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Report No: PAD3407

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED IDA SCALE-UP FACILITY CREDIT  
IN THE AMOUNT OF EUR 287.7 MILLION  
(US\$315 MILLION EQUIVALENT)

TO THE

REPUBLIC OF CÔTE D'IVOIRE

FOR AN

URBAN RESILIENCE AND SOLID WASTE MANAGEMENT PROJECT

MAY 20, 2020

Urban, Resilience, and Land Global Practice  
Africa Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2020)

Currency Unit = CFA Francs (CFAF)

CFAF 599 = US\$1

US\$1 = EUR 0.9133

## FISCAL YEAR

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

AECID	Spanish Agency for International Development Cooperation ( <i>Agence Espagnole pour la Coopération Internationale au Développement</i> )
AFD	French Agency for Development ( <i>Agence Française de Développement</i> )
AfDB	African Development Bank
ANAGED	National Waste Management Agency ( <i>Agence Nationale de Gestion des Déchets</i> )
AWPB	Annual Work Plan and Budget
BCEAO	Central Bank of West African States ( <i>Banque Centrale des Etats d'Afrique de l'Ouest</i> )
BOAD	West African Development Bank ( <i>Banque Ouest Africaine de Développement</i> )
CAPEX	Capital Expenditure
C2D	Debt Reduction and Development Contract ( <i>Contrat de Désendettement et de Développement</i> )
CERC	Contingent Emergency Response Component
C-ESMP	Contractor's Environmental and Social Management Plan
COVID-19	Coronavirus Disease of 2019
CPF	Country Partnership Framework
CQS	Selection Based on the Consultants' Qualifications
CURB	Climate action for URBan sustainability
CVET	Landfill and recycling center ( <i>Centre de Valorisation et d'Enfouissement Technique</i> )
DA	Designated Account
DAA	Abidjan Autonomous District ( <i>District Autonome d'Abidjan</i> )
DAF	Directorate of Administration and Finance
DAGRU	Directorate of Addressing Management and Urban Restructuring ( <i>Direction Adressage Gestion et Restructuration Urbaine</i> )
DAUD	Office of Urban Sanitation ( <i>Direction de l'Assainissement Urbain et du Drainage</i> )
DB	Design-Build
DBFO	Design-Build-Finance-Operate
DBO	Design-Build-Operate
DGAS	Directorate of Sanitation and Salubrity ( <i>Direction Générale de l'Assainissement et de la Salubrité</i> )
DGTCP	Directorate of Debt ( <i>Direction Générale du Trésor et de la Comptabilité Publique</i> )
DPF	Development Policy Financing
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EIRR	Economic Internal Rate of Return
EPC	Engineering, Procurement, and Construction

EPIC	Public Industrial and Commercial Establishment ( <i>Etablissement Public à Caractère Industriel et Commercial</i> )
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
EU	European Union
EWS	Early Warning System
FA	Framework Agreement
FBS	Fixed Budget Selection
FM	Financial Management
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIS	Geographic Information System
GoCI	Government of Côte d'Ivoire
GRM	Grievance Redress Mechanism
ICT	Information and Communication Technology
ID	Identification
IDA	International Development Association
IC	Individual Consultant
ICB	International Competitive Bidding
IFC	International Finance Corporation
IFR	Interim Finance Report
IGF	General Inspectorate of Finance ( <i>Inspection Générale des Finances</i> )
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IPF	Investment Project Financing
IRF	Property Income Tax ( <i>Impôt sur le Revenu Foncier</i> )
IT	Information Technology
LCS	Least-Cost Selection
LMP	Labor Management Plan
M&E	Monitoring and Evaluation
MCLU	Ministry of Construction, Housing, and Urbanization ( <i>Ministère de la Construction, du Logement et de l'Urbanisme</i> )
MDGs	Millennium Development Goals
MFD	Maximizing Finance for Development
MINASS	Ministry of Sanitation ( <i>Ministère de l'Assainissement et de la Salubrité</i> )
MSW	Municipal Solid Waste
NBS	Nature-based Solution
NCB	National Competitive Bidding
NGO	Nongovernmental Organization
NPV	Net Present Value
EHS/OHS	Environmental/Occupational Health and Safety
O&M	Operation and Maintenance
ONAD	National Office of Sanitation and Drainage ( <i>Office National de l'Assainissement et du Drainage</i> )
ONPC	National Civil Protection Office ( <i>Office National de la la Protection Civile</i> )
OPEX	Operational Expenditure
PA	Project Account

PCU	Project Coordination Unit
PDNA	Post Disaster Need Assessment
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PPA	Project Preparation Advance
PPP	Public Private Partnership
PPSD	Procurement Project Strategy for Development
PRICI	Infrastructure Renewal and Urban Management Project ( <i>Projet de Renaissance des Infrastructures de Côte d'Ivoire</i> )
QBS	Quality-Based Selection
RAF	Financial Management Officer ( <i>Responsable Administratif Financier</i> )
RAP	Resettlement Action Plan
REoI	Request for Expression of Interest
RDF	Refuse-Derived Fuel
RECIDE	Resilient City Development
RPF	Resettlement Policy Framework
SAI	Social Accountability International
SDAD	Sanitation and Drainage Master Plan ( <i>Schéma Directeur d'Assainissement et de Drainage</i> )
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SIA	Specialized Implementation Agency
SMEs	Small and Medium Enterprises
SODEXAM	Airports, Aeronautics, and Meteorology Operating and Development Company ( <i>Société d'Exploitation et Développement aéroportuaire, aéronautique et météorologique</i> )
SoE	Statement of Expressions
SUF	Scale-up Facility
SWM	Solid Waste Management
TEOM	Garbage Removal Tax ( <i>Taxe d'Enlèvement des Ordures Menagères</i> )
TOR	Terms of Reference
TSCP	Special Tax on Specific Plastic Product ( <i>Taxe Spéciale sur Certains Produits en Matières Plastiques</i> )
TSPE	Special Tax of Environmental Protection ( <i>Taxe Spéciale de Protection de l'Environnement</i> )
TTL	Team Task Leader
TVHA	Road, Hygiene, and Sanitation Tax ( <i>Taxe de Voirie d'Hygiène et d'Assainissement</i> )
UNDP	United Nations Development Programme
UVICOCI	Ivorian Union of Cities and Municipalities <i>Union des Villes et Collectivités de Côte d'Ivoire</i>
WAEMU	West African Economic and Monetary Union

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DATASHEET

**BASIC INFORMATION**

Country(ies)	Project Name	
Cote d'Ivoire	Urban Resilience and Solid Waste Management Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P168308	Investment Project Financing	High

**Financing & Implementation Modalities**

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input checked="" type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
15-Jun-2020	31-Oct-2026

Bank/IFC Collaboration

No

**Proposed Development Objective(s)**

The development objectives of the project are to reduce vulnerability to flooding in selected urban areas and improve solid waste management in targeted municipalities.

**Components**

Component Name	Cost (US\$, millions)
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Component 1: Flood risk mitigation infrastructure and services	181.00
Component 2: Improvement of solid waste management infrastructure and services	124.00
Component 3: Project management	10.00
Component 4: Contingent Emergency Response Component	0.00

**Organizations**

Borrower: Republic of Cote d'Ivoire  
 Implementing Agency: Ministry of Sanitation

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	315.00
<b>Total Financing</b>	315.00
<b>of which IBRD/IDA</b>	315.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	315.00
IDA Credit	315.00

**IDA Resources (in US\$, Millions)**

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
<b>Cote d'Ivoire</b>	315.00	0.00	0.00	315.00
Scale-up Facility (SUF)	315.00	0.00	0.00	315.00
<b>Total</b>	<b>315.00</b>	<b>0.00</b>	<b>0.00</b>	<b>315.00</b>

**Expected Disbursements (in US\$, Millions)**



WB Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027
Annual	0.00	15.75	47.25	78.75	78.75	63.00	31.50	0.00
Cumulative	0.00	15.75	63.00	141.75	220.50	283.50	315.00	315.00

**INSTITUTIONAL DATA**

**Practice Area (Lead)**

Urban, Resilience and Land

**Contributing Practice Areas**

**Climate Change and Disaster Screening**

This operation has been screened for short and long-term climate change and disaster risks

**SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)**

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Substantial
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● High
8. Stakeholders	● Moderate
9. Other	
10. Overall	● Substantial



**COMPLIANCE**

**Policy**

Does the project depart from the CPF in content or in other significant respects?

Yes  No

Does the project require any waivers of Bank policies?

Yes  No

**Environmental and Social Standards Relevance Given its Context at the Time of Appraisal**

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

**NOTE:** For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

**Legal Covenants**

Sections and Description



Financing Agreement, Schedule 2, Section I.A.1 (e): The Recipient shall ensure that the PCU: (i) recruits an accountant and acquires an accounting software no later than two (2) months after the Effective Date; and (ii) recruits a communication officer, a monitoring and evaluation expert, a drainage engineer, a digital and geospatial technology specialist and a solid waste management specialist no later than three (3) months after the Effective Date; and an external auditor no later than five (5) months after the Effective Date.

**Sections and Description**

Financing Agreement, Schedule 2, Section I.B.2 (a): No later than one (1) month after the Effective date, the Recipient shall prepare, under terms of reference acceptable to the Association, and furnish to the Association, an implementation manual for the Project containing detailed arrangements and procedures for: (i) institutional coordination and day-to-day execution of the Project; (ii) Project budgeting, disbursement and financial management; (iii) procurement; (iv) monitoring, evaluation, reporting and communication; (v) safeguards monitoring and mitigation; and (vi) such other arrangements and procedures as shall be required for the Project.

**Conditions**

Type	Description
Effectiveness	Financing Agreement, Article V, 5.01 (a): the Recipient has recruited (i) a coordinator, (ii) a financial management specialist and (iii) a procurement specialist (iv) a social development specialist, and (v) an environmental specialist, all with qualifications, experience and terms of reference acceptable to the Association.
Effectiveness	Financing Agreement, Article V, 5.01 (b): the Delegated Management Contracts have been duly executed, on terms and conditions acceptable to the Association, between the Recipient, acting through the Project Coordination Unit, and each of the Specialized Implementing Agencies.



