AFRICAN DEVELOPMENT FUND

Original: French

BURKINA FASO

FEEDER ROADS PROJECT

APPRAISAL REPORT

NB: This document contains errata or corrigenda (see Annexes)
TABLE OF CONTENTS

PROJECT INFORMATION, TABLE OF SOCIO-ECONOMIC INDICATORS, CURRENCY AND MEASURES, LIST OF ABBREVIATIONS, LIST OF ANNEXES, LIST OF TABLES, PROJECT LOGICAL FRAMEWORK, AND SUMMARY

1 PROJECT ORIGIN AND BACKGROUND .......................................................................................... 1

2 THE TRANSPORT SECTOR ........................................................................................................ 2
   2.1 The Transport System ........................................................................................................ 2
   2.2 Transport Policy, Planning and Coordination .................................................................. 3

3 THE ROAD SUB-SECTOR ........................................................................................................... 4
   3.1 The Road Network ........................................................................................................... 4
   3.2 Vehicle Fleet and Traffic .................................................................................................. 4
   3.3 Road Transport Industry .................................................................................................. 4
   3.4 Road Network Administration and Staff Training ......................................................... 5
   3.5 Road Maintenance .......................................................................................................... 6
   3.6 Financing of Investments and Road Maintenance ......................................................... 7
   3.7 The Road Construction Industry ..................................................................................... 8

4 THE PROJECT .......................................................................................................................... 8
   4.1 Project Design and Justification ....................................................................................... 8
   4.2 Project Area of Influence and Beneficiaries .................................................................... 10
   4.3 Strategic Context ............................................................................................................ 12
   4.4 Objectives ..................................................................................................................... 13
   4.5 Project Description ......................................................................................................... 13
   4.6 Environmental Impacts ................................................................................................. 15
   4.7 Social Impact ................................................................................................................ 16
   4.8 Project Cost .................................................................................................................... 17
   4.9 Sources of Finance ........................................................................................................ 18

5 PROGRAMME IMPLEMENTATION ......................................................................................... 20
   5.1 Executing Agency ........................................................................................................... 20
   5.2 Institutional Provisions .................................................................................................... 20
   5.3 Implementation and Supervision Schedule ................................................................... 20
   5.4 Procurement of Goods and Services ............................................................................. 22
   5.5 Disbursement Provisions .............................................................................................. 23
   5.6 Monitoring and Evaluation ............................................................................................ 23
   5.7 Audit Reports ............................................................................................................... 23
   5.8 Coordination with Donors ............................................................................................. 24

6 PROJECT SUSTAINABILITY ................................................................................................... 24
   6.1 Recurrent Costs .............................................................................................................. 24
   6.2 Project Sustainability ....................................................................................................... 24
   6.3 Key Risks and Mitigation Measures ................................................................................. 25

7 PROJECT BENEFITS ............................................................................................................... 25
   7.1 Economic Analysis ......................................................................................................... 25
   7.2 Economic Rate of Return and Sensitivity ..................................................................... 28

8 CONCLUSIONS AND RECOMMENDATIONS ....................................................................... 28
   8.1 Conclusions .................................................................................................................... 28
   8.2 Recommendations ......................................................................................................... 28

This report was prepared by Messrs. M. LEKE, Principal Transport Economist, Mission Leader, B. TRAORE, Chief Transport Engineer (OCIN.3) and L. JOOTTUN, Environmentalist (OCIN.0), following their mission to Burkina from 05 to 18 May 2004. The Division Manager is Mr. B.L.M. ASKOFARE, OCIN.3 (Ext. 2526).
PROJECT INFORMATION

Date: May 2004

The information given hereunder is intended to provide some guidance to prospective suppliers, contractors 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 and guidance should be obtained from the Executing Agency of the Borrower.

1. COUNTRY: Burkina Faso
2. NAME OF PROJECT: Feeder Roads Project
3. LOCATION: Burkina Faso
4. BORROWER: Burkina Faso
5. EXECUTING AGENCIES: Ministries of Infrastructure, Transport and Housing (MITH) through the General Directorate of Feeder Roads (DGPR)
6. 01 BP 2517 Ouagadougou 01
7. Burkina Faso
   Tél : (226) 50 35 60 26

8. PROJECT DESCRIPTION

The project components are:

A. FEEDER ROADS IMPROVEMENT

This comprises the following activities:

A.1 Improvement works of 975km of feeder roads in 13 provinces of the country, including 865 km of cotton-farm tracks in the West and South-West and 110 km of tracks serving the market-gardening areas in the provinces of Houet (30 km) and Kadiogo (80 km);
A.2 Works control and supervision; and
A.3 Technical assistance to the General Directorate of feeder roads.

B. INSTITUTIONAL SUPPORT

Institutional support consists of actions in favour of the Ministry of Infrastructure, Transport and Housing (MITH) and the women’s groups of the project area. This component has the following sub-components:
B.1 Establishment of provincial feeder-road units comprising the construction of buildings for offices and accommodation (fully borne by the Government) the supply of light site equipment for the maintenance of feeder roads (on ADF financing).

B.2 Actions for the women’s groups of the project area through the supply of intermediate means of transport (IMT), namely ass-drawn carts and bicycles.

C. PROJECT MANAGEMENT

It comprises:

C.1 Financial audit of the project;

C.2 Monitoring/assessment of the project impact on the populations living within the vicinity of the project and sensitisation of these populations on the endemic diseases, notably HIV/AIDS, on the traffic and exploitation of children in the cotton farms and environmental protection.

9. TOTAL COST

Total project cost : UA 18.76 million
   i) Foreign exchange cost : UA 6.67 million
   ii) Local currency cost : UA 12.09 million

10. ADF LOAN : UA 15.71 million

11. OTHER SOURCES OF FINANCE
   - Government: : UA 3.05 million

12. LOAN APPROVAL DATE : September 2004

13. PROBABLE START-UP DATE OF PROJECT/DURATION : Sept-2005 / 40 months

14. PROCUREMENT OF WORKS, GOODS AND SERVICES

   - PROCUREMENT OF GOODS AND WORKS : Road works will be procured through local competitive bidding. The procurement of goods for the provincial units and the intermediate means of transport will be through local shopping.

   - CONSULTANCY SERVICES REQUIRED AND SELECTION STAGE : The consultancy services required for works control and supervision, technical assistance, accounting and financial audit, as well as for monitoring/evaluation and sensitisation will be procured through competition on the basis of shortlists.

15. PROJECT ENVIRONMENTAL CATEGORY : The project is classified in category II
CURRENCY EQUIVALENTS

(May 2004)

UA 1 = CFA.F 797.139
UA 1 = US$ 1.45183

FISCIAL YEAR

01 January - 31 December

WEIGHTS AND MEASURES

1 kilogramme (kg) = 2.205 lbs
1 metre (m) = 3.29 feet (ft)
1 kilometre (km) = 0.621 mile
1 square kilometre (km²) = 0.3861 sq mile
1 hectare (ha) = 2.471 acres

ACRONYMS AND ABBREVIATIONS

ADB = African Development Bank
ADF = African Development Fund
AFD = Agence française de développement
CFAF = Franc de la communauté financière d’Afrique
CFP = Centre de formation et de perfectionnement
       (Training and Development Centre)
DWC = Directorate of Works and Coordination
EDF = European Development Fund
ESMP = Environmental and Social Management Programme
ESMU = Environmental and Social Management Unit
EU = European Union
FRP = Feeder Roads Project
GDFR = General Directorate of Feeder Roads
GDR = General Directorate of Roads
ICB = International Competitive Bidding
IDA = International Development Association
IMT = Intermediate Means of Transport
IRI = International roughness index
IRR = Internal Rate of Return
LC = Local Shopping
MITH = Ministry of Infrastructure, Transport and Housing
NRTS = National Rural Transport Strategy
PASEC-T = Transport Sector Adjustment Programme
PIA = Project Impact Area
PIP = Public Investment Programme
PU = Provincial Unit
RM = Road Maintenance
RMF = Road Maintenance Fund
RTP = Rural Transport Programme
SME = Small and Medium-scale Enterprise
TR = Trunk Roads
TSP = Transport Sector Project
Veh/d = Vehicles per day
**LIST OF ANNEXES**

<table>
<thead>
<tr>
<th>№</th>
<th>TITLE</th>
<th>Number of pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Map</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Organisation Chart of MITH</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Summary of the Environmental and Social Management Plan</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>List of Category of Expenditure of ADF-financed Project</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>TOR of the Technical Assistance to GDFR</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Project Implementation Schedule</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Summary of the Economic Evaluation</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>List of Bank-financed Projects in Burkina Faso</td>
<td>1</td>
</tr>
</tbody>
</table>

**LIST OF TABLES**

<table>
<thead>
<tr>
<th>№</th>
<th>TITLE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Summary Cost Estimate by Project Component</td>
<td>18</td>
</tr>
<tr>
<td>4.2</td>
<td>Cost Summary by Category of Project Expenditure</td>
<td>18</td>
</tr>
<tr>
<td>4.3</td>
<td>Source of Project Finance</td>
<td>19</td>
</tr>
<tr>
<td>4.4</td>
<td>Expenditure Schedule by Project Component</td>
<td>19</td>
</tr>
<tr>
<td>4.5</td>
<td>Expenditure Schedule by Project Source of Finance</td>
<td>19</td>
</tr>
<tr>
<td>5.1</td>
<td>Provisions for the Procurement of Works and Services</td>
<td>22</td>
</tr>
</tbody>
</table>
Burkina Faso
COMPARATIVE SOCIO-ECONOMIC INDICATORS

Basic Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Burkina Faso</th>
<th>Africa</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Population (millions)</td>
<td>2002</td>
<td>12.6</td>
<td>831.0</td>
<td>5,024.6</td>
</tr>
<tr>
<td>Urban Population (% of Total)</td>
<td>2002</td>
<td>19.7</td>
<td>38.6</td>
<td>43.1</td>
</tr>
<tr>
<td>Population Density (per Km²)</td>
<td>2002</td>
<td>46.1</td>
<td>27.6</td>
<td>60.6</td>
</tr>
<tr>
<td>GNI per Capita (US $)</td>
<td>2002</td>
<td>250</td>
<td>650</td>
<td>1,154</td>
</tr>
<tr>
<td>Labor Force Participation - Total (%)</td>
<td>2002</td>
<td>47.0</td>
<td>43.1</td>
<td>45.6</td>
</tr>
<tr>
<td>Labor Force Participation - Female (%)</td>
<td>2002</td>
<td>48.4</td>
<td>33.8</td>
<td>39.7</td>
</tr>
</tbody>
</table>

Demographic Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Burkina Faso</th>
<th>Africa</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Growth Rate - Total (%)</td>
<td>2002</td>
<td>2.9</td>
<td>2.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Population Growth Rate - Urban (%)</td>
<td>2002</td>
<td>6.0</td>
<td>3.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Population &lt; 15 years (%)</td>
<td>2002</td>
<td>50.5</td>
<td>43.2</td>
<td>32.4</td>
</tr>
<tr>
<td>Population &gt;= 65 years (%)</td>
<td>2002</td>
<td>2.7</td>
<td>3.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Dependency Ratio (%)</td>
<td>2002</td>
<td>106.6</td>
<td>86.6</td>
<td>61.1</td>
</tr>
<tr>
<td>Sex Ratio (per 100 female)</td>
<td>2002</td>
<td>95.4</td>
<td>98.9</td>
<td>103.3</td>
</tr>
<tr>
<td>Female Population 15-49 years (%)</td>
<td>2000</td>
<td>23.0</td>
<td>26.9</td>
<td>25.4</td>
</tr>
<tr>
<td>Life Expectancy at Birth - Total (years)</td>
<td>2002</td>
<td>45.7</td>
<td>50.6</td>
<td>62.0</td>
</tr>
<tr>
<td>Life Expectancy at Birth - Female (years)</td>
<td>2002</td>
<td>46.2</td>
<td>51.7</td>
<td>66.3</td>
</tr>
<tr>
<td>Crude Birth Rate (per 1,000)</td>
<td>2002</td>
<td>2.8</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Crude Death Rate (per 1,000)</td>
<td>2002</td>
<td>14.7</td>
<td>15.3</td>
<td>8.4</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1,000)</td>
<td>2002</td>
<td>93.2</td>
<td>89.2</td>
<td>79.8</td>
</tr>
<tr>
<td>Maternal Mortality Rate (per 100,000)</td>
<td>1999</td>
<td>484</td>
<td>641</td>
<td>440</td>
</tr>
<tr>
<td>Total Fertility Rate (per woman)</td>
<td>2002</td>
<td>6.7</td>
<td>4.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Women Using Contraception (%)</td>
<td>1999</td>
<td>11.9</td>
<td>40.0</td>
<td>59.0</td>
</tr>
</tbody>
</table>

Health & Nutrition Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Burkina Faso</th>
<th>Africa</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians (per 100,000 people)</td>
<td>1997</td>
<td>3.8</td>
<td>57.6</td>
<td>78.0</td>
</tr>
<tr>
<td>Nurses (per 100,000 people)</td>
<td>1995</td>
<td>19.6</td>
<td>105.8</td>
<td>98.0</td>
</tr>
<tr>
<td>Births attended by Trained Health Personnel (%)</td>
<td>1999</td>
<td>41.2</td>
<td>38.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Access to Safe Water (% of Population)</td>
<td>1993</td>
<td>78.0</td>
<td>60.3</td>
<td>78.0</td>
</tr>
<tr>
<td>Access to Health Services (% of Population)</td>
<td>1985</td>
<td>70.0</td>
<td>61.7</td>
<td>80.0</td>
</tr>
<tr>
<td>Access to Sanitation (% of Population)</td>
<td>2000</td>
<td>29.0</td>
<td>60.5</td>
<td>52.0</td>
</tr>
<tr>
<td>Percent. of Adults aged 15-49 Living with HIV/AIDS</td>
<td>2001</td>
<td>7.5</td>
<td>5.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Incidence of Tuberculosis (per 100,000)</td>
<td>2000</td>
<td>20.0</td>
<td>198.0</td>
<td>144.0</td>
</tr>
<tr>
<td>Child Immunization Against Tuberculosis (%)</td>
<td>2002</td>
<td>90.0</td>
<td>76.4</td>
<td>82.0</td>
</tr>
<tr>
<td>Underweight Children (% of children under 5 years)</td>
<td>1996</td>
<td>31.0</td>
<td>29.9</td>
<td>30.0</td>
</tr>
<tr>
<td>Daily Calorie Supply per Capita</td>
<td>2001</td>
<td>2,485</td>
<td>2,444</td>
<td>2,675</td>
</tr>
<tr>
<td>Public Expenditure on Health (as % of GDP)</td>
<td>2002</td>
<td>1.5</td>
<td>3.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Education Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Burkina Faso</th>
<th>Africa</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Enrolment Ratio (%)</td>
<td>1995</td>
<td>44.0</td>
<td>89.2</td>
<td>91.0</td>
</tr>
<tr>
<td>Primary School - Total</td>
<td>2000</td>
<td>44.0</td>
<td>89.2</td>
<td>91.0</td>
</tr>
<tr>
<td>Primary School - Female</td>
<td>2000</td>
<td>37.0</td>
<td>83.7</td>
<td>105.0</td>
</tr>
<tr>
<td>Secondary School - Total</td>
<td>2000</td>
<td>70.0</td>
<td>61.7</td>
<td>80.0</td>
</tr>
<tr>
<td>Secondary School - Female</td>
<td>2000</td>
<td>8.0</td>
<td>38.2</td>
<td>45.8</td>
</tr>
<tr>
<td>Primary School Female Teaching Staff (% of Total)</td>
<td>1998</td>
<td>24.4</td>
<td>49.9</td>
<td>51.0</td>
</tr>
<tr>
<td>Adult Illiteracy Rate - Total (%)</td>
<td>2002</td>
<td>74.3</td>
<td>37.9</td>
<td>26.6</td>
</tr>
<tr>
<td>Adult Illiteracy Rate - Male (%)</td>
<td>2002</td>
<td>64.1</td>
<td>29.2</td>
<td>19.0</td>
</tr>
<tr>
<td>Adult Illiteracy Rate - Female (%)</td>
<td>2002</td>
<td>84.2</td>
<td>48.4</td>
<td>34.2</td>
</tr>
<tr>
<td>Percentage of GDP Spent on Education</td>
<td>1998</td>
<td>1.5</td>
<td>3.5</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Environmental Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Burkina Faso</th>
<th>Africa</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Use (Arable land as % of Total Land Area)</td>
<td>2002</td>
<td>22.4</td>
<td>32.7</td>
<td>9.9</td>
</tr>
<tr>
<td>Annual Rate of Deforestation (%)</td>
<td>1995</td>
<td>0.7</td>
<td>0.7</td>
<td>0.4</td>
</tr>
</tbody>
</table>
| Annual Rate of Reforestation (%) | 1990 | 8.0 | 4.0 | ... | ...
| Per Capita CO2 Emissions (metric tons) | 1998 | 0.1 | 1.1 | 1.9 | 12.3 |

Source: Compiled by the Statistics Division from ADB databases; UNAIDS; World Bank Live Database and United Nations Population Division.
Notes: n.a. Not Applicable; ... Data Not Available.
vi

BURKINA FASO
Feeder Roads Project
Project Logical Framework

Start-up date: February 2005
Completion date: June 2008
Design Team: M. LEKE, B. TRAORE and L. JOOTTUN

NARRATIVE SUMMARY

1. SECTOR OBJECTIVE
   1.1. Promote trade through reduction of the domestic transportation cost.
   1.2. Improve the lifestyle of the rural populations by enhancing access to the production areas and basic social services.

2. PROJECT OBJECTIVES
   2.1. Contribute to the development of agricultural production by opening up many cotton production and market gardening areas in the 13 provinces targeted;
   2.2. Improve the level of income of the populations of the project impact area by raising the price of the surplus production resulting from the improvement of the project roads;
   2.3. Facilitate the transportation of products to the storage or selling areas by beefing up the intermediate means of transport.

3. OUTPUTS
   1. Feeder roads improved in the cotton and market garden crop production areas;
   2. Office and housing facilities constructed and equipped in the provinces;
   3. Light site equipment delivered to the provincial feeder-roads units;
   4. IMT delivered to the women’s groups of the PIA;
   5. PIA populations sensitised on sexually transmitted diseases (HIV/AIDS) and environmental protection.
   6. Performance indicators assessed.

4. ACTIVITIES/COMPONENTS
   1. Technical assistance
      Support to the GDFR
      Signing of the contract
      Bidding, bid analysis and contract award.
      Preparation of the shortlist.
      Preparation of the bidding document
   2. Works control
      Final report on the works
      Provisional works acceptance
      Monitoring and monthly reports of works
      Signing of contract
      Bidding, bid analysis and contract award.
      Preparation of the short list
      Preparation of the bidding document

MEASURES OF VERIFICATION

ASSUMPTIONS/ RISKS

OBJECTIVELY VERIFIABLE INDICATORS

1. 3% increase in the domestic traffic of goods, corresponding to 250 vehicles/day from 2008, following an improvement of the track deterioration index, which drops from 7 to 4 on average in 2008;

2. Access to at least 120 localities in all seasons starting from 2008 for the transportation of products and movement of persons by car or intermediate means of transport.

