TA. | | 3.1 Employment contract. | |
| 4. Preparation of implementation studies and issue of invitations to bid for construction of infrastructures. | | 4.1 Bid analysis report, procurement contracts. | |
| 5. Rehabilitation of buildings. | | 5.1 Service contracts and acceptance report | |
| 6. Programming and conduct of training sessions and workshops. | | 6.1 Progress reports and number of beneficiaries. | |
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1. ORIGIN AND HISTORY OF THE PROJECT

1.1 Agriculture plays a prominent role in the economy of the Democratic Republic of Congo. It accounts for 60% of GDP formation and nearly 17% of export earnings, and employs 70% of the population or 39 million people. The agricultural sector has a considerable production potential. However, the state of war in the country and its socioeconomic consequences have led to the extremely worrying impoverishment of the populations and food insecurity, as well as to a reduction in the international community’s support to the DRC. Thus, the suspension of disbursements resulting from arrears in the payment of debts owed by the DRC had completely frozen development investments. Bank Group operations had been interrupted since 1991. Since the resumption of international assistance in 1998, most of the support received by the DRC is geared towards humanitarian and emergency aid.

1.2 With the relaunch of the national reconciliation process and the payment of arrears owed donors, the DRC has met the necessary conditions for the return of its development partners. Hence, in 2002, most donors, including the Bank, expressed their readiness to support the country’s economic recovery programme. In this context, the Government has prepared an Interim Poverty Reduction Strategy Paper (I-PRSP) and an Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP) which defines sector intervention priorities. Agriculture occupies pride of place in this strategy, considering its importance in the strengthening of food security, reduction of poverty and creation of diversified sources of income, which are the key objectives of the I-PRSP and the EMRRP.

1.3 The Agricultural and Rural Sector Rehabilitation Support Project (PARSAR) in Bas-Congo and Bandundu Provinces was identified in June 2003 during a multisector identification mission to the DRC. In response to a request transmitted to the Bank by the Congolese authorities, a Bank mission went to the DRC in November 2003 and prepared this project which falls within the framework of the EMRRP. The project appraisal mission was fielded in February 2004.

2. THE AGRICULTURAL SECTOR

2.1 Main Features and Structures

2.1.1 The Democratic Republic of Congo is an immense country covering an area of 2,345,000 km². Its population in 2002 stood at 55.5 million, representing an average density of 23 inhabitants per sq km. The Congolese territory is divided into three distinct major agro-ecological areas, namely: (i) the alluvial basin of the Congo in the centre; (ii) the terraced plateaux in the south and north of the central basin; and (iii) the high altitude massifs (up to 5,000 m) in the east and north-east. Although the DRC derives most of its public revenues and export earnings from mining, agriculture is the country’s key economic sector in terms of GDP and employment. The war and insecurity that have beset the country have impacted greatly on the agricultural sector’s performance. Its value added plunged from US$ 3.4 billion to US$ 2.1 billion between 1990 and 2000, representing a fall of 38%. Concerning investments in the agricultural sector, the 1990s were marked by a decline in public financing and lack of private capital due to an unfavourable business environment. Since 1998, and as part of post-war emergency interventions by the various partners of the DRC, there has been a slight upturn in investments in agriculture, thus reviving the financing of the sector.
2.1.2 The DRC practices basically rain-fed farming dominated by food crops. In spite of the great opportunities for irrigation, only 13,500 ha of sugar cane and rice are irrigated out of a potential 4 million ha. Agriculture takes up only 10% of the useful agricultural areas, 3% of which are cultivated and the rest (7%) used as grazing land. Moreover, soil productivity is low. Indeed, with a drop in public financing and lack of private capital, very little is spent on cropping (family labour, and absence of fertilizers, quality seeds and plant-care products).

2.1.3 Food crops comprise essentially tubers, plantains, maize, rice, groundnuts and beans. They are grown under a traditional system of crop rotation, slash-and-burn farming associated with the practice of falling land for long periods of five, and even more, years. Farmers do not use fertilizers and plant-care products. Animal or mechanical traction is rarely used; less than 10% of farmers use these types of traction. Food cropping covers annually a surface area of about 5 million ha with a production estimated in 2001 at 19.8 million tones. Cassava accounts for 80% of food production considering its importance in the diet of the Congolese.

2.1.4 Exports of agricultural products in 2001 included notably coffee (2,300 tonnes), cocoa (1,700 tonnes), timber (31,000 m³) and rubber (940 tonnes). Export earnings have plummeted over the past years, from US$ 334 million in 1995 to US$ 6.5 million in 2000, due to a general decrease in the production of all export products. Some products such as palm oil are no longer exported especially because of the ageing of plantations, lack of technical supervision and follow-up by competent services, deterioration of production and marketing infrastructure and disruption of marketing channels. Revival of this sector is dependent on the introduction of incentives for the private sector and a programme for the large-scale regeneration and rehabilitation of plantations and industrial infrastructure.

2.1.5 There are two types of farming in livestock production in the DRC. The first, which is the most widespread, is the traditional farming especially of small livestock (goats, sheep and pigs). The animals are bred without shelter and without veterinary care. The second is the modern intensive farming carried out by missionaries and some private farms. The animals are housed and receive satisfactory feeding and veterinary care. The total animal population comprises 793,000 cattle bred mainly in the east of the country, 4,067,000 goats, 910,000 sheep, one million pigs and 2.5 million poultry. National meat production was estimated at 70,400 tonnes in 2001, 35% of which was pigs (24,900 tonnes), 27% goats (18,700 tonnes), 18% cattle (13,000 tonnes), 16% poultry (11,000 tonnes) and 4% sheep (2,800 tonnes). Livestock production was seriously hit by the socioeconomic crisis both in terms of numbers (-30%) and of production (-20%). Meat shortage is estimated at about 130,000 tonnes annually whereas the available grazing land can accommodate more than six times the present animal population.

2.1.6 Fishing is traditional and is carried out using antiquated means in the numerous rivers and lakes and on the Atlantic coast. Fishery resources are substantial and diversified. The annual production potential is estimated at 700,000 tonnes of fish. Production was estimated at 220,000 tonnes in 2001, representing 30% of the potential and an average annual fish consumption of 4 kg per capita, which is far below the recommended international standard of 36 kg per capita per annum.

2.1.7 Forests cover more than 125 million ha, most of which is poorly exploited. A part of this surface area (about 15%) was converted into national parks and/or nature reserves. Timber resources, estimated at 6 million m², are under exploited (less than 300,000 m² produced at present). Forest exploitation is carried out in an uncontrolled manner, without an exploitation plan.

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1 BCC’s 2001 statistics
2.2 Sector Institutions

2.2.1 Agriculture and rural development falls within the competence of four ministries, namely: the Ministry of Agriculture, Fisheries and Livestock (MINAGRI), the Ministry of Rural Development (MINDR) the Ministry of Lands, Environment and Tourism (MINAFET) and the Ministry of Scientific and Technical Research (MINREST). They are responsible, each in its area of intervention, for policy, planning, and implementation and monitoring of development programmes. MINREST is structured into research centres covering all the scientific domains (health, mining, geology, agriculture, etc). The other ministries are organized as follows: (a) central level (Kinshasa): a Central Directorate of General Services and a technical directorate for each intervention sub-sector; (b) regional level: provincial, district and council (“territorial”) inspectorates comprising various regional services.

2.2.2 In addition to the above-mentioned structure, there are several production support services on the ground. Under MINAGRI, the National Agricultural Studies and Agricultural Research Institute (INERA) carries out the propagation, introduction and adaptation of plant and animal material and technologies. The following key services fall under MINAGRI: (1) the National Extension Service (NES) in charge of disseminating new technologies in the agricultural sector; (ii) the National Seed Service (SENASEM) in charge of the seed sector; (iii) the National Agricultural Statistics Service (NASS) responsible for the collection, monitoring and evaluation of data relating to the agricultural sector; and (iv) the Veterinary Laboratories (Kinshasa and Lubumbashi) which deal with veterinary research, analyses and services. The MINDR intervenes through (i) the National Cooperatives and Producers’ Organization Service (NCPOS) in charge of providing support for the structuring and promotion of the farming community; and (ii) the Agriculture Mechanization Service (SEMA) whose main duty is the promotion of the mechanization of agriculture.

2.2.3 In general, the present institutional capacities of the various services mentioned above are weak and many of them have no operational programme. They have been suffering for over a decade now from lack of resources and financial support from the government which, in any case, has led to a loss of skilled staff and, consequently, to a situation of complete abandonment by the State of its regulation, guidance and control functions. Some services continue to operate thanks to limited support provided by development partners as part of emergency aid. This near absence of public service is very noticeable on the ground, judging by the inadequacy of services rendered to farmers and the low level of organization of the farming community and professional associations which should act as links in development operations.

2.3 Sector Support Services

2.3.1 Agricultural research: agricultural research is conducted mainly within INERA. Other bodies such as the Faculty of Agricultural Sciences and the Faculty of Veterinary Sciences also intervene in this area but their actions are limited, specific and short-term depending on financing possibilities. INERA has five research centres (Nioka, Yangambi, Mulungu, Gandajika and M’vuazi) and seven research stations (Bambesa, Kiyaka, Luki, Boketa, Kipopo, Gimbi and Bongabo) covering the entire country. At present, only M’vuazi station in Bas-Congo carries out research activities per se. The other stations are idle, because they are almost completely isolated due to lack of resources. All the stations have virtually no agricultural inputs and research equipment. With regard to human resources, INERA has 63 researchers, 117 technicians and 94 research workers. Lack of financial and material resources has reduced its capacity to generate technology and accelerated the departure of researchers towards other occupations.
2.3.2 INERA’S research programme includes various themes covering the following areas: (i) food production; (ii) industrial products; (iii) livestock production; and (iv) management and conservation of natural resources. However, implementation of most of these programmes is slow, due to their precarious human and financial resources situation. The few ongoing activities concern mainly the maintaining of the germplasm and basic strains of already developed varieties, and improvement of staples (cassava, maize, rice, legumes and banana). These activities are receiving some external support within the framework of networks of sub-regional research organizations and emergency programmes initiated by FAO and other donors. In spite of the modest resources put at its disposal, INERA has achieved worthwhile results in the improvement of yields and resistance to diseases of some foodstuffs notably cassava and banana. However, these achievements are not being disseminated in the rural areas due to lack of financing. To remedy this deficiency, on the one hand, and ensure synergy between the various interventions in this area, on the other hand, it is necessary to strengthen INERA’s human resources and logistics particularly in the area of plant material multiplication and dissemination, especially the material that has proves its worth.

2.3.3 Agricultural skills development: the DRC has a system of intensive and broad-based formal training in agriculture at all levels, from junior (A³) to senior (engineers and veterinarians) staff. The country has 34 (thirty-four) higher training institutions and 600 (six hundred) technical colleges. Like all other public institutions, these structures constantly lack resources. Continuous training of cadres and technicians of the agricultural sector is now provided only when there is external financing.

2.3.4 Agricultural extension: the National Extension Service (NES) is responsible for the provision of agricultural advisory services, and dissemination of technologies and improved genetic material. It has, in Kinshasa, a National Coordination backed by six divisions (programming, training/research, technology, personnel management, finance, and monitoring and evaluation) each of which comprises two to three bureaux. At the regional level, there are six provincial coordinations with district bureaux and units. The units ensure direct contact with producers through grassroots development workers each of whom is responsible for 300 farmers on average. The NES operates on the ground with other stakeholders (INERA, SENASEM, NGOs and projects) within the framework of specific collaboration protocols. With the support of UNDP, FAO and the World Bank, the NES has been given a new lease of life and has started harmonizing its intervention approaches and methods. It generally uses the farmer field schools (FFS) approach developed by FAO and based on training under real farming conditions. However, with the completion of the above-mentioned support, the extension workers do not have enough means to properly perform their duties. These include: (i) lack of means of transport and teaching aids; (ii) state of complete decay of office buildings; (iii) non-existence of material and moral motivation; and (iv) absence of training and retraining programmes. Extension activities, which can still be seen on the ground, are backed by emergency programmes which take care of the logistics and other operating costs of extension.

2.3.5 Financing of the agricultural community: the financing of agriculture through the formal channel of financial institutions has disappeared from the Congolese agricultural landscape since the early 1990s. Savings and credit structures have been stifled by inflation and monetary instability. The banking sector which is facing enormous difficulties has never really committed itself to financing small producers. All these events have contributed to the loss of savers’ confidence in commercial banks, cooperatives and other local financing systems.
2.3.6 To fill this gap, the Government encouraged the establishment of the Microfinance Institutions Network (RIFIDEC) in September 2002 in order to contribute towards the improvement of the situation of savings and credit cooperatives and all other micro-finance institutions in the DRC. RIFIDEC’s objective is to rehabilitate and develop the micro-finance sector, strengthen the institutional capacities of its member institutions and defend the interests of the financing system operators. At present, it has 208 members, namely: 29 savings and credit cooperatives, 176 micro-finance institutions and 3 supervisory structures. Its lead partner is GTZ and it is a member of the African Micro-Finance Association (AFMIN). RIFIDEC is at present operational in Bas-Congo, Bandundu, Kassai-Oriental, Kassai-Occidental and Katanga Provinces. It is nevertheless facing constraints which limit its interventions, particularly lack of logistics and weak capacities of its structures.

2.3.7 Experiments are being conducted at the moment with the help of some donors, notably the UNDP, in order to establish a decentralized and self-managed financial system. They are carried out by NGOs and other organizations such as the Diocesan Development Bureau, the Ekumene missionaries, the Research and Technical Supervision Group (GRET), the Investment Promotion Savings and Credit Cooperative (COOPEC) and “la COOPEC de la Commune évangélique de l’alliance du Congo” (COOPEC/C.E.A.C.), etc. The idea is to facilitate, by granting credit, the procurement of inputs and implementation of extra-agricultural income-generating activities through the revival of local financial intermediation. Micro-finance institutions (MFIs) will receive technical and financial support from donors to improve their capacity to organize and mobilize savings which will later be used to finance agricultural activities. Although these experiments are still limited in number, the beneficiaries seem to be satisfied with them and should therefore be encouraged.

2.4 Organization of the Farming Community

2.4.1 The farming community is organized essentially into groups and associations which are generally informal. The State has sought to promote different forms of association, especially mutual and cooperative associations. However, lack of a clear vision of how to structure them and the small resources made available to the services concerned have made it impossible to achieve tangible results. With the crisis experienced over the past years, there has been a vast movement to create associations, local development initiatives (LDI) and national NGOs. This movement is caused by the action of international NGOs and, specifically, it is linked to the need for grouping required by an initiative or a development programme with immediate benefit to the members of the group. This drive helped initiate the farming community organization process. In 2003, there were 224 national associations and NGOs organized and approved by the State. Concerning women, there is a National Women’s Council which is represented in all the provinces. There are representatives of public institutions, non-governmental organizations and women’s associations.

2.4.2 The various associations intervene in very diverse areas: agriculture, processing of products, small livestock farming, and marketing. A great effort was made by the various partners to group them within platforms the most important of which are the Federation of Laic and Economic NGOs (FOLECO) and the National Council of Development NGOs (CNONGD). Some other associations form networks. These structures are an important negotiator in the rural areas. They can be used as an interface between projects and beneficiaries for all development activities. At present, the performance of these structures is limited especially because of: (i) inefficiency of the steering institutions; (ii) inadequate basic training of members; and (iii) lack of financial resources. These constraints must be removed in order to revive the farming community and improve its organization.
2.5 Land Tenure System

2.5.1 The land tenure system in the DRC is governed by Law No. 73/21 of 20 July 1973 as amended and supplemented by Law No. 80/8 of 18 July 1980 which makes the State the sole owner of the soil and subsoil. This law, which is inspired by the customary land system, provides for the prior consent of the Leader of the Clan owner of the land before endorsement by the Administrative Authority of the allocation of lands. In practice, access to land has first to be authorized by the customary leaders who grant land plots as life estate or “freehold” to the applicants. Such allocation will be used as proof when seeking officialization by Territorial Administration of ownership of the land plots obtained. Land is made available to farmers after drawing up leasing contracts of a long duration of up to 99 years for big farms. Development and payment of an annual land tax are the conditions that the beneficiary of land must meet in order to maintain his right to the said land. In the eyes of the land law, women have the same rights and obligations as men. However, such rights are not always granted automatically. There is a need for sensitization programmes to foster the application of this law in rural areas.