## I. STRATEGIC CONTEXT

### A. Country Context

1. **Economic growth has remained strong in recent years.** With gross domestic product (GDP) growth estimated at 7.4 percent in 2018 (4.8 percent in per capita terms) and 7.3<sup>1</sup> percent in 2019, Côte d'Ivoire continues to be one of the fastest growing economies in Sub-Saharan Africa (which grew overall at 2.3 percent in 2018). The services and industrial sectors supported the country's strong economic performance. The services sector recorded a strong performance due to the growth of telecommunication, trade, and transport services. Public investments (in the Fourth Bridge and metro projects in Abidjan) and private investments (particularly in the housing sector) supported the construction sector while agro-processing boosted manufacturing activities. In the primary sector, higher cocoa, coffee, and cotton crops offset the lower production in the cashew sector.

2. **Economic growth has been associated with a moderate decline in poverty and inequality, but the gap between the poor and the rich remains high.** At the national level, poverty has slightly decreased from 29.1 percent in 2008 to 24.4 percent in 2019<sup>2</sup> (international poverty line US\$1.90 PPP<sup>3</sup>). In urban areas, however, poverty has increased, partly as a result of migration from rural to urban areas. The decline in poverty at the national level is driven by a reduction in poverty in rural areas where the proportion of people living below the poverty line decreased from 62.5 percent in 2008 to 56.8 percent in 2015. Though universal enrollment and gender parity have been nearly achieved in primary education, gaps remain in secondary education, with the lowest participation rates in rural and poor communities. Employment is predominantly informal and the country faces major challenges in terms of job quality and urban mobility.

3. **The medium-term outlook has been generally favorable, but the COVID-19 pandemic is expected to have a significant negative impact.** Growth projections are being revised downward, now expected to be around 2-3 percent in 2020. The government's confinement measures, and a domestic outbreak will hurt domestic demand – a key driver of growth in past years - and global spillovers will negatively affect exports. This, coupled with the cost of a crisis response economic stimulus package, will put pressure on government finances, drive up debt and widen the budget deficit. However, 2021 and beyond are expected to see a recovery to the previous levels of 7 percent and above. In the medium run, growth will be driven by increased productivity in the agricultural and industrial sectors, and a dynamic services sector. The use of improved seeds is expected to increase agricultural productivity and the expansion of cocoa and cashew processing will support the manufacturing sector. Greater agricultural productivity and processing will lead to an increase of exports. The construction sector will continue to grow as new industrial zones as well as public infrastructure are developed both in Abidjan and in the secondary cities. All these sectors should both benefit from and contribute to the country's rapid urbanization and economic progress. As a result of reforms improving the business climate, private investment is expected to further accelerate in the agribusiness and service sectors. Inflation is expected

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<sup>1</sup> World Bank Macro-poverty Outlook : [http://macropovertyoutlook.worldbank.org/mpo\\_files/mpo/mpo-sm20-civ.pdf](http://macropovertyoutlook.worldbank.org/mpo_files/mpo/mpo-sm20-civ.pdf)

<sup>2</sup> World Bank Macro-poverty Outlook : [http://macropovertyoutlook.worldbank.org/mpo\\_files/mpo/mpo-sm20-civ.pdf](http://macropovertyoutlook.worldbank.org/mpo_files/mpo/mpo-sm20-civ.pdf)

<sup>3</sup> PPP = purchasing power parity.



to gradually increase, reaching 2.0 percent in 2022 (well below the West Africa Economic and Monetary Union [WAEMU] target) as the output gap remains positive.

4. **While the medium-term outlook remains favorable, risks are tilted to the downside, notably in the short run.** Vulnerability to external shocks remains one of the main challenges to achieving sustainable growth. Rising concerns over cocoa-related deforestation and child labor in Côte d'Ivoire might lead to reduced access to markets in Europe and the United States (which account for about 85 percent of cocoa exports). A stronger-than-expected decline in cocoa prices could adversely affect fiscal revenues, economic growth, and the significant share of the population whose livelihoods depend directly on cocoa. A tightening of monetary policy in international and regional markets would increase the cost of borrowing and affect debt sustainability. As for domestic risks, the 2020 presidential elections could lead to an increase in spending (social spending as well as public investments). With the COVID-19 crisis expenditure, the GoCI will not be able to comply with the regional convergence criterion for the fiscal deficit of 3 percent of GDP in 2020. Given the Regional crisis, the WAEMU convergence criterion has been suspended. Going forward, compliance next year (2021) is also at risk due to the COVID-19 crisis. However, the overall macroeconomic framework is adequate and the Government is committed to compliance with the convergence criterion on fiscal deficits in the longer run. Greater political uncertainty, as well as the resurgence of sociopolitical tensions, may also have a negative impact on investor confidence in Côte d'Ivoire and affect economic growth. Finally, adverse climatic conditions may negatively affect agricultural output and exports. Most of these risks are exacerbated by the COVID-19 crisis, which has brought about heightened global volatility in commodity prices and tightening of financing conditions. In addition, the public budget will be under further pressure from increased expenditure needs, notably to combat the pandemic.

## B. Sectoral and Institutional Context

### Rapid and Uncontrolled Urbanization

5. **The urban sector in Côte d'Ivoire is characterized by an unprecedented population growth.** More than 50 percent of the Ivorian population lives in cities in 2020<sup>4</sup>, with an urbanization rate of around 5 percent per year. The Abidjan Autonomous District includes the highest human and economic concentration in the country: a population estimated today between 5 and 6 million inhabitants or 20 percent of the total population and nearly 45 percent of urban dwellers. The Abidjan Autonomous District alone accounts for more than 60 percent of the country's economic activities. By 2025, one Ivorian out of four will live in the Abidjan metropolitan area. Eleven other cities with more than 100,000 inhabitants are considered as secondary cities; the largest five are Bouaké, Daloa, Korhogo, San Pedro, and Yamoussoukro. Between 1998 and 2014, the population grew by 53 percent in Abidjan, 43 percent in San Pedro, and 17 percent in Bouake, which was severely affected by civil unrest.

6. **Basic sanitation, solid waste management (SWM), and stormwater infrastructure facilities in the urban sector have not kept up with rapid urban growth.** The country's booming economic development combined with a lack of land planning and infrastructure maintenance have deepened Côte d'Ivoire's urban problems and led to environmental degradation and greater vulnerability to natural hazards. Major factors exacerbating this vulnerability include (a) occupation of *'non-aedificandi'*, or areas

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<sup>4</sup> UN Habitat Côte d'Ivoire Country Profile : <https://population.un.org/wup/Country-Profiles/>



not suitable for construction, building dwellings in high-risk areas such as storm basins; (b) a deficit in alternative housing exacerbated by rural to urban migration; (c) a lack of investment for implementation of master plans for sanitation and drainage; (d) an inadequate SWM system, causing unsanitary conditions and spreading diseases; and (e) insufficient involvement of local authorities in development management.

### **Incomplete (or Unachieved) Decentralization Process**

7. **The Government's 2003 decentralization policy and transfer of responsibilities of the state to local authorities specifies 16 main areas of expertise.** The institutional framework governing decentralization and the law changed in 2012, reducing formerly five levels of decentralized entities into two: regions (31) and municipalities (197). In addition, two autonomous districts were created for Abidjan and Yamoussoukro. Nevertheless, devolution has not been accompanied by a full transfer of financial and human resources, and local authorities lack autonomy and capacity to manage rapid urbanization and provision of infrastructure and urban services.

8. **The Abidjan Autonomous District (*District Autonome d'Abidjan, DAA*) is a special type of local authority with legal and financial autonomy.** Its main sources of funding come from the taxes collected and transferred by the state, including taxes for built-up land, patents, casino gaming licenses, and state subsidies, among others. The district comprises 13 municipalities and 96 villages. The district's authority was set into law in 2014<sup>5</sup> and includes (a) environmental protection, (b) land use planning, (c) mitigation of the adverse effects of urbanization, (d) promotion and implementation of social and cultural economic development, (e) public safety, and (f) protection and promotion of cultural traditions.

### **Disaster Risk Profile and Climate Change**

9. **Côte d'Ivoire is prone to natural disaster risks such as flooding and landslides, which are exacerbated by the effects of rapid urbanization and climate change.** The country is in the transition zone between a humid equatorial climate in the south and the drier tropical climate in the north. In the north, the rainy season is from June to October, while in the southern region, May to June brings heavy rains, averaging 2,000 mm annually along the coast, and shorter rains occur during August and September. High rainfall in the south supports an abundance of agriculture, namely cocoa, cashews, and coffee.

10. **Floods are a perennial hazard in Côte d'Ivoire, especially in the southern part of the country with the highest rainfall.** An estimated 60,000 people are affected by floods and nearly 0.7 percent of the country's GDP is lost every year. Furthermore, other coastal cities like Abidjan and Grand-Bassam, are particularly vulnerable to natural disasters associated with sea-level rise.

11. **Climate trends are characterized by rising temperatures and increasing extreme events.** An analysis of climate data from 1970 to 2015 shows an average rise of a little more than 1°C. But future change in precipitation is not easily predictable, and different climate modeling scenarios present a large variability over the very long term. However, by 2050, the country could face an estimated 9 percent decrease of precipitation in May coupled with an increase of 9 percent in October and 30 cm of sea level rise. Rising temperatures and increased variability will also increase the frequency and magnitude of extreme events. These will further exacerbate the risk of flooding due to more frequent extreme

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<sup>5</sup> No. 2014-453 of August 5, 2014.



precipitations and lack of capacity to discharge stormwater by the existing drainage systems, as well as due to sea level rise in coastal cities. In the absence of a comprehensive study on the impact of climate change on the Ivorian economy, estimates can be made based on extrapolations of data from African continent-wide studies. According to the Intergovernmental Panel on Climate Change (IPCC), climate change could reduce Africa's GDP by 2–4 percent by 2040 and between 10 and 25 percent in 2100. For Côte d'Ivoire, this would correspond to an equivalent loss of CFAF 380–770 billion. More concerning is the possibility that climate change could push 2–6 percent of additional households into extreme poverty by 2030. For Côte d'Ivoire, this would correspond to nearly 1 million additional people in a situation of extreme poverty (people living on less than US\$1.90 a day) in addition to the existing 6 million.