3. OUTPUTS
   1. 975 km of improved feeder roads in 2008: 865 km in the cotton production areas and 110 km in the market gardening areas.
   2. 45 provincial units established and equipped in 2008.
   3. 11,250 light site equipment delivered to the 45 provincial units in 2008.
   4. 400 women’s groups equipped with intermediate means of transport in 2008.
   5. About 150,000 persons in the PIA sensitised on HIV/AIDS and environmental protection.

4. INFLOWS/RESOURCES
   Components in million UA

   Components | LC | C. | Total
   1. Works | 2.0 | 2.5 | 4.5
   2. Institutional support | 1.4 | 1.5 | 2.9
   3. Project management | 0.0 | 0.0 | 0.0
   Base cost | 4.5 | 5.0 | 9.5
   Physical contingencies | 1.0 | 1.3 | 2.3
   Price escalation | 0.9 | 1.2 | 2.1
   Total | 6.4 | 7.5 | 13.9

4.1. Availability of all the financing required

4.2. Appraisal estimates
4.3. Project accounting
4.4. Disbursement registers
4.5. Loan and grant agreements
4.6. Completion and audit report.

3.1. Actual implementation of the decentralisation policy.
3.2. Support of the populations to the feeder roads maintenance policy.

2.1. Annual reports of the Ministry of Agriculture on agricultural productions.
2.2. Projections based on the report of the Ministry of Agriculture.
2.3. Reports of the MITH and of the Consultant in charge of works control and supervision on the project implementation status.

3.1. Works acceptance and equipment delivery report.
3.2. Monthly and quarterly project supervision and completion reports.
3. Road and building construction works.
Works implementation:
Signing of contracts.
Contract award.
Bid analysis
Submission of bids
Launching of shopping among supplier
Preparation of bidding documents.

IS THIS ORDER CORRECT?

4. Procurement of equipment
Report on equipment delivery.
Delivery of equipment
Signing of supply contracts.
Contract award.
Analysis of supply bids
Submission of bids
Launching of shopping among suppliers.
Preparation of bidding documents

5. Project financial audit.
Final report of the project financial audit.
Annual financial audit report.
Signing of contract
Bidding, bid analysis and contract award.
Preparation of the short list.
Preparation of the bidding document.

6. Monitoring/evaluation and Sensitisation of the populations.
7. Awareness-raising campaign
Signing of contract.
Bidding, bid analysis and contract award.
Preparation of the short list.
Preparation of the bidding document.

Sources of finance in million UA

<table>
<thead>
<tr>
<th>Source</th>
<th>F.</th>
<th>L.</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADF loan</td>
<td>8.66</td>
<td>0.05</td>
<td>8.71</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>0</td>
<td>0.05</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8.66</td>
<td>0.05</td>
<td>8.71</td>
<td></td>
</tr>
</tbody>
</table>

Human Resources
GDFR, consultants, ADF project officer, technical assistance,
MDC, SME
EXECUTIVE SUMMARY

1 PROJECT ORIGIN AND BACKGROUND

1.1 The feeder roads project was defined and designed following a series of actions the most important of which are: i) the inventory of feeder roads that led in 1999 to the drawing up of a general list of feeder roads; ii) the establishment in 2001 of the General Directorate of feeder roads placed under the supervision of the Ministry of Infrastructure in collaboration with the Ministry of Agriculture; iii) the adoption in March 2003 of the National Rural Transport Strategy Paper; and iv) the preparation of a priority investment programme (PIP) focused on the improvement of 12,000 km of feeder roads over a period of ten years starting from 2003.

1.2 The implementation of the project will contribute to the improvement of the living conditions of the rural populations in the 13-targeted provinces, notably by raising the price of the marketable surplus production and through better access to the basic social services (health centres, school, local administration). The project is consistent with the 2002-2004 CSP. Indeed, it falls within rural development, which is among the priorities of the CSP, with particular emphasis on actions aimed at strengthening the infrastructure and promoting the rural development of some provinces targeted under the ongoing administrative decentralisation.

1.3 The project is part of the network of 6,060 km of feeder roads to be improved over the period 2002-2008 and for which the required resources have been mobilised. The key donors involved in the improvement of the 6,060 km are: IDA, ADF, IDB, KFW, Swiss Cooperation and Danish Cooperation. A preparation mission on the project took place in February 2004 after the implementation in July 2002 of the socio-economic, engineering and environmental studies upon AFD financing. This report was prepared at the end of the May 2004 appraisal mission on the basis of the results of the studies conducted and the investigations carried out on the project during the preparation and appraisal missions.

2. LOAN PROPOSAL

The ADF loan totalling UA 15.71 million will be utilised to finance 100% of the foreign exchange cost and slightly over 75% of the local currency cost of the project.

3. SECTOR AND SPECIFIC OBJECTIVES OF THE PROJECT

The project is a component of the second transport sector programme. Its sector objectives are therefore to: i) foster trade through reduction of the domestic transport cost; and ii) improve the living conditions of the rural populations through a better access to the production areas and basic social services. Its specific objectives are to: i) contribute to the development of production by opening up many cotton-production and market gardening areas in the 13 provinces targeted; ii) improve the income level of the populations of the project impact area through enhancement of the value of the surplus production resulting from the improvement of the project roads; and iii) facilitate the transportation of produce towards the storage or selling points by beefing up the intermediate means of transport.

4. PROJECT OUTPUT

To achieve the above-mentioned objectives, the following outputs are expected:

- 975 km of improved feeder roads;
- offices and accommodations built and equipped in the 45 provinces;
• 11,250 light site implements (4,500 pickaxes, 4,500 shovels and 2,250 wheelbarrows) delivered to the 45 provinces;
• 400 ass-drawn carts and 60 bicycles provided to the women’s groups of the 13 target provinces;
• the populations of the PIA sensitised, especially on sexually transmitted diseases (HIV/AIDS) and environmental protection;
• the project performance indicators assessed.

5. PROJECT COST

The estimated project cost net of taxes and customs duties is UA 18.76 million: UA 6.67 million in foreign exchange and UA 12.09 million in local currency.

6. SOURCES OF FINANCE

6.1 ADF and the Government of Burkina Faso will jointly finance the project. The ADF loan will finance: (i) the road works and their supervision; (ii) technical assistance to GDFR; (iii) the project financial audit; (iv) the monitoring/evaluation of the project impact and the sensitisation of the populations; (v) the supply of materials and equipment of the provincial units (PU) and (vi) the intermediate means of transport intended for the women’s groups of the project area.

6.2 The Government’s contribution will finance the construction works of the buildings in the 45 provinces under the provincial units.

7. PROJECT IMPLEMENTATION

Project implementation will stretch from September 2005 to December 2008, i.e. over a total period of about 40 months.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 The project is technically well designed. Its negative impacts on the environment are low and controllable. It generates an economic rate of return of 14%, showing that it is economically justified.

8.2 Recommendations

In view of the above, it is recommended that an ADF loan not exceeding UA 15.71 million be granted to Burkina Faso. This loan will be utilised to implement the project as designed and described in the present report. The loan will be subject to the specific conditions in the loan agreement.
1. PROJECT ORIGIN AND BACKGROUND

1.1 The feeder roads project (FRP) falls within the internal and external opening up policy implemented since the country’s independence and is among the top national priorities. With an area of 247,112 km², Burkina Faso is a landlocked country, sharing borders with Benin, Côte d’Ivoire, Ghana, Mali, Niger and Togo. It has a very low-density road network of 0.056 km/km². It therefore needs permanent links to the ports of the neighbouring countries for its external trade, namely the ports of Benin, Côte d’Ivoire and Togo, as well as a structured and dense road network for the shipment of productions to the storage or trading centres and for the access of the populations to basic social services.

1.2 More specifically, the project is a component of the ongoing Second Transport Sector Programme (TSP.2). Like the preceding programme (Transport Sector Adjustment Programme or PASECT), TSP.2 is supported by several multilateral and bilateral donors. It seeks mainly to consolidate the achievements of PASECT, which was implemented between 1992 and 1999 (revival of economic activities, particularly agricultural and pastoral activities, cut-back on transport costs and poverty reduction), to pursue the opening up of the rural areas through improvement of the level of service of feeder roads and to support the administrative decentralisation under way in the country, by providing the local communities with the human and material resources to enable them ensure proper maintenance of the feeder roads. Indeed, pursuant to the Decentralisation Act, the local communities are deeply involved in the management and maintenance of the rural roads network in all the provinces of the country.

1.3 FRP was formulated and designed further to a series of actions the most important of which are: i) the inventory of the feeder roads, which led in 1999 to the drawing up of a general list of feeder roads; ii) the establishment in 2001 of the General Directorate of Feeder Roads placed under the supervision of the Ministry of Infrastructure, Transport and Housing; iii) the adoption in March 2003 of a national rural transport strategy paper; and iv) the preparation of a priority investment programme (PIP) focused on the improvement of 12,000 km of feeder roads over a period of ten years starting from 2003.

1.4 The implementation of the project will contribute to the welfare of the rural populations in the 13 target provinces, notably by enhancing the value of the surplus marketable production and through a better access to the basic social services (health centres, schools, local administration). The project is consistent with the 2002-2004 CSP. Indeed, it falls within the framework of rural development, which is among the priorities of the CSP, with particular emphasis on measures aimed at strengthening infrastructure and promoting the rural development of some provinces targeted under the ongoing administrative decentralisation.

1.5 The project is part of the network of 6,060 km of roads to be improved over the period 2002-2008 and for which the necessary resources have been mobilised. The leading donors involved in the improvement of this road network are the IDA, ADF, IDB, KFW, Swiss Technical Assistance and Danish Technical Assistance. A preparation mission was organised on the project in February 2004 following the socio-economic, engineering and environmental studies conducted in July 2002 upon AFD financing. The present report was prepared at the end of the appraisal mission carried out in May 2004, on the basis of the available results of the studies and investigations carried out on the project during the preparation and appraisal missions.
2. THE TRANSPORT SECTOR

2.1 The Transport System

General

2.1.1 Burkina Faso has no sea front or navigable river. Its transport system is therefore reduced to three main means of transport: road, rail and air. After having for a long time been under the influence of the public authorities, the system is being gradually liberalised, logically leading to the beefing up of the private sector’s role. This policy, supported by the donors, aims to enhance the performance of the enterprises in the sector and to enable them to participate more actively in efforts to open up the country.

2.1.2 Through the institutional reforms (State disvestiture, strengthening of the role of the private sector, etc) implemented in recent years, the sector’s performance has somewhat improved. Thus, at present, the three means of transport account for 8% of GDP and employ over 15% of the population working in the formal sector, i.e. at least 76,000 permanent or temporary jobs. The continuation of these reforms, notably through the second transport sector project being implemented with the donors’ support, of which the Bank, should lead to the strengthening of the role of the private sector and to the improvement of the services offered by each of these three means of transport. These reforms equally lay emphasis on rural transport with the Government’s launching of an intermediate means of transport support and promotion programme known as the Rural Transport Programme (RTP), steered by the Ministry of Infrastructure, Transport and Housing in collaboration with the Ministry of Agriculture and the Ministry of Social Welfare.

Road Transport

2.1.3 In Burkina Faso, the road is the dominant means of transport; it provides almost the entire domestic transport of persons and goods and carries over 50% of the imports and exports. Road transport consists of a road network of 15,272 km, of which 1993 km are paved, and a vehicle stock estimated in 2002 at 100,000 motor cars and 110,000 mopeds, in all 210,000 motorized vehicles. The road plays a dual role in the country: it facilitates the movement of persons and goods within the country, and serves as an essential support for the shipping of imports and exports transiting through the sea ports of neighbouring countries, namely the ports of Abidjan, Lome, Accra and Cotonou. Following the socio-political crisis in Cote d’Ivoire since 2002, road transport between the two countries has declined in favour of other neighbouring countries, especially for the transit of external trade.

Rail transport

2.1.4 The national railway net work comprises a 98km-long domestic line linking Ouagadougou and Kaya line and a 517 km section of the inter-state line, totalling 1,155 km, linking Ouagadougou (Burkina Faso) and Abidjan (Cote d’Ivoire). In 1989 the joint entity in charge of operating this interstate line, namely the Régie Abidjan-Niger (RAN), was dismantled mainly for mismanagement. Following this dismantling, and for reasons of efficiency, two assets-holding companies were established: the Société des chemins de fer du Burkina (SCFB) and the Société ivoirienne des chemins de fer (SICF). In addition, by mutual agreement, the two countries entrusted, through a concession-type agreement, the operation of the two domestic sections to the Société internationale de transport africain sur rail (SITARAIL). Its capital stock is held as follows: 15% by either State, 3% by staff of the company and 67% by the private operator.

2.1.5 Since these changes, the goods traffic stands at about 400,000 tonnes per annum in spite of the increasingly keen rail/road competition. Passenger traffic declined steadily from 414,000 passengers in 1996 to 379,000 in 1997 and to 269,000 prior to the Ivorian crisis. Owing to the crisis, rail transport between the two countries was suspended for several
months. This greatly weakened the SITARAIL. As a result, the improvement of its financial position expected from the reactivation of its activities is likely to be slow and modest.

**Air transport**

2.1.6 The key function of air transport is to link the country to the rest of the world and contribute to the promotion of tourism, which is beginning to play a significant role in the economy. The activities of air transport are concentrated on the Ouagadougou and Bobo Dioulasso airports. The existing facilities and equipment meet the international standards and ensure traffic management both during the day and at night. Passenger traffic fluctuates between 100,000 and 120,000 passengers per annum. Equipped with two Fokker 28 planes, the national company, Air Burkina, makes a significant contribution to the overall traffic, i.e. on average about 45%. It operates the domestic lines and links up some neighbouring countries: Benin, Cote d’Ivoire, Mali, Senegal and Togo. The company has just been privatised following the management difficulties it was faced with in recent years. This privatisation is part of the institutional reforms implemented under the transport sector adjustment programme (PASECT) and has enabled the company to buttress its management and enhance its financial performance.

2.2 Transport Policy, Planning and Coordination

2.2.1 The general policy that should serve as a basis for actions in favour of the transport sector are spelt out in the «Transport Sector General Policy Statement» adopted by the Government in 1991 and updated under the PASECT. It falls within the National Economic Recovery Policy. In this drive, priority is given to i) the maintenance of the existing infrastructure in order to preserve the transport network, ii) external opening up mainly through the expansion of road links with the bordering countries, iii) internal opening up through the construction of secondary roads and feeder roads, and iv) enhancement of the performance of the institutions and enterprises in the sector.

2.2.2 The projects and specific actions that can contribute to the achievement of these objectives are included in the priority investment programme (PIP). The most important operation, implemented between 1992 and 1999 and resulting from this mode of planning, is the transport sector adjustment programme, which was financed by fifteen or so bilateral and multilateral donors, including ADF. It covers the whole transport sector: road, railway and air transport. The ADF operation focused on the rehabilitation and maintenance of earth roads, along with the training of road sub-sector workers. The new benchmark adopted by the Government and supported by the donors for the 2002-2008 period is the second Transport Sector Programme (TSP-2), of which the present project is a component.

2.2.3 Following the recent merging of the Ministry of Infrastructure and the Ministry of Transport, responsibility for applying the Government policy in the sector and coordinating the activities developing therein is entrusted to the new ministry created by the merging, namely the Ministry of Infrastructure, Transport and Housing (MITH). This Ministry, the MITH, is specifically responsible for defining the transport infrastructure sector policy, the programmes and actions resulting therefrom, ensuring not only their implementation but also the organisation and regulation of the transport industry. To that end, it will be assisted by five Directorates: the General Directorate of Roads (GDR), the General Directorate of Feeder roads (GDFR), the Directorate of Studies and Planning (DSP), the General Directorate of Land and Sea Transport (DLST) and the General Directorate of Civil Aviation (DCA). It also controls several services, companies and organisations. The establishment, in 2001, of the GDFR falls within the policy of opening up the rural areas and promoting transportation therein. This policy should in the end lead to the opening up of 5,000 to 6,000 villages and the agro-pastoral production areas linked to them.
3. **THE ROAD SUB-SECTOR**

3.1 **The Road Network**

3.1.1 The road network has a total length of 61,367 km, of which 15,272 km are classified. The unclassified network is made up of 46,095 km of feeder roads (FR). Out of this total, 12,000 km have been selected as priority roads and should be improved by the year 2008. The classified network comprises 2,007 km of paved roads, with an additional 517 km of roads being paved 346 km awaiting paving and 12,402 km of earth roads. The network density is 1.1 km for 1,000 inhabitants and 4.5 km for 100 km². In comparison, these averages are 2.4 km/1,000 inhabitants and 4.7 km/100 km² for the UEMOA zone and 4.2 km/100 km² for Africa.

3.1.2 The trunk roads constitute the primary network or «principal structure» composed of major roads for transporting supplies and evacuating exports, as well as thoroughfares disseminated over the national territory. Regional and departmental roads form the secondary network. Finally, the tertiary or local network is comprised of feeder roads and makes it possible to reach the rural populations in their environment. 58% of the trunk roads are in good state, 40% are in average state and 2% in bad state. 70% of the earth main roads are in good state, 23% are in average state and 7% in bad state. More than 80% of the feeder roads are in a bad state.

3.2 **Vehicle Fleet and Traffic**

3.2.1 The current vehicle fleet, estimated by the Directorate of Land and Sea Transport on the sole basis of registrations, is 100,000 vehicles, about 48 % of which are more than 10 years old. In addition to this number of motorcars, there are some 110,000 mopeds, representing a total of 210,000 motorised vehicles. This fleet has an annual fuel consumption of 230,000 to 240,000 m³. Notwithstanding the landlocked nature of the country, fuel supply does not pose a major problem, and stock-outs are almost non-existent.

3.2.2 The traffic volume on the road network depends mainly on the level of service of the roads. Thus, everywhere on the national territory, paved roads generate much more traffic than the earth roads. The traffic breakdown on the paved roads is as follows: 20 % of the tarred network carries a maximum traffic of 200 vehicles/day, 50 % generates a traffic of 200 to 500 vehicles/day and 30 % registers over 500 vehicles/day. Conversely, and with a few exceptions, barely 10 % of the earth network registers traffic higher than 100 vehicles/day, the traffic volume on 90 % of the earth network being between 30 and 100 vehicles/day. Disparities are also noted in the traffic growth rate: the annual average growth rate is about 8 % on the paved network compared to 3.5 % on the earth-road network. The tracks are especially used by the intermediate means of transport (IMT), namely carts, bikes and motorcycles. There are no reliable statistics on the IMT fleet, but it is known that they play an increasingly important role in the transportation of products or the movement of persons throughout the national territory.