2.5.2 Agricultural land, though abundant, is unequally distributed because of a land law which is still strongly marked by customs that confer on traditional chiefs ownership of vast estates which are randomly developed by third parties in the form of share farming. Moreover, large areas granted to enterprises and/or to private individuals are underexploited because they are above their capacity to manage. This type of tenure sometimes limits agricultural investments and the rational utilization of factors of production and, consequently, land productivity. The Government which is aware of this problem has initiated a national consultation with all the stakeholders with a view to amending the land law to render it more equitable and more attractive to private investors.

2.6 Gender and Poverty

2.6.1 Gender: women represent about 52% of the total population of the country and 73% of them live in rural areas. They make up 51% of the working rural population. Their major activity is food production. Women carry out 66% of agricultural activities as against 34% for men, and spend 7 to 8 hours a day in the fields. The crucial problem of women remains the intensity of the tasks they perform in the fields and at home. In rural areas, women ensure 75% of food production, take care of the storage and processing of food products for the survival of their families and market 60% of food production. The participation of women in extension activities is appreciable: 33% of visits by instructors, 46% of members of contact groups are women, 12,000 women in the DRC were trained in techniques of preservation and processing of agricultural products. However, they are under-represented in the extension system: 7 women out of 112 extension workers, that is less than 7%.

2.6.2 In addition to the causes of difficulty of access to education common to both sexes girls are particularly affected by school drop-out due to pregnancies, early marriages and tradition which encourages parents to discredit the education of girls. In 2001, the female illiteracy rate was 48.2%, which is higher than the male rate (25.8%). The illiteracy rate in rural areas is higher; it is 55%. The enrolment rate for girls is lower than the rate for boys. In 1998, it was 32.3% for girls as against 49.7% for boys. In rural areas, 20% of farmers’ organizations are women’s associations. Women represent 35% of mixed organizations.

2.6.3 Poverty: The entire country and all the social categories are hit by poverty, with very marked inequalities. The main poverty indicators are alarming. The per capita GDP plunged from US$ 300 in 1993 to US$ 68 in 2001. It is estimated that the percentage of people living below the poverty line, which is US$ 1 per person per day, represents nearly 80% of the population, with a more marked incidence in women.
2.6.4 Though, for the moment, it is difficult to estimate the level of the female population that is poor, a survey carried out in April 1999 indicates that, on average, 44% of women as against 22% for men are without any income. The high mortality rate is observed mainly among the poor and vulnerable groups that are the rural and suburban populations, women of child-bearing age and children under the age of 5. There is also a deterioration of the key health indicators (life expectancy at birth, all forms of malnutrition, HIV/AIDS seroprevalence rate).

2.7 Development Constraints and Potential

2.7.1 The agricultural sector is facing different types of constraints. In fact, many crops have been destroyed and farms completely abandoned because of socio-political instability, thus resulting in a drastic decrease in areas under cultivation. Farmers who have been able to pursue their activities have turned to traditional subsistence agriculture which is carried out with minimum agricultural inputs and hence unproductive. The most affected sectors are foodstuffs and cash crops. The effects of the civil war (theft and uncontrolled slaughtering) have been very detrimental to the livestock population.

2.7.2 The inadequacy and disorganization of the sector’s support services like agricultural and zootechnical research, extension, technical supervision and financing of the farming community which are almost inoperative on the ground because they lack resources are major obstacles to the modernization of the country’s agriculture. The deterioration of basic socioeconomic infrastructure, the isolation of production areas because of the very bad state of feeder roads and the absence of organized marketing channels cause enormous difficulties in the supply of agricultural inputs and marketing of production, thus resulting in distortions of trade and a drop in farmers’ income. Furthermore, lack of appropriate incentives for private investments has seriously deprived the agricultural sector of capital and limited its value added.

2.7.3 Despite these constraints, the DRC’s agricultural sector has great potential. The country’s very favourable climatic and ecological conditions, together with a remarkable hydrographic network, allow for the practice of a very varied range of farming: food crops, tree cultivation, cash crops, etc. Agricultural land is very vast (80 million ha) but only 10% of the land is being developed at the moment. The hydrographic network is very dense, covers the entire country and offers tremendous water resources that can be mobilized (50% of the continent’s fresh water). The area of grazing and savannah land can bear an animal burden of 40 million head, compared to less than 7 million head at present. Forests cover more than 125 million ha most of which is poorly exploited. The fishery production potential, located on the Atlantic coast, the Congo river and its tributaries and the numerous lakes within the country, is estimated at 700,000 tonnes of fish per annum. This potential which is undertapped at present (less than 200,000 tonnes per annum) offers considerable production opportunities. Timber resources, estimated at 6 million m3, are underexploited. The forest is also an important biodiversity reserve and an appreciable source of energy and income for the poor populations. The rural areas of the country are also characterized by an abundant and young agricultural labour force that is very attached to land. All these factors allow for the practice of intensive and very diversified agriculture and different types of livestock farming.
2.8 Government Sector Policy and Strategy

2.8.1 In the face of the declining contribution of the agricultural sector, the Government prepared, with the support of donors, a strategic framework for the development of the agricultural and rural sector. It aims at strengthening food security, reducing poverty and increasing production, which are the key objectives of the Interim Poverty Reduction Strategy Paper (I-PRSP) and the Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP). The scenario advocated for the development of the sector comprises three phases, namely: (i) reconstruction phase (2002-2004); post-conflict growth phase (2005-2009); and (iii) consolidation phase (2010-2014).

2.8.2 The objectives of the reconstruction phase are the creation of an enabling environment for the stimulation of production and the strengthening of food security. It aims to attain an average growth rate of 3.6% per annum for foodstuffs, livestock production and export products excluding timber. The projected average growth rate for timber is 20%. The chosen priority interventions for this phase are: (i) strengthening of the capacities of agricultural support services in order to improve technical supervision and the organization of the farming community; (ii) rehabilitation of access infrastructure in order to open up the production areas; and (iii) provision of factors of production at affordable prices.

2.8.3 The post-conflict growth phase aims at putting in place appropriate mechanisms for financing the farming community, promoting private investments, building the institutional and organization capacities of the rural populations and promoting new technologies. The goal of the consolidation phase is the attainment of a growth rate of over 6% for the different agricultural sub-sectors. The planned interventions consist in consolidating the activities undertaken during phase II by implementing multisector development projects throughout the entire territory.

2.9 Donor Interventions in the Agricultural Sector

2.9.1 Following armed conflicts, only emergency aid through NGOs and United Nations humanitarian agencies, notably FAO, continued to be provided during the 1990s. Actions focused on provision of support to extension services, seeds, the national rice programme and agricultural statistics. FAO is supporting the country in the establishment of an information system for food security, the formulation of sub-sector strategies, the restructuring of MINAGRI services, the production of seeds and agro-forestry. FAO is also implementing a number of activities financed from bilateral funds provided especially by France, the Netherlands, Switzerland, Sweden and USAID. Most of the activities concern the supply of agricultural inputs (food seeds, fertilizers and small implements), cattle vaccination campaigns and support to fishery activities. These projects, of an emergency aid nature, implemented with reduced financial resources, have a limited spatial impact. They however have had considerable impacts especially in capacity building.

2.9.2 In 1997, the UNDP and FAO prepared a National Agricultural and Rural Sector Recovery Programme (NARSRP) which recorded very limited results. Difficulties especially of an institutional nature were noted. They include excessive centralization of decision-making and allocation of expenditures in a way that substituted the project for the State. This led the parties concerned to close the programme and envisage the formulation of a new form of intervention focused on the empowerment of beneficiaries, limiting the geographical areas covered and involving structures other than State structures in implementation, in particular FAO, UNOPS and NGOs. Hence, two projects were prepared and financed by the UNDP. These are (i) the Agricultural Sector Producers Support Project for Kassaï-Occidental, Kassaï-Oriental, Katanga and
Kinshasa Provinces (Project 4 K) implemented by FAO; and (ii) Community Capacity Building Project in Bandundu and Bas-Congo Provinces (Project 2B) implemented by UNOPS. These projects should be completed by the end of 2004.

2.9.3 The initial feedback from donors on the operations conducted using the new approach (projects 4 K and 2 B) is favourable, in particular as concerns the involvement of the beneficiary populations in implementation and ownership of the outcomes. It should, however, be pointed out that the quality of some physical outputs, particularly farm roads, is not quite satisfactory for lack of erosion protection and drainage structures. The weak supervision and technical control capacities of the services concerned explain, to a large extent, these weaknesses. These lessons will be taken into account in this project with the building of the capacities of MINDR services and hiring of a works technical control firm.

2.9.4 All the donors are intervening under the Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP) since it was prepared in 2002. These are mainly the World Bank, the European Union and Belgian Cooperation. The principal activities funded by these donors in the agriculture sector concern aspects of marketing, agricultural professionalization, processing and preservation of products, agricultural research, rehabilitation of roads and agricultural feeder roads, community marketing infrastructure and management of natural resources. USAID is financing projects aimed at improving food security and the living conditions of the populations. These interventions are in the start-up phase, so they cannot be appraised at this stage. However, considering the country’s situation, they should have considerable socioeconomic impacts.

2.9.5 The Bank Group has only one project being implemented in the Congolese agricultural and rural sector. It is a multinational environmental protection support project entitled: Regional Environmental Information Management Programme. It was approved in 2000 and concerns, in addition to the DRC, the Republic of Congo, Equatorial Guinea, Gabon, Chad and the Central African Republic. This project aims to establish, by the end of 2004, an integrated environmental management system covering the entire Congo river basin. To date, the various project activities are being executed satisfactorily. Since the Bank resumed cooperation with the DRC in 2002, it has approved the funding of the following five operations: (i) support to economic recovery and reunification of the country; (ii) institutional support; (iii) Emergency Multisector Socioeconomic Infrastructure Rehabilitation Project (EMSIRP); (iv) support to the rehabilitation of the educational system; and (v) support to the health development master plan in the eastern province. These operations aim, among other things, at building capacities, reconstructing basic socioeconomic infrastructure and improving health coverage and the education system. The first three operations are in the start-up phase and the other two which were approved in March 2004 are not yet effective.

3. THE SUB-SECTORS

3.1 Food Sub-Sector

3.1.1 The food sub-sector in the DRC is the main source of income for the rural populations. It comprises basically tubers, plantain, maize, rice, groundnut and bean and employs about 6 million farmers. The area sown annually per farm is about 0.5 ha. The yields are low. The production systems practised are (i) the traditional system; with no notable technological input; (ii) the intermediary system which differs from the first by the organization of producers into associations; thanks to this structuring, the farmer has easier access to supervision and to production support services; and (iii) the modern system that is practised on some big farms which resort to mechanization and, the use of agricultural inputs and salaried workers.
3.1.2 The total areas devoted to food production in 2001 are estimated at about 5.17 million ha broken down as follows: 2 million ha of cassava; 1.69 million ha of cereals (maize and rice); 0.5 million ha of oilseeds; 0.36 million ha of legumes; and 0.35 million ha of banana. Production is estimated at 19.8 million tonnes, of which 16 million tonnes of cassava or 80% of the total production. Cereals (maize and rice) rank second with 1.54 million tonnes. This production is below the current food needs of the populations which are estimated at 25 million tons per year. Furthermore, production is only growing at 2% per annum, compared to a population growth rate of 3%. Food shortage is estimated at between 20% and 32%, depending on the region. Market gardening is not developed because of transport problems and isolation of the production areas. Market garden crops are grown mainly around the major urban centres where marketing is easy. The distribution of areas under cultivation and production per crop is shown in Table 1 of Annex 2 of the working document.

3.1.3 The development of the food sub-sector is confronted with antiquated farming practices and difficulties of access to quality inputs, especially seeds. In addition to these constraints are lack of appropriate technology and material for processing and storage, and marketing difficulties at the level of the isolated areas. Many production areas are unable to transport their products to the major consumer centres. Cases of poor sales and rotting away of products in the fields, on the one hand, and shortage of food and price hikes in towns, on the other hand, are very frequent. Improvement of production and marketing thereof and then the strengthening of the food security of the population are absolutely dependent on the easing of these constraints. These aspects will be taken into account as regards interventions under the present project.

3.2 Seed Sub-sector

3.2.1 At the institutional level, the seed sub-sector falls under two ministries; namely: (i) the Ministry of Scientific and Technical Research which ensures varietal improvement and the production of pre-basic and basic seeds in INERA’s research stations; and (ii) MINAGRI which is in charge of seed multiplication and dissemination through its various structures, namely: the National Seed Service (SENASEM), the National Extension Service (NES) and seed operators.

3.2.2 SENASEM ensures the control and certification of seeds and the identification, promotion and training of seed operators. It has eight State farms covering an area of over 1,500 ha in nine provinces where it multiplies seeds produced by INERA, and seed control laboratories. It has a staff of 217 workers including 70 engineers. It has expertise in seed multiplication which has been used by various projects concerning seeds, especially those funded by the EU, FAO and Belgian Cooperation. In connection with the application of the law on the privatization of seed multiplication and marketing activities two seed multiplication farms have already been transferred to private promoters in Bas-Congo. The privatization of the other State farms is under way. This process must be accelerated so as to increasingly involve the private sector in the sector and ensure the sustainability and development of improved seed production. This will, moreover, enable SENASEM to fully devote itself to its main role of ensuring control and providing advisory services. Government’s commitment to privatize all the farms is a condition precedent to disbursement of the loan resources.

3.2.3 The NES is in charge of disseminating improved seeds and advising producers. It also intervenes with SENASEM in the identification and training of growers and supervision of seed farms. NGOs also intervene, with the support of various emergency aid programmes, at different levels of the seed sub-sector (distribution, supervision, multiplication and marketing). Seed operators are made up of producer associations/groups, SMEs and big private companies.
They produce and market improved seeds. They also carry out basic seeds varietal maintenance activities when they are involved, by INERA, in basic seed multiplication. These operators who currently are the major partners of the State in the transfer of seed farms will be supported and associated by the present project in the multiplication and dissemination of improved seeds.

3.2.4 The intervention capacities of the above-mentioned structures are limited and do not make it possible to meet the needs of the sub-sector. The support so far given them is far from satisfying all their needs. INERA, which is at the base of the seed production process, is experiencing many difficulties. The various research centres do not have laboratory equipment and data processing equipment. Likewise, the tilling equipment of the experimental stations which is decrepit cannot help meet the increasing need for basic seeds. INERA’s human resources need to be updated on new technologies. SENASEM does not have well equipped laboratories and skilled staff to properly ensure the control and certification of seeds. The NES is also facing a lot of difficulties regarding the mobility of its workers on the ground because of the unavailability of means of transport. To mitigate these constraints, the present project provides for the strengthening of the capacities of its structures with regard to the planned actions.

3.2.5 The country’s total seed needs, as estimated by FAO in 2003 on the basis of cultivated areas, stand at 134,000 tonnes of different seeds of which 669 tonnes of pre-basic seeds, 7,740 tonnes of basic seeds and 125,662 tonnes of certified seeds, and 53,900 linear km (lkm) of cassava cuttings. The total amount of different types of seeds currently available (produced by INERA) is only 650 tonnes (of which 550 tonnes of maize), that is barely 0.5% of the country’s needs. The distribution of needs by type of seeds of the major crops is shown in Table 2 of Annex 2 of the working document.