**12. The Abidjan Autonomous District is particularly prone to disaster risks such as flooding and landslides.** According to the available statistics, more than 26 percent of the district's area is at risk of floods and landslides. Over the past decade, Abidjan has experienced recurrent floods, resulting in significant human and economic losses. The immediate causes include (a) inadequate drainage infrastructure and associated investments to adapt the system to current and future urban/climate conditions; (b) operating deficit and sanitation and drainage networks; (c) human occupation of the right-of-way of sanitation and drainage and sites unsuitable for construction; (d) dumping of household and other waste into sewage and drainage networks; (e) uncontrolled extraction of land, deforestation, and disordered land clearing; and (f) obstruction of gutters and drains.

#### Storm Water Management

**13. In the city of Abidjan, climate change and the poor condition of the storm drainage network contribute to increasing flood risk.** The post-flood assessment proved that lack of an adequate drainage system was one of the most aggravating factors contributing to recurrent flooding. Except for a few investments, such as the Abidjan East-West Watershed (funded under the IDA Infrastructure Renewal and Urban Management Project (P124715), , and the Mahou neighborhood discharge system, the rainwater drainage system in the Abidjan Autonomous District has received little investment since the 1990s. In some neighborhoods, such as Abobo in the north, only an estimated 11 percent of the landmass is serviced with rainwater drainage. In addition to the recurring damage to public and private assets, the lack of functioning drainage systems has a knock-on effect on urban mobility, as unchecked rainwater increases the speed with which road networks deteriorate.

**14. In Côte d'Ivoire, sanitary and stormwater systems are overseen by the National Office of Sanitation and Drainage (*Office National de l'Assainissement et du Drainage, ONAD*), which serves as the management entity for projects within this sector.** The ministry responsible for the sector is the Ministry of Sanitation (*Ministère de l'Assainissement et de la Salubrité, MINASS*). Within MINASS, the Directorate of Sanitation and Salubrity (*Direction Générale de l'Assainissement et de la Salubrité, DGAS*) is tasked with oversight roles. The DAA has also assumed an important role in the same sector, albeit limited to the Greater Abidjan area. The 13 communes that make up the Abidjan Autonomous District also play a role at the local 'neighborhood' level.

**15. To tackle flood risk and poor sanitation in Abidjan, the Government of Côte d'Ivoire (GoCD) commissioned the preparation of a Sanitation and Drainage Master Plan (*Schéma Directeur d'Assainissement et de Drainage du District Autonome d'Abidjan, SDAD*) which was finalized in 2018.** The plan, financed by the French Agency for Development (*Agence Française de Développement, AFD*),



through the C2D (Debt Reduction and Development Contract - *Contrat de Désendettement et de Développement*) provided an estimate of the financial needs for drainage and sanitation for Abidjan by 2030 and a vision for sewer infrastructure development in Abidjan through 2030. The plan was set up in eight phases, with US\$2,100 million for sanitation infrastructure and US\$505 million for stormwater infrastructure. The cost of Phase one is around US\$280 million for stormwater, with a first tranche of around US\$220 million.

16. **In addition to the Abidjan Autonomous District, secondary cities within Côte d'Ivoire are also in dire need of investment in drainage infrastructure.** Some have already prepared drainage and sanitation master plans for planification and programming of investments. These include Soubré, Séguéla, San Pedro, Daloa, Man, Grand-Bassam, Bouaké, Dimbokro, Abengourou, Yamoussoukro, Gagnoa, Odienne, Bondoukou, Daoukro and Korhogo. The total investment for studies and design of drainage infrastructure in secondary cities is estimated at US\$3.3 million, and the construction cost is estimated at US\$310 million.

### Solid Waste Management

17. **Ivorian cities urgently need to tackle solid waste, including overflowing collection centers and proliferating open dump sites.** Along with stormwater management issues, Abidjan's post-flood assessment clearly identified solid waste as one of the most aggravating factors contributing to recurrent flooding and therefore a key sector for addressing urban flooding. During the past decade, cities have increased their daily solid waste production, but collection rates have not kept pace, worsening public health and safety hazards.

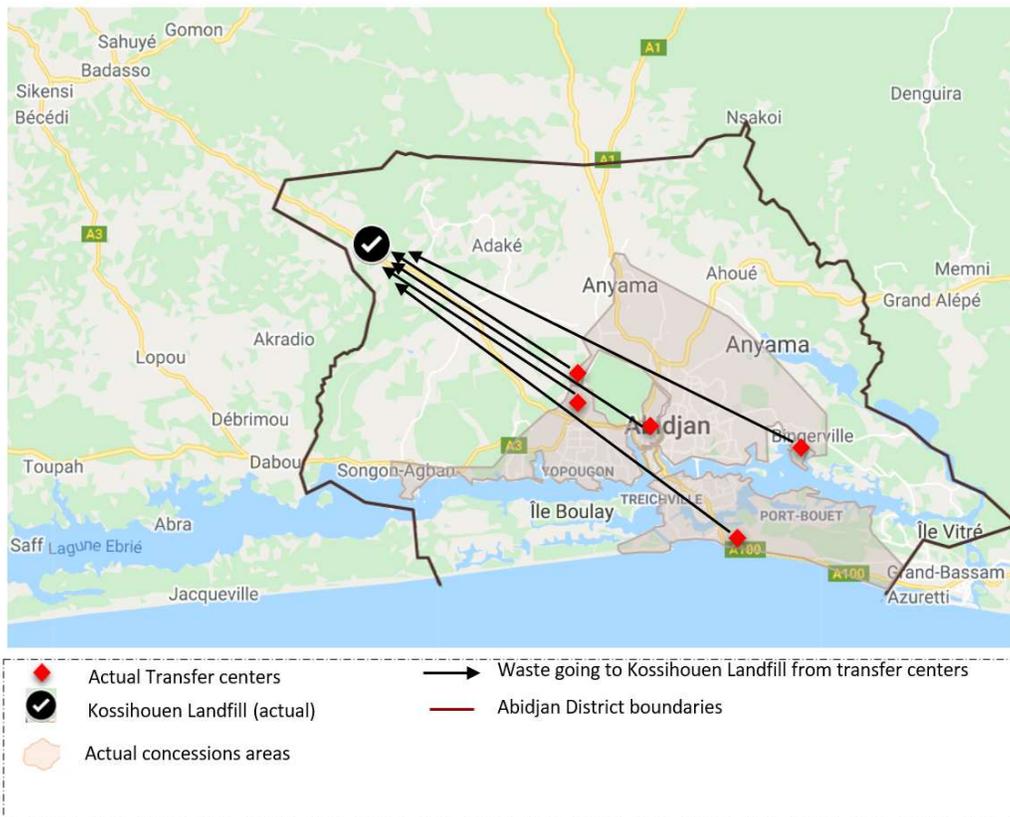
18. **In 2018, Côte d'Ivoire produced over 4 million tons of solid waste, of which 2.5 million tons were uncollected.** Because of low formal collection rates, open dumping and burning are commonly used to eliminate residual household waste. Even formally collected waste is disposed of at unsanitary dumpsites without processing. Access to waste collection and treatment is uneven across regions. Existing collection services are irregular and unreliable (especially in secondary and peripheral municipalities), and with no sanitary landfill, open dumping and burning are prevalent. In 2018, the collection rate in Abidjan was estimated at only 48 percent. After launch of new private concessions at the end of 2018, this rate has increased sharply to about 85 percent after one year of operations. However, in secondary municipalities, the current collection rate remains at 40 percent and waste management is rudimentary and sporadic.

19. **At the institutional level,** SWM in Côte d'Ivoire is overseen by the National Waste Management Agency (*Agence Nationale de Gestion des Déchets, ANAGED*), which is a public industrial and commercial establishment (*Etablissement Public à Caractère Industriel et Commercial*) created in 2017. ANAGED oversees the management of all types of solid waste, including disposal of hazardous waste and medical waste. The DGAS is in charge of the supervision. ANAGED is placed under the technical and administrative supervision of MINASS and the financial supervision of the Ministry of Economy and Finance. Thus, from an institutional stance, the Government has given a strong message about the public service vocation in SWM.

20. **To deal with the hazardous situation in the Abidjan Autonomous District, the Government has worked with the private sector to modernize and improve SWM.** In 2016, the MINASS launched international tenders to contract private international operators for provision of SWM services in 13 municipalities of the Abidjan Autonomous District (villages and peripheral municipalities are not

included). Currently, two international operators (with a seven-year contract) are in charge of collecting and transporting solid waste of three sectors, covering (geographically) most of the urban agglomeration of Abidjan, to a single landfill. A third seven-year concession was awarded to a private operator for the construction and operation of a landfill in Kossihouen (north west of Abidjan) for the treatment of 1,250,000 tons per year. The entire investment for this contract is provided by the private sector against the repayment (both capital expenditure [CAPEX] and operational expenditure [OPEX]), by the Government, of a fixed portion relating to the investment (monthly fixed payment) and a remuneration per ton received at the landfill. Revenues for the sector are provided by the national budget through a portion of a set of taxes (Property Tax [*Impôt sur le Patrimoine Foncier*]; Property Income Tax [*Impôt sur le Revenu Foncier*, IRF]; Road, Hygiene, and Sanitation Tax [*Taxe de Voirie d'Hygiène et d'Assainissement*, TVHA]; Garbage Removal Tax [*Taxe d'Enlèvement des Ordures Menagères*, TEOM]; Special Tax on Specific Plastic Product [*Taxe Spéciale sur Certains Produits en Matières Plastiques*, TSCP]; and Special Tax of Environmental Protection [*Taxe Spéciale de Protection de l'Environnement*, TSPE], among others), which cover costs for collecting, transporting, and operating the consolidation points and the transfer centers, as well as cleaning costs. Current concessions include a three-month renewable guarantee on operating costs and guarantee the investment of the landfill.