3.3 **Road Transport Industry**

3.3.1 The road transport industry is in the hands of a few modern medium-scale enterprises and a large number of poorly organised small operators and private individuals. The rapid growth of inter-city transport demand, and the operational inability of the small transport operators to cope up with it, prompted the Government to establish in 1984 the National Public Transport Corporation (Régie nationale de transport en commun). The operation of the corporation resulted, for more than a decade, in a marked improvement in the conditions of inter-city transport, as well as that of intra-city transport such as in Ouagadougou and Bobo Dioulasso. The corporation was privatised under the PASECT following a deficit-generating management that threatened its survival; the financial performances indeed showed a loss of
over CFAF 325 million on average per annum. The new company that took over has just renewed the fleet of public transport vehicles whose availability rate has increased to over 80%.

3.3.2 Access to the profession of road transport operator is free, and the competition between small operators remains keen. A minimum of training and organisation is therefore necessary for the operators. This role falls, among others, to the Training and Development Centre (Centre de formation et de perfectionnement - CFP), which has in recent years benefited from IDA and ADF interventions. The operational capacity of the centre has, thanks to these interventions, significantly improved and its training and development activities help gradually improve the standard of the road transport operators.

3.4 Road Network Administration and Staff Training

3.4.1 Road network administration comes under the Ministry of Infrastructure, Transport and Housing. The Ministry performs this activity through the technical services, namely the General Directorate of Roads (GDR), for the classified road network and the General Directorate of Feeder Roads (GDFR) for the tertiary network comprising feeder roads.

3.4.2 Following the privatisation of road maintenance, effective since 2000, the GDR is limited to the planning and programming of road maintenance activities. It also continues to design and monitor the implementation of construction programmes. The GDFR, established in 2001, is responsible for the definition and implementation of the feeder roads development policy in collaboration with the Ministry of Agriculture. In this regard, it is particularly responsible for (i) drawing up the list of feeder roads likely to form the tertiary network, (ii) developing a method for managing these feeder roads with the participation of the beneficiary populations, (iii) conducting awareness-raising actions with a view to the approval of this management by the populations, (iv) developing an investments planning and feeder roads maintenance method based on criteria other than those relating to traffic and the internal rate of return applied to the standard road network, (v) coordinating, organising and monitoring interventions on the feeder roads, (vi) preparing the engineering design of the feeder roads and monitoring those prepared by third parties, and (vii) controlling and supervising feeder road works, etc.

3.4.3 For the discharge of its duties, the GDFR comprises three Directorates. The Directorate of Studies and Monitoring (DSM) is, inter alia, in charge of drawing up an annual operations programme on the feeder roads, supporting the decentralised structures in the design and planning of operations on the tertiary network, conducting studies on force account and monitoring those entrusted to the consultants, studying and monitoring price trends in the feeder roads sub-sector, and, preparing or monitoring the bidding documents prepared on force account or by consultants. The DSM comprises a Secretariat, the Studies and Standardisation Service (SSS) and the Programming and Monitoring Service (PMS).

3.4.4 The Directorate of Works and Coordination (DWC) is in charge of monitoring, controlling and supervising the execution of feeder roads improvement or maintenance works, initiating test sites and/or road works teaching sites with a view to developing work methods (construction, management and maintenance) for the feeder roads (HIMO methods, etc.). The DWC comprises a Secretariat, the Works and Control Service (WCS) and the Coordination and Network Management Service (CNMS).

3.4.5 The administrative, financial and contracts management Department (AFCMD) is responsible, among other things, for collecting the background texts and documents required for contract approval (financing agreement, donors’ non-objection notice, agreement of the national authorities), establishing payment certificates and monitoring project disbursements, carrying out all the accounting transactions of the GDFR. It is also responsible for the administrative management of staff, for planning their training and movements in
collaboration with the Directorate concerned, managing the assets, records and documentation of the GDFR, etc. The AFCMD comprises a Secretariat, the Contracts Service (CS) and the Administrative and Financial Service (AFS).

3.4.6 The organisation chart of the GDFR is given in Annex 2. The GDFR, established in 2001, does not yet have all the staff required for its functioning. The executive posts are filled but all the services do not have heads as yet. The recruitment process has been launched following identification of the senior and middle-management staff requirements.

Staff training

3.4.7 The training and development of the workers in charge of road maintenance is provided by the training and development centre (CFP). This centre proposes modules to SMEs, which are the key stakeholders of the privatised road maintenance. To enable it to meet these training obligations, the CFP benefited from an ADF support under PASECT and the present TSP.2 has envisaged the strengthening of certain support actions ranging from the supply of equipment and teaching aids to the training of trainers. In addition, training actions are in progress in the CFP and concern the civil works technical officers of the feeder roads provincial units, the upgrading of the SMEs, the training of GDFR officers, etc. These support actions, which started in 2003, are financed by IDA.

3.5 Road Maintenance

3.5.1 Since the privatisation of road maintenance in the year 2000, the routine maintenance works of the classified network and their control are fully entrusted to SMEs and consulting firms. Rehabilitation or periodic maintenance works are entrusted to large international enterprises that have more material and financial resources.

3.5.2 The resources intended for road maintenance come from the annual budgetary appropriations. These resources make it possible to carry out routine maintenance on a road network of 10,000 km, which will increase to 13,000 km in 2004 with a provisional appropriation of over 7 billion CFAF. It is planned to cover the whole classified network by 2008. To achieve this, Burkina Faso is launching this year, on IDA financing, a study to create a road fund. The terms of reference of this study were being finalised at the time of the appraisal of this project. The periodic maintenance and rehabilitation of the classified network continue to be funded in large part by the donors.

3.5.3 At present, there is little maintenance of the tertiary network. Only the feeder roads for the evacuation of cotton in the production areas are regularly maintained by the Société burkinabè de fibres textiles (SOFITEX), which each year devotes to their maintenance CFAF 1 per kg of seed cotton bought during the preceding crop year. Financing the cotton-farm feeder roads is part of the missions assigned to SOFITEX by the Government. These resources are managed by a cotton sub-sector management committee grouping the representatives of the national union of cotton farmers, (holder of 34% of SOFITEX shares), of the State (35% of the shares) and of the other shareholders. For the 2001/2002 crop year, SOFITEX invested over CFAF 210 million to maintain 850 km of cotton-farm feeder roads. For the 2003/2004 crop year, an amount of CFAF 280 million is forecast.

3.5.4 SOFITEX finances the works, but they are prepared and executed under the technical supervision of GDFR. An inventory of the tracks to be maintained is made annually by GDFR and SOFITEX field workers who take stock of the actual state of the tracks of their areas by classifying them by order of priority, depending on the production to be evacuated. GDFR prepares the bidding documents and launches bids on behalf of SOFITEX. The intervention of SOFITEX also focuses on the supervision and financing of the farmers who are often called upon to repair areas where traffic is interrupted (swamps, cut-off tracks, etc). This financing is in the form of hiring tipper trucks for collecting maintenance materials and these trucks are put at the disposal of the farmers when necessary.
3.5.5 In March 2003 the Government adopted a national rural transport strategy (NRTS). This strategy lays emphasis on the transfer of responsibility for feeder roads and departmental roads to the local communities under the administrative decentralisation going on in the country. Thus, the maintenance of rural infrastructure is henceforth borne by the provinces. The latter will each have a provincial unit to be created under the present project with trained technical staff and adequate materials and equipment. The resources required will mostly come from the State budget for non-cotton-farm feeder roads, pending the establishment of the road fund, and from the cotton sub-sector for the tracks linking up the cotton production areas. NRTS envisages the effective involvement of the populations concerned; the nature and level of contribution of these populations will be determined in consultation with the local communities and the interested parties. The actual implementation of the decentralisation policy is a lending condition.

3.5.6 The privatisation of road maintenance has been effective since 2000. Since then, training and development actions have been initiated for SMEs under the PASECT and TSP 2. To help solve the problem of inadequate public works equipment affecting the SMEs active on the domestic market, the Government plans to implement three-year rolling contracts coupled with an obligation for the SMEs to provide equipment. This could be in the form of an equipment procurement plan depending on the disbursement status of the contract. Likewise, according to the association of SMEs, a reduction in the payment period of works accounts, which is currently longer than six months, would help improve the financial base of the SMEs that carry out the maintenance works. The Government is sensitised on these issues and shares with the donors the conviction that the establishment of a second-generation road fund, upon completion of the studies, constitutes an appropriate solution to the road maintenance problem.

3.6 Financing of Investments and Road Maintenance

3.6.1 Road investments are mainly financed from external resources, in loan or grant form, with the Government’s participation, which varies according to each donor. The leading stakeholders in the sector are the European Union, World Bank, ADF, Arab Funds, West African Development Bank, OPEC and the Nordic Funds. During PASECT (1992-1999), investments for the road sub-sector were around US$ 360 million, with a Government contribution of about 20%. Under TSP.2, investments should attain US$ 500 million – US$ 330 million for the road component – with a Government participation of 12 to 15%.

3.6.2 The present needs of the routine maintenance of the priority network are estimated at about seven (7) billion CFA francs. They are covered by the budgetary resources granted annually to the road fund, which is a budgetary line receiving these funds. In practice, these funds are effectively and regularly made available to the GDR. In view of the priority the Government gives to the satisfactory operation of road transport in the country, it is determined to continue financing the routine maintenance and plans to make efforts to allocate a growing share of the national budget to periodic maintenance. Moreover, contrary to previous practices, the commitments and works implemented in the last three years have reached the level of the resources allocated. It follows from the audits and implementation reports that the resources earmarked for road maintenance were satisfactorily utilised.

3.6.3 The Government has in its transport policy letter confirmed that it will pursue the efforts undertaken to strike a balance between the resources required for proper maintenance of the network with the amounts allocated in the budget to that end. The Government’s ultimate objective is to have adequate specific resources to ensure not only the routine maintenance of the classified network but also that of the priority feeder roads network. It is in this perspective that the feasibility study of an autonomous road fund mentioned earlier is being launched under TSP2 on World Bank financing. This important study aimed at sustaining the maintenance resources, will examine the institutional aspects, the taxation to be
put in place to cover the maintenance requirements and the procedures for utilising the resources of the road fund. The recommendations of this study will be transmitted to the Bank for opinion. This is a lending condition.

3.7 The Road Construction Industry

3.7.1 The construction industry is characterised by a competitive market open to all qualified firms. Since the privatisation of road maintenance, this market has been dominated by private enterprises and consulting firms. In addition to the big foreign or regional private enterprises, which bid for major construction and/or rehabilitation works, more and more local SMEs are participating in the bids for road maintenance works. The National Civil and Public Works Control Laboratory (Laboratoire national des bâtiments et des travaux publics - LNBTP) dominates the market for laboratory tests. This partly state-owned company conducts, on behalf of the State and third parties, studies, control or research in the area of civil engineering construction materials. It has the necessary skills and equipment. Some small private laboratories, or those belonging to large enterprises, also operate in the sector. Private local consulting firms operate alongside foreign or regional consulting firms in the sector, thus enabling a fair competition during bids for studies, works control and supervision.

3.7.2 The major problems often affecting the performance of local SMEs are related to difficulties in procuring heavy public works equipment and having access to the bank credit system. Likewise, most of the SMEs have some difficulty ensuring a sound management of their activities. However, the technical constraints are beginning to be mitigated with the equipment hire company (Société de location de matériel –SLM)) and some private individuals who offer rented equipment in adequate quantity for maintenance works. In addition, the training and development centre (CFP) offers the SMEs training modules both in the areas of management (financial and contracts) and works execution.

3.7.3 Since the privatisation of road maintenance, certain SMEs have emerged from the teeming number recorded immediately after this privatisation and they are capable of doing more or less complex improvement works. Thus, the 800 km of feeder roads in the cotton areas, financed in 2002 by AFD, were constructed within the contractual deadlines by five SMEs selected at the end of bids. There are therefore SMEs on the market with the technical capabilities required to execute the works planned under this project.

4. THE PROJECT

4.1 Project Design and Justification

4.1.1 The present feeder roads project is part and parcel of TSP.2, which, after the PASECT that was implemented between 1992 and 1999, constitutes the new benchmark for priority investments in the transport sector up to 2008. It was designed and formulated on the basis of the key objectives of TSP.2 summarised as follows: i) strengthening of the institutional and regulatory framework of the sector; ii) improvement of access to the agricultural and pastoral production areas, especially the cotton and market gardening areas; iii) strengthening of poverty reduction by providing the rural populations with access to the basic social services (schools, health centres, etc.) and by enhancing the value of their productions; and iv) reduction of transportation costs and provision of better quality transport services and safety for the users.

4.1.2 The final project design depends more particularly on the participatory approach the ultimate purpose of which was to establish a general consensus on the project and its economic and socio-environmental impact. At the end of the consultations and discussions organised under this approach, the broad outlines of the project were adopted by the various parties involved, namely the populations of the project impact area (PIA), the administration, the road sector enterprises and the NGOs. Apart from the feeder roads improvement works, emphasis was laid on the following points: i) support to women’s groups who play a pivotal role in
agricultural production and the transportation of products in the rural area; and ii) creation of provincial units for the feeder road works to support the local communities, which are henceforth in charge of feeder roads maintenance in accordance with the provisions in force under the decentralisation. Moreover, account was taken of the project’s impact on the environment and endemic diseases, notably HIV/AIDS. Sensitisation actions on these crosscutting issues were therefore adopted in the present project.

4.1.3 All the feeder roads selected under the project are part of the priority network of 12,000 km of feeder roads programmed to be improved over a period of 10 years. Many donors are involved in this vast improvement programme of 12,000 km. Indeed, AFD has financed studies on 1,700 km of feeder roads in the cotton-production areas and subsequently financed, at the end of the said study, works on over 800 km of the total; the ADF will finance the remaining 865 km under this project. The World Bank will finance 3,000 km, which it appraised in December 2002. The recruitment of consultants for the engineering studies and the preparation of bidding documents is in progress. The IDB will finance 1,000 km under a project it appraised since December 2000. The engineering studies are completed and the bidding documents were transmitted in May 2004 to the IDB for notice of non-objection. Bids will be launched latest in the third quarter of 2004 and works are planned to start in the last quarter of 2004. KFW will finance 330 km for which the financing agreement was signed in July 2003. The engineering studies are under way. Finally, Swiss Technical Assistance and DANIDA plan to finance each 500 km after the experimental phase, which is nearing completion, based on the HIMO method.

4.1.4 The feeder roads were selected on the basis of 6 fundamental criteria with a weighting scheme translating the relative importance of each criterion. These criteria are summarised as follows:

<table>
<thead>
<tr>
<th>Selection criterion</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Importance of the link in relation to the number of inhabitants of the communities connected</td>
<td>5/20</td>
</tr>
<tr>
<td>ii) Opening up of the health structures</td>
<td>4/20</td>
</tr>
<tr>
<td>iii) Opening up of the markets</td>
<td>4/20</td>
</tr>
<tr>
<td>iv) Serving the areas with agro-pastoral potentialities</td>
<td>3/20</td>
</tr>
<tr>
<td>v) Serving the tourist sites</td>
<td>2/20</td>
</tr>
<tr>
<td>vi) Socio-cultural importance of the areas linked up</td>
<td>2/20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20/20</strong></td>
</tr>
</tbody>
</table>

4.1.5 The priority feeder roads selected, of a total road length of 12,000 km, have each scored higher than 15. In addition, the engineering, economic and environmental studies of the roads identified in the 13 provinces under this project have been conducted by a local consulting firm on AFD financing. The studies focused on 865 km of cotton-farm feeder roads and 151 km of feeder roads connecting the market gardening areas. The consultant has undertaken an inspection tour of all these feeder roads to determine their state, the consistency of the works to be done and the economic rates of return. These rates, which vary from 13% to 16%, attest the economic justification of the feeder roads selected.

4.1.6 It follows from the above that the project is well designed and consistent with the rural development, decentralisation and promotion of intermediate means of transport (IMT) policy defined by the Government and supported by donors. Moreover, the funds mobilised and the activities related to the intervention of the multilateral and bilateral donors involved in the roads improvement programme will be coordinated by a special unit created under TSP.2, in collaboration with the General Directorate of feeder roads. This unit, which is already operational thanks to World Bank financing, is managed by a Coordinator appointed by the
Ministry of Infrastructure, Transport and Housing, which is the technical supervisor of the unit. The Coordinator will be assisted by support staff for the conduct of the activities of the unit, notably consultation meetings, works implementation monitoring and the preparation of project status reports.

Proposed improvements

4.1.7 The improvement principles adopted for the roads to be constructed or rehabilitated are:

- Layout according to a well-defined area and passing through the ridge lines as much as possible;
- Bush clearing using a bulldozer blade, cleaning and necessary flux removal;
- Constitution of a road platform through shaping of the natural ground;
- Raising of the road platform in the low-lying areas;
- Embankments connecting the structures;
- Installation of a continuous, gravelly and lateritic wearing course 15 cm thick and 5m wide;
- Minimum sanitation structures: aprons in cyclopean concrete (for most of the water passages); culverts (of exceptional type and in the areas hemmed in by steep hills); lateral ditches and outlets.

4.1.8 For the periodic maintenance operations effected in the already rehabilitated by heavily degraded roads that have lost their level of service, the interventions are:

- Bush clearing, flux removal and cleaning of the road shoulders;
- Patching to fill up the potholes and areas of water stagnation;
- Rehabilitation of the connecting embankments eroded in the neighbourhood of the sanitation structures;
- Construction of supplementary structures;
- Implementation of a supplementary wearing course (up to 15 cm thick) or construction of a reshaping with regravelling;
- Maintenance and repairs of the existing structures;
- Construction of lateral ditches and mechanical cleaning of those blocked.

4.2 Project Area of Influence and Beneficiaries

Delimitation and features of the area

4.2.1 The roads selected under the project are concentrated in 13 of the 45 provinces in the country. They concern about 40 sections of roads whose total length is estimated at 975 km. Their improvement will facilitate all-season access to many cotton and market gardening villages and areas. Besides, these provinces will each benefit from institutional support, the strengthening of the physical inputs intended for the routine maintenance of the roads after their rehabilitation and those already rehabilitated on the one hand, and on the other, the promotion of non-motorised means of transport for some women’s groups of the project area. Based on these considerations, the project impact area (PIA) considered will stretch to all the 13 provinces, namely: Bougouriba, Comoé, Houet, Kénédougou, Kossi, Mouhoun, Sanguié, Banwa, Balé, Tuy, Léraba, Ioba and Kadiogo.

4.2.2 The PIA thus defined covers a total area of 79,978 km²; it is located in a geographical region where the relief is slightly undulating with an altitude that varies from 250 to 350 metres. The climate is of the sudano-sahelian type characterised by a rainy season from May to October and a dry season for the rest of the year. Though it has a low rainfall averaging 700 mm per annum, the PIA is part of the regions of the country with a dense hydrographical
network and where there are numerous, temporary or permanent ponds without outflow, which
give rise to off-season farming activities in most of the provinces concerned. Thus, the
dominant natural vegetation is quite dense. It has a shrubby cover occupying over 50% of the
uncultivated areas, whereas the grassy strata are almost permanent throughout the year.

