



AFRICAN DEVELOPMENT FUND

PROJECT : **Gourou Integrated Watershed Management Project – Emergency Phase**

COUNTRY : **Cote d’Ivoire**

APPRAISAL REPORT

Date: September 2010

| | | | |
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Currency Equivalents
September 2010

UA 1= FCFA 780.582

Fiscal Year
January 1 – 31 December

Weights and Measures

| | | | | | |
|-----------------|---|------------------|-------------------|---|------------------------------|
| m | = | meter | m ² | = | square meter |
| lm | = | linear meter | m ³ | = | cubic meter |
| km | = | kilometre | mm ³ | = | million cubic meter |
| km ² | = | square kilometre | m ³ /h | = | cubic meter per hour |
| l/s | = | litre per second | l/d/inhab. | = | litre per day per inhabitant |

Abbreviations

| | | |
|-------|---|---|
| ADF | : | African Development Fund |
| ANDE | : | National Environmental Agency |
| CSOS | : | Country Strategy Overall Score |
| DAD | : | Directorate of Sanitation and Drainage |
| DPD | : | Detailed Preliminary Design |
| DGACM | : | General Directorate of Sanitation, Construction and Maintenance |
| EIRR | : | Economic Internal Rate of Return |
| ESIA | : | Environmental and Social Impact Assessment |
| IPFMS | : | Integrated Public Finance Management System |
| MCUH | : | Ministry of Construction, Urban Development and Housing |
| MFFAS | : | Ministry of Family, Women and Social Affairs |
| PMU | : | Project Management Unit |
| PRSP | : | Poverty Reduction Strategy Paper |
| SD | : | Summary Design |
| UA | : | Unit of Account |

Grant Information Sheet

Client Information

DONEE : Republic of Cote d'Ivoire

EXECUTING AGENCY : Ministry of Construction, Urban Development and Housing (MCUH)

Financing Plan

| Source | Amount (UA M) | Instrument |
|-------------------|---------------|--------------|
| ADF | 23.00 | Grant |
| Government | 0.30 | Contribution |
| TOTAL COST | 23.30 | |

ADF Key Financing Information

| | |
|-------------------------------|---------------|
| Grant | UA 23 million |
| Interest type | NA |
| Interest rate spread | NA |
| Commitment fee | NA |
| Other fees | NA |
| Tenor | NA |
| Grace period | NA |
| FIRR, NPV (baseline scenario) | NA |
| EIRR, NPV (baseline scenario) | 13% |

Timeframe – Main Milestones (expected)

| | |
|------------------------------|----------------------|
| Concept Note Approval | August 2010 |
| Project Approval | November 2010 |
| Effectiveness | December 2010 |
| Last Disbursement | December 2014 |
| Completion | December 2013 |
| Last Repayment | NA |

Project Summary

The Gourou Basin has a surface area of approximately 28.6km² and stretches along 9 km from North to South (from Abobo to the Indénié interchange). Measuring an average of 3 km across, it is bordered to the East by the Boulevard Latrille extension toward the II Plateaux District and to the West by the Adjamé-Anyama railroad. Located to the Centre-North of the city of Abidjan, it drains into the Ebrié Lagoon which, in turn, is connected to the Gulf of Guinea by Vridi Canal and discharges into the Abi Lagoon shared with Ghana. The Gourou Integrated Watershed Management Project involves implementing basin-wide strategic operations to ensure: (i) better regulation of drainage water toward the outlet, in particular at the level of the Indénié interchange; (ii) improved environmental management and treatment of solid waste; and (iii) preparation of a planning document on basin-wide integrated management. The project will be implemented over 36 months beginning January 2011, at a total estimated cost of UA 23.30 million (excluding tax and duty).

The direct project beneficiaries are the population of the four districts of Adjamé, Abobo, Cocody and Plateau, amounting to 2,800,000 people, including 495,000 residing within the vicinity of the Basin. The project will have a major impact on this population in terms of: (i) reducing the incidence of water-borne diseases; (ii) increasing the sense of responsibility with regard to environmental and solid waste management issues; and (iii) decreasing poverty, thanks to the distribution of financial income during and after the works. This population will contribute to achieving the project goals by adjusting its behaviour in terms of land use, hygiene and sanitation.

The root of the problems facing the Basin lies in its heavy and anarchic urbanization, the incomplete construction of road, sanitation and drainage networks, the poor management of solid waste (causing heavy flooding), soil erosion and the inability of the existing sanitation network to cope with storm drainage. This situation results in repeated flooding at the level of the intersection and its neighbouring areas, traffic hold-up at the Indénié interchange, the salinization of the Lagoon and an insalubrious environment.

The project will consist of several phases. The first phase (“the Emergency Phase”) involves: (i) rehabilitating and constructing retarding basins, drainage channels and their connections to the main canal; and (ii) conducting a study to define the measures required to implement a sustainable sanitation and drainage strategy for the Basin. The strategic activities to be implemented upstream of the basin during this phase aim at preventing flooding and reducing solid waste accumulating around the Indénié intersection, thus allowing for easier drainage at the interchange. These measures will strengthen: (i) cleaning out and rehabilitation of canals around Indénié; and (ii) dredging and reinforcement of the Lagoon outfalls financed by the World Bank downstream of the Basin. Given the frequency and intensity of flooding around the Basin (including Indénié), the resulting human and economic losses, as well as the fact that the works financed by the World Bank are currently under way, the purpose of ADF's intervention during this phase is to speed up the implementation of measures designed to reduce flooding at the Indénié intersection in the short term.

The study to be conducted within the project context will define the measures needed to find a sustainable solution to the problems facing the Gourou Basin, and will conclude with a roundtable organized by the Government and attended by technical and financial partners to share the results obtained. Thus, the study will enable a short-, medium- and long-term investment program to be drawn up that will, in turn, lead to the design and implementation of other phases of the project.

This project – which will help to improve access to and quality of basic social services as well as protect the environment – fits seamlessly into the Poverty Reduction Strategy Paper for 2009-2013. It is also in line with the priorities defined in the Bank's Country Strategy Overall Score (CSOS) for 2009-2010. By supporting this project, the Bank is reaffirming its declared commitment to aid Cote d'Ivoire in its crisis exit strategy. Its experience in conducting projects in this sector and the lessons drawn from various interventions as well as the insights gained by other development partners were taken into account when designing the project.

The lessons drawn from designing and implementing the project will be reported in various related documents, i.e. study reports, progress reports, supervision reports and the completion report.