**Figure 1. Mapping of SWM System: Current Situation in the Abidjan Autonomous District**



Map created using Google map.

21. **Additional public-private partnerships (PPPs) should further unleash the potential of private sector financing and demand-responsive SWM services, including solid waste valorization.** The



Government's ambition for integrated and sustainable SWM cannot be financed and supported by the public sector alone. Global experience shows that private sector participation in solid waste infrastructure and service provision, if done properly, can leverage investment by orders of magnitude and greatly improve service provision—as is already evident by the successful first efforts described earlier. The Government will need to take even bolder steps to level the playing field and unlock the potential of the private sector for further improvements in the SWM sector's performance, sustainability, and geographical coverage while managing public perception. The Government, through the proposed project, will seek to attract further private investment in the solid waste sector by (a) engaging the service of an international firm as a PPP transaction adviser; (b) ensuring more balanced allocation of responsibilities and risks in the tender documents; and (c) considering de-risking measures, such as guarantees, necessary to incentivize strong private sector participation in SWM. Moreover, the project will support waste valorization initiatives, including reuse, recycling, composting, and so on, which will reduce the huge amount of waste going to landfill (currently only small-scale waste valorization activities are in place). Among other initiatives, the project will support the SWM system in Abidjan Autonomous District by completing the envisioned system with transfer centers and a second disposal and recovery facility, to supply the areas not covered by the current concessions and reduce the massive amount of waste currently transferred to the existing landfill in Kossihouen (see figure 1).

### Institutional Capacity and Digital Technologies

22. **Although the deficits in drainage and SWM infrastructure are a main cause of flooding, the situation is worsened by the fact that even current infrastructure is not performing at the expected level, due to poor maintenance, deliberate clogging with waste, illegal occupation of public rights of way, and natural factors such as landslides and silting of watercourses.** Simply adding more infrastructure will not resolve the flooding issue; it also requires regular maintenance of current infrastructure, enforcement of zoning, and development of future infrastructure, all using an evidence-based approach, coordinated across all relevant institutions.

23. **Currently the lack of use of information systems and institutional coordination for planning and operations is preventing an effective and efficient use of resources.** This is particularly important for an environment as complex as Abidjan with multiple and intricate interactions between sectors, people, and the urban space. The baseline can be described along the lines of four main pillars—institutional arrangements, standards, data, and system integration—which can be described as follows: (a) there is no institutional framework for foundational and sectoral data management; (b) there is no regulation of mandates or responsibilities, making data access, sharing, and usage difficult for governmental agencies or other stakeholders; (c) data are not exploited in sectoral operational structure; and (d) systems are being developed or planned with limited integration of specific sectors, such as drainage or urban planning, or part of them only. However, none of the systems are operational or embedded in institutional business processes. These systems will need to be implemented while incorporating technological and institutional mechanisms to ensure that data can be exchanged smoothly and dynamically and in an integrated fashion across sectors.

24. Other examples such as the *'Eco-quartier'* (Eco-neighborhood), a large District-led land valorization initiative, or the support to local startups by the Ministry of Information and Communication Technology demonstrate that Abidjan and Côte d'Ivoire could potentially leverage digital development opportunities to increase the impact of urban development interventions overall.



## Addressing Flood Risk by Enhancing Urban Resilience - Climate Adaptation and Mitigation

25. **The proposed project aims to address current and future flood risk in the city of Abidjan and selected secondary cities, by** (a) improving stormwater management capacity through construction/rehabilitation of primary and secondary drainage systems; (b) improving and scaling up the collection, transfer, disposal, and valorization of SWM, which is a direct cause of flooding; and (c) enhancing digital technologies and building institutional capacity for improved urban services and planning, including early warning systems (EWSs). These actions will enhance urban resilience to climate change and disaster risk by providing better planning, reducing impacts of extreme events, and facilitating faster recovery from these events. The project will provide significant climate adaptation (to increased weather and climate variability and sea level rise) and mitigation (better management of waste, which is often burned, and reduced traffic congestions due to reduced high-frequency flood events and road upgrading) with a particular focus on gender issues and empowering women and youth.

### C. Relevance to Higher Level Objectives

26. **The proposed project is aligned with the World Bank FY16–FY19 Country Partnership Framework (CPF)<sup>6</sup> for Côte d’Ivoire, extended to FY21.** To achieve its objectives, the CPF comprises three pillars of intervention: (a) accelerating sustainable private sector-led growth; (b) building human capital for economic development and social cohesion; and (c) strengthening public financial management and accountability, as well as two cross-cutting themes: (a) governance and (b) spatial inequality. The proposed project is linked to the first pillar by directly contributing to two of its four objectives: objective 2: to strengthen economic infrastructure and objective 4: formalize and improve access to land for business and agriculture. Through reducing the risk of floods, the project will limit losses and damage suffered by economic actors, increase the mobility of goods and people through better quality, all-season roads, and protect land from flooding allowing better use for economic activities. Lastly, through enhancing the capacity of institutions in urban resilience planning and zoning and developing community engagement for urban flood risk reduction and adaptation to climate change, the project will help create an urban environment more conducive to private sector development.

27. **The project will contribute to the World Bank’s twin goals of eliminating extreme poverty and boosting shared prosperity.** By improving infrastructure services in participating cities, the proposed interventions will directly improve living conditions, especially for residents in extremely poor households, through better access to services and economic opportunities. By improving drainage and SWM services, the project will help reduce the high health and flood risks currently faced by poor urban households, thus protecting them from losses of family assets caused by flooding/illness. The proposed investments in urban infrastructure will create jobs for the poor, especially youth, thus improving the livelihoods of those households both in the short run (due to increased income from temporary jobs) and in the long run (due to gained job skills and increased employment opportunities).

28. **The project will contribute to the implementation of the strategy for Africa, by (a) unlocking Maximizing Finance for Development (MFD) opportunities in the solid waste sector, where significant private investments are expected to be leveraged by the proposed project through the setting up of PPPs for solid waste collection, transfer, disposal, and valorization; (b) contributing to the digital economy**

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<sup>6</sup> Country Partnership Framework (CPF) for the Republic of Côte d’Ivoire, FY16-FY19, August 2015



agenda with the creation of digital platforms (EWSs, common municipal database repository), the support to local innovation ecosystem and entrepreneurs on local digital solutions for urban management, the promotion of digital skills through capacity building, with a focus on geospatial technologies; (c) contributing to the development of the **human capital**, by reducing the vulnerability of communities at risk of climate and disaster shocks, which could undermine the hardly gained improvements in poverty reduction; and (d) improving **resilience** to climate and disaster risk by reducing potential impacts of extreme events and promoting a preparedness approach, which will provide significant economic and social co-benefits, including community engagement and awareness.

29. **The project will contribute directly to the achievement of Sustainable Development Goal 11: Sustainable Cities and Communities**, including access to services and sanitation of poor neighborhoods, inclusive urbanization, and participatory planning addressing environmental issues related to municipal waste management.

30. **The project will contribute to the Côte d'Ivoire National Development Plan (2016–2020)**, particularly for (a) Pillar II: accelerating the development of human capital and promoting well-being and (b) Pillar IV: development of infrastructures harmoniously distributed over the national territory and preservation of the environment. By reducing the risks of flooding, the project will allow a better preservation of the health and school infrastructures, a better urban mobility, and a good social integration of the populations living in the deprived neighborhoods, thus contributing to increasing the productivity of the people, the ultimate goal of the development of human capital. By improving the quality of waste management, the project will also contribute to improving the health of populations and the preservation of the environment.

31. **The project will work as a financial and technical platform for multi-development partner engagements and mobilizing finance for development.** The project is part of a larger initiative undertaken by the Government and several development partners to strengthen urban resilience in Côte d'Ivoire. In particular, the World Bank supported the Government with the organization of a round table to coordinate different contributions for the implementation of the SDAD in Abidjan. The round table took place in May 2019 and elicited investment commitments for about US\$700 million. Several development partners have already committed or are discussing financial supports, such as US\$150 million from the African Development Bank (AfDB), the French Development Agency, and the European Union (EU). The project is also discussing co-financing activities with the Spanish Agency for International Development Cooperation (AECID) and the EU, through the EU External Investment Plan (EIP)—Resilient City Development (RECIDE) for a Payment Guarantee from the EU to provide an extra layer of confidence to international private sector firms willing to enter the SWM market in Côte d'Ivoire.

32. **Rationale for accessing IDA Scale-up Facility (SUF) funding.** The project has benefited from IDA's SUF program because of its strong impact on the development and its support toward resilience building of the DAA and selected secondary cities. The proposed project will improve (a) resilience to flood risk and (b) access to public services for SWM in the most vulnerable neighborhoods of Abidjan. Investing in urban resilience, disaster risk management (DRM), and SWM will yield triple dividends: (a) avoiding losses and saving lives when disasters strike, particularly in the most vulnerable and poorest communities of Abidjan; (b) unlocking economic potentials in a greener, safer, and stronger Abidjan, for example, through land value capture and land zoning; and (c) developing co-benefits, or uses, of a specific investment, for example, human well-being and health from nature-based solutions (NBSs) or improved emergency



response though EWSs. DRM projects typically provide short time frame for the return of investment, particularly for the reduction of disaster losses, which can be experienced since project implementation.

33. **The operation is designed to enhance resilience in selected urban areas.** In the context of the COVID-19 pandemic, this is even more relevant, as the activities supported by this operation contribute to the Government's efforts to: (a) improve the country's ability to manage disaster risk, by strengthening preparedness, prevention, response and recovery capacities; (b) quickly mobilize resources in the aftermath of catastrophic events, including COVID-19 and other causes of pandemics, through the CERC; as well as (c) improve sanitary and hygiene conditions in densely populated and underserved communities in the District of Abidjan and selected secondary cities, while ensuring sustainable basic urban services (such as drainage and solid waste management) and resilience.

## II. PROJECT DESCRIPTION

### A. Project Development Objective

#### PDO Statement

34. The objectives of the Project are to reduce vulnerability to flooding in selected urban areas and improve solid waste management in targeted municipalities.