4.2.3 In spite of these natural conditions that are more favourable than in the other regions of
the country, the PIA is no less threatened by the climatic crisis, which affects mainly all the
sahelian regions. According to the climatic studies conducted on Burkina Faso, this crisis,
acutely felt since 1960, is characterised by a fall in the amount of rainfall and its spread, an
increase in maximum temperatures with the appearance of more and more frequent
exceptional phenomena, such as severe droughts, floods and micro sandstorms. In the PIA as
elsewhere, the gradual destruction of the plant cover, the over-utilisation of the grazing lands
and repeated bushfires aggravate the crisis and weaken the natural environment. To slow
down, and even check this trend, the Government has undertaken various environmental
measures aimed in particular at changing the behaviour of the rural populations in the face of
these global problems of sustainable development.

Population and Poverty Profile in the Area

4.2.4 The population of the PIA is estimated at 3.64 million inhabitants (representing 30% of
the national population): 48.80 % men and 51.20 % women. The most sparsely populated
provinces are those of Bougouriba (76,498 inhabitants) and Léraba (92,927 inhabitants). This
is therefore a fairly populated area, mainly characterised by its enormous agro-pastoral potent,
the increasing role of rural women in agricultural and animal production, notably through the
dynamics of a multitude of women’s groups, which benefit from the close supervisory services
of the Ministry of Women’s Empowerment and the Coordination Unit of the Rural Transport
Programme (RTP). In spite of the agricultural potential and the dynamics of the rural world,
the human poverty index (HPI) in the PIA still remains high. This situation has been
highlighted by the human poverty index determined on the basis of the following parameters:
i) proportion of the population likely to die before age 45, ii) literacy rate and iii) percentage of
households without drinking water and with hardly access to the basic services or the barest
minimum. According to the results obtained, 51.22 % of the population of the PIA have a life
expectancy of under 45 years, experience illiteracy and difficulties of access to the basic social
services, compared to a national average of 55.7 %.

4.2.5 Foremost among the principal causes of this poverty profile is the landlocked nature of
several agricultural production and pastoral villages and areas. This landlocked nature renders
difficult the shipping of products and access to the basic social services and trading centres,
especially in the rainy season during which side channels, flooded low-lying areas and
saturated lands constitute almost impassable barriers. The implementation of the project will
help significantly reduce these obstacles and sustain the economic growth, as well as the
poverty reduction policy in the PIA.

Productions of the Area

4.2.6 Like the country, the economy of the PIA relies essentially on agriculture and
stockbreeding. In general, the bases of the agricultural activities are the small family farms
geard mostly towards grain production. But for a decade or so, cotton and market gardening
have been in full expansion in the PIA, which consequently becomes an important national
economic area, especially given that cotton is the leading export product and foreign exchange
earner of the country, and that some vegetables produced in market gardens are sold
increasingly on the international market. In 2002, the total cultivated area in the PIA was
estimated at 1.43 million ha in relation to 3.63 million ha for the whole country.
Consequently, more than 39% of the areas cultivated throughout the country are located in the
PIA. In general, agriculture in the area, just as elsewhere in Burkina Faso, depends on the
vagaries of the climate and the low-yield farming methods used.
4.2.7 In 2002, the agricultural output recorded in the PIA was estimated at 1.99 million tonnes, broken down as follows: 67% of grains; 19% of cotton; and 14% of sundry products (fruits, vegetables, etc.). In the livestock sector, the existing cattle population is over 5 million heads. Apart from its economic role as a product and source of income for a large part of the population, animal husbandry also has a well-established social function. Livestock products are indeed used in all the religious or civil ceremonies such as baptism, ancestor-worship, marriage, funerals and ritual sacrifices at the beginning and end of the crop year. Taken as a whole, Livestock, therefore, contributes to the strengthening of social and family ties and to poverty reduction, in that cattle or poultry are quick-selling products on the domestic and external markets and procure quite substantial incomes for the stockbreeders and their families. The project will promote the development of these activities and, consequently, contribute to poverty reduction in the PIA.

4.3 Strategic Context

4.3.1 The programme directly stems from the national rural transport strategy in Burkina Faso. This strategy was adopted in March 2003 after the establishment in 2001 of a General Directorate of Feeder Roads (GDFR) specifically entrusted with the promotion and management of feeder roads in collaboration with the Ministry of Agriculture and Decentralised Communities. The main objective targeted in these actions is the opening up of 5,000 to 6,000 villages scattered over the 45 provinces of the country and to ensure access to many agricultural and pastoral production areas. In all, 46,000 km of feeder roads have been listed under this objective, a very small fraction of which has been improved. The bulk of this network is made up of tracks in the form of paths for pedestrians, animals and carts, which had never been improved in the past.

4.3.2 The improvement and rehabilitation needs are therefore particularly great, which makes the definition of priority works difficult. The strategy finally adopted in the medium term is to «do a little, but well». In other words, the strategy consists in intervening up to 2010 on a limited fraction of the feeder road network, but whose socio-economic impacts will be immediate and sustainable. It favours construction standards that limit maintenance requirements (submersible aprons for example) and will use the feeder roads database (FRDB) that is being put in place.

4.3.3 In line with this strategy, a priority investment programme (PIP) has been defined in coordination with the donors and focuses on the improvement of 12,000 km of feeder roads by 2010 and support to the maintenance of these roads. All the provinces are concerned, but efforts are concentrated on the most important rural areas in terms of population and agro-pastoral production. The present project is part and parcel of the PIP and will enable the improvement, over a period of five years, of more than 50% of the roads billed under this programme. However, the sustainability of the project depends in large part on the effective creation of the decentralised communities, which, since the adoption of the Decentralisation Act, are responsible for the implementation of feeder roads maintenance programmes. The establishment of the local communities is a lending condition.

Bank’s Experience in the Sector

4.3.4 Burkina Faso has in the last 20 years benefited from six (06) Bank Group operations in the transport sector for a total amount of UA 63.15 million. These operations went to the road sub-sector for the financing of five (05) projects and one (01) study. They are the Fada Ngourma-Pama- Tindangou, Banfora-Gaoua-Batié, Bilanga –Fada Ngourma projects, the Road Maintenance Project of the Second Road Programme, and the Ouagadougou-Léo-Ghana Border road study. The first three projects and the road study are fully completed, the road maintenance project is nearing completion and the second road programme has just started.
The projects implemented have had an important economic impact by opening up many regions, strengthening the socio-economic infrastructure of the areas crossed, reducing the road transport cost and constructing water reservoir structures.

4.3.5 In view of the semi-arid climate and the poverty of the populations of most of the areas concerned, the road projects implemented represent considerable opportunities for employment, network strengthening, water-supply improvement for the populations living within the vicinity and livestock. The Bank should therefore consolidate these social impacts by ensuring that the work specifications, among other things, make it clear to the contractors that their site installations should be constructed with durable materials for subsequent use as schools and various public centres, and that the wells or water reservoirs constructed by these contractors are rehabilitated at the end of works to meet the needs of the populations. The present project takes these concerns into account.

4.3.6 The executing agencies concerned have, thanks in part to the Bank’s operations, been able to strengthen their experiences. They have at present a good mastery of project implementation and monitoring, a fairly satisfactory knowledge of the Bank’s rules of procedure and a better programming of road maintenance works. Besides, the shortcomings identified with regard to separate accounting and audit, which constituted a major problem in the management of Bank loans, have been addressed with the implementation of the road maintenance project and the establishment within the GDR of a special department in charge of internal accounting and audit.

4.4 Objectives

This project is a component of TSP.2 and, as such, its sector objective will be to: i) foster trade by reducing the domestic transport cost; and ii) improve the welfare of the rural populations through better access to the production areas and basic social services. The specific objectives are to: i) contribute to the development of production by opening up many cotton production and market gardening areas in the targeted 13 provinces; ii) improve the income level of the populations of the project Impact area by enhancing the value of the surplus production resulting from improvement of the project roads; and iii) facilitate the transportation of the products to the storage and selling areas by strengthening the intermediate means of transport.

4.5 Project Description

4.5.1 The expected project outputs are:

- improvement of 975 km of feeder roads in the 13 provinces concerned;
- construction and equipping of offices and accommodations in the 45 provinces from the Government’s contribution;
- delivery of 11,250 light site equipment (4,500 pickaxes, 4,500 shovels and 2,250 wheelbarrows) to the 45 provinces;
- supply of 400 ass-drawn carts and 60 bicycles to the women’s groups of the targeted 13 provinces;
- sensitisation of the populations of the PIA, in particular on the sexually transmitted infections (HIV/AIDS) and on environmental protection; and
- assessment of the project performance indicators.
Project components

4.5.2 The project components are:

A. FEEDER ROADS IMPROVEMENT

This component consists of the following activities:

A.1 improvement works of 975 km of feeder roads in 13 provinces of the country: 865 km of cotton-farm feeder roads in the West and South-West and 110 km of cart tracks in the provinces of Houet (30 km) and Kadiogo (80) connecting the market gardening areas; they will be constructed in keeping with the standards accepted, depending on the current levels of deterioration and presented in paragraphs 4.1.8 and 4.1.9;

A.2 works control and supervision: the services required will be entrusted to experienced consulting firms which, among others, will ensure that the outputs conform to the specifications; and

A.3 technical assistance to GDFR, whose generic terms of reference are included in Annex 5.

B. INSTITUTIONAL SUPPORT

4.5.3 This component comprises the following sub-components:

B.1 Establishment of provincial feeder road units. This action contributes to the implementation of the decentralisation policy that envisages the ultimate transfer of the competences of the Central Administration in certain socio-economic infrastructure (notably feeder roads) to the local communities (LC). The provincial units (PU) to be created in the 45 provinces will in the first instance depend on the GDFR, but will in the end be gradually transferred to the local communities. They comprise the construction of offices and accommodations and the provision of light site equipment. The construction cost of the buildings (for offices and accommodation) will be entirely financed by the Government’s counterpart contribution.

B.2 Actions in favour of the women’s groups in dire need of intermediate means of transport, identified and selected as such by the Ministry of Social Welfare, supported by the Rural Transport Programme Coordination (RTPC). They centre on the supply of ass-drawn carts and bicycles.

C. PROGRAMME MANAGEMENT

It comprises:

C.1 Financial audit. The project accounts will be audited annually by an approved independent auditor, who will audit the utilisation of the project resources and prepare annual audit reports.

C.2 Monitoring/evaluation of project impact on the neighbouring populations and sensitisation of these populations on health problems, especially protection against HIV/AIDS, traffic and exploitation of children in the cotton farms, environmental protection (control of abusive cutting of firewood and bushfire, etc.).

4.5.4 The works focus on the rehabilitation or periodic maintenance of the feeder roads already improved and the upgrading of rough tracks into village roads. They are broken down into several lots to take account of the geographical spread of the feeder roads.
4.5.5 Control and supervision services will be provided by the consultants recruited for the purpose and they will be assisted by their national counterparts. The appointment of these counterparts who will be integrated into the control teams is a lending condition. In view of the geographical distribution of the works on 13 provinces, they will be sub-divided into two or three lots. They will provide the GDFR with the logistics for site monitoring. The logistics will include means of mobility for the coordinator, as well as field allowances for him and his counterparts. Moreover, considering that the GDFR is not yet fully beefed up with the core staff, a technical assistant will be recruited to support it in the project implementation. The terms of reference of this assistance are given in Annex 5.

4.5.6 The basic facilities of the provincial units comprise, per province, an office with an adjoining meeting room, a residence with its annexes (kitchen, bathroom and toilets) for the civil engineering technical officer (CETO), who will run the unit, as well as a watchman’s house and the fencing of the said facilities.

4.5.7 The equipment supplied to the units comprises shovels, pickaxes and wheelbarrows for road mending works on the feeder roads by the beneficiary populations. The action in favour of the women’s groups consists in providing them with intermediate means of transport (IMT) to lighten their daily occupations. They are ass-drawn carts and bicycles. They will be divided into the 13 provinces of the project impact area. Priority will be given to the groups that would not have benefited from this type of action.

4.5.8 The project financial audit will be performed by a consultant. The terms of reference were discussed with the GDFR during the project appraisal mission.

4.5.9 The monitoring/evaluation of the project impact on the beneficiary populations and the awareness campaign seek to determine the project performance indicator on agricultural production and on the mobility of the populations, and to inform the poor and vulnerable populations of the opportunities and risks, which will arise from the improvement of the feeder roads, in order to bring them to adopt a responsible behaviour that will help improve their welfare. The topics will focus on: (i) prevention of STD/AIDS risks; (ii) child labour in the cotton plantations; and (iii) respect and protection of the environment.

4.6 Environmental Impacts

4.6.1 In view of its location in the relatively stable regions and the environmental impact which is easily controllable through the implementation of appropriate measures, the project is classified in category 2. The assessment of the environmental and social conditions carried out during the field visits, and the examination of the environmental study report indicate that the environmental impacts will be minimal. Besides, the socio-economic impacts will be very beneficial. The measures recommended in the environmental and social management plan (ESMP) will help mitigate the negative impacts.

4.6.2 The programme implementation will help reduce the transport cost and the travel time between the localities and the countries, enhance the employment opportunities and income of the local population and women in particular, facilitate access to the periodic food commodity markets, prevent diseases such as STD/AIDS and preserve the human and physical environment. Overall, the project will reduce poverty and improve the lifestyle of the population. Women will be the greatest beneficiaries.

4.6.3 During works execution and after the commissioning of the improved roads, the major negative impacts that may arise would concern: dust, noise, vibrations and security problems during site improvement and the installation of construction equipment and materials; degradation of the soil within the vicinity of the road, quarries, access roads and work sites; water pollution by the discharge of sediments and pollutants in the bodies of water;
deforestation by the site personnel through the cutting of trees for firewood in the forest areas; felling of the trees on the road layout, related structures and borrowing areas; clandestine killing of the wildlife by the workers; the expected increase in cotton production; increase of contagious diseases (STD/AIDS) through an influx of foreign populations. The field visits and engineering studies indicate that there will be no expropriation of lands or houses.

4.6.4 The recommended mitigation measures and the monitoring of these measures are detailed in the annexes. The Environmental and Social Management Unit (ESMU) of the Ministry of Infrastructure, Transport and Housing will be in charge of monitoring the implementation of the mitigating and enhancing measures as well as compliance with the applicable regulation. It will work in close collaboration with the control mission, which will provide an environmentalist, 10 days per quarter, throughout the project duration, to support the ESMU, and who will ensure the implementation of the ESMP, site management, the implementation of specific environmental and social works and the search for solutions to short-term environmental problems. Moreover, the Permanent Secretariat of the Environment will be called upon to give advice and assist in the solution of important environmental and social problems.

4.6.5 The cost relating to the environmental protection measures (repair of the borrowing sites and their development, planting of copses and alignments, continued reforestation), estimated at UA 610,000, is included in the works cost. The other costs are estimated as follows: establishment of ESMU UA 12,500 and sensitisation UA 60,000. The cost relating to the monitoring of the environmental and social measures is included in the cost of the services to be provided by the control mission.

4.7 Social Impact

4.7.1 The major impact expected from the programme implementation is to render more accessible the numerous villages and secondary socio-economic centres where over 51% of the population is considered very poor, as they do not have the strict minimum estimated in 2002 at 72,690 CFAF (94 dollars) per person and per annum. This segment of the population, thanks to better travel conditions and the intermediate means of transport put at the disposal of the most underprivileged women’s groups, will be induced to increase the marketable production and derive additional incomes that can improve their living standard. The surplus production will also help reduce food insecurity in certain provinces of the project impact area, which are in deficit and whose inhabitants can get supplies more easily on the local markets.

4.7.2 The improvements projected will, moreover, enable easier access to the health centres and domestic markets, especially for women who are the principal «victims» of the landlocked nature of the many villages concerned by the project, and also for the NGOs and international public-health-assistance organisations, which are very active in the country. For instance, while 60% of the children in the urban centres like Ouagadougou will be immunised under the extended vaccination programme (EVP) being implemented throughout the national territory, less than 30% of the children in the rural areas benefit from it. The shortage of access roads passable in all seasons is one of the causes of the low vaccination coverage in this area.

Impact on Women

4.7.3 A large segment of the female population lives in the numerous villages of the project impact area. These women, as in the rest of the country, produce and sell various agricultural commodities: grains, tubers, oilseeds, fruits and vegetables. They are also active in the craft industry and stockbreeding, particularly in sheep rearing, which consists in raising a limited number of sheep (2 to 6 heads) fed at home. The animals to be sold are brought to the local market, preferably during festive seasons, with a view to obtaining the best prices.
4.7.4 The opening up of these villages will stimulate the different activities enumerated and enable the women engaged in them to sell their marketable products more easily and thereby improve their welfare. These women could also carry on other activities related to the project, namely petty trading, catering business close to the site installations during the works implementation phase. The project will, in addition, provide better access to the principal health centres mostly located in provincial headquarters.

Impact on Poverty

4.7.5 During the implementation phase, the skilled and unskilled jobs created, as well as the procurement of projected works, goods and services will benefit in large part the SMEs and the local workers. Thanks to the mutual support network still very active in the country, the salaries received will be used to cover the vital needs of several households while contributing to the renewal or strengthening of the currently used agricultural equipment (carts, hoes, machetes etc.). Moreover, a part of the salaries will be used to finance the petty trade and cottage industries, which procure additional income to members of the community. After works completion, the tendency to produce more will be great; the resulting additional production will help improve the food security and income of households in the area. Finally, the most needy women’s groups will, under the project, benefit from the intermediate means of transport likely to reduce the difficulty of cotton picking, the collection and distribution of market garden produce on the domestic markets while improving their yields.

4.8 Project Cost

4.8.1 The project has been estimated at CFAF 14,957.16 million or UA 18.76 million: CFAF 5,309.68 million in foreign exchange (UA 6.66 million) and CFAF 9,647.48 million in local currency (UA 12.10 million). Taxes amount to CFAF 2,692.29 million, representing mostly the VAT estimated at 18% of the total duty-free cost. They will be borne by the Government.

4.8.2 The estimate comprises a provision for physical contingencies and price escalation. Physical contingencies have been estimated at 10% of the base cost. Price escalation has been calculated on the basis of an annual inflation rate of 2% for foreign exchange and 3.2% for the local currency. The estimated costs are based on the engineering studies conducted on the feeder roads in 2002.

4.8.3 It should be underscored that the unit cost of improving the cotton-farm feeder roads is markedly higher than that of the cart tracks owing to the standard adopted for the latter. Indeed, cotton-farm feeder roads carry a heavier traffic than cart tracks (articulated trucks for the collection of cotton) and consequently require a special improvement. The unit costs of the works vary from CFAF 3 million for cart tracks to over CFAF 8.5 million for cotton-farm feeder roads.