Results-Based Logical Framework

| Hierarchy of Objectives | Expected Results | Reach | Performance Indicators | Baseline, Indicative Targets and Timeframe | Assumptions/Risks |
|---|--|---|---|--|--|
| <p>Goal Help to improve living conditions of the population of the Abidjan district</p> | <p>Impact: By 2015 1. Reduce the poverty index 2. Reduce morbidity and mortality rates</p> | <p>Beneficiaries: Population of Abidjan, estimated at 5,800,000 people</p> | <p>Impact Indicators 1 Poverty index 2 Malaria incidence rate 3 Infant/child mortality rate 4 Maternal mortality rate 5 Mortality linked to cholera <i>Sources:</i> Revised PRSP, MCUH, reports on health and environmental structures, Institute of Health and Demographic Statistics <i>Method:</i> Compiled statistics, surveys/population</p> | <p>Anticipated Long-term Progress 1 The poverty index decreases from 48.9% in 2010 to 33.6% in 2015 2 The malaria incidence rate falls from 146 per thousand in 2009 to 110 per thousand in 2015 3 The child mortality rate falls from 84 per thousand in 2009 to 32 per thousand in 2015 4 The maternal mortality rate falls from 543 deaths per 100,000 live births in 2009 to 149 deaths per 100,000 live births in 2015 5 Mortality linked to cholera falls from 15.39% in 2009 to 11.54% in 2015</p> | <p>Assumptions Political and social stability Consolidation of reform in the sector Measures Consolidation of the objectives relating to conflict prevention, the security of persons and property, and the promotion of good governance Finalization and implementation of the conclusions of the Sanitation Sector Institutional and Policy Study</p> |
| <p>Outcomes 1 Help to reinforce and enhance the security of the sanitation network of Abidjan 2 Help to improve socioeconomic and sanitary conditions, and change the behaviour of the population of the four districts covered by the project in terms of hygiene 3 Reinforce the institutional capacity of the sector's stakeholders</p> | <p>Project Outputs (by 2013) 1 Reduce the flood plain at the level of the intersection 1.2 Draw up a planning document geared toward the integrated management of the basin catchment area 2.1 Improve the socio-sanitary conditions of the population 2.2 Make a positive contribution to altering the population's behaviour in terms of land use, hygiene and sanitation 3.1. Strengthen DGACM's ability to implement projects</p> | <p>Beneficiaries: Population of the four districts (Abobo, Adjamé, Cocody, Plateau), approximately 2,800,000 inhabitants, of which 1,414,000 women MCUH</p> | <p>Outcome Indicators 1.1 Post-rain flood plain at the level of the intersection 1.2 Document for planning and integrated management of the Gourou catchment area 2.1 Number of jobs created 2.2 Number of people sensitized 2.3 Reduced expenditure on health 3.1 Establishment of a Project Management Unit (PMU) <i>Source:</i> MCUH, BNETD, reports on health and environmental structures, reports on project activities, project monitoring/evaluation system <i>Methods:</i> activity monitoring and supervision, socioeconomic and health surveys</p> | <p>Anticipated Medium-Term Progress The flood plain of the intersection is reduced from 4 ha to 0.5 ha A short-, medium- and long-term investment and management program is available; 2,300 jobs are created, 1,000 of which for women Approximately 228,000 people are sensitized, 115,000 of whom are women Per capita expenditure on health is reduced from FCFA 30,000 to FCFA 25,500 per year A national PMU set up within DGACM</p> | <p>Risk Delay in procurement and disbursement Measures Adoption of the Order on emergency projects for contracts and disbursements Preparation of an administrative, financial and accounting procedures manual Implementation of annual financial audits</p> |

| Activities | Products | Beneficiaries: | Product Indicators | By 2012 | Risks |
|--|--|---|--|---|---|
| 1) Sanitation infrastructure works | 1.1) Reservoirs constructed 1.2) Reservoirs rehabilitated 1.3) Drainage canals constructed 1.4) Drainage canals rehabilitated 1.5) Reservoirs connected to the main canal | Population of the zone covered by the project, i.e. 495,000 people Decentralized local authorities; the transport sector Government structures | 1.1) Number of new reservoirs built 1.2) Number of reservoirs rehabilitated 1.3) Number of km of drainage canals constructed 1.4) Number of drainage canals rehabilitated 1.5) Number of reservoirs connected to the main canal | 1.1) Four (4) reservoirs built 1.2) Three (3) reservoirs rehabilitated 1.3) 4,654 km of drainage canals built or rehabilitated 1.4) 3,346 km of drainage canals rehabilitated 1.5) Three (3) reservoirs connected to the main drainage canal | <u>Risks</u> Inadequate capacity of the different sector stakeholders <u>Measures</u> Provision has been made for training courses and logistic support for DA managers; |
| 2) Works monitoring and supervision | 2) Works monitoring and supervision | MCUH Supervision offices | 2) Periodic monitoring and supervision reports available and distributed | Ten quarterly reports produced and distributed | Recruit consultants to ensure that the work is done correctly |
| 3) IEC on land use/sanitation/hygiene/health | 3.1. Enhanced involvement of the population in sanitation issues 3.2 The population is sensitized to the dangers linked to the habitation of thalwegs | Women, youth associations, students, artisans, health officers | 3.1 Number of people sensitized 3.2 Number of officers re-trained 3.3 Number of youths given training and logistic support 3.4 Number of women street cleaners given logistic support | 3.1) 228,000 people sensitized 3.2) Twenty six (26) health officers, 50% of which women, trained on environment/sanitation/recycling 3.3) Eight hundred (800) youths charged with pre-collection trained 3.4) Five hundred (500) female street cleaners given logistic support | Set up a Steering Committee to monitor project activities; adopt the participatory approach An efficient monitoring/evaluation is implemented |
| 4) Gourou Basin Integrated Management Study | 4.1) Master Plan and BD on the Basin's storm water drainage works prepared 4.2) Master Plan and BD on the Basin's wastewater drainage works prepared 4.3) Master Plan and BD on solid waste collection, disposal and recycling works prepared, with selection of transfer centres and controlled disposal sites 4.4) Master Plan and BD on bulky waste collection, disposal and recycling works (tires, wrecked vehicles, etc.) prepared 4.5) Land use plan prepared 4.6) Works protection perimeters defined and surveillance measures mapped out 5.1) The institutional capacity of government structures reinforced | Companies, suppliers, consultancy firms, NGOs, workers, etc. Government structures: DAD, DRE, environment and health, MFFAS Government consultants and structures | 4.1) Master Plan on the Basin's storm water drainage is available and distributed 4.2) Master Plan on the Basin's wastewater drainage is available and distributed 4.3) Master Plan on solid waste collection, disposal and recycling is available and distributed 4.4) Master Plan on bulky waste collection, disposal and recycling (tires, wrecked vehicles, etc.) is available and distributed 4.5) Land use plan is available 4.6) Works protection perimeter defined 5.1) Number of government officials trained | (1) Environmental and social diagnostic study conducted (1) The Gourou Basin Integrated Management Study completed One (1) planning document is available 5.1) 120 administrative managers, 30% of which women, are trained in GIS, IWRM and network maintenance | <u>Risk</u> Poor solid waste management: <u>Measure</u> Recommendations of the study on solid waste management are implemented |
| 5) Institutional support | 6.1) PMU managers recruited and their national counterparts designated | | 6.1) Number of consultants recruited 6.1) Number of peers seconded to the project full-time Source: Supervision reports, periodic reports and PCR Methods: Supervisory missions | 6.1) Seven (7) consultants recruited 6.2) Seven (7) peers seconded | <u>Risks</u> Lack of coordination between the ministries to implement IEC <u>Measures</u> A specialised NGO is recruited |
| 6) Set up the PMU | | | | | |
| Resources ADF grant: UA 23,000,000 Government: UA 200,000 TOTAL: UA 23,000,000 | | | | | |

REPORT AND RECOMMENDATION OF MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS CONCERNING A PROPOSED GRANT TO THE REPUBLIC OF COTE D'IVOIRE FOR THE GOUROU INTEGRATED WATERSHED MANAGEMENT PROJECT – EMERGENCY PHASE

Management hereby submits the following report and recommendation on a proposed grant of UA 23 million to finance the Gourou Integrated Watershed Management Project in Abidjan, Cote d'Ivoire.

I. STRATEGIC THRUST & RATIONALE

I.1 Project Linkages with Country Strategy and Objectives

I.1.1 The aim of the PRSP for Cote d'Ivoire for 2009–2013 is to consolidate peace and improve the living conditions of the country's population. Thus, six strategic thrusts have been defined, the fourth of which is to improve access to and quality of basic social services, protect the environment, promote gender equality and social welfare. Therefore, this project falls within the context of the fourth PRSP pillar. It is also in line with the development plan prepared by the Ministry for Construction, Urban Development and Housing (MCUH) for the 2010-2013 period, the key objectives of which are to: (i) strengthen the institutional framework and sector policy; (ii) improve the efficiency of existing infrastructure and equipment; (iii) correct intra- and intercommunity imbalances; and (iv) enhance development tools, taking into consideration the underprivileged segments of society and, generally, preventing the loss of human life and the resurgence of diseases whose repercussions could weigh on the country's entire economic, administrative and social life.