#### PDO-level Indicators

35. The progress toward achieving the PDO would be assessed by the following proposed results indicators:

- Number of residents protected against flooding (gender disaggregated).
- Number of people provided with access to improved solid waste services (gender disaggregated).

### B. Project Components

#### Component 1: Flood risk mitigation infrastructure and services (US\$181 million)

36. **This component focuses on mitigating the negative impacts of recurrent flooding** through a hybrid approach that combines green and grey infrastructures, including urban drainage and associated roadworks, and NBSs for erosion control and water retention. It also includes 'soft' measures such as flood EWSs and urban planning. The component is implemented through four subcomponents.

#### *Subcomponent 1.1: Urban drainage and associated roadworks (US\$135 million)*

37. **The recently completed Abidjan Autonomous District SDAD identified infrastructure gaps for stormwater and wastewater management in the District.** The master plan is organized in phases of implementation based on priority criteria. The subcomponent will contribute to the implementation of Phase 1 of the master plan, with a specific focus on reducing flood risk in vulnerable communities of the



Abidjan Autonomous District. Moreover, it will provide interventions in other secondary cities vulnerable to flooding such as Grand-Bassam and Bouake.

38. Specific activities to be supported by this subcomponent include

- (a) Construction/rehabilitation of primary and secondary drainage in selected vulnerable neighborhoods of the Abidjan Autonomous District and in targeted areas of Grand-Bassam, Bouake, and other selected secondary cities;
- (b) Construction/rehabilitation of roadworks associated with drainage works where feasible and needed; and
- (c) Rehabilitation of selected water retention areas to reduce peak flood discharge to drainage and to reduce the size of downstream structures.

39. **Moreover, the component will support the establishment of sustainable operation and maintenance (O&M) mechanisms for drainage infrastructure** including using digital technology to monitor and manage the maintenance of the stormwater management systems and the development of new sanitation and stormwater master plans for five district capital cities and associated detailed technical studies for priority investments. To ensure they will be adapted to the needs of the population, stakeholder consultations will be undertaken throughout project implementation.

***Subcomponent 1.2: Nature-based solutions for erosion and landslide control (US\$15 million)***

40. **NBSs are effective in reducing flood risk while providing environmental and socioeconomic benefits.** They can improve environmental quality by restoring green spaces in cities, providing recreational opportunities for citizens, lowering temperatures and pollution in urban areas, and optimizing the cost of infrastructure investments. Within the Abidjan Autonomous District, many green spaces originally dedicated to urban water management are now degraded. For example, canal banks are often abandoned, polluted, or occupied. This worsens erosion causing sedimentation of sand in adjacent canals. Moreover, it favors the accumulation of garbage, which is washed away during precipitation events, exacerbating flood risks in already vulnerable areas. This subcomponent will introduce the concept of NBSs for flood risk management in the Abidjan Autonomous District and Grand-Bassam, Bouaké, and other selected secondary cities.

41. Specific activities to be supported by this subcomponent include

- (a) Revegetation and improvement of canal banks;
- (b) Erosion control works for selected thalwegs prone to landslides and erosion, including revegetation works;
- (c) Revegetation and double use of water retention areas with green spaces and leisure areas; and
- (d) Construction/rehabilitation of micro water retention areas following nature-based approaches in available selected areas such as parks, parking lots, sidewalks, and playing



fields.

***Subcomponent 1.3: Emergency preparedness and early warning system (US\$16.5 million)***

42. **To complement structural investments and have a comprehensive flood management approach**, this subcomponent will reinforce the capacity of the institutions and population to prepare for and manage flood emergency to avoid losses in the events where a structural approach is not sufficient. It is one of the most effective ways to reduce loss and damage from disasters (reaching cost-benefit ratios between 4 and 36<sup>7</sup>).

43. Specific activities to be supported by this subcomponent include the following:

- (a) Deployment of a flood risk EWS and emergency preparedness measure in selected cities (around 3) to collect and communicate hydrometeorological information, warning, and alerts and support real-time intervention management. This includes emergency measures (for example, contingency plans at municipal level) and strengthening response capacity.
- (b) Capacity building targeted toward most vulnerable groups (for example, the disabled, women) to reinforce awareness of disaster risk, knowledge for behavior change, and ability to cope with emergencies. These activities respond to needs identified during the 2018 Post Disaster Needs Assessment (PDNA) particularly on (i) raising public awareness through information campaigns, plans, and trainings on DRM issues such as flooding and landslides, (ii) setting up local networks of female leaders for disaster risk reduction (DRR) and waste management, (iii) organizing trainings on EWSs share risk information in real time.

***Subcomponent 1.4: Resilient urban planning (US\$14.5 million)***

44. **The objective of this subcomponent is to prevent the creation of new risks as the cities develop and the pressure from rapid urbanization further intensifies and to drive development in unsafe areas**, by enabling resilient planning and integration of risks in all sectors, particularly in land management, to avoid the encroachment of non-constructible areas and the public domain of the state. It will focus on integrating resilience in urban planning by developing studies and skills in resilient urban planning. These activities will be underpinned by investment in digital technology and data that will provide the foundation for better urban planning.

45. Specific activities to be supported by this subcomponent include the following:

- (a) Studies and plans including (i) preparatory studies and community engagement for preventive resettlement and slum upgrading for communities at risk, (ii) detailed urban plans integrating flood risk management for five municipalities of the Abidjan Autonomous District, and (iii) studies to plan integrated resilient urban development in specific neighborhoods of Abidjan and secondary cities with a lens on potential private capital mobilization to build flood mitigation measures

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<sup>7</sup> Hallegatte, S. 2012. "A Cost-Effective Solution to Reduce Disaster Losses in Developing Countries: Hydro-Meteorological Services, Early Warning, and Evacuation." Policy Research Working Paper.



- (b) Foundational digital data, systems, and skills to support data-driven resilient spatial planning through activities such as (i) a strategy for geospatial data management in Abidjan and two secondary cities; (ii) urban digital platforms with a common municipal data repository to facilitate data sharing between stakeholders, including in two secondary cities, the acquisition of digital elevation model and aerial imagery and the digitization of parcels and ownership data, with the attribution of parcel unique ID (this work is already financed for Abidjan); and (iii) the associated capacity building programs.

## **Component 2: Improvement of solid waste management infrastructure and services (US\$124 million)**

46. **Trash accumulating along waterways prevents the flow of rainwater and is a major cause of flooding.** As long as trash collection remains spotty, flooding will continue affecting people living in poor neighborhoods disproportionately. The component aims to help further improve the SWM system in the Abidjan Autonomous District, expand the model to other secondary cities, and optimize the systems through better governance, reducing waste quantities buried, and use of digital technology. The component is divided into three subcomponents, the first focused on the delivery of key facilities and equipment, the second on capacity building and institutional strengthening, the third on improving the system performance.

### ***Subcomponent 2.1: Strengthening solid waste management capacities in the Abidjan Autonomous District and two selected intercommunal groups of secondary cities (US\$118 million)***

47. **To improve solid waste services for citizens in selected municipalities, this subcomponent will finance** SWM facilities and equipment needed to establish or improve (where it already exists) the delivery of SWM services in the Abidjan Autonomous District and two intercommunal groups of secondary cities. This subcomponent is divided into two parts.

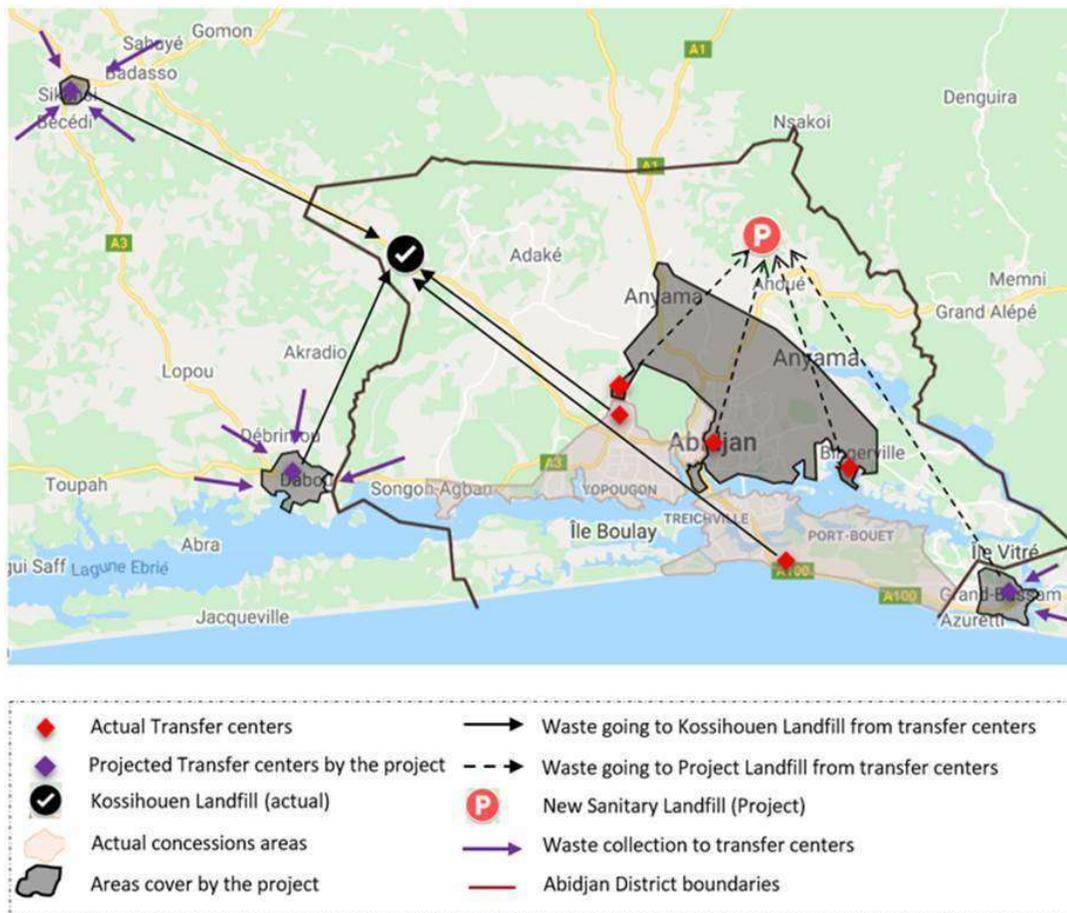
#### *(a) Abidjan Autonomous District*

48. In 13 communes of the Abidjan Autonomous District, SWM services are currently provided by two private operators. Ongoing concessions cover a large part of the urban population of the District and provide good collection rates, estimated between 80 percent and 100 percent of the quantities foreseen in the concession contracts. However, some peripheries and adjacent areas (such as Grand-Bassam) and categories of waste (green, industrial, construction, and so on) are not included in the current concessions. Moreover, the planned infrastructure system (collection centers, transfer stations, and final disposal sites) remains incomplete due to lack of financial resources and because most of the waste is disposed of with limited valorization (that is, limited reuse, recovery, and composting), which results in excessive use of the only existing landfill (thus reducing its life-span) and a large production of leachate to be treated, in addition to nonoptimal cost of collection and transfer.