The summary cost estimate by project component is given in Tables 4.1.
Table 4.1: Summary Cost Estimate by Project Component

<table>
<thead>
<tr>
<th>A. FEEDER ROADS IMPROVEMENT</th>
<th>In Million CFAF</th>
<th>In Million UA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.E.</td>
<td>L.C.</td>
</tr>
<tr>
<td>A.1 FR improvement works</td>
<td>3564.1</td>
<td>5346.15</td>
</tr>
<tr>
<td>A.2 Works control</td>
<td>531.94</td>
<td>354.63</td>
</tr>
<tr>
<td><strong>Total A</strong></td>
<td>4096.04</td>
<td>5700.78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. INSTITUTIONAL SUPPORT</th>
<th>In Million CFAF</th>
<th>In Million UA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.E.</td>
<td>L.C.</td>
</tr>
<tr>
<td>B.1 Establishment of provincial FR units</td>
<td>157.5</td>
<td>2042</td>
</tr>
<tr>
<td>B.2 Supply of IMT to women’s groups</td>
<td>0</td>
<td>131</td>
</tr>
<tr>
<td><strong>Total B</strong></td>
<td>157.5</td>
<td>2173</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. PROJECT MANAGEMENT</th>
<th>In Million CFAF</th>
<th>In Million UA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.E.</td>
<td>L.C.</td>
</tr>
<tr>
<td>C.1 Technical assistance to DWC and GDFR</td>
<td>189.36</td>
<td>126.24</td>
</tr>
<tr>
<td>C.2 Financial audit</td>
<td>17.47</td>
<td>22.24</td>
</tr>
<tr>
<td>C.3 Monitoring/evaluation and Sensitisation</td>
<td>0</td>
<td>59.57</td>
</tr>
<tr>
<td><strong>Total C</strong></td>
<td>206.83</td>
<td>208.05</td>
</tr>
</tbody>
</table>

**Base Cost**

<table>
<thead>
<tr>
<th>Category of expenditures</th>
<th>In Million CFAF</th>
<th>In Million UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base cost</td>
<td>4460.37</td>
<td>8081.83</td>
</tr>
<tr>
<td>Physical contingencies</td>
<td>446.04</td>
<td>808.18</td>
</tr>
<tr>
<td>Price escalation</td>
<td>412.14</td>
<td>746.76</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>5318.55</td>
<td>9636.77</td>
</tr>
</tbody>
</table>

Table 4.2 Cost Summary by Category of Project Expenditure

<table>
<thead>
<tr>
<th>Category of expenditures</th>
<th>(In Million CFAF)</th>
<th>(In million UA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.E.</td>
<td>L.C.</td>
</tr>
<tr>
<td>A. Works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1 Road works</td>
<td>3564.10</td>
<td>5346.15</td>
</tr>
<tr>
<td>A.2 Building construction works</td>
<td>0.00</td>
<td>2042.00</td>
</tr>
<tr>
<td><strong>Total Works</strong></td>
<td>3564.10</td>
<td>7388.15</td>
</tr>
<tr>
<td>B. Goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.1 Light public works equipment</td>
<td>157.5</td>
<td>0.00</td>
</tr>
<tr>
<td>B.2 IMT equipment of the women's groups</td>
<td>0.00</td>
<td>131.00</td>
</tr>
<tr>
<td><strong>Total Goods</strong></td>
<td>157.5</td>
<td>131.00</td>
</tr>
<tr>
<td>C. Consultancy services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.1 Works control and supervision</td>
<td>531.94</td>
<td>354.63</td>
</tr>
<tr>
<td>C.2 Technical Assistance to DWC and of the GDFR</td>
<td>189.36</td>
<td>126.24</td>
</tr>
<tr>
<td>C.3 Audit financier</td>
<td>17.47</td>
<td>22.24</td>
</tr>
<tr>
<td>C.4 Sensitisation on STD/AIDS, environment protection</td>
<td>0.00</td>
<td>59.57</td>
</tr>
<tr>
<td><strong>Total Consultancy services</strong></td>
<td>738.78</td>
<td>562.67</td>
</tr>
<tr>
<td>Base cost</td>
<td>4460.38</td>
<td>8081.83</td>
</tr>
<tr>
<td>Physical contingencies</td>
<td>446.038</td>
<td>808.183</td>
</tr>
<tr>
<td>Price escalation</td>
<td>412.139</td>
<td>746.761</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>5318.55</td>
<td>9636.77</td>
</tr>
</tbody>
</table>

4.9 Sources of Finance

4.9.1 The project will be jointly financed by the ADF and the Burkinabe Government. The ADF financing will concern: (i) feeder road works, control of these works and technical assistance to the GDFR for the implementation of the project; (ii) supply of light site equipment for the provincial units; (iii) intermediate means of transport for the women’s
groups of the PIA; and (iv) consultants for the project audit, monitoring/assessment of the project impact on the beneficiary populations and sensitisation of the populations on STD/AIDS and environmental protection. The Government will finance the basic infrastructure of the units as its contribution (buildings for offices and accommodations).

4.9.2 The ADF loan of a total amount of UA 15.71 million, representing 83.72% of the total project cost, excluding taxes, will be utilised to finance 100% of the foreign exchange cost and 74.69% of the local currency cost of the project. The local currency cost borne by ADF is relatively high owing to the fact that the bulk of the goods, work and services will be procured on the local market.

4.9.3 The indicative table of the financing plan is given below.

<table>
<thead>
<tr>
<th>Table 4.3: Source of Project Finance (in million UA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>ADF loan</td>
</tr>
<tr>
<td>Government</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The expenditure schedule by component and by source of finance is given in tables 4.4 and 4.5 respectively:

<table>
<thead>
<tr>
<th>Table 4.4 Expenditure schedule by project component (in million UA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>A. FEEDER ROADS IMPROVEMENT</td>
</tr>
<tr>
<td>A.1 Feeder roads improvement works</td>
</tr>
<tr>
<td>A.2 Works control</td>
</tr>
<tr>
<td>Total A</td>
</tr>
<tr>
<td>B. INSTITUTIONAL SUPPORT</td>
</tr>
<tr>
<td>B.1 Establishment of FR provincial units</td>
</tr>
<tr>
<td>B.2 Supply of IMTto women’s groups</td>
</tr>
<tr>
<td>Total B</td>
</tr>
<tr>
<td>C. PROJECT MANAGEMENT</td>
</tr>
<tr>
<td>C.1 Technical assistance to DWC and GDFR</td>
</tr>
<tr>
<td>C.2 Financial audit</td>
</tr>
<tr>
<td>C.3 Monitoring/evaluation and Sensitisation</td>
</tr>
<tr>
<td>Total C</td>
</tr>
<tr>
<td>Grand total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4.5 Expenditure Schedule by Project Source of Finance (in million UA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>ADF loan</td>
</tr>
<tr>
<td>Government</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
5. PROGRAMME IMPLEMENTATION

5.1 Executing Agency

5.1.1 The executing agency is the Ministry of Infrastructure, Transport and Housing through the General Directorate of Feeder Roads (GDFR), which in turn, is assisted by the Directorate of Works and Coordination (DWC). The human and material resources of the DWC, which directly depends on the GDFR, are being beefed up to enable it to correctly monitor project implementation. For greater efficiency of DWC in the project activities, technical assistance will be provided within the GDFR to strengthen the technical team in charge of preparing and monitoring project implementation. The Director of the DWC will head this team made up of at least two civil engineers and a technical assistant. The organisation chart of the executing agency is given in Annex 2.

5.1.2 The technical assistance will entail the provision, by a consulting firm, of the services of a road engineer with at least ten years’ experience in the monitoring of road projects. He must have been Manager of at least one road project and shall provide proof thereof. The terms of reference of the technical assistance are given in Annex 5.

5.2 Institutional Provisions

5.2.1 Experienced and qualified consulting firms will be recruited for the monitoring and supervision of the works divided into several lots. Besides the engineers required for these services, their respective teams will comprise environmental experts for the implementation of the environmental protection measures. In addition, these firms will hire the services of the “laboratoire national du bâtiment et des travaux publics” (LNBTP) for all the geotechnical aspects of the works. Under the supervision of the GDFR, they will monitor, on the field, the implementation of works, control their technical and environmental quality, ascertain the works actually done and their invoicing, and prepare periodic implementation reports.

5.2.2 The technical assistance provided to the GDFR for project monitoring will be put under the direct supervision of the Director of Works and Coordination and will work in close collaboration with the other technical directorates, notably the Directorate of Financial, Administrative and Contracts Management DFACM. During the project implementation period, the technical assistant will work with the DWC in the monitoring of the overall programme. The said technical assistant will be allocated functional offices within the GDFR. This will be a lending condition in order to get the Government to speed up the renovation works of the premises to make them functional before the recruitment of technical assistance.

5.3 Implementation and Supervision Schedule

5.3.1 The project will be implemented in 40 months. The tentative project implementation schedule detailed in Annex 6 is as follow:
<table>
<thead>
<tr>
<th>No</th>
<th>ACTIVITIES</th>
<th>RESPONSIBILITY</th>
<th>TARGET DATE</th>
<th>END</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LOAN APPROVAL AND EFFECTIVENESS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Loan approval</td>
<td>ADF</td>
<td>Sept 2004</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Signature and entry into force of the loan agreement</td>
<td>Govt/ADF</td>
<td>Oct 2004</td>
<td>Oct 2005</td>
</tr>
<tr>
<td>2</td>
<td>PROJECT IMPLEMENTATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Technical assistant consultant</td>
<td>ADF</td>
<td>Dec 2004</td>
<td>Dec. 2004</td>
</tr>
<tr>
<td></td>
<td>Approval of the bidding document</td>
<td>ADF</td>
<td>Jan 2005</td>
<td>Jan 2005</td>
</tr>
<tr>
<td></td>
<td>Approval of the shortlist by ADF</td>
<td>GDFR</td>
<td>Feb 2005</td>
<td>March 2005</td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bid analysis and approval.</td>
<td>CM, DGPR et FAD</td>
<td>April 2005</td>
<td>July 2005</td>
</tr>
<tr>
<td></td>
<td>Assistance to GDFR</td>
<td>Consultant</td>
<td>Sept. 2005</td>
<td>Dec 2008</td>
</tr>
<tr>
<td>2.3</td>
<td>Works control Consultant</td>
<td>ADF</td>
<td>Dec 2004</td>
<td>Dec. 2004</td>
</tr>
<tr>
<td></td>
<td>Approval of the bidding document</td>
<td>ADF</td>
<td>Jan 2005</td>
<td>Jan 2005</td>
</tr>
<tr>
<td></td>
<td>Approval of the shortlist by ADF</td>
<td>GDFR</td>
<td>Feb 2005</td>
<td>March 2005</td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bid analysis and approval.</td>
<td>MC, GDFR and ADF</td>
<td>April 2005</td>
<td>July. 2005</td>
</tr>
<tr>
<td>2.4</td>
<td>Works</td>
<td>ADF</td>
<td>Feb 2005</td>
<td>March. 2005</td>
</tr>
<tr>
<td></td>
<td>Approval of BD by ADF</td>
<td>GDFR/MITH</td>
<td>April 2005</td>
<td>July 2005</td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td>MC, GDFR and ADF</td>
<td>Aug 2005</td>
<td>Dec 2005</td>
</tr>
<tr>
<td></td>
<td>Bid analysis and approval</td>
<td>MITH/Contractors</td>
<td>Oct 2005</td>
<td>Jan 2006</td>
</tr>
<tr>
<td></td>
<td>Contract notification and mobilisation of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>contractors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Procurement of equipment</td>
<td>ADF</td>
<td>Jan 2006</td>
<td>Feb 2006</td>
</tr>
<tr>
<td></td>
<td>Approval of BD by ADF</td>
<td>GDFR/MITH</td>
<td>Feb 2006</td>
<td>April 2006</td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td>MC, GDFR and ADF</td>
<td>May 2006</td>
<td>July 2006</td>
</tr>
<tr>
<td></td>
<td>Bid analysis and approval</td>
<td>MITH</td>
<td>August. 2006</td>
<td>Oct 2006</td>
</tr>
<tr>
<td></td>
<td>Negotiation and procurement</td>
<td>Suppliers</td>
<td>Nov. 2006</td>
<td>Jun 2008</td>
</tr>
<tr>
<td></td>
<td>Delivery of supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>Consultant for sensitisation</td>
<td>ADF</td>
<td>Jan 2005</td>
<td>Feb 2005</td>
</tr>
<tr>
<td></td>
<td>Approval of BD by ADF</td>
<td>GDFR/MITH</td>
<td>March. 2005</td>
<td>April 2005</td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td>MC, GDFR and ADF</td>
<td>May 2005</td>
<td>July 2005</td>
</tr>
<tr>
<td></td>
<td>Bids analysis and approval</td>
<td>MITH</td>
<td>Aug 2005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negotiations and procurement</td>
<td>NGO</td>
<td>Oct 2005</td>
<td>Nov 2008</td>
</tr>
<tr>
<td></td>
<td>Performance of services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7</td>
<td>Consultant for project audit</td>
<td>ADF</td>
<td>June 2005</td>
<td>Aug 2005</td>
</tr>
<tr>
<td></td>
<td>Approval of BD by ADF</td>
<td>GDFR/MITH</td>
<td>July. 2005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Launching of bids</td>
<td>MC, GGFR and ADF</td>
<td>Sept. 2005</td>
<td>Nov 2005</td>
</tr>
<tr>
<td></td>
<td>Bids analysis and approval</td>
<td>MITH</td>
<td>Dec. 2005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.2 ADF will organise a project-launching mission and later undertake the supervision mission. A mid-term review mission on project implementation will also be carried out. The provisional schedule of these missions is given hereunder.
### Provisional Supervision Schedule

<table>
<thead>
<tr>
<th>Approval Date (month/year)</th>
<th>Activities</th>
<th>Skills Required</th>
<th>Staff Contribution (staff/weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/2004</td>
<td>Launching</td>
<td>Civil Engineer, disbursement officer, procurement officer</td>
<td>3</td>
</tr>
<tr>
<td>11-12/2005</td>
<td>Supervision</td>
<td>Civil Engineer (CE) and Transport economist (TE)</td>
<td>4</td>
</tr>
<tr>
<td>5-6/2006</td>
<td>Supervision</td>
<td>CE, Environmentalist, TE</td>
<td>5-6</td>
</tr>
<tr>
<td>1-2/2007</td>
<td>Supervision</td>
<td>CE and/TE</td>
<td>5-6</td>
</tr>
<tr>
<td>5-6/2007</td>
<td>Mid-term review</td>
<td>CE - Environmentalist, Gender expert - TE – disbursement</td>
<td>9-10</td>
</tr>
<tr>
<td>1-2/2008</td>
<td>Supervision</td>
<td>CE and TE</td>
<td>4</td>
</tr>
<tr>
<td>9-10/2008</td>
<td>Supervision</td>
<td>CE - Environmentalist, Gender exp.</td>
<td>5-6</td>
</tr>
<tr>
<td>1-12/09</td>
<td>Project completion report</td>
<td>Civil engineer – Transport economist – Environmentalist – Gender expert</td>
<td>4-8</td>
</tr>
</tbody>
</table>

#### 5.4 Procurement of Goods and Services

5.4.1 All procurements relating to the project will be conducted according to the Bank’s procedures using the relevant standard bidding documents. The modalities of the different procurements to be made under the project are summarised in the following table and detailed later on.

Table 5.1: Provisions for the Procurement of Works and Services (million UA)

<table>
<thead>
<tr>
<th>Category of expenditure</th>
<th>ICB</th>
<th>LCB</th>
<th>Shortlists *</th>
<th>Local shopping</th>
<th>Financing other than ADF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Works</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.2 Buildings</td>
<td>3.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.05</td>
</tr>
<tr>
<td>B. Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.1 Light PW equipment</td>
<td></td>
<td></td>
<td>0.24 [0.24]</td>
<td></td>
<td></td>
<td>0.24 [0.24]</td>
</tr>
<tr>
<td>B.2 IMT for women’s groups</td>
<td></td>
<td></td>
<td>0.20 [0.20]</td>
<td></td>
<td></td>
<td>0.20 [0.20]</td>
</tr>
<tr>
<td>C. Consultancy Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.1 Road works control</td>
<td></td>
<td></td>
<td>1.33 [1.33]</td>
<td></td>
<td></td>
<td>1.33 [1.33]</td>
</tr>
<tr>
<td>C.2 Building works control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.3 Technical assistance for G</td>
<td></td>
<td></td>
<td>0.47 [0.47]</td>
<td></td>
<td></td>
<td>0.47 [0.47]</td>
</tr>
<tr>
<td>C.4 Financial audit</td>
<td></td>
<td></td>
<td>0.06 [0.06]</td>
<td></td>
<td></td>
<td>0.06 [0.06]</td>
</tr>
<tr>
<td>C.5 Evaluation/Sensitisation</td>
<td></td>
<td></td>
<td>0.09 [0.09]</td>
<td></td>
<td></td>
<td>0.09 [0.09]</td>
</tr>
<tr>
<td>Total</td>
<td>16.38 [13.33]</td>
<td>1.95 [1.95]</td>
<td>0.44 [0.44]</td>
<td></td>
<td>18.76 [15.71]</td>
<td></td>
</tr>
</tbody>
</table>

* The shortlist applies only to the use of consultants.
+ The figures in brackets concern amounts financed by ADF loan.
- ADB here means African Development Bank Group

#### Works

5.4.2 Considering the limited scale of the works by lot, resulting from the dispersion of the feeder roads in the PIA, their nature and programming over three years, the relevant procurements will be conducted through local shopping.

#### Goods

5.4.3 The local shopping method will be used for the procurement of light site equipment intended for feeder roads maintenance and for the procurement of the intermediate means of transport.
Consultancy Services

5.4.4 The procurements of consultancy services for works control and supervision, for technical assistance to GDFR and for financial audit will be conducted through international competitive bidding on the basis of shortlists approved beforehand by the Bank. The selection of these consultants will be based on the lowest price method for such services. Services relating to the monitoring/evaluation of the project impact on the beneficiary populations and to their sensitisation will be procured through local shopping on the basis of the shortlists of consultants or NGOs specialised in the area. Selection will be based on the lowest price method for similar services.

General Information Note

5.4.5 The text of the general information note on procurement was discussed and adopted with the Government during project appraisal. It will be issued for publication in «Development Business» upon approval of the loan by the Board of Directors.

Review procedures

5.4.6 Finally, the following documents will be submitted to the Bank for prior review and approval before they are published. They are: (i) the special note on works procurement, (ii) bidding documents, (iii) bid analysis reports comprising recommendations on contract awards and contracts, (iv) shortlists, and (v) draft contracts, if those incorporated in the bidding documents have been modified.