I.1.2 The Bank's strategy for the country for the 2009-2010 period as defined in the CSOS, is based on two main thrusts: (1) settlement of arrears; and (2) reengagement. The second pillar under Thrust 2 seeks to consolidate economic recovery and improve the people's living conditions by developing infrastructure, in particular of an economic and regional nature. This project fits squarely with the second pillar under the CSOS Thrust 2. Linked to the Gulf of Guinea by Vridi Canal, the Ebrié Lagoon has its source within Cote d'Ivoire and flows into the Abi Lagoon, part of which is located to the East of Ghana, via the Azagnié Canal. Improving the quality of the Ebrié Lagoon will thus have a direct impact on the quality of other lagoons in the sub-region.

I.2 Rationale for Bank's Involvement

I.2.1 The project will play a key role in the strategic reengagement of the Bank in Cote d'Ivoire. The involvement of ADF is also justified by: (i) the need to rapidly reduce the loss of human life and material damage from floods at the Indénié intersection following even the briefest rainfall; (ii) the need to draw up an integrated management plan for the Gourou Basin, taking into account all aspects related to hydrology, sanitation, refuse disposal, urbanization and land use, with a view to finding a definite solution to the problems facing the Basin in general and the Indénié intersection, in particular; and (iii) the need to rehabilitate the sanitation network, which has fallen into severe disrepair, due on the one hand to the inadequate nature and poor maintenance of equipment and a lack of new investment in the sector and, on the other, to the rapid urban growth as a result of population displacement caused by the crisis.

I.2.2 The project plugs seamlessly into activities currently being implemented by other donors in the sector. Lastly, the Bank has proven experience in financing and monitoring sanitation projects, particularly in fragile environments such as Liberia, Sierra Leone and the Democratic Republic of Congo.

I.3 Donor Coordination

| | Sector or Sub-sector | Scope | | |
|---|---|---------------|-------------------|-------------------|
| | | GDP | Exports | Labour Force |
| | [sector or sub-sector] | % | Not available [%] | Not available [%] |
| Stakeholder - Annual public expenditure (average)** | | | | |
| | Government | Donors | 2009 | |
| UA million | 4.90 | 25.77 | World Bank | 65% |
| % | 06% | 84% | European Union | 35% |
| Level of coordination among donors | | | | |
| | Existence of thematic working groups | | | No |
| | Existence of sector-wide approaches (SWAPs) or integrated sector approaches | | | No |
| | Involvement of ADB in donor coordination*** | | | M |
| * as most appropriate ** years [year 1 to year 2] *** for this sector or sub-sector | | | | |
| **** H: head; M: member but not head; none: no participation | | | | |

Generally, the country's political crisis has had an adverse impact on activity coordination among donors. Within the sanitation sector, this coordination is tangible insofar as the partners intervene within the context of the program designed by the MCUH. The World Bank, through the Emergency Urban Infrastructure Project (PUIUR), is financing the improvement of household waste management, the strengthening of the wastewater network in Abidjan, and the maintenance and rehabilitation of the canals at the Indénié intersection, whose impact the implementation of the project under consideration will reinforce. For its part, the European Union is financing the strengthening of the wastewater network in Abidjan, an institutional study, a sanitation sector policy for Cote d'Ivoire and studies to update the master plans of three cities. This coordination could further intensify around the to be developed within the framework of this project.

II. PROJECT DESCRIPTION

2.1. Project Components

The project components are outlined in the table below:

| Component Name | Sub-Component Name | Estimated Cost (CFAF M) | Component Description |
|--|-----------------------------------|-------------------------|---|
| A. Infrastructure | A1. Works | 13,022 | <ul style="list-style-type: none"> (i) Construction of four flood retarding dams in the Gourou catchment basin; (ii) Construction of drainage works comprising reinforced concrete dams measuring 12 lm, a trapezoidal canal measuring 1,864 lm, a reinforced concrete box culvert measuring 12 lm and gutters in reinforced concrete measuring 312 lm, at the level of the old scrap yard – ADJAME; (iii) Rehabilitation of four flood retarding dams in the Gourou catchment basin; (iv) Rehabilitation and construction of drainage works, including a rectangular reinforced concrete canal measuring 600 lm, a trapezoidal canal measuring 300 lm and reinforced concrete culverts measuring 800 lm in the Marché Gouro and Fraternité Matin/Edipress areas. |
| | A2. Works control and supervision | 884 | Control and supervision of construction work for the retarding dams, drainage facilities and rehabilitation works on dams in the Gourou catchment basin. |
| | A3. IEC development | 669 | <ul style="list-style-type: none"> (i) Field study for implementing the IEC; (ii) Development of technical backup for sensitization; (iii) Sensitization of leaders and the population with regard to the aims of the project and the questions surrounding the use of the land acquired for the project, waste disposal, hygiene and sanitation. |
| B. Implementation of a Global Study | | 1,301 | <ul style="list-style-type: none"> (i) Identification of problems facing the Gourou Basin; (ii) Definition of solutions toward integrated management of the Basin, taking account of all cross-cutting aspects (hydrology, sanitation, land, refuse disposal, urbanization, gender, etc.); (iii) Development of a short-, medium- and long-term investment program; (iv) Organization of a round table involving the sector donors. |
| C. Institutional Support | | 700 | <ul style="list-style-type: none"> (i) Support to the Directorate of Sanitation and Drainage (DAD); (ii) Support to the directorates of different ministries involved (DRE, DGE/MEEF, DGPH/MSHP and DGPE/MFFAS); (iii) Support to the training of DAD officials and those from various ministries involved in the project; (iv) Technical Assistance Fund. |
| D. Project Management | | 1,611 | <ul style="list-style-type: none"> (i) Set up and operation of project management; (ii) Quality control of studies and works; (iii) Management of contracts/archiving (iv) Support to the coordination of the other components; (v) Transfer of knowledge to local peers; (vi) Implementation of monitoring/evaluation activities, account audits and environmental assessment. |

2.2. *Technical Solutions Adopted and Alternatives Explored*

The project focuses partly on rehabilitating existing works in the basin built following top quality hydro-geological studies that constituted an example of urban engineering at the time. These studies envisaged various technical alternatives; the solution retained remains pertinent to this day. For harmonization purposes, the new works will be constructed using the same technology. The technology adopted to construct the retarding basins and drainage works are simple in design and in line with international standards as recognized by Cote d'Ivoire (the counterpart). The requisite technical studies for this project have been conducted in full.

2.3. *Project Type*

This is a project loan operation. Given the relative weakness of: (i) institutional organization within the sector; (ii) the procurement system; and (iii) the management of public expenditure, a sector-wide approach (SWAP) or budget support is not feasible. For now, the project loan is the most suitable instrument, in view of the fact that a reform of the sanitation sector and the public procurement Code is currently under way.

2.4. *Project Cost and Financing Arrangements*

2.4.1 The total cost of the project is estimated at UA 23.30 million. It will be financed through a UA 23 million ADF grant (98.7 %) and an Ivorian Government contribution amounting to UA 0.3 million (1.3 %). The project cost estimate is based on the unit cost of recent bids in Cote d'Ivoire, plus a 10% and 3% provision for physical contingencies and annual price escalation, respectively.