49. To complete and optimize the current SWM system in the District and adjacent areas, authorities identified and planned for additional facilities, including a second disposal site, three transfer stations, and a recycling center, in addition to waste valorization initiatives and equipment, which will reduce the total amount of waste to be disposed of (see figure 2 for indicative location of the new planned facilities). The second disposal site is expected to reduce by around 40 percent the volumes processed by Kossihouen Landfill (currently >3,400 tons per day with growing trends) extending its lifespan. The diverted waste

from Kossihouen included in the current concession (lot1) will account for 80 percent of the new landfill daily capacity (see figure 2). The proposed subcomponent of this project will support the sector to (a) reduce the costs of transporting solid waste to the existing Kossihouen Landfill by redirecting waste from sector 1 (North-East sector; see figure 2) of Abidjan to the new Attiekoi landfill (this option is already foreseen in the current concessions); (b) set up collection and transport systems for categories of waste that are currently not processed by the current concessions, such as, among others, green waste, construction waste, bulky waste, ordinary industrial waste, waste from other economic activities, and medical waste; (c) promote and support activities for sorting, reuse, composting, and recycling of selected categories of solid waste collected, such as, among others, plastics, paper, and tires. At the new landfill site, the private operator will undertake recycling and recovery of waste for the secondary raw material market (for example, compost, refuse-derived fuel, and biogas) to reduce landfilling of waste; and (d) improve cleanliness in communities of the DAA and adjacent areas by providing three new transfer facilities to serve these areas.

**Figure 2. Mapping of Project Intervention in the Abidjan Autonomous District**



*Note:* Location of new facilities is indicative and not final.

*Map created using Google map*

**50. Specific activities to be supported by this subcomponent include**



- (i) Technical feasibility studies for the optimization of SWM in the Abidjan Autonomous District and contractual modalities for PPPs;
- (ii) Technical feasibility, preparation of safeguard documents, detailed engineering design studies, and supervision services related to the proposed investments;
- (iii) Technical feasibility study for the management of solid waste from health activities in the Abidjan Autonomous District and for the mode of contracting with the private sector;
- (iv) Construction of a new solid waste treatment/valorization and disposal facility, including fixed equipment and associated roadworks in the Abidjan Autonomous District;
- (v) Construction of three transfer centers and a recycling center, including civil works and fixed equipment to complete the existing system already included in the current concessions; and
- (vi) Elimination of uncontrolled deposits and dumpsites in the localities of Grand-Bassam, Sikensi and Dabou once the new solid waste treatment/recycling and disposal facility is constructed and operational.

51. **The proposed investments included in this subcomponent will be implemented through a PPP.** Under this PPP, the private sector will design, construct, co-finance, and operate the new waste management system described earlier (landfill and transfer stations) along the value chain of transfer, recycling, treatment, and disposal. Within the PPP preliminary structuring, private sector co-financing is kept to a minimum to show government commitment and attract private sector firms for a potential design-build-finance-operate (DBFO) approach. Therefore, the risk of this approach not materializing is low as it was already undertaken by the Government and private operators for the current concessions, whose CAPEX was 100 percent financed by private operators. However, as a contingency measure, if that option does not materialize, the construction of the new infrastructure will be carried out as design-build-operate (DBO) or as design-build (DB). The new PPP will not merge with the existing ones but will optimize and complete the current system as initially envisioned and add an additional concession to the system for the operation of the new landfill and transfer stations.

52. **At this preliminary stage, it is too early to precisely define the risks that fall under the responsibility of the state and the private sector.** Although a preliminary financial analysis and structuring of the investment has been prepared during project preparation, a more detailed analysis and final structuring will be prepared during project implementation by the Government with the support of a transaction advisor, to better target the main risks (commercial, political, environmental and social risks, and so on) and their allocation among the various stakeholders.

*(b) Secondary Cities*

53. **Implementation of integrated waste management systems in two targeted intercommunal groups of secondary cities:** (a) Toumodi, Yamoussoukro, Tiebissou, Djebonoua, and Bouaké and (b) Korhogo, Sinématiali, Ferkessédougou, and Ouangolodougou. These agglomerations were selected by the Government, following feasibility studies, using three main criteria: (a) total population and population growth, (b) current socioeconomic situation and expected positive impacts that improved SWM could



have, and (c) technical and geographical suitability for intercommunal systems. In these secondary agglomerations, the project will introduce a new way to manage solid waste in small and medium-size municipalities, by leveraging inter-municipal cooperation around SWM to address land scarcity, take advantage of economies of scale, and attract private sector participation for greater efficiency. To these ends, the project will support the establishment of intercommunal agreements among municipalities within the same agglomeration. The inter-municipal agreements will specify (a) location of waste management infrastructure, (b) management structure for operating and maintaining common infrastructure, and (c) grievance redress mechanisms (GRMs) disaggregated by gender.

54. **Specific activities** to be supported by this subcomponent include

- (i) Preparation of intermunicipal waste management strategies through a thorough consultation process for all actors (including specific consultations with women's groups) in each agglomeration;
- (ii) Preparation of municipal waste management plans for municipalities within each agglomeration, identifying specific investments in infrastructure, equipment, service delivery models, and cost recovery and entry points for the private sector;
- (iii) Technical feasibility, preparation of safeguard documents, detailed engineering design studies, and supervision services related to the proposed investments;
- (iv) Construction of 2 new facilities for solid waste treatment/valorization and disposal, including fixed equipment and associated roadworks for the two targeted intercommunal groups of secondary cities;
- (v) Construction of transfer centers, including civil works and fixed equipment, in the two targeted intercommunal groups of secondary cities; and
- (vi) Elimination of uncontrolled deposits and dumpsites in the localities concerned once the 2 new facilities for solid waste treatment/valorization and disposal are constructed and operational.

***Subcomponent 2.2: Strengthening sector governance, institutional capacity, and citizen engagement (US\$2.7 million)***

55. **This subcomponent aims to strengthen the institutional framework governing the sector to ensure the effectiveness of investments under Subcomponent 2.1**, by creating a favorable environment for private sector investments in the solid waste sector. It will also support the strengthening of instructional capacity to plan and manage the solid waste system and contribute to citizen engagement and awareness.

56. **Specific activities** to be supported by the subcomponent include the following:

- (a) Operationalization of the existing laws and regulations governing SWM, through ensuring (i) effective municipal and intercommunal planning for SWM, (ii) the availability of financial



resources for secondary cities waste collection, and (iii) an increase in local solid waste taxation to strengthen the sector's self-financing capacities and sustainability

- (b) Technical assistance seeking to (i) strengthen the institutional framework through a range of activities from legal support to capacity building; (ii) promote a sustainable financing mechanism for the sector, including support for carrying out surveys and tax databases for solid waste fees/taxes; (iii) reinforce the PPP framework, with the standardization of key bidding documents and contracts; and (iv) enhance solid waste service delivery by promoting private sector participation in SWM and optimizing the upstream value chain of waste collection and transportation in view of overall services improvement and their effective link with the newly established downstream infrastructure and tailoring capacity-building activities to participating municipalities to support them in managing the newly established SWM system, including preventing marine and sanitary litter in the Abidjan Autonomous District

***Subcomponent 2.3: Improving solid waste management through citizen engagement, recycling, reuse, composting, and digital technology (US\$3.3 million)***

57. Specific activities to be supported by this subcomponent include the following:

- (a) An outreach program to sensitize and improve public behavior on solid waste and litter management, to reduce solid waste in the drainage network. The activity will adopt a participatory and inclusive approach with citizens, communities, and nongovernmental organizations (NGOs) (with a particular focus on women's organizations), who will be engaged throughout the project for implementation and monitoring of results.
- (b) A strategy to develop and operationalize best practices in waste reduction, recycling, and circular economy including the identification of three to four value chains with high potential for local recycling and circular economy opportunities.
- (c) A gender-focused training program to develop the skills of small and medium enterprises (SMEs) on relevant recycling tools and techniques as well as on entrepreneurship skills focusing on the most profitable and relevant value chains.
- (d) Technological tools to be used by national agencies, municipalities, and citizens to allow better monitoring and control of SWM services. It will involve the use of technologies such as geolocation, web applications, and smartphones to collect operational information, measure and monitor performance of service providers, and plan and communicate service quality.

**Component 3: Project management (US\$10 million)**

58. **This component will support project management activities.** Specifically, it will support technical assistance, equipment, training, and operating costs for the Project Coordination Unit (PCU) and specialized implementation agencies (SIAs), including establishing and implementing a comprehensive monitoring and evaluation (M&E) system as well as geospatial data, training of the implementing agencies



in environmental and social management, grievance redressal, procurement, and financial management (FM).

#### **Component 4: Contingent Emergency Response Component (CERC) (US\$0 million)**

59. **This Contingent Emergency Response Component (CERC)** is included under the project in accordance with World Bank Policy on Investment Project Financing (IPF), (paragraphs 12 and 13), for situations of urgent need of assistance, as a project-specific CERC. Given the increasing climate risks in Côte d'Ivoire, particularly the risks of flooding and drought, the Government may request the World Bank to reallocate project funds to support mitigation, response, recovery, and reconstruction. Therefore, it is advisable to have a contingent component to prepare for quick responses to emergencies. This will allow for rapid reallocation of project funds in the event of a natural or artificial crisis during the implementation of the project.