5.5 Disbursement Provisions

5.5.1 The direct disbursement method is envisaged for the works, consultancy services and supplies. On that basis, the Bank will make the corresponding direct payments to the successful contractors and consulting firms.

5.6 Monitoring and Evaluation

5.6.1 Monitoring-evaluation comprises mainly the Bank’s supervision missions, mid-term reviews and a final evaluation, including the completion reports of the borrower and the Bank. The consultants in charge of works control and supervision will prepare monthly and quarterly reports on project implementation. GDFR will furnish the Bank, on a quarterly basis, with a report on the project implementation status in keeping with the existing format. This report will include an account the implementation of all the project components. The same goes for the programmes and the annual status reports. GDFR and the General Directorate of Cooperation will coordinate the donors’ interventions with the assistance of the Coordination Unit set up under World Bank financing (TSP.2).

5.6.2 The consultants in charge of works control and supervision will, at the end of these activities, prepare the end-of-works reports, which they will submit for validation to the GDFR. The latter will prepare the project wrap-up report in line with the existing format and within six months of project completion. The consultants will assist the GDFR in the final acceptance of works.

5.6.3 The GDFR accounts officer will keep the general project account. An annual project financial audit will be performed and the report communicated to the Bank. This will enable the Government and the Bank, under project-implementation monitoring, to ensure that: (i) the loan resources were effectively utilised to finance the project, (ii) the loan accounts are correctly kept, and (iii) the Bank’s loan administration procedures are well followed.

5.7 Audit Reports

5.7.1 The project account will be kept according to a standard private chart of accounts and according to a computerised accounts management system that conforms to the West African accounting system (SYSCOA). This system should make it possible to monitor project
expenditures according to the projections by source of finance, category of expenditure and by component. There will be an external audit of the project accounts every year by an audit firm hired in keeping with Bank Group procedures. An allocation is earmarked to this end from the project funds. The audit reports will be submitted to the ADF not later than six months after the end of each accounting year. As the project will be implemented in 40 months, it is agreed that the Borrower will commission four annual audits, the last of which will be conducted at the end of the project.

5.8 Coordination with Donors

5.8.1 The benchmark for aid coordination in favour of the transport sector is the TSP. This coordination will be effected, at the level of the General Directorate of Cooperation of the Ministry of Finance, with the collaboration of the Ministry of Infrastructure, Transport and Housing. A project coordination unit (PCU), run by a Coordinator, has been established under the Transport Sector Project. The duties of the PCU are, among others, to organise annually a conference on the transport sector in Burkina Faso in order to increase the participation of all the stakeholders in the management of the sector. This conference brings together all the stakeholders, including the private sector, representatives of the civil society in the rural and urban areas, representatives of the elected personnel, mostly those of the provinces, and donors.

6. PROJECT SUSTAINABILITY

6.1 Recurrent Costs

6.1.1 The feeder roads maintenance cost is estimated at CFAF 90,000 per km and per annum for the cotton-farm feeder roads, and at CFAF 60,000 per km and per annum for the other tracks. At present, the cotton-farm feeder roads are maintained by SOFITEX. For the moment, the other tracks are not systematically maintained. The interventions focus much more on localised repairs when a track is cut off (disruption of engineering structures, caving in of a platform, etc.) in order to restore traffic.

6.1.2 The national strategy adopted in March 2003 provides for a systematic annual maintenance of all the improved feeder roads. This maintenance will be provided by the decentralised communities in keeping with the decentralisation policy that is being implemented.

6.2 Project Sustainability

6.2.1 Considering that the maintenance of feeder roads is fundamental to the sustainability of the investments made for their improvement, the NRTS plans to implement a new approach to this maintenance, which lays emphasis on design, management, a maintenance culture and a certain degree of professionalism. The construction standards to be proposed at the design stage should limit the maintenance needs. Feeder roads management gives priority to the utilisation of these norms, which will be codified in the «specifications» in collaboration with the village land management committees. Moreover, the populations should move from the ad hoc repair culture (only when the road is cut off) to an infrastructure maintenance culture based on an annual programming that favours a certain number of systematic actions each year. Finally, the staff and managers in charge of feeder roads will receive training and a bonus to cope with the tasks of organising, carrying out and managing the maintenance of the feeder roads (FR). The maintenance will concern manual road-mending works by jobbers under the supervision of a civil works technical officer (CWTO). The tasks will focus on ensuring that the feeder roads can be plied at all times (treatment of the structures) and that the sanitation infrastructure are maintained (ditches, outlets).
6.2.2 Sustainable resources, combined with a sound maintenance policy, being a condition indispensable for the sustainability of the improved roads, the Government has taken steps to this end pending the provision of a second-generation road fund. Thus, the annual road maintenance resources currently coming from the State budget, for an amount of CFAF 7 billion, are regularly made available and allocated as a priority to the classified main roads network. As for the cotton-farm feeder roads, they are maintained annually by SOFITEX. This company every year allocates CFAF 1 per kg of seed cotton bought during the previous crop year. Besides, the decentralisation envisages the transfer of skills to the local communities for the maintenance of the feeder roads. This transfer should be accompanied by the resources required for the maintenance. Following their privatisation, maintenance works are carried out by the SMEs on the basis of bids, with the DGPS' technical monitoring deemed satisfactory for the works recently implemented. Finally, TSP.2, which is under implementation, is considering a study for the creation of a road fund and an institutional support to the CFP to strengthen its operational capacity in the training and guidance of SMEs. The study in question is on the point of being launched. It will incorporate, among others, the feeder roads maintenance problems in a context of decentralisation and strengthening of the rural economy.

6.3 Key Risks and Mitigation Measures

6.3.1 The project risks are of two types. The first concerns the delay in the effective implementation of the decentralisation policy, which is intended to enable the decentralised communities in charge of the local infrastructure to have the resources required for the construction and maintenance of the said infrastructure. The second risk concerns the absence of concrete measures to enable the effective participation of the populations in the maintenance of the feeder roads.

6.3.2 However, certain measures already taken, or being taken by the Government, are geared towards mitigating these risks. Indeed, Act n° 041/98/AN of August 1998 establishing the organisation of the administration of the Burkina Faso territory and delegating to the Provinces, among other things, the powers to construct and maintain the rural roads, is being updated with a view to its effective application in the rural communes by 2006. The identification phase of the rural communes has just been completed. At the end of this phase, 302 rural communes were selected and will be established between 2005 and 2006. Moreover, under the present project, the creation of units endowed with adequate equipment and skilled staff for the maintenance and management of the feeder roads constitutes the premise for the application of the decentralisation policy.

6.3.3 The second risk is mitigated by the fact that during discussions on the NRTS under the participatory approach, the populations demonstrated their enthusiasm to actively participate in the maintenance of their non-cotton-farm feeder roads network. On this basis, the dialogue between the Administration and these populations should, prior to the implementation of the provincial units, lead to a consensus on the level and modalities of mobilisation of their contribution.

7. PROJECT BENEFITS

7.1 Economic Analysis

General

7.1.1 The primary objective of the improvement of 975 km of feeder roads under the project is to support the rural sector, which ensures the subsistence of about 80% of the national population, accounts for more than 30% of the gross national product and provides at least 50% of the export earnings. Upon their commissioning by the year 2008, the improved roads will rely on the primary and secondary networks to form a meshwork that makes it possible to reach many agricultural production and pastoral areas, the basic services (schools, health
centres etc.), the selling points and the local administration. The expected effect of the opening up should lead, from the economic point of view, to a significant surplus production and an increased marketing of the agro-pastoral productions. At present, most of the populations of the PIA are confined to a subsistence economy owing mainly to the fact that most of the roads are impassable, especially during the rainy season. The project is likely to solve these problems, stimulate production and alleviate poverty in the PIA.

7.1.2 The project roads belong to the category of traffic of 5 to 10 vehicles a day. This low traffic, which does not take into account the intermediate means of transport widely used in the collection of produce and the movement of persons in the whole PIA, are far from reflecting the economic and social importance of the areas served by the feeder roads. The proposed investments cannot therefore be justified on the basis of the benefits related to automobile traffic (reduction of the vehicle operating cost). Therefore, the project economic analysis is based on the feeder road improvement and maintenance costs and the increase in agricultural value estimated on the basis of a comparison between the «non-project» situation and the «project» or reference situation.

**Surplus Production**

7.1.3 The surplus production was estimated on the basis of the projections made under the agricultural sector sustainable growth strategy. The principal objectives of this strategy are to:

i) increase agricultural production from 5 to 10% a year up to 2010, starting from 2000;

ii) contribute to an increase in the incomes of farmers and stockbreeders by at least 3% per annum and per person from 2008;

iii) create conditions that ensure the populations access to an adequate and balanced diet; and

iv) create an awareness on, and strengthen the sustainable management of, natural resources by the rural communities.

7.1.4 One of the major conditions defined by the Government to achieve the objectives of agricultural growth and increased revenues of the rural populations, as specified above, is the improvement and adequate maintenance of the feeder roads by the local communities under the ongoing administrative decentralisation in the country. The impact of the feeder roads improvement projects is considered determinant in this sustainable growth strategy and would lead to an annual increase of 2 to 3.5% in the overall agricultural production. This increase, variable depending on the crops (grains, cotton), represents the surplus production directly linked to the implementation of feeder roads improvement projects.

7.1.5 On the basis of these general forecasts and allowing for an adequate margin of error, the following specific assumptions have been selected under the present project:

i) the basic production is that of 2002 with an average growth rate of 1.5% up to 2008. Production in 2008 will therefore be 1,457,955 tonnes of grains, 409,846 tonnes of cotton and 314,688 tonnes of other crops;

ii) during the life of the improved roads, fixed at 15 years from 2008 – the year when the roads will be commissioned - the production of grains, cotton and other crops attributable to the project, will increase by 1%, 1.5% and 1.5% respectively; and

iii) at least 70% of the additional food crops and the totality of the additional cotton production will be marketed.
7.1.6 The surplus production resulting from these assumptions are summarised as follows:

<table>
<thead>
<tr>
<th>Surplus production</th>
<th>Years</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2012</td>
<td>2017</td>
<td>2022</td>
</tr>
<tr>
<td>Grains (tonnes)</td>
<td>14,579</td>
<td>15,171</td>
<td>15,945</td>
<td>16,759</td>
</tr>
<tr>
<td>Cotton (tonnes)</td>
<td>6,148</td>
<td>6,525</td>
<td>7,0294,482</td>
<td>7,572</td>
</tr>
<tr>
<td>Other crops (000 tonnes)</td>
<td>4,720</td>
<td>5,009</td>
<td>5,397</td>
<td>5,814</td>
</tr>
</tbody>
</table>

Additional Project-Related Incomes

7.1.7 These incomes result from the marketing of the surplus production in the proportions indicated in paragraph 7.1.5. The unit prices applied are the producer prices furnished by the Ministry of Agriculture and Livestock. They are: grains CFAF 75/kg, cotton CFAF 175/kg and other products CFAF 600/kg. The results obtained are summarised below:

<table>
<thead>
<tr>
<th>Product</th>
<th>Additional income (million CFAF)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2012</td>
<td>2017</td>
<td>2022</td>
</tr>
<tr>
<td>Grains</td>
<td>765.42</td>
<td>796.47</td>
<td>834.09</td>
<td>878.79</td>
</tr>
<tr>
<td>Cotton</td>
<td>1,075.84</td>
<td>1,141.86</td>
<td>1,230.11</td>
<td>1,325.18</td>
</tr>
<tr>
<td>Other products</td>
<td>198.25</td>
<td>210.42</td>
<td>226.68</td>
<td>244.20</td>
</tr>
</tbody>
</table>

Reduction of the Maintenance Cost

7.1.8 The annual and periodic routine maintenance cost every five years in the reference situation and the «project» situation is as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Unit</th>
<th>Cost in a Non-Project Situation (CFAF)</th>
<th>Cost in a Project Situation (CFAF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance of roadside ancillaries</td>
<td>km</td>
<td>120,000</td>
<td>114,000</td>
</tr>
<tr>
<td>Partial contribution of materials</td>
<td>m3</td>
<td>6,000</td>
<td>5,700</td>
</tr>
<tr>
<td>Reshaping</td>
<td>km</td>
<td>60,000</td>
<td>57,000</td>
</tr>
<tr>
<td></td>
<td>km</td>
<td>300,000</td>
<td>285,000</td>
</tr>
<tr>
<td>Annual average cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periodic Maintenance</td>
<td>km</td>
<td>4,000,000</td>
<td>3,400,000</td>
</tr>
</tbody>
</table>
Costs and Economic Benefits

7.1.9 The economic cost of the investment (cost excluding tax and without price revisions) is estimated at CFAF 12,543.19 million, spread over three and half years from 2005. The economic benefits taken into account in calculating the rate of return are of two types: the increase in agricultural value and the reduction in the maintenance cost of the project roads. Provisions have been made for routine maintenance every year and for periodic maintenance every five years starting from 2008. The economic results of these different factors is given in Annex 7.

7.2 Economic Rate of Return and Sensitivity Test

7.2.1 The rate of return determined from the three factors, namely agricultural value added, the maintenance cost and the investment cost excluding taxes and without price revision is 14%. This rate shows that the project is economically viable. These results have been subjected to sensitivity tests based on the estimated cost and the quantifiable benefits expected from the implementation of the project. Regarding the cost, the factors likely to undergo unpredictable changes are of two kinds: the preparation works of the road platform and the trend of fuel prices. For the benefits, the most sensitive variable is the basic production of grains and other crops, which depends on several uncontrollable exogenous factors, such as rainfall and land problems.

7.2.2 The results of these tests given in Annex 7 show that the ERR are relatively stable. In effect, with an increase of 10% in the investment cost, the IRR amounts to 13 %, and with a 10% reduction of the expected benefits, it stands at 13 %. The combination of these low assumptions gives an IRR of 11 %. The project therefore remains viable even in these three worst-case scenarios.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 Engineering, socio-economic and environmental studies have been conducted on the project, which is classified in environmental category II. The engineering studies took into account the nature of the roads (servicing of the cotton production and market gardening areas) in proposing the most technically and environmentally adequate improvement standards. The project design also took into consideration the decentralisation policy, which gives more responsibilities to the local communities in the management of the feeder roads.

8.1.2 The project is consistent with the 2002/2004 CSP for Burkina in view of its contribution to the promotion of the rural sector in the 13 target provinces. The sustainability of the proposed investments is ensured, thanks to the new feeder roads maintenance policy, which involves the local communities, the beneficiary populations and SOFITEX. The project is therefore technically well designed and economically viable, as it generates an internal rate of return of 14%. Besides, the sensitivity tests show that the unfavourable variations of this rate do not call into question the economic viability of the project.

8.2 Recommendations

8.2.1 In view of the above, it is recommended that an ADF loan not exceeding UA 15.71 million be granted to Burkina Faso. This loan will be utilised to implement the project as designed and described in the present report. It will be subject to the following conditions:

Conditions of Entry into Force

8.2.2 The loan agreement that will be signed between the ADF and the Government of Burkina Faso will enter into force when the latter would have fulfilled Section 5.2 of the General Conditions Applicable to Loan and Guarantee Agreements.
Conditions for the first Disbursement

8.2.3 Disbursements will be made from the loan only when the Government would have fulfilled the following conditions precedent:

Conditions Precedent to First Disbursement

8.2.4 The ADF will effect the first disbursement of the loan resources only upon fulfilment by the Borrower of the following specific conditions:

(i) the undertaking to communicate to the Fund the results of the feasibility study on the establishment of a second-generation road fund, and to implement the recommendations of the said study (paragraph 3.6.3);

(ii) the undertaking to initiate, as soon as possible, the implementation of the decentralisation policy (paragraph 3.5.5 and 4.3.3);

(iii) evidence that the technical assistance has been allocated operational premises to be used as offices (paragraph 5.2.2); and

(iv) evidence of the appointment of counterparts to the sites, who will be integrated into the control mission teams. Their qualifications and experiences would have been submitted beforehand to the Fund for approval (4.5.5);

Other Conditions

8.2.5 The Borrower shall in addition have:

(i) furnished, not later than 31 December 2006, the results of the feasibility study on the establishment of a second-generation road fund; and

(ii) furnished, not later than 31 December 2007, evidence of the application of the Decentralisation Act, notably with regard to the management of the local infrastructure, including the feeder roads.
ANNEX 2

BURKINA FASO
FEEDER ROADS PROJECT: ORGANISATIONAL CHART OF MITH

GENERAL SECRETARIAT

GENERAL DIRECTORATE OF FEEDER ROADS

- GDFR
- Assistance
- SECRETARIAT
  - DES
    - Secretariat
      - SEN
      - SPS
  - DTC
    - Secretariat
      - STC
      - SCGR
    - Secretariat
      - SDC
SUMMARY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Project name: Burkina Faso: Feeder Roads Project
Project number:
Country: Burkina Faso
Department: OCIN
Division: OCIN.3

1. Brief Project Description and Principal Environmental and Social Components

1.1 The project concerns the improvement of 1,016 km of feeder roads in the 13 cotton production and market gardening provinces, the construction and equipment of 45 offices and accommodations in the 45 provinces, the purchase of 11,250 light equipment and their delivery to the 45 provinces, the purchase and delivery of site equipment to the CFP, the supply of 400 ass-drawn carts and bicycles for the women’s groups in the 13 cotton production and market gardening provinces, and the sensitisation of the populations of the PIA on environmental protection and sexually transmitted diseases (HIV/AIDS).

1.2 The main environmental and social components of the project are: the sensitisation of the populations on health-related problems, especially HIV/AIDS control and environmental protection (abusive cutting of firewood, bushfire, poaching and the exploitation of children by certain landowners on their plantations, etc); the rehabilitation and development of the borrowing areas; the installation of village copes and the planting and nurturing of trees along roads in the towns; the monitoring of the environmental and social measures; the beefing up of the capacities of the environmental unit of the Ministry of Infrastructure, Transport and Housing in terms of the environmental and social impact assessment, followed by environmental studies and environmental audit.

1.3 On the sectoral level, the project will contribute to the reduction of transportation costs thereby improving the competitiveness of the national economy and ensuring better transport services to the rural areas. The specific project objectives aim to foster agricultural promotion, accessibility and trade in the target 13 provinces, poverty reduction and HIV/AIDS control, and to support the local communities under the Government’s decentralisation policy.

1.4 In view of its location in the relatively stable regions and the environmental incidences easily controllable through the implementation of appropriate measures, the project is classified in category 2. The evaluation of the environmental and social conditions carried out during field visits and the review of the environmental assessment report indicate that the environmental impacts will be minimal. On the other hand, the socio-economic impacts will be highly beneficial and visible. The measures recommended in the Environmental and Social Management Plan (ESMP) will help mitigate the negative impacts and enhance the positive impacts.

2. Key Environmental and Social Impacts

2.1 The implementation of the project will help: reduce the transport cost and the travel time between the localities and the countries, increase the job and income opportunities of the local population, women in particular; facilitate access to the periodic food commodity markets; prevent diseases like STD/AIDS and preserve the human and physical environment. In all, the project will contribute to poverty reduction and improve the environment and living conditions of the population. Women will be the greatest beneficiaries.