3.2.6 To overcome these inadequacies, the DRC has included seed production among the EMRRP’s priorities and has encouraged associations and private growers to conclude collaboration agreements with INERA and SENASEM, with a view to developing this sub-sector. To this end, the Ministry of Agriculture has undertaken the preparation of a National Seed Plan with the support of FAO. The Plan is the strategic and policy framework for intervention in the seed sub-sector. It aims, among other things, at strengthening the seed control and certification mechanism. Basic legal instruments are not yet put in place and the sub-sector is still governed by a ministerial order issued in March 1997. A new seed bill has already been prepared as well as texts to create a National Seed Board and a National Varieties Approval Committee. The passing of this law, planned for the first half of 2004, is essential for the encouragement of private investments in the seed sub-sector. Government’s commitment to enact this law is a condition precedent to the disbursement of the loan resources.

3.3 Rural Infrastructure Sub-sector

3.3.1 Rural infrastructures is under the supervisory authority of the Ministry of Rural Development (MINDR). The main duties of this Ministry are: the formulation and conduct of rural development policies and strategy; the preparation and monitoring of development projects; the development and equipment of rural areas; and the organization and supervision of the rural population. The general state of rural infrastructures is a reflection of the country’s situation. Stoppage of interventions of donors since the early 1990s, lack of domestic resources and the damage caused by conflicts and political instability in the country have led to the collapse of all rural infrastructure. This dismantling of infrastructure is a major obstacle to the country’s economic recovery.
3.3.2 The DRC has a road network of 152,400 km, including 87,000 km of local roads commonly known as agricultural feeder roads which are under the supervisory authority of the MINDR. This network which is rudimentary and very fragile because of the way it was initially constructed is currently destroyed as follows: 95% of general purpose roads and 70% of local roads. The country’s inland waterways make up an extensive network of about 16,000 km, including 3,600 km of agricultural waterways which are almost inaccessible for want of maintenance and buoys. The deterioration of agriculture feeder roads (roads and waterways) increases the cost of transport, thus hampering the free movement of persons and produce and, hence, constitutes an obstacle to rural development. Interventions by the Agricultural Feeder Roads Directorate (AFRD) which is responsible for the network are limited because of the inadequacy of the financial and material resources allocated to it.

3.3.3 Drinking water supply and sanitation (DWSS) in rural areas is critical. The rate of access to drinking water dropped from 19% in 1991 to 16% in 2002. The rate of access to sanitation is barely 5%. The primary cause of such decline is lack of financing, want of resources by the National Rural Water Supply Service which is responsible for the development of water supply and sanitation infrastructure and absence of maintenance of existing water points. Most of the rural population drink unsafe water from unprotected sources, rivers, lakes or shallow wells. This situation leads to a deterioration of the health status of the populations, rural-urban migration and a fall in agricultural production.

3.3.4 Marketing infrastructure, composed of markets and warehouses, is inadequate and far from the villages and production areas. Make shift sales outlets created by farmers lack basic infrastructure, in particular sheds, stores, water points and latrines. This situation results in a decline in trade and hinders the recovery of the rural economy.

3.3.5 In general, rural infrastructure faces many constraints, in particular: (i) non-inclusion in the State budget of maintenance funds; (ii) inadequacy of resources at the level of local authorities and grassroots communities; (iii) high rehabilitation costs; (iv) failure to involve beneficiaries in the design, management and maintenance of infrastructure; and (v) lack of organization of grassroots communities to take charge of infrastructure in their area.

3.3.6 To address this situation, the Ministry of Rural Development prepared a three-year action plan covering the period 2004-2006 to promote rural development and fight against poverty. The overall objectives of the plan are: (i) the rehabilitation of socioeconomic infrastructure, according priority to high agricultural production areas; (ii) the supervision of the populations using a grassroots participatory approach; and (iii) the building of the capacities of the MINDR.

4. THE PROJECT

4.1 Project Design and Rationale

4.1.1 The war and insecurity experienced by the country over the past decade have seriously affected the performance of the agricultural sector. Production systems have been gradually geared towards subsistence agriculture, thus resulting in enormous losses of productivity. This situation translated into serious food insecurity, with an overall food deficit of between 20% and 32% depending on the region, and a massive impoverishment of the populations.

4.1.2 The inadequacy and disorganization of the sector’s support services, like technical supervision, agricultural extension and promotion, agricultural and zootechnical research and financing of the farming community, are major obstacles to the modernization of the country’s agriculture. The deterioration of socioeconomic infrastructure, the isolation of production areas and
the absence of organized marketing channels cause enormous difficulties in the supply of agricultural inputs and equipment, and marketing of production, thus resulting in distortions of trade and a drop in farmers’ incomes.

4.1.3 The Agricultural and Rural Sector Rehabilitation Support Project (PARSAR) will target priority activities that can remove the above-mentioned constraints and revive the agricultural and rural sector. It will back, together with the other partners of the DRC, the Government’s ongoing efforts under the Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP) aimed at strengthening food security and reducing poverty. The criteria for choosing Bas-Congo and Bandundu Provinces as priority intervention areas are: the high level of poverty in these areas especially in Bandundu Province which is one of the country’s biggest provinces (295,000 km²) where the level of poverty is one of the lowest; the strategic importance of these provinces in food production and supply (about 25% of agricultural GDP); better accessibility of their chief-towns compared to the other parts of the country; and complementarity with the actions of other donors.

4.1.4 The project was designed in a way to optimize coherence and synergy between its own activities and with those of other donors. The design takes account of the priority needs of the populations, the safeguard of agricultural production as well as the entrusting of responsibility to and self-promotion of farmers to ensure the management of the infrastructure to be constructed. The planned actions were identified and designed with the participation of all the stakeholders, especially: the representatives of the beneficiaries, associations and NGOs, and the various ministries concerned, following workshops and meetings held in Kinshasa as well as in the concerned districts.

4.1.5 Implementation of the project is designed such that it will be carried out mainly with the active participation of the beneficiaries, Grassroots Community Organizations (GCO), NGOs, local small and medium-scale enterprises (SMEs) and other local promoters (craftsmen, pieceworkers). Works will be carried out using the labour-intensive (LI) technique with local materials. This method of works implementation will allow for: (i) ownership of the project outputs by the beneficiaries; (ii) support to the emergence of local promoters; (iii) creation of jobs; and (iv) injection of resources into the region which will help stimulate its economy and check rural-urban migration. One might have considered entrusting the works to a contractor but the works are generally small in scope and scattered and, hence, would be very expensive. Furthermore, because of the long period of instability experienced by the Congo, no local contractor is qualified for this type of works.

4.1.6 Three alternatives were considered for the project implementation, namely: an implementation unit established within one of the sector ministries, a special implementation agency or the Central Coordination Bureau (BCECO). The first two options were ruled out for the following reasons: (i) the very profound weakness of institutional capacities and lack of transparency at the level of the sector ministries; and (ii) the probable high management costs and the risk of keeping national technicians and cadres in the background if the project is executed by a specialized agency. Such an option does not foster the building of their capacities and their ownership of the project actions.

4.1.7 The option to place the project within the BCECO is dictated by the weak capacity of public services; concern about transparency and rational management of the loan and grant resources; the fact that the BCECO ensures the management of the EMRRP under which the present project is placed; and the need to avoid creating new structures for the implementation and coordination of the interventions of the different donors. The risk of overloading the BCECO
considering the size of the portfolio that it is managing will be mitigated by the strengthening of its capacities as provided for in the project and by the fact that the project will be managed by an independent Implementation Unit established within the BCECO itself.

4.1.8 The project will work in perfect synergy and complementarity with the development programmes and projects funded by the other donors in Bas-Congo and Bandundu Provinces. The various project components were discussed with the lead donors operating in the agricultural sector, notably the World Bank, the European Union, Belgian Cooperation, UNDP, FAO and USAID. In its implementation, the project will prioritize the approach based on response to requests made by the grassroots communities and the “make or buy” principle.

4.2 Project Area and Beneficiaries

4.2.1 The project area covers Bas-Congo and Bandundu Provinces which have great agricultural and livestock production potential. They are the main sources of basic foodstuff supply for the capital Kinshasa which is experiencing a chronic shortage of agricultural products. A study conducted by MINAGRI in 2003 estimates the food needs of the capital (7 million inhabitants) at 3.5 million tonnes. Satisfaction of these needs is a priority of the EMRRP.

4.2.2 The project covers a total surface area of 349,605 km². It is bounded to the north by Equateur Province, to the south by Angola, east by Kassaï-Occidental Province and west by the Republic of Congo, the Atlantic ocean and the Cabinda enclave. The city of Kinshasa is located between the two provinces. Administratively, Bandundu Province is divided into four districts: Kwango, Kwilu, Mai-Ndombe and les Plateaux. Bas-Congo is divided into three districts, namely: Bas-fleuve, Cataractes and Lukaya. Each district is divided into three to five “territoires” (areas) depending on the number of inhabitants and the surface area. The population of the two provinces is estimated at about 8,286,000 of which 6,050,000 or 73% live in rural areas. There are about 1.5 million households of an average size of 5.5 persons.

4.2.3 Agriculture is the main economic activity in the two provinces. It is practised by nearly 1,125,000 farmers cultivating mainly food crops. Cassava is the principal crop grown because of its importance in the diet of the rural population and the climatic conditions which are favourable to it. Market garden crops and fruit trees are grown essentially on land near the major urban centres where there are outlets. The total areas under cultivation are estimated at 1,466,000 ha broken down per crop as follows: 690,000 ha of cassava, 368,000 ha of cereals (maize and rice), 205,000 ha of groundnut, 93,000 ha of banana, 65,000 ha of bean and 25,000 ha of sweet potato and yam. The average area sown annually per farm is 0.5 ha. Generally, the average land-use plan of a typical farm is as follows: 50% tubers (cassava), 25% cereals (maize and rice where irrigation is possible), 15% oilseeds (groundnut and soya bean) and 10% legumes (bean and cowpea) and banana.

4.2.4 In 2000, food production of the project area was estimated at 5,550,000 tonnes, as against a need estimated at 7,980,000 tonnes for the area. Agricultural production is dominated by cassava with 4,927,000 tonnes, representing 88% of total production. Cereals (maize and rice) rank second with 251,000 tonnes. This production represents about 30% of national production (19.8 million tonnes). Current average yields are 7t/ha for cassava, 0.7t/ha for cereals and oilseeds, 0.5t/ha for legumes and 4t/ha for banana. These yields are very low compared to potential yields obtained in research stations by INERA. In M’vuazi research station, yields reached 60t/ha for cassava, 3.5t/ha for cereals (maize and rice), 2.5t/ha for bean and 30t/ha for banana, that is over five times the current yields. Details of areas and production of the project area are shown in Annex 6.
4.2.5 The production systems are characterized by the dominance of manual labour, and very limited use of organic and mineral manures. In most cases, the seeds used are degenerated. Only farmers in intervention areas of agricultural projects benefit from acceptable plant material and a minimum amount of technical supervision. Yields are low and hence producers do not make enough income. At present, the average annual income per standard farm of 0.5 ha is estimated at CF 83,000 in Bandundu (US$ 210) and CF 153,200 in Bas-Congo (US$ 380). Cassava and banana which are the main food crops are experiencing many phytosanitary problems (especially African mosaic, anthracnosis and acaroids) and degeneration of plant material. Major research works aimed at eradicating these ills and ensuring varietal improvement were conducted with the support of FAO and USAID, the South-East Consortium for International Development (SECID), the International Institute of Tropical Agriculture (IITA) and the International Network for the Improvement of Banana and Plantain (INIBAP). The first results relating to the resistance of cassava and banana to diseases and to an increase in their yield are promising. However, these research works, conducted with limited financial resources, might not be pursued in the short term.

4.2.6 The distribution of work between men and women is linked to the hardness of the tasks to be performed. Clearing, felling of trees and slash-and-burn of fields are done by men during a period of about three months a year. In addition to clearing, men devote almost 15 days a month for the rest of the works. Women are involved in all the other works from soil preparation and sowing to marketing of products. They carry out more than two-thirds of the production of cassava which is the staple food of the populations. In general, women spend about 20 days a month on farming 4 to 5 hours a day. In addition, they are responsible for fetching water, processing cassava and other household chores. These different functions give women an important role in food security.

4.2.7 The development of the food sub-sector, which is the main source of income for farmers and the guarantor of food security in the DRC, is ineluctably dependent on the mitigation of the above-mentioned constraints at both the level of farmers and the level of production support services. The actions proposed in this project are in line with this objective.

4.2.8 Project beneficiaries: the primary direct beneficiaries of the project will be (i) farmers, members of grassroots producer groups/associations, whose income per household does generally exceed CF 200,000 (US$ 500) per annum, who will be organized, trained in their various domains of activity and assisted by making inputs available to them; (ii) local communities and traders from different backgrounds who will benefit from the basic infrastructure put in place; (iii) promoters of production support services (craftsmen, traders, etc); and (iv) the technical services of ministries involved in agricultural and rural development and INERA. Promoters of NGOs that are partners of the project and micro-finance structures active in Bandundu and Bas-Congo will equally benefit from the project activities.

4.3 Strategic Context

4.3.1 The Agricultural and Rural Sector Rehabilitation Support Project (PARSAR) falls within the framework of the Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP) whose activities are extracted from the broader multisector rehabilitation and reconstruction programme prepared by the Ministry of Planning and Reconstruction in September 2001, in consultation with the various sector ministries and donors. This programme focuses on three main components: rehabilitation and reconstruction of basic infrastructure (transport, water supply, electricity and urban infrastructure); (ii) agriculture, provision of social services (education, health and social protection) and local community-based development; and (iii) formulation of medium and long-term sectoral strategies, and building of human and institutional capacities. The first phase of this programme, which is financed by IDA, is being implemented.
4.3.2 The PARSAR is part of this programme and addresses the priorities defined by the Government to move from the stabilization phase to the reconstruction and economic recovery phase. It is in line with the guidelines of the Interim Poverty Reduction Strategy Paper (I-PRSP) which fixes as priorities for the period 2002-2005 the rehabilitation of socioeconomic infrastructure, the development of human resources as well as the strengthening of institutional capacities. It is equally in line with the microeconomic framework prepared by the Government with the support of the IMF. It is consistent with the Bank’s vision and the guidelines defined in the 2002-2004 Country Strategy Paper (CSP) which retains rural development and the social sectors as areas of priority intervention with a view to sustainably reducing poverty which affects 80% of the population the vast majority of whom live in the rural areas. The planned actions to improve access to drinking water and sanitation fall within the framework of the Bank’s initiative for water supply and sanitation in rural areas.

4.4 Project Objectives

4.4.1 Sector goal: the project sector goal is the strengthening of food security.

4.4.2 Specific objective: the project’s specific objective is the stimulation of agricultural production in Bas-Congo and Bandundu Provinces.

4.5 Project Description

4.5.1 The following are the project components: (A) Institutional support and capacity building; (B) Support to agricultural production; (C) Rehabilitation of basic socioeconomic infrastructure; and (D) Project management.

A. Institutional support and capacity building

4.5.2 To assist the structures of the ministries in charge of agricultural and rural development in the planning, monitoring and coordination of the implementation of the project activities, on the one hand, and INERA in its agricultural research activities, on the other hand, support will be provided for institution and capacity building. Such support will focus on the rehabilitation of offices, training and retraining of cadres and workers, provision of adequate means of work, transport and communication, and technical assistance.

4.5.3 Support to MINAGRI: the project will finance, for the benefit of MINAGRI staff, 68 persons/month of training and further training, the organization of 20 workshops and participation at 15 regional and international conferences and seminars. Some 300 cadres and employees of central and provincial services will benefit from these actions. Training and retraining workshops and seminars will be held at national level so as to enable the cadres of provinces not affected by the physical outcomes of the project to also benefit from them.