Project Cost Estimate by Component [UA million]

| Component | Cost in Foreign Exchange | Cost in Local Currency | Total | Foreign Exchange % |
|---------------------------|--------------------------|------------------------|--------------|--------------------|
| 1. Infrastructure | 13.51 | 3.17 | 16.68 | 81 |
| 2. Comprehensive study | 0.95 | 0.46 | 1.41 | 67 |
| 3. Institutional support | 0.72 | 0.08 | 0.80 | 90 |
| 4. Project management | 0.29 | 1.62 | 1.90 | 15 |
| Total base cost | 15.47 | 5.33 | 20.80 | 74 |
| Physical contingencies | 1.55 | 0.53 | 2.08 | |
| Price escalation | 0.31 | 0.11 | 0.42 | |
| Total project cost | 17.33 | 5.97 | 23.30 | |

Sources of Financing (in UA million)

| Sources of Financing | Total cost | % of total |
|------------------------------|--------------|---------------|
| ADF | 23.00 | 98.70 |
| Government | 0.30 | 1.30 |
| Total cost of project | 23.30 | 100.00 |

2.4.2 In line with the Bank's policy on eligible expenditure and following Government's request after indicating its commitment to implement the project, the activities of the national counterpart were limited to providing the project with functional premises and paying the salaries of the local staff seconded to the project. The Government has actually fulfilled the three criteria, namely: (i) **the country's commitment to implement its comprehensive**

development program. In this regard, the Government is currently implementing a three-year economic program supported by an IMF Extended Credit Facility (ECF) and based on the commitments outlined in the Poverty Reduction Strategy Paper (2009-2013). The results of the third joint review (IMF, World Bank and ADB) conducted in September 2010 confirms that the Government is fast-tracking economic policies designed to foster growth and reduce poverty; (ii) **the financing allocated by the country to the sanitation sector has increased, compared with past activity.** The resources allocated in the past to the sanitation sector and evaluated at below 3% of Government's budget, increased to 3.75% for the period 2009-2013, amounting to CFAF 94.4 billion, of which CFAF 63.6 billion to improve the sanitation system in Abidjan; and (iii) **the country's budget situation and debt level.** Cote d'Ivoire's budget situation remains hampered by the level of expenditure resulting from the reunification and crisis exit context, coupled with the over-exploitation of available tax resources. In 2010, the level of tax mobilization (19.2% of GDP) will not be sufficient to effectively counterbalance expenditure (21.1% of GDP). Within the context of pending elections, Cote d'Ivoire's cash flow situation remains extremely tense. Furthermore, as far as the country's debt level is concerned, it is worth noting that after applying all traditional debt relief mechanisms, the Net Present Value (NPV) of the country's debt was estimated at EUR 12.8 billion at end 2007, equivalent to 327% of budgetary receipts. Having thus exceeded the 250% threshold, the country became eligible for debt relief within the HIPCI framework. In March 2009, Cote d'Ivoire reached the decision point and was able to conclude agreements with the Paris and London Clubs. The results of the sensitivity analysis revealed the need for fiscal prudence. The Government hopes to reach the completion point in 2011.

Expenditure Schedule by Component (UA million)

| Component | 2011 | 2012 | 2013 | Total |
|-------------------------------------|-------------|--------------|-------------|--------------|
| 1. Infrastructure | 3.74 | 13.08 | 1.87 | 18.69 |
| 2. Comprehensive study | 0.32 | 0.95 | 0.32 | 1.59 |
| 3 Institutional support | 0.62 | 0.09 | 0.19 | 0.90 |
| 4. Project management | 0.81 | 0.66 | 0.66 | 2.13 |
| Total project cost per annum | 5.49 | 14.78 | 3.04 | 23.30 |

Project Cost by Expenditure Category and Source of Financing (UA million)

| Category | ADF | GVT | Total |
|------------------------------|--------------|-------------|--------------|
| 1. Works | 16.69 | | 16.69 |
| 2. Services | 5.21 | | 5.21 |
| 3 Goods | 0.70 | | 0.70 |
| 4. Operation | 0.40 | 0.30 | 0.70 |
| Total cost of project | 23.00 | 0.30 | 23.30 |

2.5. Project Target Area and Beneficiaries

The project encompasses the four districts of Adjamé, Abobo, Cocody and Plateau, with a total population of 2,800,000, including 495,000 directly affected by its outcome. In addition to decreasing flooding, the project will have a positive impact by reducing the incidence of water-borne diseases (in turn cutting health expenses among the target the population) and improving environmental and solid waste management. In terms of jobs, it will help to reduce unemployment among women and youths by creating one thousand (1,000) temporary jobs during the implementation phase, and one thousand three hundred (1,300) permanent jobs, including five hundred women street cleaners and eight hundred (800) youths working in household waste pre-collection.

2.6. *Participatory Approach for Identification, Design and Implementation*

During dialogue, identification and preparation missions conducted by the Bank, a consultative process was adopted through meetings and discussions, during which account was taken of various issues affecting the population and various sector players. Town hall meetings and informal consultations with beneficiaries highlighted the need for the project to support the improvement of household waste collection. Numerous consultations, discussions and meetings were held with the stakeholders with focus on programme objectives, positive impact and expected benefits. The establishment of a Project Steering Committee will ensure the continuity of this participatory process during the project implementation phase.

2.7. *Bank Group Experience and Lessons Reflected in Project Design*

Lessons drawn by the Bank and other donors from financing projects in Cote d'Ivoire were reflected in the project design, as set forth below:

(i) Inadequate coordination between the ministries: To promote the involvement of all ministries in monitoring and managing the project, a Steering Committee will be set up to coordinate and articulate actions taken as part of the project and others ongoing, as well as ensure the project's consistency with current sector policies. In the same vein, the ministries responsible for the environment and the family will each appoint a peer to accompany the experts of the management unit throughout the project duration;

(ii) Delays in approving bidding dossiers, contracts and disbursements: The project will benefit from the provisions of Order 192/MEF concerning procedures and arrangements for processing expenditure on emergency investment projects, which stipulate that disbursement procedures for external project resources and public procurement be decentralized and pared down. The application of the provisions outlined in this Order should help to reduce the local contract processing timeframe to 42 working days;

(iii) The inadequate technical capacity of small- and mid-sized enterprises (SMEs) awarded contracts nationwide: Given the urgent nature of the project and the type of works to implement, the lot groupings preferred using international competitive bidding.

2.8. *Key Performance Indicators*

2.8.1. The key performance indicators for measuring the project outputs will include: (i) the surface area flooded at the intersection following rainfall; (ii) the number of jobs created by the project; (iii) the number of women street cleaners and youths supported; (iv) the availability of a document for planning investments in the catchment area in the short, medium and long term; and (v) the existence of a national project implementation unit within the General Directorate of Sanitation, Construction and Maintenance (DGACM). These monitoring indicators were defined in consultation with the DGACM.

2.8.2. Data on the indicators will be collected by the monitoring/evaluation expert working with the Project Management Unit (PMU), based on: (i) the statistics of the National Office for Engineering and Development Studies (BNETD); (ii) the PMU monitoring/evaluation system; (iii) the town halls within the project zone; and (iv) project activity reports. Should the need arise, provision has also been made to recruit consultants to monitor social aspects and the outcome of the Information, Education and Communication (IEC) campaign.

III. PROJECT FEASIBILITY

3.1. *Economic and Financial Performance*

| | |
|---------------------------------|--------------|
| EIRR (baseline scenario) | (13%) |
|---------------------------------|--------------|

N.B. detailed calculations are given in Annex B7

This project is not suitable for financial analysis, as the benefits are mainly economic. The economic analysis was carried out based on project costs and benefits. The following key assumptions underpin the economic analysis: (i) the investment cost, excluding financial contingencies; (ii) a 10% annual discount rate; (iii) the annual maintenance cost, estimated at 2% of the cost of works; (iv) benefits linked to reduction in health expenditure; (v) benefits linked to reduction in Government expenditure to maintain the intersection due to flooding; and (vi) distribution of financial income to workers on sites during the execution of works. Based on these parameters, the project's EIRR is estimated at 13%. As such, it is deemed economically viable. Sensitivity tests have proven its viability in all types of scenario. The quantification of other economic benefits, particularly productivity gains linked to improvements in road traffic, reduction in vehicle maintenance costs, development of land within the project target area and reduction in time commuting to work would further enhance project viability.