2.2 During works execution and the commissioning of the improved roads, the negative impacts that may arise would concern: dust, noise, vibration and security problems during site improvement and the installation of construction equipment and materials; the destruction of some trees on the road layout, degradation of the soil on the said layout, quarries, access roads and work sites; water pollution by the discharge of sediments and pollutants into the bodies of water; deforestation by the site personnel, cutting down of trees for firewood in the villages near the forest areas; felling of the trees on the road layout, related structures and borrowing areas; the destruction of animal shelters and bird nests through the felling of trees and crushing by the machines; poaching by the workers; expected increase in cotton production; increase of contagious diseases (STD/AIDS) due to an influx of foreign populations.

3. Improvement and Mitigation Programme

3.1 The mitigation measures recommended are to: frequently water the areas that cause dust pollution and maintain transport vehicles and machinery in a good operating state in order to minimise atmospheric pollutions; apply the provisions for limiting speed in the towns and the wearing of anti-dust masks; install and ensure the functioning of anti-pollution devices; take all the necessary steps (wire fencing, net, protective boards, etc.) to ensure that construction materials, scrap materials or wood debris do not fall into the bodies of water; provide for and construct sanitation structures on the sites for the disposal of waste water; collect used oils, filters and batteries and dispose of them safely in
consultation with the relevant authorities; conserve the topsoil layer, if possible, for its re-utilisation during the rehabilitation of the borrowing sites; level and cover with topsoil, the borrowing areas and the quarries and, if necessary, replant the local species; in consultation with the villagers and competent authorities; rehabilitate the borrowing areas as reservoirs and use them as animal drinking points; take the necessary precautions to limit the destruction of vegetation; take all the necessary steps to prevent industrial accidents during the works; sensitisie the staff on the detrimental effects of poaching and the resultant sanctions.

3.2 Sensitisation actions are also recommended with respect to environmental protection and management, problems caused by bushfires, destruction of the forest stock, good farming practices, soil conservation, water-borne diseases, more particularly malaria and STD/AIDS, protection and social promotion of the underprivileged groups, socio-economic protection and legal protection of the family and women.

3.3 Awareness campaigns throughout the project duration will be organised. These campaigns will use the school, the press, the radio and informal talks in the villages as means of information. At the radio, broadcasts will discuss health issues, STD/AIDS, water-borne diseases, environmental protection, the family, the preservation of customs and traditions, moral value and sense of citizenship, etc. Likewise, seminars, talks and discussions will be organised in the villages to sensitisie women, young girls, village chiefs, workers, etc. These seminars will be led by specialised NGOs. Moreover, the traditional, local and ministerial authorities will be responsible for the implementation of the policy relating to soil utilisation, village land management and land resources. All these concerns will be taken into account and appropriate measures included in the specifications of the contractors for their implementation.

3.4 Landscaping measures are planned to improve the environment and welfare of the beneficiary populations. These measures concern embellishing the village entrances with trees, planting trees along the roads, developing the borrowing areas and planting copses, etc.

4. Monitoring Programme and Supplementary Initiatives

4.1. The Environmental and Social Management Unit (ESMU) of the Ministry of Infrastructure, Transport and Housing will be responsible for monitoring the implementation of the mitigation and improvement measures and compliance with the applicable regulation. It will work in close collaboration with the control mission, which will provide an Environmentalist, 10 days per quarter, throughout the project duration, to support the ESMU. It will ensure the implementation of the ESGP, site management, the execution of specific environmental and social works and the search for solutions to short-term environmental problems. This unit will define the biological and abiotic environment monitoring indicators, as well as the pollution indicators. Besides, the Permanent Secretariat of Environment will be required to give advice and assist in the solution of major environmental and social problems.

4.2 The Government and ADF will undertake a detailed review of the implementation of the ongoing project. The reports furnished by this Unit should include the physical outputs of the works, the technical and environmental difficulties encountered, the proposed solutions, the efficiency of the environmental and social measures, new problems that will arise, their solution and other relevant recommendations. These quarterly reports will be regularly transmitted to the Bank.

4.3. The field visits and engineering studies indicate that there will be no expropriation of land or houses. However, if this expropriation proves necessary, all the properties expropriated will be evaluated and compensations paid prior to the start of works.

5. Institutional Provisions and Capacities Building Needs

5.1 The environmental and social institutional framework in Burkina Faso comprises the Governmental institutions, the local communities and their representatives, the populations and their organisations, NGOs, the private sector, international and multilateral cooperation agencies, as well as regional and sub-regional institutions. The Ministry of Environment and Welfare is responsible for the definition and implementation of environmental policies and environmental resources management. Act No 005/97/ADP of 30 January 1997 defines the environmental preservation tools (environmental education, environmental impact assessment), the environmental preservation measures, and measures to improve the living conditions. An environmental and social management unit (ESMU) was established within the MITH by decree No 2003/008/MITH/MECV/MASS, in 2003. The duty of this unit is to take the environmental and social concerns into account in the design and implementation of projects and programmes supervised by the MITH.

5.2 Under the project, the ESMU will be responsible for monitoring the implementation of the mitigation and improvement measures and for compliance with the applicable regulations. It will work in close collaboration with the control mission, implement the ESMP, manage the sites, implement specific environmental and social works, and seek
solutions to short-term environmental problems. The control mission will provide an environmentalist to support the ESMU. The Permanent Secretariat of Environment will be required to give advice and assist in the solution of major environmental and social problems.

6. **Public Consultations and Demands for the Dissemination of Information**

6.1 The beneficiary population, NGOs in the area, local authorities, village chiefs and the institutions concerned were consulted during project design and preparation through seminars and personal contacts. This same procedure will be followed during the implementation of the environmental and social management plan.

7. **Cost Estimates**

7.1. The cost relating to the environmental protection measures (rehabilitation of the borrowing sites and their development, planting of copses and roadside trees) and the monitoring of reforestation estimated at UA 60,000, is included in the works cost. Costs relating to the monitoring of the environmental and social measures are included in the mission control cost. The cost relating to the possible expropriation or destruction of the crops will be borne by the Government.

8. **Implementation Schedule and Production of Reports**

8.1. The implementation of the environmental and social measures will last throughout the project cycle. The project implementation unit will submit quarterly reports to the Bank. These reports will include, among others, the physical outputs of the works, the effectiveness of the environmental and social measures, the problems encountered and the solutions envisaged.
BURKINA FASO
FEEDER ROADS PROJECT: LIST OF THE CATEGORY OF EXPENDITURE OF THE ADF-FINANCED COMPONENT

<table>
<thead>
<tr>
<th>Category of Expenditure by Source of Finance of the ADF Components (in million UA)</th>
<th>(In million CFAF)</th>
<th>(In million UA)</th>
<th>ADF (million UA)</th>
<th>Gvt (million UA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of expenditure</td>
<td>F.E.</td>
<td>L.C.</td>
<td>Total</td>
<td>F.E.</td>
</tr>
<tr>
<td>A. Works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1 Road Works</td>
<td>3564.10</td>
<td>5346.15</td>
<td>8910.25</td>
<td>4.47</td>
</tr>
<tr>
<td>A.2 Building construction works</td>
<td>0.00</td>
<td>2042.00</td>
<td>2042.00</td>
<td>0.00</td>
</tr>
<tr>
<td>S/total works</td>
<td>3564.10</td>
<td>7388.15</td>
<td>10952.25</td>
<td>4.47</td>
</tr>
<tr>
<td>B. Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.1 Light public works equipment</td>
<td>157.50</td>
<td>0.00</td>
<td>157.50</td>
<td>0.20</td>
</tr>
<tr>
<td>B.2 IMT equipment of the women’s groups</td>
<td>0.00</td>
<td>131.00</td>
<td>131.00</td>
<td>0.00</td>
</tr>
<tr>
<td>S/total Goods</td>
<td>157.50</td>
<td>131.00</td>
<td>288.50</td>
<td>0.20</td>
</tr>
<tr>
<td>C. Consultancy services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.1 FR works control and supervision</td>
<td>531.94</td>
<td>354.63</td>
<td>886.57</td>
<td>0.67</td>
</tr>
<tr>
<td>C.2 Technical assistance to DWC and GDFR</td>
<td>189.36</td>
<td>126.24</td>
<td>315.60</td>
<td>0.24</td>
</tr>
<tr>
<td>C.3 Financial audit</td>
<td>17.47</td>
<td>22.24</td>
<td>39.71</td>
<td>0.02</td>
</tr>
<tr>
<td>C.4 Sensitisation monitoring/evaluation</td>
<td>0.00</td>
<td>59.57</td>
<td>59.57</td>
<td>0.00</td>
</tr>
<tr>
<td>S/total consultancy services</td>
<td>738.78</td>
<td>562.67</td>
<td>1301.45</td>
<td>0.93</td>
</tr>
</tbody>
</table>
ANNEX 5

TERMS OF REFERENCE OF THE TECHNICAL ASSISTANCE TO GDFR

I - Introduction

The General Directorate of Feeder Roads, established by Decree No. 2001-049/MIHU/SG/DGPR of 22 October 2001 comprises three central directorates. Two of them are technical directorates and one is a support directorate. They are:

- the Directorate of Studies and Monitoring (DSM),
- the Directorate of Works and Coordination (DWC),
- the Directorate of Financial, Administrative and Contracts Management (DFACM).

The General Directorate of Feeder Roads is, on behalf of the Ministry of Infrastructure, Transport and Housing, responsible for the definition of the feeder roads policy. In this respect, it plays essentially the role of delegated implementing agency in the implementation and management of feeder roads projects. It is therefore responsible for the implementation of the transport sector programme (TSP) with regard to feeder roads.

The financial package represented by the project financed by the African Development Fund (ADF), the necessity to comply with the donor’s procedures and the magnitude of the tasks that fall to this directorate, demand that the DWC should granted technical assistance for a more efficient management of the project. ADF has accepted to provide the Administration with an experienced road/agricultural engineering expert with a sound knowledge of the donors’ procedures and regulations, in particular the procedures of the African Development Fund, in order to raise the absorptive capacity and improve the level of DWC’s quality of service.

That is why the ADF and the Government of Burkina Faso have decided to set up technical assistance within the DWC, under the project to construct 975 km of feeder roads over a period of 40 months, with the possibility of extension to cover the project duration.

II – Terms of Reference of the Technical Assistant

The road/agricultural engineering expert, made available to the General Directorate of Feeder Roads by a consulting firm, will have the following duties and responsibilities:

- under the supervision of the Director of Works and Coordination, he will be integrated into the DWC and advise its members on all their day-to-day tasks;
- he will organise the control and monitoring of the studies conducted by third parties;
- he will supervise the works control and the technical and financial monitoring of the project;
- he will ensure the effective implementation of the routine maintenance programme of the feeder roads;
- he will prepare the competitive bidding documents (works or supply of services), bids and contracts;
- he will review the bidding documents, make appropriate comments with a view to improving them if necessary, and fine-tune them with the donor’s procedures;
- he will participate in the bid analysis and evaluation, and will prepare, in concert with the consulting firm(s) in charge of works control, analysis reports and recommendations;
- he will contribute to the final preparation of the work contracts in keeping with the donors’ procurement procedures;
- he will participate in the preparation of the works execution programme, taking into account the different operators intervening on the sites and provide sound coordination between them;
- in concert with the consulting firms, he will monitor the progress of works and ensure that they are implemented in accordance with the implementation schedule;
- He will see to it that the works execution programme is respected and, in the event of delay, he will propose corrective measures;
- he will participate in the preparation of the monthly payment accounts and ensure that expenditures remain within the budget limits;
- he will study possible amendments, additional works and works on force account, consider their appropriateness and evaluate their cost;
- in cooperation with the consulting firms, he will prepare monthly works status reports and the quarterly reports to be submitted to the various donors;
- participate in the provisional acceptance of the works and give his opinions on the possible claims of the contractors;
- he will monitor the channel of payment of the contractors’ accounts;
he will assist in the drafting of the end-of-works report and the final accounts; and
it is understood that these duties are not restrictive and that they could be redefined on the site as
and when the project so demands.

III – Duties of the Technical Assistant

The technical assistant will, in general, ensure the correct application of the General Public Procurements
Regulation relating to works, service delivery and the monitoring of actions from the technical and financial points of
view in order to ensure that the deadlines are complied with.

- He will participate in the follow-up of the studies conducted by third parties, in works supervision and
  control and in the technical and financial monitoring of the projects under way. He will in this respect
  participate in the periodic site meetings to support the GDFR officers representing the executing agency.
- He will participate in the drawing up of projects and programmes of action, in the preparation of bidding
documents, in the opening and analysis of bids, in the preparation of performance contracts and works
contracts,
- He will assist in the establishment of a price index and schedule in the public works sector,
- He will give technical opinions and bring his skills into play for the services he will be required to offer, or
will suggest such services to the General Directorate of Feeder Roads.

IV - Reports

The Technical Assistant will submit quarterly and annual reports and an end-of-mission report in three copies for
the Administration and in two copies for the ADB.

The reports should include a brief summary of each action undertaken. They should be concise and exhaustive.
They should be submitted within 15 days of their preparation. The Administration has 10 days to make its observations
or approve the reports.

V - Logistics

The Ministry, through the General Directorate of Feeder Roads, will provide the Technical Assistant with premises for
the office and secretariat, equipped with electricity and water. The telephone bills will be borne by the Technical
Assistance.

The following will be financed under the contract: the renovation of the premises, a vehicle and its operating
expenses, maintenance of the data processing equipment, the salaries of a driver and a secretary. The equipment and
the vehicle will be at the disposal of the Technical Assistant throughout the duration of the mission. At the end of the
mission, the equipment and the vehicle will become the Administration’s property.
# Annex 6

## Burkina Faso

### Feeder Roads Project: Implementation Schedule

<table>
<thead>
<tr>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
</table>

### 1. Loan Approval and Entry into Force

1. **Loan Approval**
   - Approval of BD by ADF
   - Assistance to GDFR

2. **Loan Entry into Force**
   - Bidding
   - Bid analysis and contract approval

### 2. Project Implementation

#### 2.1 Project Coordination

1. **Technical Assistant Consultant**
   - Approval of BD and SL by ADF
   - Assistance to GDFR

2. **Technical Coordinator**
   - Approval of BD by ADF
   - Assistance to GDFR

3. **Consultant for Works Control**
   - Approval of BD and SL by ADF
   - Assistance to GDFR

4. **Road and Building Construction Works**
   - Approval of BD by ADF
   - Assistance to GDFR

5. **Procurement of Plant and Equipment**
   - Approval of BD by ADF
   - Assistance to GDFR
<table>
<thead>
<tr>
<th>2.6 Sensitisation consultant</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of BD and SL by ADF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bidding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid analysis and contract approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.7 Project financial audit</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of BD and SL by ADF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bidding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid analysis and contract approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Burkina Faso

**Feeder Roads Improvement Project: Summary of Economic Evaluation**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Cost (Million CFA)</th>
<th>Agricultural Increase</th>
<th>Reduction of Maintenance Cost (Million CFA)</th>
<th>Total Benefits (Million CFA)</th>
<th>Balance (Million CFA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>728</td>
<td></td>
<td></td>
<td></td>
<td>-728</td>
</tr>
<tr>
<td>2006</td>
<td>5907.59</td>
<td></td>
<td></td>
<td></td>
<td>-5907.59</td>
</tr>
<tr>
<td>2007</td>
<td>5907.60</td>
<td></td>
<td></td>
<td></td>
<td>-5907.60</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td>2055.72</td>
<td>14.85</td>
<td>2070.57</td>
<td>2070.57</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td>2082.63</td>
<td>14.85</td>
<td>2097.48</td>
<td>2097.48</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>2110.01</td>
<td>14.85</td>
<td>2124.86</td>
<td>2124.86</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>2137.44</td>
<td>14.85</td>
<td>2152.29</td>
<td>2152.29</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td>2165.88</td>
<td>594</td>
<td>2759.88</td>
<td>2759.88</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>2194.37</td>
<td>14.85</td>
<td>2209.22</td>
<td>2209.33</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>2223.27</td>
<td>14.45</td>
<td>2238.12</td>
<td>2238.12</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>2252.56</td>
<td>14.85</td>
<td>2267.41</td>
<td>2267.41</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>2282.24</td>
<td>14.85</td>
<td>2297.09</td>
<td>2297.09</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>2309.33</td>
<td>594</td>
<td>2169.63</td>
<td>2169.63</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>2342.83</td>
<td>14.85</td>
<td>2903.33</td>
<td>2903.33</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>2373.58</td>
<td>14.85</td>
<td>2357.68</td>
<td>2357.68</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td>2404.49</td>
<td>14.85</td>
<td>2388.43</td>
<td>2388.43</td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td>2436.85</td>
<td>14.85</td>
<td>2419.34</td>
<td>2419.34</td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td>2468.04</td>
<td>14.85</td>
<td>2451.70</td>
<td>2451.70</td>
</tr>
</tbody>
</table>