4.5.4 The project provides for the rehabilitation and equipment of 12 offices of provincial inspectorates in Bandundu and Bas-Congo, as well as 8 offices of central technical services. It will also repair and equip two laboratories belonging to SENASEM in Bas-Congo and in Kinshasa. A batch of teaching aids will be made available to rural promotion workers for extension and dissemination of technical themes among farmers. The project will equally finance the procurement of data processing equipment for agricultural services in Kinshasa and in the two provinces. Short-term consultancy services, that is a total duration of 25 persons/month, are also planned to conduct statistical surveys and train the staff concerned and prepare specific studies in the domain of markets and prices.
4.5.5 **Support to INERA:** support will be given to INERA to develop agricultural research and enhance its basic seeds production capacity. The support will cover the financing of 12 persons/month of training and retraining of researchers, supply of data processing equipment, procurement of scientific documents and equipment of two laboratories with data processing, office automation and experimentation equipment. A total of 40 researchers and assistant researchers will benefit from this support. Moreover, the project will finance the renovation and equipping with tilling equipment of Bandundu (Kiyaka) and Bas-Congo (M’vuazi) experimental research stations in order to increase their production capacity. Plans have been made for the conclusion of a collaboration agreement between the project and INERA for the procurement of seeds. The agreement defines in detail the duties of each party.

4.5.6 **Support to MINDR:** the project will strengthen the capacities of the various central services of the Ministry of Rural Development and of its provincial services in Bas-Congo and Bandundu Provinces. To this end, it will finance: the repair of six buildings; (ii) the procurement of data processing equipment, office furniture and equipment, 6 topographic equipment kits, 6 sets of hydrometry equipment and 6 sets of laboratory equipment; (iii) the training and further training of 450 State cadres and technicians in a number of themes relating to project management, the LI technique, erosion-control through the use of vetiver, preparation of feasibility studies, sustainability of infrastructure, site management and works control, monitory-evaluation, environmental monitoring and surveillance, rapid diagnosis participatory approaches, and promotion of local development committees; (iv) the organization of 24 seminars and workshops on information and discussion relating to rural infrastructure development and sustainability, 4 of which will be regional and 20 local; (v) the training in the LI technique of 200 technicians from among the beneficiaries and 150 team leaders and site leaders from among the local operators; and (vi) the training of 350 infrastructure management committees. Training will be organized in the form of theoretical and practical sessions on the ground and will be provided by specialized institutions and consultants.

4.5.7 **Support to the Ministry of Environment:** there are plans to strengthen the environmental monitoring skills of the concerned services in Kinshasa and in both provinces, so that the monitoring of environmental issues should not be hindered by bottlenecks in the establishment of efficient structures at the national level. The support will involve the improvement of working conditions through the rehabilitation and equipment of 10 offices with furniture and data processing equipment and the procurement of 10 motorcycles for field workers. Furthermore, 30 employees of the concerned services will benefit from 6 persons/month of training in project monitoring and evaluation, environmental management, soil conservation and restoration, waste management and energy saving.

4.5.8 **Support to the Ministry of Women’s Affairs:** the project will provide support for improvement of the working conditions, skills and mobility of workers in direct contact with the rural areas. It will finance the rehabilitation and equipment of five offices, the procurement of five motorcycles and five bicycles and training of 20 female trainers. The planned training will cover, *inter alia*, the following: (i) data processing and management of databases; (ii) functional literacy for girls; (iii) gender approach, and (iv) conduct and management of income-generating activities.

**B. Support to agricultural production**

4.5.9 This project component aims at the development of agricultural production through the production and dissemination of improved seeds, the extension of adequate production techniques, as well as outreach activities.
4.5.10 Production and dissemination of improved seeds: The project will make available to farmers quality food-producing seeds and seedlings (cassava, maize, bean, rice, groundnut and banana) that are adapted to the climatic conditions of the area and that meet the needs of farmers. For this purpose, an agreement will be concluded between INERA and the project for the supply of 395 tonnes of various basic seeds, 9.5 million linear metres (lm) of cassava cuttings and 2 million banana shoots. The basic seeds will be placed at the disposal of 2,600 agri-growers identified beforehand and trained by SENASEM. These quantities of seeds and seedlings allow for the sowing, after multiplication, of 40,000 ha of cassava and 18,000 ha of other food crops, representing about 5% of the existing sown areas of the project area. To encourage farmers to get more involved in seed multiplication, the project will supply to them, free of charge, basic seeds for multiplication. In return, the beneficiaries will undertake in writing to respect the technical norms and standards recommended by research at their expense (soil preparation, fertilization, quantity of seed, crop care) and to apply the recommendations of the supervisory technicians. The multiplied seeds must be certified by SENASEM before dissemination, for commercial production, to about 133,000 farmers. SENASEM will initiate, with the support of the project, a technical supervision programme for multiplication farms and for the control and certification of seeds before they are disseminated. The project will also finance the conduct in situ of 500 demonstrations in the different intervention districts. The demonstrations will cover, inter alia, the following themes: introduction of new varieties, balanced fertilization of soil, biological pest control and ploughing adapted to field conditions.

4.5.11 The project will ensure, through this component, the establishment of a real partnership between INERA and seed growers, on the one hand, and between seed growers and end-users of improved seeds on the other hand. Sensitization actions and open-door days will be organized for the benefit of the various parties so as to establish sustainable collaboration mechanisms (assessment of needs, preparation of orders, fixing of supply and payment conditions, etc.). This will help ensure the sustainability of this activity after completion of the project investment phase.

4.5.12 Training in seed multiplication and specific techniques will be provided to 150 field workers and 2,600 seed growers. It will be dispensed, by contract, by INERA as concerns seed multiplication, and by specialized consultants for the other themes. All in all, 26 persons/month of consultancy services are provided for this purpose.

4.5.13 Extension: The project will strengthen the dissemination of adequate production techniques by providing the NES with the necessary resources and technical assistance. In this context, provision has been made for the identification and dissemination of technical themes that address the concerns of farmers and national food security and natural resources conservation objectives. The themes to be disseminated will focus on: (i) improvement of farmers’ technical skills in food production; (ii) introduction of new high-yield varieties; (iii) integration of agriculture and stockfarming (use of animal traction, upgrading of sub-products of plant and animal origin, organic fertilization of soil); and (iv) mastery of product preservation and processing techniques by the introduction of rice threshing machines, corn shellers, oil presses, cereal mills, etc. In order to reach the highest number of farmers, the seed growers will broadcast video documentaries and rural radio programmes for the dissemination of the above-mentioned themes. These activities will be conducted on the ground by NES employees with the support of the agricultural Technical Assistant (TA) to be recruited by the project for a period of 36 months. These actions will have a significant impact on the increase of crop yields and, consequently, agricultural incomes. The increase in production is estimated by project year 5 at 946,000 tonnes for all species. Trends in future areas and production are shown in Annex 6. The recommended technical norms and standards, future yields and the expected gross profit margins per hectare of crop are shown in Tables 4 and 5 of Annex 2 of the working document.
4.5.14 Rural promotion: Groups and associations of producers and traders will be organized and training provided to address the needs expressed by all the stakeholders in the rural areas. These include: (i) structuring of groups and training them; (ii) implementation and management of income-generating activities (IGA); and (iii) setting up of village savings and credit funds. Furthermore, the project will encourage the development of production support activities focusing on the processing and storage of products and manufacture of farm tools. In total, nearly 300 associations including 50 of an artisanal nature will benefit from these different actions.

4.5.15 In the area of communication, the project will use the channels of information available at the level of local rural community radios. Information and sensitization campaigns will be carried out on the recommended technical themes, markets and prices, demonstration days, passability of roads, etc. Broadcasts on the rights and obligations of individuals to the community, prevention measures in the area of health (HIV/AIDS and malaria) and nutrition and on the dissemination of women’s rights, particularly as concerns land tenure issues, have also been planned. In this connection, the project will strengthen the capacities of the two pilot rural radio stations. The first has been put in place and financed by FAO at Banza-Gungu in Bas Congo while the second is being set up in the district of Idiofa in Bandundu. FAO which has long-standing experience in the setting up of rural radios will be solicited to help the project procure additional equipment for the rural radios and secure a consultant to prepare communication themes and train the staff involved. To achieve this end, provision has been made for 10 persons/month of consultancy services.

4.5.16 The project will finance the procurement of the necessary demonstration equipment and products for the conduct of all the activities (packaging products and equipment, small tilling equipment, plant-care and veterinary products, etc.) and place at the disposal of workers the means of transportation of seeds and inputs and travel: 2 vans, 20 motorcycles and 100 bicycles.

4.5.17 To help farmers procure the necessary imports and equipment, the project plans to support MFIs in the intervention area (RIFIDEC, COOPECI, COOPEC/C.E.A.C., etc) in the intensification and expansion of their capacity to finance inputs and income-generating activities. The support will be provided in the form of data processing equipment, office furniture and equipment, communication equipment and technical assistance for the establishment of data banks. The support will also cover the putting in place of an accounting system and training in financial management.

C. Basic socioeconomic infrastructure

4.5.18 This project component consists in constructing community rural infrastructure that can improve the living conditions of the populations and increase the value added of farms. It comprises two phases: rehabilitation of agricultural feeder roads, in particular rural roads and inland waterways; and building of community infrastructure including marketing infrastructure, drinking water supply and sanitation. The activities of these two phases will be carried out in an integrated manner in priority areas with a high agricultural production potential, in order to maximize their impact on the development of these areas.

4.5.19 Rehabilitation of agricultural feeder roads entails the rehabilitation of 1,000 km of local roads and 600 km of inland waterways linking the production areas to the marketing centres. Community infrastructure projects includes: (i) development of 160 drinking water supply sources; (ii) construction of 60 public latrines; and (iii) building of marketing infrastructure (20 markets and 35 warehouses).
4.5.20 Agricultural feeder road rehabilitation works will be carried out at low cost by using human resources and local materials with the LI technique. This technique is already being used successfully in projects funded by the World Bank, UNDP, EU and Belgian Cooperation. Road rehabilitation works will consist in rendering the road network passable, first by working on the black spots (destroyed crossing structures, major quagmires, etc.) and then by repairing seriously deteriorated sections of roads. The rehabilitation of agricultural inland waterways consists in preparing them for use by removing specific obstacles and by an appropriate marking with buoys. To better control LI sites, rehabilitation works will be subdivided into small lots of no more than 10 km per contract, while repair of crossing structures will be lumped together in lots which will take into account the technical facilities for carrying out the works as well as their location.

4.5.21 The project plans to put in place immediately after the rehabilitation works, mechanisms and structures to ensure the maintenance of rehabilitated agricultural roads, otherwise they would quickly become impassable. Under the UNDP/ILO project, the Directorate for Agricultural Feeder Roads (DAFR) had used a successful experience in road maintenance by beneficiaries grouped together within Local Road Maintenance Committees (LRMC). The Rehabilitation Support Project (RSP) also used this approach in Bandundu, together with means of self-financing maintenance.

4.5.22 Community infrastructure must meet certain eligibility criteria, notably: improve the living conditions of the populations; and respond to demands from grassroots communities with an operational organization for the functioning and maintenance of roads. They must be viable from a technical and environmental point of view; enlist as much local resources, both human and material, as possible for their construction; and/or create sustainable jobs. The financing mechanism, the procedures for execution of the infrastructure and the role of the different stakeholders will be defined in a procedures manual which will be prepared from the start of the project and which will be inspired by the manual prepared within the framework of the EMRRP “Agriculture” component funded by the World Bank.

4.5.23 The capacities of the communities will be built to enable them to identify by themselves their major problems, define suitable solutions in the form of sub-projects, plan their execution, play the role of owner as regards their implementation and assume full responsibility for the management and maintenance of infrastructure that will be built under the projects. In practice, each project intervention will be conditioned by the firm commitment of communities to participate, in kind or in cash, in the cost of the infrastructure to be built and take full charge of their subsequent management and maintenance. For each community project, the contribution of the initiators/beneficiaries (in cash, in kind or labour) must be 10% of the project cost at the least. Support for supervision of rural infrastructure to be constructed will be provided, on the ground, to grassroots communities by local implementation agencies and provincial technical services.

4.5.24 Considering the fragile nature of the soil and the heavy rainfall in the project area, provision is made for the preservation of soil along the roads to be rehabilitated and the protection by vetiver of infrastructure against erosion and runoff. Provision is also made for use of the participatory diagnosis approach, the COAIT “Community options and investment tools”, for the active mobilization of beneficiaries and their participation in the construction of the infrastructure provided in order to maximize the chances of their sustainability. This technique, which is initiated by the NGO known as Innovative Resources Management (IRM), is successfully used for the active mobilization of communities in the DRC for the implementation of natural resource conservation projects funded by USAID. Unlike the other approaches, it has the advantage of going beyond the identification of problems and classifying them. It indeed helps induce the grassroots communities to analyze development alternatives, chose appropriate solutions and seek financing for them. A presentation note on this approach is included in the working document.
D. Project management

4.5.25 The project will be managed by the ADB Projects Implementation Unit (PIU) established within the Central Coordination Bureau (BECO). Details on the establishment of the Bureau, its objectives and structure and the project portfolio that it manages are presented in the working document. The PIU was set up and financed under the Emergency Multisector Socioeconomic Infrastructure Rehabilitation Project (EMSIRP) to manage Bank interventions in the country. It comprises an engineer who is the Unit head, a contracts award specialist, an accountant and support staff. It will be strengthened with the necessary human and material resources for implementation of the project and assisted by two branch units which will be established on the ground, one in Bas-Congo and the other in Bandundu.

4.5.26 The project will finance the necessary capital and operating costs of implementation of the project and will provide the PIU additional financing to cover its operating costs. Eight 4-wheel drive commercial vehicles (pickups) will be procured for implementation of the project, that is two for the project head office and three for each branch. Procurement of the vehicle is justified by the size of the project area, the multiplicity and dispersal of interventions, the multiplicity of the districts involved (a total of eight), difficult access to sites, the exorbitant cost of hiring vehicles in the DRC and limitation of State budget resources for financing the foreign exchange necessary for the procurement of vehicles.

4.5.27 The project will support the BCECO by building its capacities and financing the management costs related to overall coordination activities, financial management and award of project contracts. It will also finance costs relating to the interventions of services of technical ministries at central, regional and provincial levels involved in implementation of the project; internal and external monitoring and evaluation costs of the project; auditing of accounts and procurements; monitoring of the environmental and social management plan; preparation of procedures manuals; establishment of an information and management system; and functioning of the Steering Committee and the Project Technical Monitoring Committee.

4.6 Production, Markets and Prices

4.6.1 Production. Available agricultural statistics show that at the national level, for most food products, consumption needs are not covered by the present production levels. In the project area, food production was estimated in year 2000 at 5.5 million tonnes compared with demand of about 8 million tonnes, representing a shortage of 2.5 million tonnes. The project area is the primary supplier of food products to the city of Kinshasa whose population is more than 7 million. The expected additional production at project completion is 946,000 tonnes, broken down as follows: 833,000 t of cassava; 37,000 t of maize, 7,000 t of paddy rice; 48,000 t of banana; 10,000 t of groundnuts, and 11,000 t of various products.

4.6.2 Markets. Different operators intervene in the agricultural products marketing chain; wholesalers, traders-sowers, pedlars, agro-industrialists, and retailers. The marketing of agricultural products is done at different types of markets: permanent rural markets, non-permanent rural markets, inter-provincial markets (Kinshasa and Bandundu), border markets and export markets. However, because of the problems outlined above, producers are forced to sell their products cheaply to intermediaries. Customs statistics show that the country continues to import appreciable quantities of some food products. In 2002, in particular, imports of rice and maize were 239,000 t and 64,000 t respectively, sold especially in Kinshasa.
4.6.3 On the basis of the production deficit noted in 2000, which was about 25%, and considering the inadequate financing of farms and marketing difficulties, trends in population growth, the projected additional demand at the end of the project, for the main food products cultivated in the project area, stands as follows: cassava: 600 t; plantain: 142,000 t; white rice: 209,000 t; and maize: 250,000 t. The additional production generated by the project will allow for coverage of all the needs of the project area in cassava, the staple of the area and on which the main improvement activities which will be carried out by the project focus, and a part of the needs in other products.