3.2. **Environmental and Social Impact**

Environment

3.2.1 The project has been classified under Environmental Category 2. It is to be implemented in urban thalwegs and does not involve relocating the population or damaging natural resources. Noise, disruption to traffic and destruction of some vegetation during works, together with the minor inconvenience of dust contamination, are the main inconveniences identified with regard to the project. However, the project will have a positive impact that will be seen during the implementation phase and when the works become operational. **During the implementation phase**, the positive impacts will include the recruitment of unskilled labour during works execution, thus temporarily improving the living standard of a number of families. The training given to youths and women in the districts will allow them to develop their knowledge and disseminate good practices in the surrounding area. They will contribute indirectly to extending the project's health impact.

3.2.2 **During the operational phase**, the foremost positive impact of the project will concern improvement in the quantity and quality of water reaching the lagoon due to the clean up of the receiving environment at outfalls, thanks to the absence of different types of polluted effluent. The other positive effects are linked to: (i) the efficient functioning of basins; (ii) the elimination of stagnant water; (iii) reduced insecurity among local residents

and a better quality of life; and (iv) reduced risk of flooding, accompanied by a fall in the prevalence of water-borne diseases such as malaria. In addition, retarding dams and restored or newly built drainage canals will: (i) increase the value of neighbouring properties; (ii) reduce the release of odour into the atmosphere within a certain radius; and (iii) eliminate the discharge of waste water into the Basin, which may pollute the soil and surface water because of residual pollution by faecal germs, protozoan cysts, and the eggs of worms such as tenia, ascaris, oxyures, anopheles larvae, bilharziosis, etc. The health of the residents will benefit from the project.

3.2.3 The cost of mitigative or improvement measures is included in the cost of works as is normally the case for operations of this kind. An environmental audit will be carried out at the end of works. An Environmental and Social Management Plan (ESMP) concerning the project impact area has been drawn up and will be put under the responsibility of the National Environment Agency (ANDE), pursuant to an agreement signed with the Ministry for Construction, Urban Development and Housing (MCUH). Contracts for works will envisage measures designed to minimize the negative effects on the environment.

Climate Change

3.2.4 The project will have no direct impact on climate change since works execution will not involve the emission of greenhouse gases. The construction of retarding dams will allow a decrease in excess water flowing downstream. Consequently, the risk of flooding will be reduced. The terms of reference of the comprehensive study to be finalized by the Project Management Unit will include issues on climate change. IEC activity and support for improved waste management will contribute to controlling methane formation from natural fermentation of the waste remaining in the basin. Companies engaged in the project will also be required to use machines with top performing engines to prevent the project from having any negative impact whatsoever on climate change attributable to the use of fossil fuels by machines during works execution.

Gender

3.2.5 The project will have no negative effect whatsoever on gender. On the contrary, it will help to strengthen capacity and guarantee the distribution of financial income to youths and women, both of which constitute Abidjan's vulnerable population group. During project execution, the Ministry in charge of the Family, Women's and Social Affairs (MFFAS) will sit on the Project Steering Committee and designate a representative who will be attached to the Project Management Unit (PMU) to enable him/her benefit from peer training by the socioeconomic consultant. The gender dimension will also be reflected during the PMU staff recruitment process, wherein female candidates will be encouraged to apply.

Social Aspect

3.2.6 The project will have a significant social impact: (i) reduction in loss of lives and material damage attributable to flooding at the Indénié intersection; (ii) reduction in cases of malaria from 146 per thousand to 110 per thousand by 2015, and reduction in mortality from cholera from 15.39% to 11.54% by 2015; and (iii) development of a culture of sanitation and change in behaviour by an average local population of 228,000.

3.2.7 The project will also have an impact on poverty. With the emergence of several work sites in the city and the purchase of materials and equipment from the local market, the project

will help to revive economic activity and will lead to the creation of nearly 1,000 temporary jobs and 1,300 permanent jobs. Similarly, the increased well-being of a population estimated at 495,000 will help to cut spending on healthcare.

Forced Relocation of the Population

3.2.8 No forced relocation is anticipated.

IV. PROJECT IMPLEMENTATION

4.1. Implementation Arrangements

4.1.1. The MCUH will be the project executing agency through the General Directorate of Sanitation, Construction and Maintenance (DGACM), within which a Project Management Unit (PMU) will be established. The establishment of this Unit is necessary because of the DGACM's limited technical, financial and accounting capacity. In view of the DGACM's limited institutional capacity, experts will be recruited to strengthen the PMU, notably a hydraulics engineer who will head the Unit, a hydrologist, a civil engineer, a procurement expert, an environmentalist, a socio-economist, a monitoring/evaluation expert and a financial and accounting officer. The Government will appoint national counterparts to accompany the Unit's experts and assign them full time to the project. The CV of such counterparts would have been approved beforehand by the ADF. Furthermore, to improve the effectiveness of the DGACM's supervision of the Unit, the Director General of the DGACM will be the Project Coordinator.

4.1.2. A Steering Committee headed by the Minister of Construction, Urban Development and Housing, or his/her representative, and comprising the different parties involved in the project, will be set up to coordinate measures taken as part of the project and others ongoing or billed for the future, as well as the project's consistency with existing sector policies. The Steering Committee will be responsible for guidance, monitoring and coordination. It will meet every six months and determine the objectives, the program and the schedule for each six-month period. It will examine quarterly reports on project activities, assess its financial management and take any measures it considers necessary to ensure the harmonious implementation of various components of the project and smooth coordination with the activities of other donors. Any issues regarding authority will be referred to the Committee to ensure the smooth and coordinated execution of works. The Coordinator of the Project Management Unit will act as its Secretary.

4.1.3. Furthermore, the project will benefit from the provisions of Order 192/MEF as applied by the State to emergency projects. This Order mostly seeks to relax project management rules to reduce delays in procurement and speed up the disbursement of external resources. Among other provisions, it envisages the establishment of an internal Project Monitoring Committee formed by the departments of the Ministry of Finance and the Project Coordinator, which will meet monthly to review the responsibilities of each party involved in the project. It will submit a quarterly monitoring report with its recommendations to the Director of the Office of the Minister of Finance.

Procurement of Goods and Services

4.1.4. The project will apply the Bank's rules and procedures for the procurement of goods, services and works. Although Cote d'Ivoire's new public procurement regulations (Decree 2009-259 of 6 August 2009) largely comply with international standards and the Bank's procedures and policy, they are incomplete. The management structures for public procurement are not yet in place or not yet operational, in particular the units envisaged for the internal control of public procurement in contracting authorities (the details stipulating their composition and the conditions under which they are to work have not yet been published).

4.1.5 Annex B5 gives details of the procurement procedures for different contracts. In view of the relative limitations of local businesses, the allotment strategy adopted for the project favoured: (i) using international competitive bidding for works; and (ii) the principle of geographic location per allotment. A procurement plan was prepared, discussed and accepted during negotiations. The DGACM will be responsible for procurement. A capacity assessment in this regard revealed a need to strengthen the Directorate to enable it to conduct procurement activities. Consequently, all procurement will be subject to the *a priori* review procedure, under the conditions described in Annex B 4. An expert in procurement will be recruited by the Project Management Unit to assist the DGACM. This expert will be responsible for training DGACM staff and improving the administration and tracking of contracts.

Disbursement Arrangements

4.1.6 Disbursement will be carried out according to Bank procedures, i.e. the direct payment method, the rolling fund method and the reimbursement method. In accordance with Bank guidelines, the Borrower will open a special account in a bank acceptable to the ADF, to receive funds intended for managing the project. The opening of such an account is a condition for awarding the ADF grant. The project team will be trained in the Bank's disbursement procedures from the very start to ensure that orders for disbursement are prepared and submitted swiftly, and that the Bank's procedures in this area are respected.