\[
\text{IRR} = 14\%
\]
### Burkina Faso: List of Bank-Financed Projects

<table>
<thead>
<tr>
<th>Title</th>
<th>Amount approved</th>
<th>Date Approved</th>
<th>Date signed</th>
<th>Date of effectiveness</th>
<th>1st disbursement Date</th>
<th>Closing Date</th>
<th>Amount approved</th>
<th>Amount cancelled</th>
<th>Net commitments</th>
<th>Amount disbursed</th>
<th>Closing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Water Supply Project</td>
<td>8.52</td>
<td>24-Nov-93</td>
<td>30-Dec-93</td>
<td>20-Feb-95</td>
<td>31-Dec-99</td>
<td>31-Dec-04</td>
<td>8.52</td>
<td>-</td>
<td>8.52</td>
<td>5.18</td>
<td>10.18</td>
</tr>
<tr>
<td>Bazega and Kadogo Decentralised and Participatory Rural Dev. Project</td>
<td>15.00</td>
<td>18-Apr-01</td>
<td>30-May-01</td>
<td>27-March-02</td>
<td>02-May-02</td>
<td>31-Dec-07</td>
<td>15.00</td>
<td>-</td>
<td>15.00</td>
<td>2.65</td>
<td>17.65</td>
</tr>
<tr>
<td>Agricultural Development Study in the Centre-West</td>
<td>0.58</td>
<td>28-Nov-01</td>
<td>15-Feb-02</td>
<td>17-Apr-02</td>
<td>17-Apr-02</td>
<td>31-Dec-04</td>
<td>0.58</td>
<td>-</td>
<td>0.58</td>
<td>0.16</td>
<td>0.74</td>
</tr>
<tr>
<td>Comoe, Leraba and Kenedougou Rural Development Programme</td>
<td>22.00</td>
<td>27-Nov-02</td>
<td>21-March-03</td>
<td>22-Oct-03</td>
<td>18-March-04</td>
<td>31-Dec-09</td>
<td>22.00</td>
<td>15.00</td>
<td></td>
<td>0.12</td>
<td>22.12</td>
</tr>
<tr>
<td>Small Dams Development Programme</td>
<td>23.00</td>
<td>12-Dec-02</td>
<td>21-March-03</td>
<td>22-Oct-03</td>
<td>10-March-04</td>
<td>31-Dec-09</td>
<td>23.00</td>
<td>15.00</td>
<td></td>
<td>0.20</td>
<td>23.20</td>
</tr>
<tr>
<td>Forest Resources Management Project</td>
<td>23.00</td>
<td>21-May-03</td>
<td>04-Jun-03</td>
<td></td>
<td>31-Dec-08</td>
<td>23.00</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
<td>0.00</td>
<td>23.00</td>
</tr>
<tr>
<td>National Town Planning Scheme</td>
<td>23.00</td>
<td>21-May-03</td>
<td>04-Jun-03</td>
<td></td>
<td>31-Dec-08</td>
<td>23.00</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
<td>0.00</td>
<td>23.00</td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>71.09</strong></td>
<td><strong>71.09</strong></td>
<td><strong>10.48</strong></td>
<td><strong>14.48</strong></td>
<td><strong>95.52</strong></td>
</tr>
<tr>
<td>Road Maintenance Project</td>
<td>11.38</td>
<td>09-Jan-97</td>
<td>13-Feb-97</td>
<td>26-Nov-97</td>
<td>09-Jun-98</td>
<td>31-Dec-02</td>
<td>11.38</td>
<td>11.38</td>
<td></td>
<td>10.00</td>
<td>11.38</td>
</tr>
<tr>
<td>Second Road Programme</td>
<td>22.00</td>
<td>14-Nov-01</td>
<td>07-Dec-01</td>
<td>16-Oct-02</td>
<td>31-Dec-05</td>
<td>22.00</td>
<td>22.00</td>
<td></td>
<td></td>
<td>22.00</td>
<td>22.00</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>32.00</strong></td>
<td><strong>32.00</strong></td>
<td><strong>7.99</strong></td>
<td><strong>24.99</strong></td>
<td><strong>7.99</strong></td>
</tr>
<tr>
<td>Ouagadougou DWS (Ziga Dam)</td>
<td>4.74</td>
<td>15-Dec-97</td>
<td>28-Feb-98</td>
<td>30-Jun-98</td>
<td>31-Dec-01</td>
<td>31-Dec-05</td>
<td>4.74</td>
<td>4.74</td>
<td></td>
<td>4.74</td>
<td>4.74</td>
</tr>
<tr>
<td>DWSS for Bobo and the Secondary Centres</td>
<td>0.97</td>
<td>22-March-00</td>
<td>28-Aug-00</td>
<td>21-May-01</td>
<td>06-Dec-01</td>
<td>31-Mar-05</td>
<td>0.97</td>
<td>0.97</td>
<td></td>
<td>0.97</td>
<td>0.97</td>
</tr>
<tr>
<td>Decentralised Rural Electrification Study</td>
<td>0.91</td>
<td>17-Apr-02</td>
<td>28-May-02</td>
<td>28-May-02</td>
<td>30-Jan-04</td>
<td>0.91</td>
<td>0.91</td>
<td></td>
<td></td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td>Drinking Water Supply and Sanitation Programme</td>
<td>10-Sept-03</td>
<td>18-Dec-03</td>
<td></td>
<td>31-Dec-09</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drinking Water Supply and Sanitation Programme</td>
<td>10-Sept-03</td>
<td>18-Dec-03</td>
<td></td>
<td>31-Dec-09</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>6.62</strong></td>
<td><strong>6.62</strong></td>
<td><strong>3.09</strong></td>
<td><strong>3.53</strong></td>
<td><strong>3.53</strong></td>
</tr>
<tr>
<td>Programme of Poverty Reduction in the Urban areas</td>
<td>14.00</td>
<td>10-Dec-98</td>
<td>05-Feb-99</td>
<td>16-Nov-99</td>
<td>05-Oct-01</td>
<td>31-Dec-04</td>
<td>14.00</td>
<td></td>
<td>14.00</td>
<td>3.60</td>
<td>17.60</td>
</tr>
<tr>
<td>Programme of Poverty Reduction in the Communal Area</td>
<td>15.00</td>
<td>10-Dec-98</td>
<td>05-Feb-99</td>
<td>05-Feb-99</td>
<td>18-Oct-02</td>
<td>31-Dec-04</td>
<td>15.00</td>
<td></td>
<td>15.00</td>
<td>0.46</td>
<td>15.46</td>
</tr>
<tr>
<td>Health project II</td>
<td>2.35</td>
<td>06-Sept-09</td>
<td>07-Sept-09</td>
<td>07-Sept-09</td>
<td>18-Mar-02</td>
<td>31-Dec-06</td>
<td>2.35</td>
<td></td>
<td>2.35</td>
<td>1.33</td>
<td>3.68</td>
</tr>
<tr>
<td>Education V</td>
<td>15.50</td>
<td>16-Jul-03</td>
<td>02-Sept-03</td>
<td>31-Dec-09</td>
<td>15.50</td>
<td></td>
<td></td>
<td>15.50</td>
<td>15.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education V</td>
<td>16.50</td>
<td>16-Jul-03</td>
<td>02-Sept-03</td>
<td>31-Dec-09</td>
<td>16.50</td>
<td></td>
<td></td>
<td>16.50</td>
<td>16.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-sector HIV/AIDS support</td>
<td>16.50</td>
<td>19-Nov-03</td>
<td>18-Dec-03</td>
<td>31-Dec-09</td>
<td>16.50</td>
<td></td>
<td></td>
<td>16.50</td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>74.00</strong></td>
<td><strong>59.00</strong></td>
<td><strong>15.25</strong></td>
<td><strong>54.25</strong></td>
<td><strong>54.25</strong></td>
</tr>
<tr>
<td>Good governance support project (GGSP)</td>
<td>2.35</td>
<td>06-Sept-09</td>
<td>07-Sept-09</td>
<td>07-Sept-09</td>
<td>18-Mar-02</td>
<td>31-Dec-04</td>
<td>2.35</td>
<td></td>
<td>2.35</td>
<td>0.33</td>
<td>2.68</td>
</tr>
<tr>
<td><strong>Multi-sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>2.35</strong></td>
<td><strong>2.35</strong></td>
<td><strong>0.33</strong></td>
<td><strong>2.68</strong></td>
<td><strong>0.33</strong></td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>186.06</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>191.06</strong></td>
<td><strong>34.87</strong></td>
<td><strong>18.13</strong></td>
<td><strong>36.00</strong></td>
<td><strong>18.13</strong></td>
</tr>
</tbody>
</table>
Annex
## Programme Cost Estimates

### Works: Storm-water drainage in Bobo
#### A. Drainage Works
1. **Lafiabougou (KU basin)**
   - FE: 552.50
   - LC: 572.60
   - Total: 1,125.10
   - Excl. Taxes: 0.68
   - Total: 1.38
2. **Haut Bingbele (HB1 Basin)**
   - FE: 797.26
   - LC: 822.83
   - Total: 1,620.08
   - Excl. Taxes: 0.98
   - Total: 1.99
3. **Haut Bingbele (HB2 Basin)**
   - FE: 791.01
   - LC: 816.38
   - Total: 1,607.39
   - Excl. Taxes: 0.97
   - Total: 1.97
4. **Moyen Bingbele (MB Basin)**
   - FE: 922.46
   - LC: 952.05
   - Total: 1,874.50
   - Excl. Taxes: 1.13
   - Total: 2.30
5. **Bas Bingbele (BB Basin)**
   - FE: 355.34
   - LC: 366.74
   - Total: 722.09
   - Excl. Taxes: 0.44
   - Total: 0.89

### B. Road Work
1. **Lafiabougou (KU Basin)**
   - FE: 850.03
   - LC: 375.99
   - Total: 1,226.02
   - Excl. Taxes: 1.04
   - Total: 1.50
2. **Haut Bingbele (HB1 Basin)**
   - FE: 148.68
   - LC: 65.76
   - Total: 214.44
   - Excl. Taxes: 0.18
   - Total: 0.26
3. **Haut Bingbele (HB2 Basin)**
   - FE: 35.64
   - LC: 15.77
   - Total: 51.41
   - Excl. Taxes: 0.04
   - Total: 0.06
4. **Moyen Bingbele (MB Basin)**
   - FE: 215.01
   - LC: 95.10
   - Total: 310.12
   - Excl. Taxes: 0.26
   - Total: 0.38
5. **Bas Bingbele (BB Basin)**
   - FE: 163.31
   - LC: 72.24
   - Total: 235.55
   - Excl. Taxes: 0.20
   - Total: 0.29

Total: 4,268.60

### Works: Private and school sewage disposal works in Ouagadougou
#### A. Works Primary Infrastructure
1. Private sewage disposal works
   - FE: 973.03
   - LC: 3,218.75
   - Total: 4,191.78
   - Excl. Taxes: 1.19
   - Total: 5.14
2. School sewage disposal works
   - FE: 172.35
   - LC: 140.24
   - Total: 312.59
   - Excl. Taxes: 0.21
   - Total: 0.38

Total: 1,145.38

### Works: Drinking water supply to 13 provinces
#### A. Works
1. Rehabilitation
   - FE: 1,559.49
   - LC: 402.34
   - Total: 1,961.82
   - Excl. Taxes: 1.91
   - Total: 2.41
2. New water points
   - FE: 1,420.96
   - LC: 366.14
   - Total: 1,787.10
   - Excl. Taxes: 1.74
   - Total: 2.19

Total: 3,192.28

### Study: DWS in 80 centres
#### A. Consulting Firms
1. Professional staff
   - FE: 368.50
   - LC: 21.56
   - Total: 390.06
   - Excl. Taxes: 0.45
   - Total: 0.48
2. Support staff
   - FE: -
   - LC: 24.75
   - Total: 24.75
   - Excl. Taxes: -
   - Total: 0.03
3. International travel
   - FE: 4.40
   - LC: -
   - Total: 4.40
   - Excl. Taxes: 0.01
   - Total: 0.01
4. Perdiem
   - FE: 18.70
   - LC: -
   - Total: 18.70
   - Excl. Taxes: 0.02
   - Total: 0.02
5. Vehicles and equipment
   - FE: 89.10
   - LC: -
   - Total: 89.10
   - Excl. Taxes: 0.11
   - Total: 0.11
6. Sundry expenses
   - FE: 21.11
   - LC: 75.42
   - Total: 96.53
   - Excl. Taxes: 0.03
   - Total: 0.12

Total: 501.81

### Support to Bobo Municipal Council
#### A. Support to Bobo Municipal Council
1. Light equipment
   - FE: 184.82
   - LC: -
   - Total: 184.82
   - Excl. Taxes: 0.23
   - Total: 0.23
2. Heavy equipment
   - FE: 178.16
   - LC: -
   - Total: 178.16
   - Excl. Taxes: 0.22
   - Total: 0.22
3. Salaries
   - FE: -
   - LC: 136.62
   - Total: 136.62
   - Excl. Taxes: -
   - Total: 0.17
4. Allowances
   - FE: -
   - LC: 23.23
   - Total: 23.23
   - Excl. Taxes: -
   - Total: 0.03
5. Perdiems
   - FE: -
   - LC: 13.20
   - Total: 13.20
   - Excl. Taxes: -
   - Total: 0.02
6. Vehicle operating costs
   - FE: -
   - LC: 29.70
   - Total: 29.70
   - Excl. Taxes: -
   - Total: 0.03
7. Provision of premises
   - FE: -
   - LC: 19.80
   - Total: 19.80
   - Excl. Taxes: -
   - Total: 0.02
8. Office running costs
   - FE: -
   - LC: 14.85
   - Total: 14.85
   - Excl. Taxes: -
   - Total: 0.02
9. Seminar
   - FE: -
   - LC: 19.80
   - Total: 19.80
   - Excl. Taxes: -
   - Total: 0.02
10. Expenses on preparations for meetings
    - FE: -
    - LC: 17.60
    - Total: 17.60
    - Excl. Taxes: -
    - Total: 0.02

Total: 389.71

### Support to DGAEP
#### A. Support to DGAEP
1. Staff salaries
   - FE: -
   - LC: 62.37
   - Total: 62.37
   - Excl. Taxes: -
   - Total: 0.08
2. Allowances
   - FE: -
   - LC: 11.06
   - Total: 11.06
   - Excl. Taxes: -
   - Total: 0.01
3. Equipment
   - FE: 58.20
   - LC: -
   - Total: 58.20
   - Excl. Taxes: -
   - Total: 0.07
4. Operating costs
   - FE: 54.79
   - LC: 45.64
   - Total: 99.43
   - Excl. Taxes: -
   - Total: 0.09

Total: 112.99

### Support to ONEA / DASS
#### A. Support to ONEA/DASS/ DEX
1. Staff salaries
   - FE: -
   - LC: 62.37
   - Total: 62.37
   - Excl. Taxes: -
   - Total: 0.08
2. Allowances
   - FE: -
   - LC: 10.71
   - Total: 10.71
   - Excl. Taxes: -
   - Total: 0.01
3. Perdiems
   - FE: -
   - LC: 13.20
   - Total: 13.20
   - Excl. Taxes: -
   - Total: 0.02
4. Operating costs
   - FE: 21.04
   - LC: 66.68
   - Total: 87.72
   - Excl. Taxes: -
   - Total: 0.09

Total: 21.04

---
## Programme Cost Estimates

<table>
<thead>
<tr>
<th>Description</th>
<th>FE</th>
<th>LC</th>
<th>Total</th>
<th>Exch.</th>
<th>Taxes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering, Works Supervision and Inspection</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Engineering consultant sewage disposal in Bobo</td>
<td>284.80</td>
<td>79.18</td>
<td>363.47</td>
<td>0.35</td>
<td>0.10</td>
<td>0.45</td>
</tr>
<tr>
<td>1. Professional staff</td>
<td>184.80</td>
<td>39.60</td>
<td>224.40</td>
<td>0.23</td>
<td>0.05</td>
<td>0.28</td>
</tr>
<tr>
<td>2. Support staff</td>
<td>-</td>
<td>23.76</td>
<td>23.76</td>
<td>-</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>3. Others</td>
<td>99.49</td>
<td>15.82</td>
<td>115.31</td>
<td>0.12</td>
<td>0.02</td>
<td>0.14</td>
</tr>
<tr>
<td>B. Engineering consultant private &amp; school sewage disposal in Ouaga</td>
<td>287.10</td>
<td>437.14</td>
<td>724.24</td>
<td>0.35</td>
<td>0.54</td>
<td>0.89</td>
</tr>
<tr>
<td>1. Professional staff</td>
<td>82.72</td>
<td>302.28</td>
<td>385.00</td>
<td>0.10</td>
<td>0.37</td>
<td>0.47</td>
</tr>
<tr>
<td>2. Support staff</td>
<td>-</td>
<td>31.68</td>
<td>31.68</td>
<td>-</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>3. Travel</td>
<td>9.68</td>
<td>-</td>
<td>9.68</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>4. Vehicles and equipment</td>
<td>89.10</td>
<td>-</td>
<td>89.10</td>
<td>0.11</td>
<td>-</td>
<td>0.11</td>
</tr>
<tr>
<td>5. Sundry charges</td>
<td>105.60</td>
<td>103.18</td>
<td>208.78</td>
<td>0.13</td>
<td>0.13</td>
<td>0.26</td>
</tr>
<tr>
<td>C. Engineering consultant DWS in 13 provinces</td>
<td>273.02</td>
<td>236.94</td>
<td>509.96</td>
<td>0.33</td>
<td>0.29</td>
<td>0.63</td>
</tr>
<tr>
<td>1. Professional staff</td>
<td>181.50</td>
<td>108.90</td>
<td>290.40</td>
<td>0.22</td>
<td>0.13</td>
<td>0.36</td>
</tr>
<tr>
<td>2. Support staff</td>
<td>-</td>
<td>31.68</td>
<td>31.68</td>
<td>-</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>3. Equipment</td>
<td>40.70</td>
<td>-</td>
<td>40.70</td>
<td>0.05</td>
<td>-</td>
<td>0.05</td>
</tr>
<tr>
<td>4. International travel</td>
<td>11.88</td>
<td>-</td>
<td>11.88</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>5. Perdiem</td>
<td>6.60</td>
<td>92.40</td>
<td>99.00</td>
<td>0.01</td>
<td>0.11</td>
<td>0.12</td>
</tr>
<tr>
<td>6. Operating costs</td>
<td>32.34</td>
<td>3.96</td>
<td>36.30</td>
<td>0.04</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Total</td>
<td>844.41</td>
<td>753.26</td>
<td>1,597.67</td>
<td>1.04</td>
<td>0.92</td>
<td>1.96</td>
</tr>
</tbody>
</table>

## MANAGEMENT: Programme Coordination

### A. Coordination Unit

<table>
<thead>
<tr>
<th>Description</th>
<th>FE</th>
<th>LC</th>
<th>Total</th>
<th>Exch.</th>
<th>Taxes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fees to staff</td>
<td>233.64</td>
<td>358.38</td>
<td>592.02</td>
<td>0.29</td>
<td>0.44</td>
<td>0.73</td>
</tr>
<tr>
<td>2. Perdiem</td>
<td>-</td>
<td>54.86</td>
<td>54.86</td>
<td>-</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>3. International travel</td>
<td>8.25</td>
<td>10.56</td>
<td>18.81</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Vehicles</td>
<td>58.66</td>
<td>-</td>
<td>58.66</td>
<td>0.07</td>
<td>-</td>
<td>0.07</td>
</tr>
<tr>
<td>5. Equipment</td>
<td>66.05</td>
<td>-</td>
<td>66.05</td>
<td>0.08</td>
<td>-</td>
<td>0.08</td>
</tr>
<tr>
<td>6. Sundry charges</td>
<td>86.60</td>
<td>105.30</td>
<td>191.90</td>
<td>0.11</td>
<td>0.13</td>
<td>0.24</td>
</tr>
<tr>
<td>Total</td>
<td>453.20</td>
<td>529.10</td>
<td>982.30</td>
<td>0.56</td>
<td>0.65</td>
<td>1.20</td>
</tr>
</tbody>
</table>

### Audit of the programme projects

<table>
<thead>
<tr>
<th>Description</th>
<th>FE</th>
<th>LC</th>
<th>Total</th>
<th>Exch.</th>
<th>Taxes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Audit of the programme</td>
<td>79.20</td>
<td>-</td>
<td>79.20</td>
<td>0.10</td>
<td>-</td>
<td>0.10</td>
</tr>
<tr>
<td>Total</td>
<td>79.20</td>
<td>-</td>
<td>79.20</td>
<td>0.10</td>
<td>-</td>
<td>0.10</td>
</tr>
</tbody>
</table>