4.6.4 Prices: Before the liberalization of agricultural prices in 1982, they were regulated and controlled by the Government through minima price mechanisms for food crops and cattle, fixed prices for cotton, minima prices pegged to world prices for coffee, tea, coca, etc. The effect of liberalization has been a marked increase in producer prices which has however been offset by a concomitant rise in the prices of staples. However, there is a wide margin between these prices and consumer prices because of the remuneration of the various intermediaries on the market. The average financial prices for 2003 were CDF 140/kg for cassava, CDF 485/kg for beans, CDF 30/kg for groundnuts, and CDF 80/kg for sweet potatoes.

4.7 Environmental Impact

4.7.1 The project has been classified in environmental category II, meaning that the identified potential negative impacts could be reduced by the systematic application of mitigating and optimization measures and adequate environmental monitoring. The summary of the Environmental and Social Management Plan (ESMP) is in Annex 6 of the report.

4.7.2 Positive impacts: Physical intervention in the environment will be negligible as the works will focus on the rehabilitation of agricultural feeder roads on existing layouts, equipping and renovation of other infrastructure in accordance with an approach that seeks to adjust the scope of the works to the level of the needs and the capacities of the grassroots communities. This could also lead to better environmental performance of long-term rural development works in the country.

4.7.3 The production and dissemination of selected seeds help reduce the proliferation of undesirable species while contributing to an increase in yields and a rise in productivity over a given area, hence, easing crop pressure on the marginal areas and on traditional fallows. The rehabilitated rural infrastructure will have positive impacts on the quality of life of the project beneficiaries. They will offer the local populations a multitude of benefits, from more easy market access to health and education, credit advice and dissemination, micro-project stimulation and to a broadening of employment prospects. The supply of drinking water to the population will increase significantly by ensuring better hygiene and sanitation conditions.

4.7.4 Negative impacts: as the creation of new roads has not been envisaged, excavation works, and hence the need to open up borrow pits, will be relatively small. However, the repair of crossing structures and dykes may hinder the natural drainage of water either because of reduced flow or increased surface-water run-off. Depending on the case, this could lead to a prolonged flooding of bottomlands situated above the structures or the erosion of soils with effects of gullying of slopes and washing down solid materials towards the areas below. Relations between the native and migrant populations will be intensified owing to the improvement of road traffic, particularly at important crossroads, supply spots and other stopping places. The resulting crowding would favour the transmission of contagious diseases, in particular sexually transmitted diseases (STD/AIDS).
4.7.5 Potential impacts on the biophysical and human environment of the rehabilitation of markets and warehouses are, among others, the production of solid wastes and liquid effluents, and various nuisances for residents bordering these facilities because of noise, dust and smoke. Potential impacts during the operation phase will be the risk of contamination of food products by pesticide residue, waste water and other organic effluents from slaughtering activities and processing of fish in the markets.

4.7.6 Mitigating measures: special attention will be paid to the quality of drainage of runoff water and in particular to the management of the drainage of water in the immediate surroundings of roads, the disruption of natural ecosystems, vulnerability of soils, operation and rehabilitation of quarries and borrow pits in the two provinces. It will be necessary to integrate vegetation actions (planting of grass, reforestation, etc) into the techniques of rehabilitation of rural roads in order to raise embankments and other structures considering the sandy nature of the soil and the heavy rainfall, especially in Bandundu Province.

4.7.7 To mitigate the risks of deterioration of the environment resulting from the construction of infrastructure, the tender specifications of successful bidders of construction works will include the usual applicable contractual clauses (evacuation of runoff water, construction of trenches and weirs, prior hydrologic diagnosis to ensure the correct size of structures, stability of dykes, limitation of nuisances due to dust during work, etc.). The risk of transmission of contagious diseases will be mitigated by the organization of regular sensitization campaigns at the work sites.

4.7.8 Concerning marketing infrastructure, the ESMP recommends, in addition to the usual instructions regarding the reduction of the wastes and pollutants, the limitation of health and safety risks for workers and residents bordering work sites as well as specific measures such as the strict application of rules of hygiene at markets and drinking water supply points, the rigorous management of polluting or infectious substances and food products, retrieval and recycling of slaughterhouse waste, regular maintenance of facilities for purification and draining of effluents, etc. The supply of drinking water will be accompanied by a phase for sensitization to the use of latrines.

4.7.9 Environmental Monitoring: The environmental and social management will be implemented by the PIU with the active support of the various central and decentralized structures of the environment services as well as the local partners. The ESMP will establish the indicators of sound application of the mitigating measures envisaged at each stage of implementation of the project activities. Provision is made for the preparation of a manual of procedures for ascertaining that the recommendations of the ESMP will be effectively taken into account during the different phases of rehabilitation and use of the rural infrastructure. Moreover, the project plans to strengthen capacities in environmental monitoring of the project team as well as the structures involved in project activities.

4.8 Project Costs

4.8.1 The total project cost, net of duties and taxes, has been estimated at CDF 15,384.16 million, or UA 28.01 million. This cost is broken down into CDF 8,311.30 million in foreign exchange, or UA 15.13 million and CDF 7,073.31 million in local currency, or UA 12.88 million. Overall ADF assistance amounts to UA 25 million (CDF 13,730.03 million, representing 89.20% of total project cost. It will cover 100% of foreign currency costs, and ADF financing in local currency costs represents 35.2% of total project cost. The ADF loan amounts to UA 18.00 million, and the ADF grant stands at UA 7.00 million. The Government’s contribution will be UA 2.86 million or CDF 1,574.80 million, representing 10.20% of total project cost and corresponding to the salaries of the national staff to be put at the disposal of the project, the cost of rental of project
offices and to the financing of a part of the costs of works and operating costs. The contribution of beneficiaries is UA 0.15 million or CDF 79.77 million. Tables 4.1 and 4.2 below give a summary of project costs by component and by category of expenditure.

Table 4.1: Summary of Estimated Project Costs by Component

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CDF Million</th>
<th>UA Million</th>
<th>% F.E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.C.</td>
<td>LC</td>
<td>Total</td>
</tr>
<tr>
<td>A. Institutional support and capacity building</td>
<td>1767.97</td>
<td>704.85</td>
<td>2472.82</td>
</tr>
<tr>
<td>B. Rehabilitation of rural infrastructure</td>
<td>3994.20</td>
<td>3627.44</td>
<td>7621.64</td>
</tr>
<tr>
<td>C. Support to agricultural production</td>
<td>1450.15</td>
<td>493.59</td>
<td>1943.74</td>
</tr>
<tr>
<td>D. Project management</td>
<td>291.62</td>
<td>863.08</td>
<td>1154.70</td>
</tr>
<tr>
<td>Basic costs</td>
<td>7503.94</td>
<td>5688.96</td>
<td>13192.90</td>
</tr>
<tr>
<td>Physical contingencies</td>
<td>523.14</td>
<td>403.05</td>
<td>926.19</td>
</tr>
<tr>
<td>Price contingency</td>
<td>284.23</td>
<td>981.29</td>
<td>1265.52</td>
</tr>
<tr>
<td>Total project cost</td>
<td>8311.30</td>
<td>7073.31</td>
<td>15384.61</td>
</tr>
</tbody>
</table>

4.8.2 Costs have been estimated on the basis of February 2003 prices in the DRC. A physical contingencies rate of 10% has been applied to basic costs of works, equipment, training and overheads. A 6% price contingency on costs in local currency and 1.5% on costs in foreign exchange has been applied to all the components. The total amount corresponding to physical contingencies (CF 926.19 million) and the price contingency (CDF 1,265.52 million) stands at UA3.9 million or 14.2% of the total project cost.

Sources of Finance and Expenditure Schedule

4.8.3 The project will be jointly financed by the ADF and the Government of the DRC as shown in Tables 4.3 and 4.4 below:

Table 4.3: Sources of Finance

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>CDF million</th>
<th>UA million</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign Exchange</td>
<td>Local Currency</td>
<td>Total Cost</td>
</tr>
<tr>
<td>ADF Loan</td>
<td>8311.30</td>
<td>5418.73</td>
<td>13730.03</td>
</tr>
<tr>
<td>Gov’t/Beneficiaries</td>
<td>0.00</td>
<td>1654.58</td>
<td>1654.58</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8311.30</td>
<td>7073.31</td>
<td>15384.61</td>
</tr>
</tbody>
</table>
### Table 4.3: Grant - Government Sources of Finance

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>CDF million</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign Exchange</td>
<td>Local Currency</td>
<td>Total</td>
<td>Foreign Exchange</td>
<td>Local Currency</td>
<td>Total</td>
</tr>
<tr>
<td>ADF Loan</td>
<td>3197.49</td>
<td>646.34</td>
<td>3843.83</td>
<td>5.83</td>
<td>1.17</td>
<td>7.00</td>
</tr>
<tr>
<td>Gov’t/Beneficiaries</td>
<td>0.00</td>
<td>565.13</td>
<td>565.13</td>
<td>0.00</td>
<td>1.02</td>
<td>1.02</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3197.49</td>
<td>1211.47</td>
<td>4408.96</td>
<td>5.83</td>
<td>2.19</td>
<td>8.02</td>
</tr>
</tbody>
</table>

4.8.4 The ADF grant will be used to finance the Institutional Support and Capacity Building Component, technical assistance and short-term consultancy services, studies and supervision of works, as well as drinking water sources development works. The grant matrix provides a detailed presentation of the activities that will be targeted.

### Table 4.4: Expenditure by Category and by Source of Finance (UA MILLION)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ADF</th>
<th>Gov’t/Beneficiaries</th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.E.</td>
<td>L.C.</td>
<td>%</td>
<td>F.E.</td>
<td>L.C.</td>
<td>%</td>
</tr>
<tr>
<td>A. Works</td>
<td>6.72</td>
<td>5.69</td>
<td>87.0</td>
<td>0.00</td>
<td>1.85</td>
<td>13.0</td>
</tr>
<tr>
<td>B. Goods</td>
<td>4.02</td>
<td>0.00</td>
<td>100.0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>C. Services</td>
<td>3.25</td>
<td>1.53</td>
<td>100.0</td>
<td>0.00</td>
<td>0.67</td>
<td>56.0</td>
</tr>
<tr>
<td>D. Staff costs</td>
<td>0.00</td>
<td>0.52</td>
<td>44.0</td>
<td>0.00</td>
<td>0.67</td>
<td>56.0</td>
</tr>
<tr>
<td>E. Operating costs</td>
<td>1.14</td>
<td>2.12</td>
<td>87.0</td>
<td>0.00</td>
<td>0.49</td>
<td>13.0</td>
</tr>
<tr>
<td>Total project cost</td>
<td>15.13</td>
<td>9.87</td>
<td>89.2</td>
<td>0.00</td>
<td>3.01</td>
<td>10.8</td>
</tr>
</tbody>
</table>

4.8.5 The ADF loan and grant will cover 89.20% of the total project cost or UA25 million, including UA15.13 million in foreign exchange and UA9.87 million in local costs. They will cover 100% of the foreign exchange costs. Expenditures under the project will be carried out in accordance with the expenditure schedule shown in the tables above (including the provisions for physical and price contingencies):

### Table 4.5: Expenditure Schedule by Component (UA million)

<table>
<thead>
<tr>
<th>Component</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Institutional support</td>
<td>0.86</td>
<td>2.41</td>
<td>0.97</td>
<td>0.16</td>
<td>0.10</td>
<td>4.50</td>
<td>16.06</td>
</tr>
<tr>
<td>B. Rehabilitation of rural infr:</td>
<td>0.27</td>
<td>3.10</td>
<td>5.54</td>
<td>4.25</td>
<td>0.71</td>
<td>13.88</td>
<td>49.55</td>
</tr>
<tr>
<td>C. Support to Agr. production</td>
<td>0.19</td>
<td>1.29</td>
<td>0.92</td>
<td>0.75</td>
<td>0.39</td>
<td>3.54</td>
<td>12.63</td>
</tr>
<tr>
<td>D. Project management</td>
<td>0.55</td>
<td>0.42</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>2.10</td>
<td>7.49</td>
</tr>
<tr>
<td>Physical contingencies</td>
<td>0.08</td>
<td>0.47</td>
<td>0.61</td>
<td>0.43</td>
<td>0.09</td>
<td>1.69</td>
<td>6.03</td>
</tr>
<tr>
<td>Price contingency</td>
<td>0.03</td>
<td>0.36</td>
<td>0.78</td>
<td>0.81</td>
<td>0.32</td>
<td>2.30</td>
<td>8.21</td>
</tr>
<tr>
<td>Total project cost</td>
<td>1.98</td>
<td>8.05</td>
<td>9.20</td>
<td>6.78</td>
<td>2.00</td>
<td>28.01</td>
<td>100.00</td>
</tr>
</tbody>
</table>

### Table 4.6: Expenditure Schedule by Source of Finance (UA million)

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADF</td>
<td>1.78</td>
<td>7.44</td>
<td>8.16</td>
<td>5.92</td>
<td>1.72</td>
<td>25.00</td>
<td>89.2</td>
</tr>
<tr>
<td>Govt/Beneficiaries</td>
<td>0.20</td>
<td>0.62</td>
<td>1.04</td>
<td>0.86</td>
<td>0.28</td>
<td>3.01</td>
<td>10.8</td>
</tr>
<tr>
<td>Total cost</td>
<td>1.98</td>
<td>8.06</td>
<td>9.20</td>
<td>6.78</td>
<td>2.00</td>
<td>28.01</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5. PROJECT IMPLEMENTATION

5.1 Implementation Agency

5.1.1 The project will be implemented by the ADB Projects Implementation Unit (PIU) within the BCECO. This Unit which is based in Kinshasa will be strengthened, in order to take account of the specific needs of the project, by an operational team and will be assisted by two provincial branch units which will be responsible for implementation of project activities on the ground. A branch unit will be created in Mbanza Ngungu in Bas-Congo Province and the other in Kikwit in Bandundu Province.

5.1.2 The staff of the operational team will comprise a rural development project management specialist who will be project head, a rural engineer who will be responsible for the Rural Infrastructure Rehabilitation component, an agronomist who will be responsible for the Agricultural Production Support component, an administrator in charge of institutional support, an agricultural economist in charge of monitoring and evaluation, an environmentalist responsible for environmental and social auditing, a bookkeeper, a computer technician and support staff (a secretary, two drivers and a messenger). This staff will be made available to the project by the Government, with the exception of the bookkeeper and computer technician who will be recruited on the basis of a short list.

5.1.3 At the provincial level, the staff of each of the branch units in Bas-Congo and Bandundu will also be put at the disposal of the project by the ministries concerned. It will comprise an agronomist or rural engineer who will be head of the branch unit, an agronomist responsible for extension and rural development, a rural engineer responsible for rural infrastructure, a bookkeeper and support staff (a secretary, two drivers and two watchmen). The head of the Bandundu provincial branch unit will be a rural or civil engineer, considering the degree of rural infrastructure to be constructed. The head of the Bas-Congo provincial branch unit will be an agronomist, considering the importance of the seed multiplication and dissemination activities to be carried out in this province. This staff will be backed by the cadres and technicians of the provincial technical services of the ministries in charge of agriculture, rural development, environment and women’s affairs.

5.1.4 The PIU, through the project operational team and its provincial branch units, will be responsible for the management of the day-to-day activities related to the project implementation in particular: preparation of bidding documents (BD), terms of reference (ToR) and requests for proposals for consultants; coordination and supervision of activities of the various stakeholders involved in the project implementation; control and reception of goods, services and works procured under the project; preparation of requests for payment; consolidation and presentation of project accounts; preparation of programmes of activities; quarterly status reports and yearly programme implementation reports; internal monitoring and evaluation of activities carried out; information and consultation with the services of the ministries concerned, the other development partners and civil society on the conduct of project activities, and conduct of project impact studies.