Financial Management Arrangements

4.1.7 Placed under the supervision of the DGACM, the Project Management Unit will be responsible for the project's financial and accounting management, and preparation of financial reports. The Head of the Project Management Unit will be charged with the day-to-day management of the project and will prepare the year's work program and schedule, as well as the half-yearly work programme, before submitting them to the Coordinator and the Steering Committee for approval. An administrative, financial and accounting procedures manual will be drawn up and suitable general and analytic accounting software installed. Appropriate configuration of the software and user training will be provided from the start of the project. The Project Management Unit's qualified and experienced accounting officer will keep private type accounting using the software installed and will prepare periodic project financial reports according to the OHADA system accounting norms applicable to public investment projects. The annual financial statement will be audited by an independent accounting firm, in line with IFAC's ISA standards and the Bank's requirements. In accordance with the Order governing emergency projects, the Ministry of Finance will conduct the internal auditing of the project to verify that expenditures are compliant and expedite payment and the submission of requests to the Bank for disbursement. A supervision mission will be fielded yearly to look into project financial management.

4.1.8 The above measures have been adopted because the fiduciary risk is deemed high, for the following reasons: (i) deterioration in governance and transparency because of the recession; (ii) the weak control mechanisms, especially internal audit, despite the existence of a substantial auditing system; (iii) delays in implementing public expenditure; (iv) delays in disbursing foreign aid; and (v) the need to regularly monitor the Project Management Unit as the experts it recruits will be required to master the Bank's procurement and financial management rules and procedures.

4.2. Monitoring

4.2.1. The DGACM will be responsible for monitoring project implementation. It will prepare quarterly reports on the status of physical implementation and the financial position. Implementation monitoring will concern the output indicators, effects and impacts as presented on the project logical framework. A monitoring/evaluation expert will be recruited by the Project Management Unit to: (i) assist in setting up an efficient monitoring/evaluation system; and (ii) monitor IEC with the assistance of a gender expert counterpart. The ministries responsible for health, the environment and social affairs will monitor IEC implementation quarterly. When required, the project will finance the recruitment of consultants for monitoring. Environmental monitoring will be conducted by the National Environmental Agency (ANDE).

4.2.2. The Bank will monitor project implementation through: (i) supervision missions fielded thrice yearly; (ii) quarterly activity reports submitted by the Donee; and (iii) annual audit reports submitted to the Bank within six months following the end of each year. The main project implementation phases, including the related schedule, monitoring activities and feedback loop are presented below:

| <u>Timeframe</u> | <u>Milestones</u> | <u>Monitoring Activities/Feedback Loop</u> |
|-------------------------|--|---|
| 11/2010 | Grant approval | ADF Board |
| 01/2011 | Grant effectiveness | Grant protocol signed |
| 03/2011 | Project Management Unit set up | No objection notice from ADF/Launching mission |
| 05/2011 | Supervisory and IEC sections set up | No objection notice from ADF |
| 07/2011 | Start of IEC services | Contracts, mobilization advance, study and Activity reports, supervisory missions |
| 08/2011 | Recruitment of contractors completed | ADF no objection notice and contracts signed |
| 10/2011 | Start of works | Mobilization advance, study and activity reports |
| 11/2011 | End of recruitment of consultancy firm for the study | ADF no objection notice and contracts signed |
| 01/2012 | Start of study | Contracts, mobilization advance, study and activity reports, supervision reports |
| 05/2012 | Completion of works | Works completion reports, supervision mission |
| 12/2012 | Comprehensive study completed | Final study report |
| 03/2013 | Donors' round table | Report on the meeting |
| 12/2013 | Completion | Completion report by country and ADF completion mission |

4.3. Governance

4.3.1. Risks associated with delays in the public procurement and project disbursement processes are the main ones the project must face, in a post-conflict country such as Cote d'Ivoire. The project design, the institutional arrangements and the financing mechanisms have been simplified, thus reducing the risk of delays in implementing the project. Furthermore, the provisions under Order 192/MEF concerning procedures and modalities for processing expenditures on "emergency" investment projects also apply. This Order mostly seeks to relax project management rules to reduce delays in procurement and speed up the disbursement of external resources. Other measures adopted concern: (i) the preparation of a procedures manual that will propose simple, reliable and rapid procedures; (ii) annual financial audits; (iii) supervision by the Steering Committee; and (iv) three supervision missions by the ADF yearly.

4.3.2. Another major risk concerns the deterioration of the political climate that might compromise the implementation of the whole Bank portfolio in Cote d'Ivoire. The favourable change in the country's social and political situation with elections due in October 2010, provides grounds for optimism.

4.4. Sustainability

4.4.1. The Government of Cote d'Ivoire has expressed a clear commitment to implement this project. Despite obvious budgetary constraints, the Government has given assurances that within six months it will fund all the technical studies needed to design and prepare the project. Furthermore, to ensure rapid project implementation, the Government has agreed that the operation should benefit from the special provisions applicable to emergency projects by bringing it under the wings of Order 192 of the Ministry of Economy and Finance. Notification of applying this Order to the project will be a condition for awarding the ADF grant.

4.4.2. The sustainability of expected project benefits will also depend on the introduction of a consistent sanitation sector policy and strategy (these responsibilities are currently shared by several ministries). In this regard, the preparation of a document for the planning and integrated management of the Gourou catchment area, including a short-, medium- and long-term investment programme, will be a factor for ensuring project sustainability. The preparation of a study, financed by the European Union, whose purpose will be to foster the development of a national sanitation policy and define an objective national sanitation strategy, will also consolidate the expected project achievements. The outcome of the study should be available before June 2011. Government's commitment to implement the conclusions of the study is a condition for awarding the ADF grant.

4.4.3. Project implementation will generate annual works maintenance charges estimated at CFAF 260 million. These charges will be funded from the State budget. Currently the State spends approximately CFAF 800 million to clear the Indénié canals, especially after the rainy season.

4.5. Risk Management

The other major risks affecting the project concern the following:

- 4.5.1. The DGACM (the directorate responsible for project implementation) has limited institutional capacity in terms of human and material resources. To

attenuate this risk, the project will recruit consultants who will make up the Project Management Unit set up within the DGACM. In their terms of reference, the consultants will be required, among other duties, to improve the capacity of the DGACM executives and ensure that their national counterparts receive peer training. In due course, the project will develop the DGACM's ability to manage similar projects. This improved ability will be useful for managing the short-, medium- and long-term investment program identified by the comprehensive study and financed within the project framework. The project will also fund training programs in geographical information system, integrated water resource management (IWRM) and the management and maintenance of sanitation networks. It will also provide logistic support to the DGACM and the ministries in charge of the environment, health and women's affairs.

- 4.5.2. Poor solid waste management: this risk is attenuated since a system for treating solid waste already exists, under the oversight of the Municipal Operations Support Mission (MACOM) financed by the World Bank and supported by all city halls. The project will consolidate this scheme by assisting the districts in household waste management. In addition, a document to map out a solid waste management strategy is being prepared (World Bank funding) and should be available latest by December 2010. Government's commitment to implement the recommendations of this study as well as presentation of the related action plan are conditions for awarding the ADF grant.
- 4.5.3. The behaviour of the population with regard to land use and household waste management: to minimize the risk of negative behavioural patterns, the project will fund a major IEC campaign aimed at local residents and local authorities. To eliminate the risk of poor coordination between ministries, the project will recruit a specialized agency to conduct the campaign that is scheduled to begin three months before works start up and continue for three months after works completion. To sustain the gains from the campaign, the project envisages reinforcing the MFFAS' capacity to conduct IEC in districts covered by the project, so that its effects are lasting.
- 4.5.4. All project measures related to solid waste management (strengthening the mechanism set up and managed by the districts, raising the awareness of the population on sanitation and the environment and developing the capacity of DGACM executives and the designated counterparts) will contribute to the project attaining its objectives, improving its performance and ensuring its sustainability.

4.6. Knowledge Building

Project implementation will help to build knowledge on: (i) catchment area management; and (ii) execution of emergency storm water drainage projects in urban areas, in the context of a post-conflict country. The experience drawn, especially through quarterly reports, audit reports and the completion report, will provide lessons for future projects. Information from a variety of sources will also be regularly collected during project supervision. The experience gained and the lessons drawn will be duly reported to the Bank and information shared within the Institution through country team meetings and other appropriate forums for exchanging ideas.