60. **Sequencing of activities and readiness.** The project is designed along a structured road map that aims to enable relatively rapid and efficient implementation of activities. In the first year of implementation, the focus will be on implementation of priority activities to improve resilience to flood risks. This includes construction/rehabilitation of drainage works in the most vulnerable and risk-prone district areas and cities for which detailed technical studies already exist. Consultants have already been recruited to update the studies and prepare the tender documents. These works, estimated at US\$37 million, will cover the cities of Abidjan and Grand-Bassam. It is expected that the tender documents will be launched after effectiveness so that works can start as soon as possible after the project is effective (end of year 2020), subject to readiness of all safeguards instruments. It is worth noting that all the selected activities are already part of the priority works identified in the sanitation and drainage master plans of the targeted cities. In parallel with these selected works, the Government submitted a long list of priority works (for US\$82 million) from the Abidjan SDAD for which preliminary technical studies are available. As part of the Project Preparation Advance (PPA), technical feasibility studies are being carried out to set up a portfolio of subprojects to be implemented in subsequent years. The bidding and environmental and social documents related to this portfolio will be ready by February 2021. In the meantime, most of the preliminary studies necessary for the identification of the waste management works, as well as those relating to digital technologies, have already been launched and will continue during the first months of implementation. Subsequently, feasibility and viability studies will be launched for prompt implementation of the works/activities from year one. Works for landfill sites will likely start in 2021 for Abidjan and 2022 for secondary cities. The Environmental and Social Management Framework (ESMF) disclosed on February 14, 2020 on the World bank website, the Resettlement Policy Framework (RPF) disclosed on March 24, 2020 as well as two Environmental and Social Impact Assessments (ESIAs) disclosed on February 18, 2020 and two Resettlement Action Plans (RAPs) disclosed on April 10, 2020, have been prepared as part of the priority activities.

#### **Project Cost and Financing**

61. The total project cost is US\$327 million, with financing of US\$315 million from the IDA SUF and US\$12 million from the private sector. Table 1 summarizes the project cost breakdown.



**Table 1. Project Cost Breakdown**

Project Components/Activities	Project Cost (US\$ million)	Source of Finance	
		IDA	Private Sector
<b>Component 1: Flood risk mitigation infrastructure and services</b>	<b>181.0</b>	<b>181.0</b>	<b>0</b>
Subcomponent 1.1: Urban drainage and associated roadworks	135.0	135.0	0
Subcomponent 1.2: Nature-based solutions for erosion and landslide control	15.0	15.0	0
Subcomponent 1.3: Emergency preparedness and early warning system	16.5	16.5	0
Subcomponent 1.4: Resilient urban planning	14.5	14.5	0
<b>Component 2: Improvement of solid waste management infrastructures and services</b>	<b>136.0</b>	<b>124.0</b>	<b>12</b>
Subcomponent 2.1: Strengthening solid waste management capacities in the Abidjan Autonomous District and two selected intercommunal groups of secondary cities	130.0	118.0	12
Subcomponent 2.2: Strengthening sector governance, institutional capacity, and citizen engagement	2.7	2.7	0
Subcomponent 2.3: Improving solid waste management through citizen engagement, recycling, reuse, composting, and digital technology	3.3	3.3	0
<b>Component 3: Project management</b>	<b>10.0</b>	<b>10.0</b>	<b>0</b>
<b>Component 4: Contingent Emergency Response Component</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>Total financing required</b>	<b>327.0</b>	<b>315.0</b>	<b>12</b>

A PPA of US\$ 6 million was allocated to the GoCI during project preparation.

**C. Project Beneficiaries**

62. **The main beneficiaries of the project will be the populations in project intervention areas** including in the Abidjan Autonomous District and in the secondary cities targeted by the project. They will benefit from the rehabilitation/construction of drainage works and the improvement of the SWM system. Beneficiaries will be sensitized on good habits and practices in terms of resilience and waste management to ensure proper appropriation of investments for their preservation and maintenance. It is expected that interventions will reach a significant number of poor and disadvantaged people as the expected covered areas include the most vulnerable of the District, which are also the most populated, namely, Yopougon and Abobo, with approximately 1.6 million inhabitants.

63. **It is worth noting that these two communities are also among the most exposed and faced seven events (floods and landslides) between May 2017 and June 2018**, destroying thousands of houses, damaging infrastructures, and causing human casualties. The population of those areas will also benefit from a healthier environment and easier access to their daily tasks.

64. **In addition, the project will create job opportunities for young people and women**, particularly through construction activities, collection, recycling, and solid waste treatment services related to the implementation of the project, as well as through the use of digital technologies for urban planning and management.



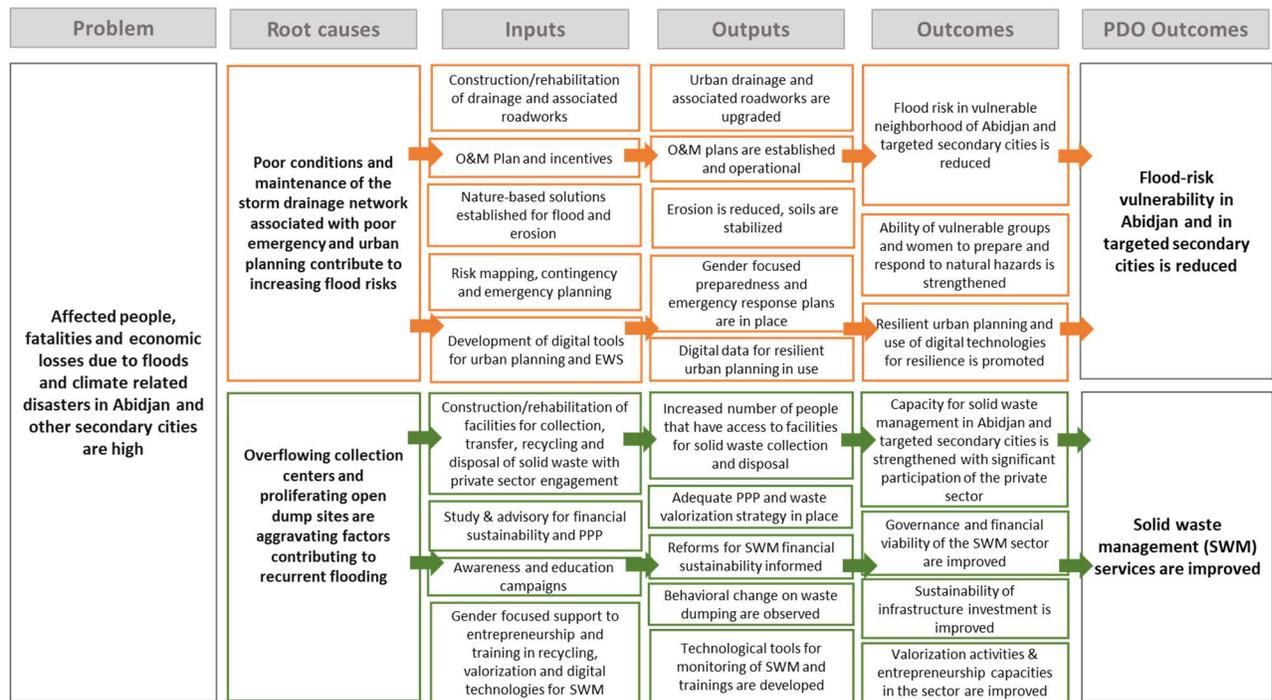
65. The public institutions involved in the project will benefit from the capacity building planned in urban planning and risk management through the implementation of a digital data management and sharing system, through the benefits of Component 3, which is innovative and strategic in a context where digital is growing and necessary for a controlled and effective capacity for adaptation.

66. The private sector will benefit from the contract opportunities offered under the project through the design and execution of public works. Moreover, they will also see their assets better protected and therefore less subjected to loss and damage recorded each year because of recurrent floods. The land value capture that will result from drainage works and household waste collection operations will boost the construction sector and offer investment opportunities to the private sector.

67. More broadly, the project will benefit the entire Abidjan Autonomous District (5 million inhabitants) as the positive impact of drainage works and household waste collection services will be felt everywhere. The population of Abidjan will benefit from a strengthened waste management system, an EWS coupled with an effective capacity stakeholder’s response to risks and disasters, and improved access to social services at all seasons through project activities.

D. Results Chain

Figure 3. Project's Theory of Change



E. Rationale for Bank Involvement and Role of Partners

68. The World Bank has extensive experience with financing and implementing urban projects in Africa, in similar contexts. The proposed project deals with the rehabilitation of infrastructure in



underserved settlements and urban planning, development, and management. The proposed project builds on key achievements and lessons learned from PRICI and other developing countries in Africa and South Asia and is further coordinated with other ongoing and planned World Bank-supported activities. The investments will complement other activities financed by the Government and other donors involved in the urban sector, such as the EU, AFD, West African Development Bank (*Banque Ouest Africaine de Développement*, BOAD), and AfDB, while the technical assistance will lay the ground for leveraging more resources and investments from other development partners for years to come. In sum, the World Bank has the required experience to link financing for provision of basic services with institutional strengthening for enhanced development outcomes and higher overall efficiency.

69. **The World Bank's involvement is important given its comparative advantage in preparing and financing major infrastructure operations.** For this project in particular, the value added of the World Bank's support will not only come from its knowledge, skills, and experience in preparing and organizing the infrastructure sectors in developing countries but also from its good insights and experience gained during PRICI in handling some of the most intractable urban management issues in Côte d'Ivoire. Furthermore, the World Bank's track record and large-scale investment are expected to incentivize other development partners to expand the project's scope of support.

70. **The World Bank has a strong knowledge of the sector, which has been enhanced with the preparation of the PDNA.** Following the floods of June 2018, the World Bank conducted, at the Government's request, a PDNA with the support of the United Nations Development Programme (UNDP) and EU. This assessment enabled the Government to assess (a) its capacity to respond to disasters and unanticipated phenomena and (b) the losses and damages and thereby the needs for effective recovery. The World Bank supported the Government in organizing a donor round table on the Abidjan SDAD. The project will support the early implementation of priority recovery actions by providing financing and technical assistance from the World Bank's solid experience in similar countries.