5.1.5 The BCECO will coordinate the preparation and fulfilment of the loan effectiveness conditions at the level of the different national institutions involved. It will assist the PIU in the establishment of the project operational team and its provincial branch units, preparation of the first procurement documents enabling the launch of the project activities and preparation of the procedures manuals. It will also be responsible for quality control in the operational and financial management of the project; award of project contracts; supervision of project activities on the
ground; coordination of the preparation of project annual budgets and action plans; and preparation of periodical reports and their transmission to the Bank, the sector ministries concerned, the Steering Committee and to the Project Technical Monitoring Committee.

5.2 Institutional Arrangements

5.2.1 Implementation of the project will be carried out in close collaboration with the technical services of the Ministries of Agriculture, Rural Development, Scientific Research, Environment and Women’s Affairs. To this end, the project provides for a number of arrangements which help ensure an effective involvement of the said services in its implementation. These arrangements include (i) the establishment of a Project Steering Committee (PSC) and a Technical Monitoring Committee (TMC) which will be made up of the representative of the above-mentioned ministries; and (ii) the effective involvement, as stakeholders, of the technical services of the various ministries involved at the level of provinces, districts and “territories” (territories) in the implementation of the project activities.

5.2.2 The Steering Committee will comprise Secretaries General (or their representatives) of the Ministry of Planning and of the sector ministries mentioned above, the Governors of Bas Congo and Bandundu, and representatives of beneficiaries, civil society and donors. This Committee, which will be chaired by the representative of the Ministry of Planning, will be the administrative and monitoring organ of the project. It shall ensure strict compliance with the loan and grant agreements by following strategic and budgetary guidelines; promoting relations with the various partners; and examining budget execution and progress reports.

5.2.3 The Technical Monitoring Committee will be responsible for the external monitoring and evaluation of the project. It will comprise officials of the Directorate for Agricultural Feeder Roads, Directorate for Agricultural Engineering, Directorate for Agricultural Economy, National Rural Water Supply Service, National Cooperatives and Farmers’ Organization, National Extension Service, National Seeds Service, National Institute for Studies and Agricultural Research, Directorate for Environment and Directorate for Studies and Planning of the Ministry of Women’s Affairs.

5.2.4 The production of basic seeds and seed plants (395 tonnes of food seeds, 9,300 kl of cassava cuttings and 2 million banana shoots) will be carried out, by contract, by INERA. A collaboration agreement, covering the species, varieties and quantities to be made available to the project per season, will be concluded from the first year in order to enable the project to receive supplies from the second year. This will also comprise a programme for the supervision of seed multiplication farms and for the training of workers responsible for this component and seed growers. The basic seeds and seedlings of INERA will be multiplied by private growers identified before hand and trained by workers of SENASEM and grassroots supervisors. The latter will assist the growers in the marketing of improved seeds and seedlings to farmers who are beneficiaries of the project. They will also ensure the supervision and technical training of farmers in order to improve agricultural production systems and techniques.

5.2.5 The micro-finance institutions which will benefit from the support of the project will be chosen from among those working in the project area, on the basis of a short list. The request for proposal will define the criteria for selection of these institutions. The support to be given to the selected institutions will be conditioned by the commitment of the latter to participate in the organization of beneficiaries for the mobilization of savings and in the provision of financing to the latter for the procurement of seeds and agricultural inputs.
5.2.6 Considering the great number of contracts to be managed for the rehabilitation of agricultural feeder roads and execution of community projects, implementation of the rural infrastructure component will be subdivided into two major lots, one for Bandundu Province and the other for Bas-Congo Province. Each lot will comprise two phases: (i) the phase made up of sensitization, structuring, organization, training of bodies responsible for civil works and establishment of mechanisms for the sustainable maintenance and management of infrastructure; and (ii) the phase made up of implementation studies, management of contracts and control of rural infrastructure works. The activities of both phases will be carried out in an integrated and coherent manner so as to ensure the sustainability of the achievements.

5.2.7 The management of each of the two phases will be entrusted, after competitive bidding and in accordance with the Bank’s Rules of Procedure, to a Local Executing Agency (LEA) with an established technical and financial management capacity which will act as Delegated Contracting Authority (NGO, GTZ, CTB, United Nations agency). A procedures manual will be prepared from the start of the project to define the role of the various stakeholders in the implementation of the rural infrastructure component (BCECO, technical services, Local Executing Agency, NGO, beneficiaries and others), relations between the various stakeholders, procedure for implementation of the agricultural feeder roads rehabilitation phase and community infrastructure phase, mechanisms for financing the said infrastructure, and procedures for financial and accounting management and award of contracts of these two phases. The TOR of the Local Executing Agencies are presented in the annexes of the working document.

5.2.8 The Directorate for Agricultural Feeder Roads and its provincial services will participate in: the definition of the priority road networks to be rehabilitated, the setting-up and training of Local Road and Inland Waterways Maintenance Committee, training of team leaders and site leaders in the LI techniques, supervision of works and establishment of maintenance mechanisms. The National Rural Water Supply Service and its provincial stations will participate in the design and development of drinking water supply sources, training of the management committees of these sources and putting in place of mechanisms for managing and maintaining them. The Directorates for Rural Engineering, Community Development and Rural Economy and their provincial services will be involved in the execution of community projects by participating in the supervision of works and in the establishment of mechanisms for maintenance and sustaining the infrastructures to be constructed.

5.3 Implementation and Supervision Schedules

The project will be implemented over a period of five years. A launching workshop will be organized from the start-up of the project. The PIU will, with the assistance of the BCECO, prepare the procedures manuals, prepare and launch the various competitive biddings and implement the various project activities in accordance with the planned schedule and the Rules of Procedure of the Bank. Bank supervision missions will be conducted twice a year. The provisional project implementation schedule is shown in the following table (Table 5.1):

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
<th>Start</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by the Board of Directors</td>
<td>ADF</td>
<td>May 2004</td>
<td>-</td>
</tr>
<tr>
<td>Signature of loan agreements</td>
<td>GVT/ ADF</td>
<td>Sept. 2004</td>
<td>-</td>
</tr>
<tr>
<td>Effectiveness of loan and grant</td>
<td>ADF/BCECO</td>
<td>January 2005</td>
<td>-</td>
</tr>
<tr>
<td>Staff mobilization</td>
<td>GVT/BCECO</td>
<td>March 2005</td>
<td>1 month</td>
</tr>
<tr>
<td>Preparation of manuals of procedure</td>
<td>BCECO/PIU</td>
<td>January 2005</td>
<td>4 months</td>
</tr>
<tr>
<td>BD, TA, NGO, vehicles and office equipment</td>
<td>BCECO/ PIU</td>
<td>March 2005</td>
<td>5 months</td>
</tr>
<tr>
<td>Putting in place of technical assistance and NGO</td>
<td>BCECO/ PIU</td>
<td>March 2005</td>
<td>5 months</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>GVT/ BCECO/ PIU P</td>
<td>April 2005</td>
<td>5 years</td>
</tr>
</tbody>
</table>
5.4 Procurement Arrangements

5.4.1 Arrangements relating to the procurement of goods and services are summarized in Table 5.2 below. All procurement of goods, works and services financed by the ADF resources will be in accordance with the Bank’s Rules of Procedure for Procurement of Goods and Works or, as appropriate, Rules of Procedure for the Use of Consultants, using the recommended standard bidding documents.

Table 5.2 : Arrangements relating to Procurement of Goods and Services (UA million)

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>ICB</th>
<th>NCB</th>
<th>SL</th>
<th>others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. CIVIL WORKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Repair of buildings</td>
<td>-</td>
<td>1.10 (1.10)</td>
<td>-</td>
<td>-</td>
<td>1.10 (1.10)</td>
</tr>
<tr>
<td>2. Rehabilitation of agricultural feeder roads</td>
<td>-</td>
<td>7.70 (6.48)</td>
<td>-</td>
<td>-</td>
<td>7.70 (6.48)</td>
</tr>
<tr>
<td>3. Rehabilitation of agricultural inland waterways</td>
<td>-</td>
<td>2.50 (2.01)</td>
<td>-</td>
<td>-</td>
<td>2.50 (2.01)</td>
</tr>
<tr>
<td>4. Development of water sources and sanitation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.68 (0.65)</td>
<td>0.68 (0.65)</td>
</tr>
<tr>
<td>5. Community marketing infrastructure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.03 (1.92)</td>
<td>2.03 (1.92)</td>
</tr>
<tr>
<td>B. GOODS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Specific equipment</td>
<td>1.21 (1.21)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.21 (1.21)</td>
</tr>
<tr>
<td>2. Seeds/a</td>
<td>-</td>
<td>0.07 (0.07)</td>
<td>-</td>
<td>0.97 (0.97)</td>
<td>0.97 (0.97)</td>
</tr>
<tr>
<td>3. Agricultural inputs and tools</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.35 (0.35)</td>
<td>0.35 (0.35)</td>
</tr>
<tr>
<td>6. Data processing equipment</td>
<td>0.70 (0.70)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.70 (0.70)</td>
</tr>
<tr>
<td>7. office furniture and equipment</td>
<td>0.71 (0.71)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.71 (0.71)</td>
</tr>
<tr>
<td>8. Vehicles</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.35 (0.35)</td>
<td>0.35 (0.35)</td>
</tr>
<tr>
<td>C. SERVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Training</td>
<td>-</td>
<td>-</td>
<td>1.20 (1.20)</td>
<td>-</td>
<td>1.20 (1.20)</td>
</tr>
<tr>
<td>2. sensitization and organization of beneficiaries (NGO)</td>
<td>-</td>
<td>0.85 (0.85)</td>
<td>-</td>
<td>-</td>
<td>0.85 (0.85)</td>
</tr>
<tr>
<td>3. Short-term consultancy services</td>
<td>-</td>
<td>0.83 (0.83)</td>
<td>-</td>
<td>-</td>
<td>0.83 (0.83)</td>
</tr>
<tr>
<td>4. Technical assistance</td>
<td>-</td>
<td>0.51 (0.51)</td>
<td>-</td>
<td>-</td>
<td>0.51 (0.51)</td>
</tr>
<tr>
<td>5. Studies and Supervision, control of contracts (LEA)</td>
<td>-</td>
<td>1.18 (1.18)</td>
<td>-</td>
<td>-</td>
<td>1.18 (1.18)</td>
</tr>
<tr>
<td>6. auditing</td>
<td>-</td>
<td>0.23 (0.23)</td>
<td>-</td>
<td>-</td>
<td>0.23 (0.23)</td>
</tr>
<tr>
<td>D. STAFF SALARIES</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.19 (0.52)</td>
<td>1.19 (0.52)</td>
</tr>
<tr>
<td>E. OPERATING COSTS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.76 (3.26)</td>
<td>3.76 (3.26)</td>
</tr>
<tr>
<td>Total</td>
<td>2.97 (2.97)</td>
<td>11.36 (9.65)</td>
<td>4.79 (4.79)</td>
<td>8.90 (7.59)</td>
<td>28.01 (25.00)</td>
</tr>
</tbody>
</table>

5.4.2 Civil works: Contracts for building repair works of a total amount of UA 1.10 million will be awarded under the National Competitive Bidding (NCB) procedures. Such contracts will be grouped into several lots not exceeding UA 150,000 each and spread over several project sites. Procurement of road rehabilitation works of an overall amount of UA 7.70 million and inland waterways rehabilitation works of a total amount of UA 2.50 million will be awarded under the National Competitive Bidding (NCB) procedures. These works will be executed using the LI technique. They will be divided into several lots of 10 km each and will be scattered over several sites of the project intervention area. The amount for each lot will not exceed UA 100,000. Consequently, these works contracts will not attract international contractors.
5.4.3 Drinking water supply sources and community marketing infrastructure development works with respective amounts of UA 680,000 and UA 2.03 million will be carried out under Bank procedures for the award of contracts relating to sub-projects with community participation. These works will be spread over several sites and divided into several lots not exceeding UA 50,000. A manual of community contracts procedures will be prepared from the beginning of the project in accordance with the Bank’s guidelines in this area.

5.4.4 Goods: procurement of specific equipment amounting to UA 1.2 million, vehicles amounting to UA 0.71 million, office equipment amounting to UA 0.70, and data processing equipment of an amount of UA 0.35 million will be carried out under International Competitive Bidding (ICB) procedures. Agricultural tools and inputs worth UA 0.07 million will be procured through NCB procedures. Procurement of basic seeds for an amount of UA 0.97 million will be by direct negotiation with the National Agricultural Research Institute.

5.4.5 Services: procurement of training services amounting to UA 1.20 million, services of local executing agencies for studies, management and supervision of LI works contracts and community sub-projects amounting to UA 1.18 million, services of NGOs for sensitization, supervision, mobilization and organization of beneficiaries amounting to UA 0.85 million; short-term consultancy services amounting to UA 0.62 million, technical assistance services amounting to UA 0.51 million; and services of auditing firms for the audit of accounts and procurements amounting to UA 0.23 million will be carried out on the basis of a short list. The preferred selection procedure is the one based on the lowest price for similar services.

5.4.6 Operating costs: procurement of goods needed for the operation of the project (office supplies, fuel, small equipment, etc.) broken into several contracts will be carried out by local shopping. The maximum of each contract will not exceed UA 20,000. The operating cost also includes mission allowances and performance allowances for seconded staff.

5.4.7 Given the considerable number of contracts to be awarded for the rehabilitation of roads and waterways through the LI technique and construction of community infrastructure, it is envisaged to procure the services of two local executing agencies for the preparation of bidding documents (BD), the award of contracts, contractualization, monitoring and control of the performance of contracts which will be concluded with local operators carrying out works. Procurements under these contracts will be audited annually. Community-based infrastructure contracts will also be reviewed a posteriori by Bank supervision missions. The PIU, which has an International Expert who is a procurements specialist, will be assisted by the BCECO contracts award unit in the management of the various procurements provided for under the project.

5.4.8 Review procedures: The following documents will be submitted for review and approval by the Bank before publication: (i) specific procurement notice; (ii) bidding documents and requests for proposal from consultants; (iii) bid evaluation reports and reports on evaluation of consultants’ proposals, including recommendations for contract award; (iv) draft contracts, where these have been amended from the drafts included in the bidding documents.

5.4.9 General Procurement Notice: The text of a General Procurement Notice will be agreed with the authorities of the DRC during loan agreement negotiations and will be issued for publication in Development Business upon approval by the Board of Directors of the loan Proposal.
5.5 Disbursement Arrangements

5.5.1 The management of the financial resources of the loan and grant will be done in accordance with the Rules of Procedure of the African Development Fund (ADF). The project operating funds will be deposited in two special accounts, one for the loan and the other for the grant. An initial deposit in the accounts will be made on the basis of a four-month activity expenditure programme prepared by the executing agency and approved beforehand by the Bank. They will be replenished periodically upon presentation of a request and expenditure supporting documents of at least 50% of the previous transfer, in accordance with Bank procedures. Disbursements for award of goods, services and works contracts will be made by direct payment to the suppliers, service providers and contractors concerned.

5.5.2 The special accounts will be managed by the executing agency and audited in the same manner as the project activities. Opening of these accounts by the borrower will be a prerequisite for the first disbursement. Moreover, the executing agency will be required to open a separate account for counterpart funds for running the project. The financial and accounting management of the project will be carried out using the TEMPRO software put in place by BCECO. The project budget will be managed and monitored by province and by expenditure category using the MS Project software. Budget estimates and requests for working capital will be backed by reports provided by this software.

5.6 Monitoring and Evaluation

5.6.1 Internal monitoring and evaluation of project activities which is carried out on a permanent basis, will be the responsibility of the team formed for this purpose at the level of the PIU and composed of the monitoring and evaluation officer and the social and environmental audit officer, under the coordination of the project head and with technical support of the technical assistance, the BCECO and ministries involved in the Project activities.