V. LEGAL FRAMEWORK

5.1. *Legal Instrument*

A protocol of agreement for the ADF grant will be signed between the Fund and the Donee.

5.2. *Conditions Associated with Bank's Intervention*

5.2.1. *Conditions precedent to entry into force of the protocol of agreement:* the ADF grant protocol of agreement shall become effective on signature.

5.2.2. *Conditions precedent to first disbursement of the grant:* Apart from effectiveness of the grant protocol of agreement, the first disbursement of ADF funds will only be made after the Donee fulfils the following conditions to the Fund's satisfaction: (i) show proof that functional premises have been made available to the Project Management Unit; (ii) show proof of setting up a Project Steering Committee and designating its members, comprising representatives of the Ministries in charge of Planning, Sanitation, Finance, Health, Family, the Environment, Infrastructure, Hygiene, a representative of Abidjan Prefecture and a representative of Abidjan District; (iii) show proof of designating counterparts to the Unit's experts (the CVs of the counterparts would have been approved beforehand by the ADF); (iv) present original documents attesting to the opening of a special account with a commercial bank acceptable to the ADF, into which the ADF funds will be lodged, including a related Letter of Comfort issued by the said bank; and (v) present the original or certified copy of the Ministerial Edict extending to the project the Order concerning procedures and modalities for processing expenditures on projects co-financed by the World Bank, including a copy of the said Order.

5.2.3. *Other conditions:* (i) No later than 31 December 2012, submit to the Fund an action plan for implementing the recommendations adopted following the institutional and sector policy study on sanitation; and (ii) No later than 30 June 2012, submit to the Fund an action plan for implementing the recommendations adopted following the solid waste strategy study.

5.2.4. *Commitments required:* (i) implement the recommendations adopted following the institutional and sector policy study on sanitation; and (ii) implement the recommendations adopted following the solid waste strategy study.

5.3. *Compliance with Bank Policies*

The project complies with applicable Bank policies.

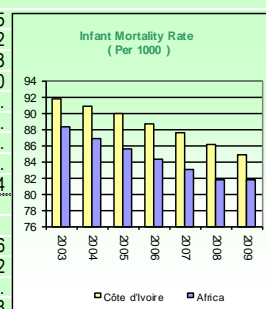
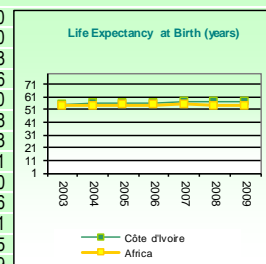
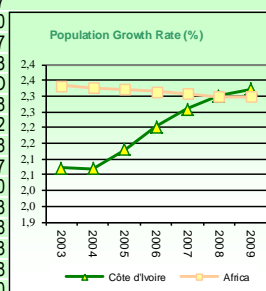
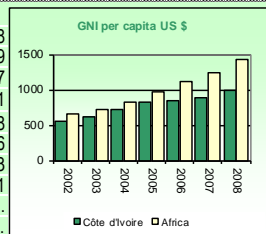
VI. RECOMMENDATION

Management recommends that the Board of Directors approve the proposed grant of UA 23 million to the Government of the Republic of Cote d'Ivoire for the purposes stated in this report and subject to the conditions stipulated therein.

Côte d'Ivoire

COMPARATIVE SOCIO-ECONOMIC INDICATORS

| | Year | Côte d'Ivoire | Africa | Developing Countries | Developed Countries |
|--|------|---------------|--------|----------------------|---------------------|
| Basic Indicators | | | | | |
| Area ('000 Km ²) | | 322 | 30 323 | 80 976 | 54 658 |
| Total Population (millions) | 2009 | 21,1 | 1 008 | 5 629 | 1 069 |
| Urban Population (% of Total) | 2009 | 49,5 | 39,6 | 44,8 | 77,7 |
| Population Density (per Km ²) | 2009 | 65,4 | 3,3 | 66,6 | 23,1 |
| GNI per Capita (US \$) | 2008 | 980 | 1 428 | 2 780 | 39 688 |
| Labor Force Participation - Total (%) | 2009 | 37,3 | 41,2 | 45,6 | 54,6 |
| Labor Force Participation - Female (%) | 2009 | 30,4 | 41,2 | 39,8 | 43,3 |
| Gender-Related Development Index Value | 2005 | 0,413 | 0,525 | 0,694 | 0,911 |
| Human Develop. Index (Rank among 182 countries) | 2007 | 163 | 0,514 | n.a | n.a. |
| Popul. Living Below \$ 1 a Day (% of Population) | 2005 | 23,3 | 50,8 | 25,0 | ... |
| Demographic Indicators | | | | | |
| Population Growth Rate - Total (%) | 2009 | 2,3 | 2,3 | 1,3 | 0,7 |
| Population Growth Rate - Urban (%) | 2009 | 3,7 | 3,4 | 2,4 | 1,0 |
| Population < 15 years (%) | 2009 | 40,6 | 56,0 | 29,2 | 17,7 |
| Population >= 65 years (%) | 2009 | 3,9 | 4,5 | 6,0 | 15,3 |
| Dependency Ratio (%) | 2009 | 80,2 | 78,0 | 52,8 | 49,0 |
| Sex Ratio (per 100 female) | 2009 | 103,8 | 100,7 | 93,5 | 94,8 |
| Female Population 15-49 years (% of total populatic) | 2009 | 23,3 | 48,5 | 53,3 | 47,2 |
| Life Expectancy at Birth - Total (years) | 2009 | 57,9 | 55,7 | 66,9 | 79,8 |
| Life Expectancy at Birth - Female (years) | 2009 | 59,3 | 56,8 | 68,9 | 82,7 |
| Crude Birth Rate (per 1,000) | 2009 | 34,5 | 35,4 | 21,5 | 12,0 |
| Crude Death Rate (per 1,000) | 2009 | 10,6 | 12,2 | 8,2 | 8,3 |
| Infant Mortality Rate (per 1,000) | 2009 | 84,7 | 80,0 | 49,9 | 5,8 |
| Child Mortality Rate (per 1,000) | 2009 | 119,5 | 83,9 | 51,4 | 6,3 |
| Total Fertility Rate (per woman) | 2009 | 4,5 | 4,5 | 2,7 | 1,8 |
| Maternal Mortality Rate (per 100,000) | 2005 | 543,0 | 683,0 | 440,0 | 10,0 |
| Women Using Contraception (%) | 2006 | ... | ... | 61,0 | 75,0 |
| Health & Nutrition Indicators | | | | | |
| Physicians (per 100,000 people) | 2004 | 11,4 | 42,9 | 78,0 | 287,0 |
| Nurses (per 100,000 people)* | 2004 | 55,7 | 120,4 | 98,0 | 782,0 |
| Births attended by Trained Health Personnel (%) | 2006 | 56,8 | 50,5 | 63,4 | 99,3 |
| Access to Safe Water (% of Population) | 2008 | 80,0 | 64,0 | 84,0 | 99,6 |
| Access to Health Services (% of Population) | 2006 | ... | 61,7 | 80,0 | 100,0 |
| Access to Sanitation (% of Population) | 2008 | 23,0 | 38,5 | 54,6 | 99,8 |
| Percent. of Adults (aged 15-49) Living with HIV/AIDS | 2007 | 3,9 | 4,5 | 1,3 | 0,3 |
| Incidence of Tuberculosis (per 100,000) | 2007 | 420,0 | 313,7 | 161,9 | 14,1 |
| Child Immunization Against Tuberculosis (%) | 2007 | 94,0 | 83,0 | 89,0 | 99,0 |
| Child Immunization Against Measles (%) | 2007 | 67,0 | 74,0 | 81,7 | 92,6 |
| Underweight Children (% of children under 5 years) | 2006 | 20,0 | 25,6 | 27,0 | 0,1 |
| Daily Calorie Supply per Capita | 2005 | 2 542 | 2 324 | 2 675 | 3 285 |
| Public Expenditure on Health (as % of GDP) | 2006 | 0,9 | 5,5 | 4,0 | 6,9 |
| Education Indicators | | | | | |
| Gross Enrolment Ratio (%) | | | | | |
| Primary School - Total | 2008 | 74,5 | 100,2 | 106,8 | 101,5 |
| Primary School - Female | 2008 | 65,9 | 91,7 | 104,6 | 101,2 |
| Secondary School - Total | 2006 | ... | 35,1 | 62,3 | 100,3 |
| Secondary School - Female | 2006 | ... | 30,5 | 60,7 | 100,0 |
| Primary School Female Teaching Staff (% of Total) | 2008 | 22,9 | 47,5 | ... | ... |
| Adult Illiteracy Rate - Total (%) | 2006 | ... | 59,4 | 19,0 | ... |
| Adult Illiteracy Rate - Male (%) | 2006 | ... | 69,8 | 13,4 | ... |
| Adult Illiteracy Rate - Female (%) | 2006 | ... | 57,4 | 24,4 | ... |
| Percentage of GDP Spent on Education | 2006 | ... | 4,5 | ... | 5,4 |
| Environmental Indicators | | | | | |
| Land Use (Arable Land as % of Total Land Area) | 2007 | 8,8 | 6,0 | 9,9 | 11,6 |
| Annual Rate of Deforestation (%) | 2006 | ... | 0,7 | 0,4 | -0,2 |
| Annual Rate of Reforestation (%) | 2006 | ... | 10,9 | ... | ... |
| Per Capita CO2 Emissions (metric tons) | 2008 | 0,3 | 1,1 | 1,9 | 12,3 |