5.6.2 To this end, activities and outcomes in relation to the project matrix will be monitored. Special emphasis will be placed on the monitoring of environmental impacts and the measures taken to mitigate them as well as socio-economic impacts on the targeted groups. In this regard, the project will conduct, from its commencement, a baseline socio-economic survey to determine the reference socio-economic situation of beneficiaries and establish the verifiable performance indicators. Project effect and impacts on the target groups will be permanently monitored by constituting cross-section samples of beneficiaries in each of the provinces involved. Two other surveys will be carried out in the third and last years of the project to assess the performance and impact of the project on the basis of the various indicators chosen.

5.6.3 Monitoring and evaluation will also cover the rate of realization of the infrastructure and development works; effective involvement of NGOs and grassroots communities; and use of the human, financial and material resources of the project. A detailed plan of the various works projected and training will be drawn up for the entire project period, and will be evaluated for the purpose of preparing quarterly implementation reports to be submitted to the Bank to which it will be appended.

5.6.4 An information and management system will be put in place to manage monitoring and evaluation data. The system will comprise: (i) a database which will contain data on the project logical framework, detailed activities of the different project components, detailed activities, data on beneficiaries, procurement of goods and services, socio-economic data, environmental situation, etc.; (ii) a geographical information system (GIS) for visualizing and monitoring the background of the various project interventions and socio-economic characteristics of the project sites and
beneficiaries; and (iii) a performance chart for monitoring the key project performance indicators for better planning of project activities. The project will have a network, an Internet connection and a website enabling access in real time to the various data. Quarterly project progress reports containing relevant information generated by the information system, will be prepared by the monitoring and evaluation team and forwarded regularly to the various stakeholders concerned (Bank, Steering Committee, Technical Project Monitoring Committee, ministries involved, etc.).

5.6.5 **External Monitoring and Evaluation**: it will be ensured by the Technical Project Monitoring Committee, comprising representatives of the Ministry of Agriculture, Ministry of Rural Development, Ministry of Environment, Ministry of Scientific Research, Ministry of Women’s Affairs and Family Welfare, the BCECO and the Governors of Bas-Congo and Bandundu. The Committee will ensure coordination between the intervention of the Ministry of Agriculture and the Ministry of Rural Development, on the one hand, and agreement of national objectives and those of the project, on the other hand, in order to propose, when necessary, to the Steering Committee, necessary adjustments. In addition to Bank supervision missions envisaged twice a year, it is also planned, during the third year of implementation, a mid-term evaluation of the project outcomes in relation to the set objectives.

5.6.6 **Reporting**: The executing agency of the project will submit the following reports to the Bank: (i) quarterly progress reports; (ii) annual progress reports; (iii) annual financial reports; (iv) mid-term evaluation report; and (v) project completion report, which will be presented to the Bank at the end of the project. The PIU will submit a half-yearly report on environmental monitoring and other cross-cutting issues.

5.7 **Financial Reporting and Auditing**

The project accounts will be kept by the executing agency of the project in accordance with generally accepted accounting principles. The accounts will be kept using the TEMPRO software procured by the BCECO, which will also be set up at the provincial branch units. It will also keep complete accounting records showing expenditure by component, by expenditure category and by source of finance. The project accounts will be audited annually by an independent external auditing firm recruited on the basis a short list. The auditing of the accounts will be financed from ADF resources. The audit reports will be submitted to the ADF not later than six months following the closing of each financial year, failing which disbursement of the grant resources will be suspended.

5.8 **Aid Coordination**

5.8.1 The coordination of aid is ensured by the Ministry of Planning and Regional Development which plays a central role in the formulation and implementation of economic and financial cooperation strategies with the various development partners and in the programming of public investments. In this capacity, it already chairs the EMRRP Steering Committee. Considering its duties in aid and investments coordination in the entire country, this ministry will be involved in the project implementation process and kept informed of its interventions. Aid coordination under the EMRRP is carried out through regular meetings of the participating donors.

5.8.2 During project identification, preparation and appraisal, the Bank held working sessions with donors represented in Kinshasa intervening in the agricultural sector, in particular: the World Bank, UNDP, FAO, EU, USAID, French Cooperation, Belgian Cooperation, GTZ and Canadian Cooperation. These meetings were an occasion for outlining the project objectives and, in return, obtaining useful information on the interventions of the donors notably in the provinces of Bas-Congo and Bandundu involved in the project, with a view to avoiding duplication, ensuring
optional utilization of the allocated resources and achieving synergy between the various interventions. Such coordination will be pursed during the project implementation period.

6 PROJECT SUSTAINABILITY AND RISKS

6.1 Recurrent Costs

6.1.1 The recurrent costs of the implementation of the project related to staff salaries, operating costs, and cost of maintenance of infrastructure, equipment and vehicles. The project is designed such that, it can be implemented by private operators, involve the provincial technical services of the various ministries concerned and the beneficiaries, so as to cut down the recurrent costs to the minimum. The PIU staff is reduced to the barest minimum to ensure the coordination of project activities. The salaries of staff of the technical services involved in project implementation are borne by the Government under the ordinary State budget and do not therefore constitute additional costs for the Government. The operating costs of the project are estimated at UA 3.76 million for the entire project period, representing 13.4% of the total project cost.

6.1.2 At the end of implementation of the project, recurrent costs relating to the maintenance of roads, water points, production infrastructure and marketing will be regularly borne by the beneficiaries in the form of collective works and contributions by members of management committees. To this end, the project will put in place on a case by case basis, immediately after completion of works, a mechanism for recovery of operating costs relating to maintenance and management of the said infrastructure.

6.1.3 Recurrent costs related to implementation of the project concern staff salaries, operating and maintenance costs of offices, equipment and vehicles of the project unit. The cost trends are as follows:

<table>
<thead>
<tr>
<th>Source of Finance</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADF</td>
<td>0.47</td>
<td>0.36</td>
<td>0.31</td>
<td>0.19</td>
<td>0.16</td>
</tr>
<tr>
<td>Government</td>
<td>0.04</td>
<td>0.05</td>
<td>0.07</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>Total</td>
<td>0.51</td>
<td>0.41</td>
<td>0.38</td>
<td>0.29</td>
<td>0.27</td>
</tr>
</tbody>
</table>

6.1.4 Bearing by the State of the current costs of the project should not pose any problem as they concern basically the salaries of public servants already in service and paid from the State budget. The ongoing economic and financial reforms will boost economic recovery and the mobilization of additional resources for the budget. Resources also derived from the HIPC initiative will help increase funds allocated for poverty reduction.

6.2 Project Sustainability

6.2.1 Sustainability of project actions is guaranteed by the principle of ownership of project outputs by the beneficiaries and the empowerment of producer organizations, village rural infrastructure management associations, female promotion groups and involvement of private operators. These activities will be backed by sensitization, promotion and training provided for under the project.

6.2.2 Various rural infrastructure maintenance mechanisms, some of which have already been successfully applied in the DRC, will be implemented, together with the beneficiaries, local authorities and provincial technical services. The putting in place of these mechanisms will take into account the specificities of each infrastructure and the socio-economic conditions of the beneficiaries and the site.
6.2.3 The mechanisms likely to contribute effectively to the sustainability of the rural infrastructure to be built include: (i) for agricultural feeder roads: toll gates applicable where traffic conditions so warrant, surtax on agricultural products which is currently being experimented, contribution in kind or in cash by the beneficiary population to the financing of maintenance costs, direct participation of the population in maintenance works in the form of community work; (ii) sources of drinking water supply: standpipes equipped with meters and managed by private individuals, institution of a fixed royalty payable during harvest period in cash or in kind, etc.; (iii) for communication infrastructure: handover of the management of the infrastructure to private operators, putting in place of a toll system for each service rendered managed by the local management committees of the infrastructure, etc.

6.2.4 Moreover, the project provides for a number of actions that foster the sustainability of rural infrastructure. These include: introduction of the technique of use of vetiver for the protection of embankments and ditches of roads; integration from commencement of the project, of sensitization campaigns into the culture of self-management and ownership by the beneficiaries of infrastructure to be constructed; simplicity of the design and construction of infrastructure in order to facilitate its management and maintenance; and forming of local infrastructure management committees with a balanced representation of women in the decision-making bodies.

6.2.5 Thanks to the training, sensitization and support actions planned under the project, the production and distribution of certified seeds will be effectively transferred to seed operators like village association, producer groups, etc. The State’s role will be limited to control, seed certification, production of pre-basic seeds and supervision of operators in the sector.

6.3 Critical Risks and Mitigation Measures

6.3.1 The first risk lies in renewed socio-political instability in the country, which would undermine all the project outputs. With the conclusion of the Global and Inclusive Agreement on Transition signed in Pretoria on 16 December 2002 which led to the adoption of a new Constitution, the putting in place of Transition Institutions, the formation of a consensus Government gathering all the politico-military leanings and the sharing of posts within the military hierarchy, there is at the moment a complete cessation of hostilities and an ongoing reconciliation and reunification process. There is a firm commitment as well as a strong involvement of donors to back the process through a significant mobilization of funds for the economic and social development of the DRC.

6.3.2 The second risk lies in the suspension of macroeconomic reforms. Economically speaking, the country experienced growth for the first time in 2002 after nearly ten years of recession and gradually succeeded in breaking with hyper-inflation and depreciation of the Congolese Franc. This performance was confirmed in 2003 with forecasts of a 5% GDP growth and 8% inflation rate as against 16% at the end of 2002. While pursuing efforts to stabilize the macroeconomic framework, the Government has put in place an ambitious sector and structural reform programme which aims to rehabilitate the private sector and prepare conditions for sustainable economic growth. Moreover, relations with the main creditors normalized in 2002. The encouraging results of reviews in November 2002 and June 2003 of the programme backed by the Poverty Reduction and Growth Facility (PRGF) enabled the DRC to reach the decision point of the HIPC initiative on 23 July 2003, thus benefiting from an 80% reduction of its debt.
7. PROJECT BENEFITS

7.1 Financial Analysis

Three farm models have been established: the Bandundu standard model of 0.50ha; the Bas-Congo standard model of 0.50%ha; and the seed growers’ pilot farm model of one hectare. The project will cover 15% of farms in Bas-Congo, representing 61,500 farms, and 10% of firms in Bandundu or 71,500 firms. The Agriculture and Rural Sector Rehabilitation Support Project will greatly contribute to the improvement of incomes of small food producers of the provinces of Bas-Congo and Bandundu which are the main beneficiary populations of the project. As a matter of fact, in the benchmark year (project year 6), the net margin for the Bandundu standard farm will rise from CF 83,000 to CF 205,525, and the margin for the Bas-Congo standard farm from CF 153,275 to CF 300,105. The margin for the pilot farm will stand at CF 3,669,900.

7.2 Economic Analysis

7.2.1 The economic analysis is based on a cost/benefit comparison, taking into account only the quantifiable objectives. Thus, the following are the assumptions retained: (i) all the investments, maintenance and operating costs have been taken into account for the assessment of the profitability of the project; (ii) the project costs and benefits have been assessed over a period of 20 years; (iii) for cassava, bean, groundnuts and sweet potato which are not sold on international markets, their financial prices have also been used for economic analysis. For white rice and maize, the economic prices considered are import substitution prices.

7.2.2 At maximum output (project year 6), activities resulting from project implementation will secure substantive additional incomes estimated at CDF 6.4 billion. The economic rate of return is estimated at 23%, which is considered satisfactory (See Annex 4).

7.3 Social Impact Analysis

7.3.1 Implementation of outreach, supervision and extension activities for producers as well as improvement of marketing channels and conditions of preservation and storage of products planned under the project will contribute to the improvement of incomes of farmers and to an increase in employment and a significant decline in the present rate of rural-urban migration. About 12% of farms in the two provinces will be directly affected by the project activities.

7.3.2 Training, organization of farmers and dissemination of farming techniques envisaged by the project will result in: (i) the training of 2,600 seed growers, 250 producer and trader groups and associations 50% of which are made up of women, 350 infrastructure management committees; (ii) improvement of the productivity of farms, especially food crop farms; (iii) the promotion of income-generating activities (small trades, crafts, businesses, storage, processing, etc.); (iv) a better future management of water and soil resources in the areas involved; and (v) the revival of farmer structures which would gradually be able to ensure sustainable development in their communities.

7.3.3 Financially, the main social benefits of the project will be derived from increased agricultural production and stimulation of marketing. Indeed, the project will put in place a high yield improved seeds production and dissemination programme that will help generate additional production of over one million tonnes of foodstuff. It will train farmers in modern production techniques, in order to increase the productivity of farms while safeguarding the environment and protecting natural resources. Increase in farm income with the project is estimated at between 60% and over 100% depending on the type of farm. Construction of marketing infrastructure, notably 20
markets and 35 warehouses, and rehabilitation of 1,600 km of agricultural feeder roads will help market agricultural products and increase farm income. The product will, through the intensification of production systems, help create about 13,500 permanent jobs. The envisaged rural promotion programme will allow for the development of non-farm income-generating activities, improvement of the nutrition of the populations and sensitization of the latter on hygiene issues.

7.3.4 Through the increased use of the L1 method in the execution of works, project will help create about 2 million working days. Such works will also contribute to the emergence of local small and medium-scale enterprises. The marketing infrastructure and agricultural feeder roads to be constructed and rehabilitated will help booster trade within the two provinces as well as with the neighbouring provinces and especially in Kinshasa. The development of 160 water sources and 60 latrines will enable about 80,000 persons to have access to drinking water and improve their hygienic conditions. Women and girls will be primary beneficiaries of this project benefit. In fact, their living conditions will be improved as they will be freed from the burden of fetching water and hence devote themselves to productive activities as concerns women and educational activities for girls.

7.4 Sensitivity Analysis

Sensitivity analysis shows that increasing investment costs of the project by 10% will not have a significant impact on the rate of return which remains at 22%. In contrast, this rate is sensitive to variations in operation costs and especially results in 17% rate of return. A 10% fall in income reduces the rate to 15%, while a 10% increase in costs together with a 5% drop in income reduces the rate of return to 13%. This shows the importance of the influence of variations in prices and yields. The measures envisaged by the project regarding the building of the capacities of producer organizations, supervision and marketing structures, dissemination of improved seeds, and stimulation of market and price information mechanisms will help better control fluctuations.

8. CONCLUSION, RECOMMENDATIONS AND CONDITIONS FOR LOAN APPROVAL

8.1 Conclusions

8.1.1 The agricultural and rural sector which is the mainstay of the Congolese economy and the main source of income for the majority of the rural population is seriously affected by the socio-economic consequences of the war which has resulted in the deterioration of rural infrastructure and a sharp drop in agricultural production. The Agricultural and Rural Sector Rehabilitation Support Programme falls within the framework of the Government’s poverty reduction strategy and its Emergency Multi-sector Rehabilitation and Reconstruction Programme which is being implemented. Implementation of the activities envisaged by the project, in particular building of the capacities of structures responsible for agricultural and rural development, rehabilitation of infrastructure, production and dissemination of improved seeds, rural promotion and supervision actions and provision of extension services to producers will contribute, together with the other development partners of the DRC, to give the agricultural sector new lease of life.

8.1.2 For Bas-Congo and Bandundu provinces, which will be more particularly targeted by these activities, the project will help increase the income of more than 130,000 farms, increase by about 10% overall agricultural production, and create nearly two million working days by using the L1 technique and about 150,000 additional jobs, thus contributing to a marked reduction in rural-urban migration. The project will also participate in the protection of the environment by ensuring the protection of soils along the 1000km of roads to be rehabilitated. As designed, the project is technically feasible and economically viable. The economic rate of return is 23%.
8.1.3 The project is in line with the country’s rural development strategy. It falls within the framework of the Emergency Multi-sector Rehabilitation and Reconstruction Programme (EMRRP). It is consistent with the I-PRSP orientations and CSP priorities of the Bank for the period 2003-2004.