Sources : ADB Statistics Department Databases; World Bank: World Development Indicators;

last update : septembre 2010

UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

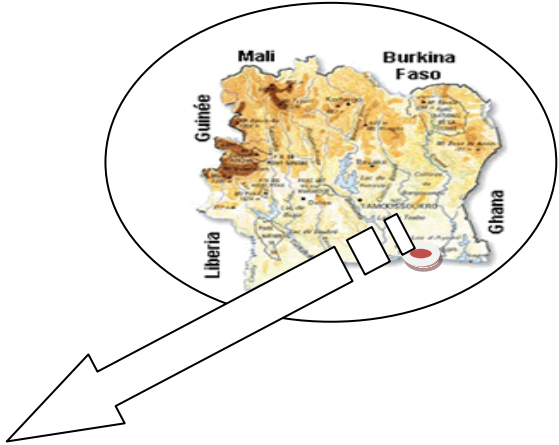
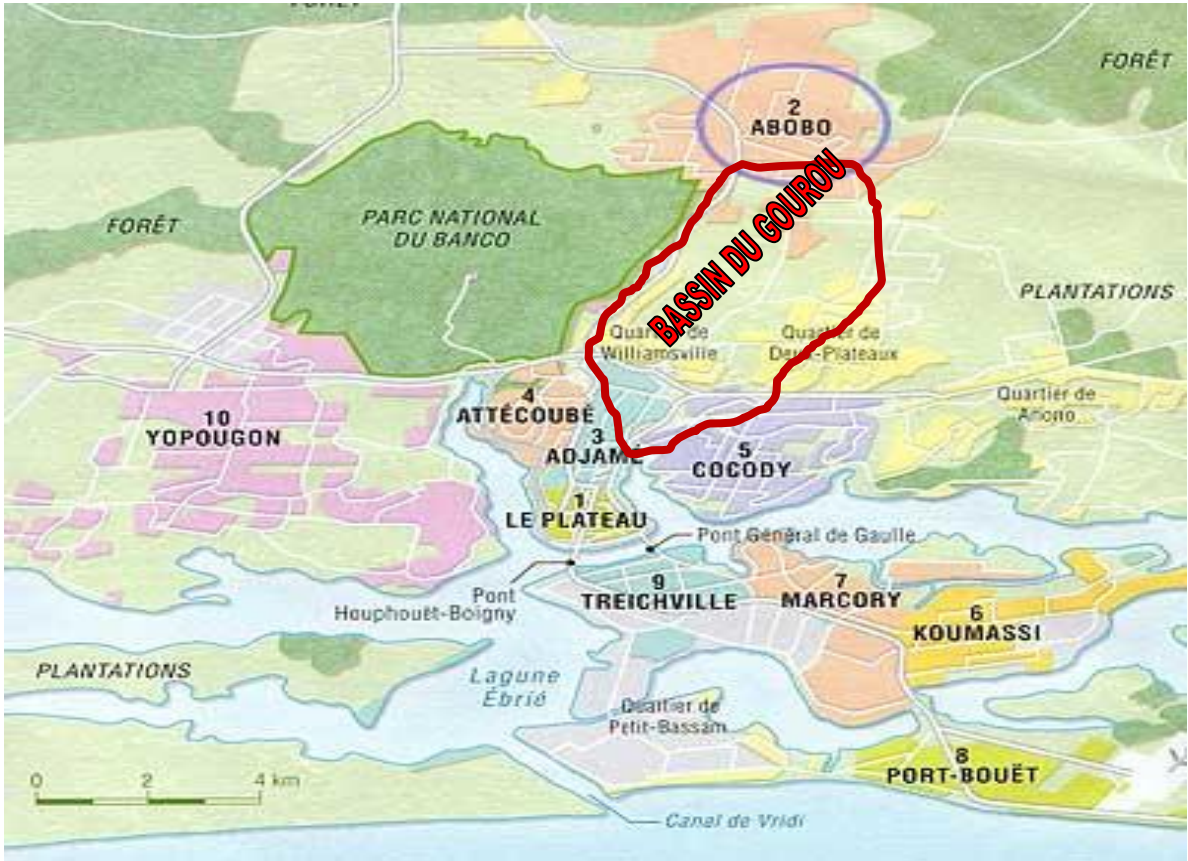
Note : n.a. : Not Applicable; ... : Data Not Available.

| Overview of the Bank's Portfolio in Cote d'Ivoire | | | | | |
|--|-----------------|----------------------|--------------------|------------------|--------------------------|
| | Approval | Effectiveness | Amount (UA) | Disbursed | % of Disbursement |
| Social sector | | | | | |
| PAIMSC (crisis exit) | 05/12/2007 | 22/04/2008 | 20,000,000 | 10,812,108 | 54.6 |
| Human Resources Development Project (PVRH II) | 11/11/1998 | 30/11/1999 | 20,000,000 | 1,904,000 | 9.52 |
| Agriculture | | | | | |
| Moyen Comoe Rural Project (PADER MC) | 28/06/2002 | 22/07/2004 | 15,000,000 | 0.00 | 0 |
| Governance | | | | | |
| Targeted Support for Capacity Building | December 2009 | December 2009 | 2,000,000 | 1,240,000 | 62 % |

**MAJOR RELATED PROJECTS FINANCED BY THE BANK
AND OTHER DEVELOPMENT PARTNERS**

| Donor | Sector | Project |
|----------------|----------------------|---|
| World Bank | Water and Sanitation | Emergency Urban Infrastructure Programme |
| European Union | Sanitation | Emergency Project IV (PUR IV) |
| European Union | Sanitation | Bouaké, Daloa and San Pedro Master Plan Update Study |
| European Union | Sanitation | Institutional and Policy Study on Sanitation in Cote d'Ivoire |

MAP SHOWING THE LOCATION OF GOUROU CATCHMENT BASIN IN ABIDJAN DISTRICT



This map has been provided by the staff of the African Development Bank Group exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the ADB Group and its members any judgment concerning the legal status of a territory nor any approval or acceptance of these borders.