8.2 Recommendations and Conditions for Loan Approval

It is recommended that a loan not exceeding UA 18.00 million and a grant not exceeding UA 7 million be granted the DRC for the purpose of implementing the project as described in this report, subject to the following specific conditions set out in the loan and grant agreements:

A. Condition precedent to entry into force

The entry into force of the loan agreement will be subject to fulfillment by the Borrower of the provisions of section 5.01 of the General Conditions applicable to loan agreements and guarantee agreements of the Bank.

B. Conditions precedent to disbursement

The disbursement of the loan resources shall be conditional upon the entry into force of the loan agreement and the fulfillment by the Borrower of the following specific conditions:

i) Provide to the ADF evidence of appointment of staff of the team that has to strengthen the PIU established within the BCECO and its branch units comprising a rural development project management specialist who will be project head, a rural engineer responsible for the Rural Infrastructure Rehabilitation component, an agronomist in charge of the Agricultural Product Support component, an administrator in charge of the Institutional Support Component, an agricultural economist responsible for monitoring and evaluation, an environmentalist in charge of social and environmental auditing, and support staff (a secretary, two drivers and a messenger). Applications of managerial staff shall be approved beforehand by the Bank (paragraph 5.1.2);

ii) Provide to the ADF evidence of assignment of national managerial staff for implementation of the project at the level of each of the provincial branch units composed of an agronomist or a rural engineer who will be head of the unit, an agronomist responsible for extension and rural infrastructure, a bookkeeper and support staff (a secretary, two drivers and two watchmen). The CVs of the cadres must receive the prior approval of the Bank (paragraph 5.1.3);

iii) Provide to the Fund evidence of opening three accounts in a commercial bank acceptable to the Fund into which the Government’s counterpart funds and the resources of the ADF loan and grant will be deposited (cf. paragraph 5.5.1);

iv) Provide to the Fund evidence of the establishment of the Project Steering Committee which will comprise secretaries-general (or team representative) of the Ministry of Planning, Ministry of Agriculture, Ministry of Rural Development, Ministry of Environment, Ministry of Scientific Research, Ministry of Women’s Affairs and Family Welfare, and the Office of the Governors of Bas Congo and Bandundu, representatives of the beneficiaries, civil society and donors (cf. paragraph 5.2.2);
v) Provide to the Fund evidence of the setting up of the Monitoring Technical Committee which will comprise officials of the Directorate for Agricultural Feeder Roads, Directorate for Rural Engineering, Directorate for Rural Economy, National Rural Water Supply Service, National Cooperatives and Farmers Organizations Service, National Extension Service, National Seeds Service, National Institution for Studies and Agricultural Research, Directorate for Environment and Directorate for Studies and Planning of the Ministry of Women’s Affairs. (paragraphs 5.2.3 and 5.6.6);

vi) Provide to the ADF evidence of assignment of buildings to house the head office and branch units of the project (paragraph 5.1.1);

vii) Undertake to enact the seed law (paragraph 3.2.6); and

viii) Undertake to transfer to the private sector all of SENASEM’s seed multiplication farms; (paragraph 3.2.2);

Other conditions: the Borrower shall in addition,

i) Submit to the Bank not later than nine months following the entry into force of the loan and grant, the agreements signed with INERA for the supply of basic seeds and with the bodies responsible for the organization and training of local communities; (paragraphs 5.2.4 et 5.4.4);

ii) Enact the seed law on 30 June 2005 at the latest; (paragraph 3.2.6); and

iii) Transfer to the private sector on 31 December 2005 at the latest, all of SENASEM’s seed multiplication farms; (paragraph 3.2.2).
This map has been provided exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank Group and its members any judgment concerning the legal status of the territory nor any approval or acceptance of these borders.
DRC : AGRICULTURAL AND RURAL SECTOR REHABILITATION SUPPORT PROJECT
IN BAS-CONGO AND BANDUNDU PROVINCES (PARSAR)

ORGANIZATION CHART OF THE EXECUTING AGENCY

- CENTRAL SERVICES MINISTRIES
- BCeCO
  - Project Steering Committee (PSC)
  - PIU
    - CTS
      - External Monitoring and Evaluation
      - Bas Congo Provincial Branch Unit
      - Bandundu Provincial Branch Unit

- Bas-Congo Provincial Technical Services
- Bandundu Provincial Technical Services
## ANNEX 3 : DRC- AGRICULTURAL AND RURAL SECTOR REHABILITATION SUPPORT PROJECT
### PROVISIONAL LIST OF GOODS AND SERVICES (UA million)

<table>
<thead>
<tr>
<th>Designation</th>
<th>ADF</th>
<th>GOVT</th>
<th>BENEFICIARIES</th>
<th>Total</th>
<th>BREAKDOWN</th>
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<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td><strong>A. WORKS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Rehabilitation of Buildings</td>
<td>1.10</td>
<td>100.0</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2. Rehabilitation Feeder Roads to Farms</td>
<td>6.48</td>
<td>84.2</td>
<td>1.22</td>
<td>15.8</td>
<td>-</td>
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<tr>
<td>3. Rehabilitation of Navigable Waterways to Farms</td>
<td>2.01</td>
<td>80.5</td>
<td>0.49</td>
<td>19.5</td>
<td>-</td>
</tr>
<tr>
<td>4. Development of Water Sources and Sanitation</td>
<td>0.65</td>
<td>94.7</td>
<td>0.00</td>
<td>-</td>
<td>0.04</td>
</tr>
<tr>
<td>5. Infrastructure and Marketing</td>
<td>1.92</td>
<td>94.6</td>
<td>0.00</td>
<td>-</td>
<td>0.11</td>
</tr>
<tr>
<td>7. Environmental Protection de</td>
<td>0.26</td>
<td>100.0</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total WORKS</strong></td>
<td><strong>12.41</strong></td>
<td><strong>87.0</strong></td>
<td><strong>1.71</strong></td>
<td><strong>12.0</strong></td>
<td><strong>0.15</strong></td>
</tr>
<tr>
<td><strong>B. GOODS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Special Equipment</td>
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<td>4. Computer Equipment</td>
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<td>6. Vehicles</td>
<td>0.71</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>7. Agricultural Implements</td>
<td>0.04</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total GOODS</strong></td>
<td><strong>4.02</strong></td>
<td><strong>100.0</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>C. SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. TRAINING</td>
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<td>0.00</td>
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<td>-</td>
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<td>2. SENSITIZATION &amp; ORGANIZATION OF THE BENEFICIARIES</td>
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<td>5. STUDIES AND WORKS SUPERVISION</td>
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<td>-</td>
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<td>6. AUDIT</td>
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<tr>
<td><strong>Sub-total SERVICES</strong></td>
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<td><strong>100.0</strong></td>
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<td>-</td>
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<td><strong>D. PERSONNEL</strong></td>
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<tr>
<td>0.52</td>
<td>44.0</td>
<td>0.67</td>
<td>56.0</td>
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<tr>
<td><strong>E. OPERATION</strong></td>
<td>3.26</td>
<td>86.9</td>
<td>0.49</td>
<td>13.1</td>
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<tr>
<td><strong>TOTAL PROJECT COST</strong></td>
<td><strong>25.00</strong></td>
<td><strong>89.2</strong></td>
<td><strong>2.87</strong></td>
<td><strong>10.2</strong></td>
<td><strong>0.15</strong></td>
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</table>
ECONOMIC ANALYSIS RESULTS

1. Assumptions used for calculation of EIRR

All investment, maintenance and operating costs have been used for the calculation of the economic rate of return;

The project costs and benefits have been assessed over a period of 20 years;

Family labour used in farms has not been valued;

2. Calculation of Economic Internal Rate of Return (EIRR) at 12 %

(Chinese Yuan) 

<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Investment</th>
<th>Operation Costs</th>
<th>Recurrent Costs</th>
<th>Additional Income</th>
<th>Net Additional Income</th>
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<td>5.975</td>
<td>4.480</td>
<td>0</td>
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<tr>
<td>2</td>
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<td>3.960</td>
<td>8.162</td>
<td>0</td>
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<tr>
<td>3</td>
<td>2007</td>
<td>2.197</td>
<td>12.642</td>
<td>0</td>
<td>11.831</td>
<td>-3.008</td>
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<td>18.113</td>
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<tr>
<td>5</td>
<td>2009</td>
<td>994</td>
<td>15.126</td>
<td>0</td>
<td>22.561</td>
<td>6.441</td>
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<tr>
<td>6</td>
<td>2010</td>
<td>0</td>
<td>15.126</td>
<td>178</td>
<td>22.561</td>
<td>7.257</td>
</tr>
<tr>
<td>7</td>
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<td>22.561</td>
<td>7.257</td>
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<td>7.257</td>
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<td>178</td>
<td>22.561</td>
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</tr>
</tbody>
</table>

\[ \text{EIRR} \quad \text{over 20 years} \quad 23\% \]
## DRC: AGRICULTURAL AND RURAL SECTOR REHABILITATION SUPPORT PROJECT IN BAS-CONGO AND BANDUNDU PROVINCES (PARSAR)

### ‘WITH PROJECT’ TRENDS IN AREAS, YIELDS AND PRODUCTION

<table>
<thead>
<tr>
<th>Description</th>
<th>Situation without project</th>
<th>Situation with project</th>
<th>Additional production (1000 t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area (1000 ha)</td>
<td>Yield (t/ha)</td>
<td>Production (1.000 t)</td>
</tr>
<tr>
<td>Cassava</td>
<td>690</td>
<td>7</td>
<td>4.927</td>
</tr>
<tr>
<td>Maize</td>
<td>300</td>
<td>0.7</td>
<td>208</td>
</tr>
<tr>
<td>Dry rice</td>
<td>68</td>
<td>0.7</td>
<td>43</td>
</tr>
<tr>
<td>Groundnut</td>
<td>235</td>
<td>0.6</td>
<td>140</td>
</tr>
<tr>
<td>Bean</td>
<td>65</td>
<td>0.4</td>
<td>25</td>
</tr>
<tr>
<td>Banana</td>
<td>30</td>
<td>3.5</td>
<td>103</td>
</tr>
<tr>
<td>Sweet potato</td>
<td>15</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>Yam</td>
<td>10</td>
<td>0.3</td>
<td>3</td>
</tr>
<tr>
<td>Plantain</td>
<td>63</td>
<td>4</td>
<td>244</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.476</td>
<td></td>
<td>5.753</td>
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SUMMARY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Brief Project Description

The main outputs of the project are: (i) building of the capacities of various ministries in charge of rural development; (ii) rehabilitation of agricultural feeder roads; (iii) rehabilitation of marketing infrastructure; (iv) multiplication and dissemination of improved seeds; and (v) training and organization of populations. The project will provide to farmers quality seeds and food crops (cassava, beans, rice, groundnuts, banana) that are adapted to local climatic conditions and responsive to the needs of the farmers. The agricultural feeder roads rehabilitation component entails the rehabilitation of local roads and inland waterways linking production areas to marketing centres. The community project component comprises development of drinking water sources; building of public latrines; and building of marketing infrastructure (markets and warehouses).

Major environmental and social impacts

The project’s activities will focus on the rehabilitation of existing roads. Since there is no provision for building new roads, there will be much less earthwork and the topographic characteristics of the roads will hardly be altered. Water runoffs that could cause erosion in steep and moderate slopes are possible especially if the drainage system is poorly built owing to inappropriate specifications and/or non-compliance with standards. Flooding resulting from poorly built structures (embankment or crossing structures) may cause serious waterlogging (low external drainage) and reduce farmland in the case of bottomlands located above the road. The poor design of crossing structures (bridges, ducts and culverts) and embankments may affect water movement due to excessive water runoff confined to some areas. This would lead to the erosion of infrastructure (infrastructure washout) or of the riverbed, prolonged flooding of bottomlands situated above the structure or soil erosion as a result of downstream water erosion (gullying with huge sedimentary deposits).
Depending on the type of marketing infrastructure and the chosen location, there are inherent risks to every construction or rehabilitation work such as the production of solid wastes (various plastic or metal wrappings); liquid effluents (including hydrocarbons and household wastewater); soil erosion caused by the constant movement of vehicles and civil engineering equipment. Other related social and health impacts, in particular the transmission of diseases (STD/AIDS), are possible due to overcrowding caused by the settlement of project workers. During the operation phase, potential impacts include contamination of food products by pesticides, release of liquid pollutants into the atmosphere, wastewater and wastes from catering and lodging facilities; wastes and organic effluents from slaughterhouses and fish processing centres, etc.

Rehabilitated rural infrastructure will impact positively on the living conditions of the project beneficiaries. They will bring unfathomable spin-offs to the local population such as better market access, improved road networks and waterways, better access to education and health services, increased sales of agricultural produce with attendant increase in household income that will in turn foster food security and better nutrition; credit scheme counselling and popularization, stimulation of micro-projects and increased employment opportunities. There would be a significant increase in community access to clean water supply thereby ensuring better hygiene and sanitation.

Selected seeds are instrumental in increasing crop yields and productivity and, thus, easing crop pressure in marginal areas and on bush fallows. Accordingly, the project will contribute to controlling deforestation by restricting the extension of farmland. The dissemination of selected seeds will mitigate the proliferation of unwanted species as certification entails regular visits to farms and ascertains the purity and specificity of seed varieties and minimum germinability.

Impact Optimization and Mitigation Programme

The Environmental and Social Management Plan (ESMP) provides for each component the implementation of measures to mitigate or eliminate potential negative impacts or improve positive impacts. In addition to specific measures pertaining to a number of activities common to all the components, there are legal, statutory and institutional actions; the establishment of an environmental and social management coordination unit; measures for enhancement of positive impacts; short listing of various officers for the implementation of positive impact enhancement and negative impact mitigating measures.

The tender specifications of successful bidders of construction and rehabilitation works will include the conventional contractual clauses (evacuation of runoff water, construction of drains and weirs, prior hydrological studies to ensure the correct size of structures, stability of dykes, reducing pollution due to dust during work, rehabilitation of quarries and borrow pits, etc.).
With reference to marketing infrastructure, the EMSP outlines general measures such as tips on waste and pollution control, curbing health and safety hazards for workers and population living around the project site and specific measures like the respect of hygiene and health rules at catering and lodging facilities; stringent management of hazardous food polluting or contaminating substances; collection and recycling of wastes from slaughterhouses and butchers’ shops; regular maintenance of systems for the purification and drainage of effluents, etc.

Environmental Monitoring and Control Programme

The ADB Projects Implementation Unit (PIU) has a social and environmental audit officer. The environmental and social management plan will be implemented by a project coordinated by PIU and actively supported by different central and decentralized bodies, support ministries (Social Affairs, Environment, Health) and technical ministries (Agriculture, Rural Development and Scientific and Technical Research). The various mitigating and optimization measures of the ESMP should be consistent with the implementation of the project’s activities through its various components. It is not therefore a specific activity that will require the expertise of PIU in environmental matters alone but a cross-cutting component covering various activities and assignments. The preparation of a manual of procedures seeks to ensure adequate mainstreaming into the different stages of infrastructure planning, building and use.

Capacity building and institutional support

Besides monitoring the status of implementation of actions to mitigate the most significant impact of the project, the environmental and social management plan also comprises institutional capacity-building measures for the project. Hence, the project, through a number of activities, will be an opportunity to sharpen skills and increase awareness on environmental issues resulting from rural infrastructure development activities.

Consultation of the community

Public consultations are planned before the building of facilities. PIU will conduct official public awareness sessions before the beginning of works. The branch unit head will organize information- and experience-sharing meetings bringing together all partners. The project will launch a newsletter to report best practices on impact management (road maintenance, maintenance of water points, environmental impact assessment, management and cleaning of rural markets and warehouses) to all stakeholders. Information found in the handouts will be broadcast on rural radios.

Cost estimates

The total cost for the implementation of the EMSP is estimated at UA300,000.

Implementation schedule and reporting

Periodic EMSP progress reports, including the implementation schedule that will be appended to the project’s schedule, will be produced and circulated to bodies and NGOs involved as well as the general public.