## F. Lessons Learned and Reflected in the Project Design

71. **Integration and consultation of stakeholders in the identification, preparation, and implementation of the project.** The World Bank's substantial experience in African countries has shown that the early, continuous, and effective involvement and participation of the involved institutions and beneficiary populations is crucial for the successful preparation and implementation of the project, to achieve its development objectives. The World Bank's urban projects in Côte d'Ivoire and in the subregion have demonstrated how the active participation of stakeholders supports the identification of appropriate activities, boosts implementation, and ensures sustainability of built infrastructure through better ownership—a key element for maintenance and management. Since the identification of the proposed project, multiple information and awareness-raising sessions have been held to ensure that communities fully understand the project and its expected impacts and thus obtain their support in implementation.

72. **An effective policy and institutional framework.** A regulatory framework that clearly defines the roles and responsibilities of various stakeholders (for example, central and local government agencies and service providers) and the procedures necessary to implement it are key for integrated and efficient drainage and SWM systems. However, not only must legislation be clear, it must also be enforceable, which requires adequate institutional capacity, financing, and legitimacy, to be effective. To create a



favorable environment for the long-term sustainability of the sector, the proposed project will thus support the operationalization of critical reforms and provide institutional strengthening.

73. **Prioritizing activities is critical to ensure a controlled sequence of implementation.** During the execution of the projects, it appeared that the disbursement of funds was slow due to either the unavailability of technical studies or the forecasting of excessively heavy activities that could not be carried out within the initially planned time frame. The project has established a set of priority activities to be carried out in the first year of implementation for which technical studies are available. Attention has been paid to ensuring that the implementation of activities will require the minimum displacement of populations/losses of economic activities at the intervention sites and have a high impact on the living conditions of the populations; this will make it possible to reduce the necessary funds to compensate project-affected-people and thus allow them to be made available quickly.

74. **Ownership of the project at the central government level is essential to address any bottlenecks and ensure high-level coordination.** Strong government commitment and good coordination between the sectoral ministries involved are critical. The project, in its institutional arrangement, has set up a Steering Committee that will ensure the sectoral strategy and intersectoral coordination of the project.

75. **The role of the private sector.** Private sector participation can be an efficient way to improve operational effectiveness as it seeks to reduce costs and make the best use of available resources. The private sector can also draw upon highly qualified staff when required for specific technologies. The keys to success are strong contract management, realistic outcomes (usually established as levels of service), and appropriate financing frameworks. To meet the potential challenges associated with the establishment of sustainable PPPs for SWM, the proposed project will (a) provide technical assistance to enhance the financing sustainability of the sector in Côte d'Ivoire, also in collaboration with the International Finance Corporation (IFC); (b) co-finance infrastructures within PPPs; and (c) consider financial guarantees to attract reputable firms and reduce costs associated with payment and political risk in the sector in Côte d'Ivoire.

### III. IMPLEMENTATION ARRANGEMENTS

#### A. Institutional and Implementation Arrangements

76. **In line with the World Bank's policy to host sectoral projects in the relevant sectoral ministries and thus strengthen their capacities, the MINASS will be the main implementing agency.** Therefore, the institutional arrangement of the project will be composed of (a) a Steering Committee, (b) a "light" PCU located in the MINASS and hosted by the DGAS, to ensure the coordination of the implementation and day-to-day management of the project, and (c) a set of SIAs.

77. **The Steering Committee** will be chaired by the Minister of Sanitation (MINASS) or his representative and will include, among others, the following ministers or their representatives: the Minister of Economy and Finance; the Minister to the Prime Minister in charge of budget and state portfolio; the Minister of Construction, Housing, and Urban Planning; the Minister of Digital Economy and Post Office; the Minister of Cities; the Minister of Territorial Administration and Decentralization; the Governor of the Abidjan Autonomous District; the President or his representative of the Ivorian Union of

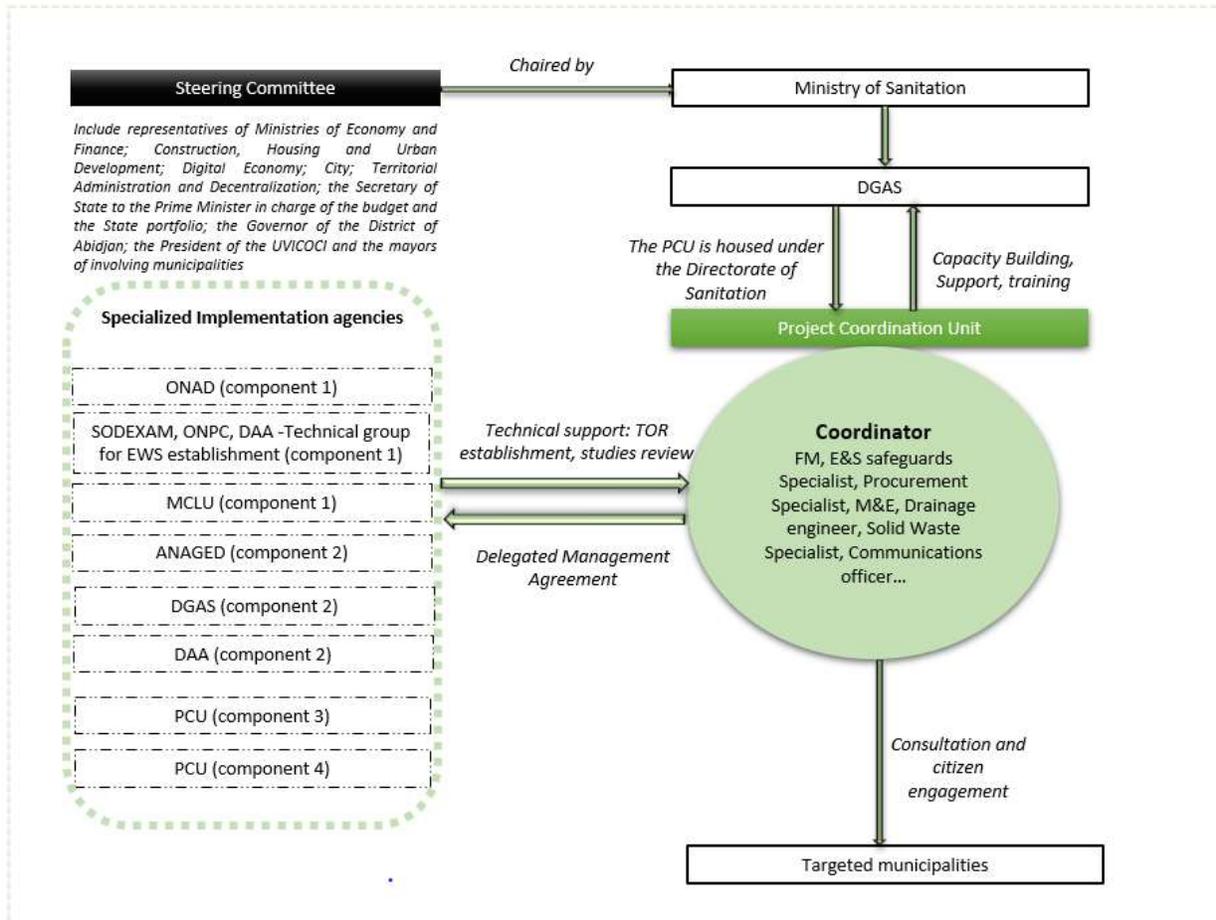


Cities and Municipalities (UVICOCI, *Union des villes et communes de Côte d'Ivoire*); and the mayors or representatives of involving municipalities. The Steering Committee will provide overall supervision of the project, ensure coherence of activities with the sector strategy, and convene intersectoral coordination for the subcomponents of other ministerial departments. The committee also validates annual budgeted work plans (ABWPs).

78. **A PCU** hosted by the DGAS will be created within the MINASS. The PCU will manage the project at the central level, coordinating overall project implementation in various locations, ensuring the timely availability of fund transfer, maintaining Project Accounts (PAs) and producing financial reports, monitoring and evaluating program implementation and impacts, and reporting results to various stakeholders as detailed in the Project Implementation Manual. It will be headed by a competitively recruited project coordinator who will be in charge of the day-to-day project management, communicating with the Government, IDA, and all stakeholders of the project and overseeing project M&E. In addition, the PCU will include, among others, (a) a procurement specialist (with extensive experience in engineering works and contract management), (b) a communications officer, (c) a drainage engineer, (d) an FM specialist, (e) an accountant, (f) an environmental safeguards specialist, (g) a social safeguards specialist, (h) an M&E expert and (i) a digital and geospatial technology specialist, and (j) the solid waste management specialist all with experience and qualifications acceptable to WB. The following key staff: the coordinator, the financial management specialist, the environmental specialist, the social development specialist and the procurement specialist will be recruited by effectiveness and the others composed of the communication officer, the drainage engineer, the M&E expert, the digital and geospatial technology specialist and the solid waste management specialist will be recruited no later than three months after effectiveness. The PCU will have specific performance criteria to ensure knowledge transfer from the PCU to the staff in the MINASS. The PIU will have to rely on SIAs for the implementation of the project.

79. **SIAs.** The technical management of each component will be coordinated by the main beneficiary structure of the activity, called an SIA in its mandate. Delegated management contract will therefore be signed between the PCU and these agencies. The contracts will define the scope of roles and responsibilities for the agencies involved in the project implementation (see Annex 1 for further details on the distribution of project implementation responsibilities across the different agencies involved).

**Figure 4. Institutional Arrangements**



Note: E&S = Environmental and social; MCLU = Ministry of Construction, Housing, and Urbanization (*Ministère de la Construction, du Logement et de l'Urbanisme*); SODEXAM = Airports, Aeronautics, and Meteorology Operating and Development Company (*Société d'Exploitation et Développement aéroportuaire, aéronautique et météorologique*); TOR = Terms of reference.

## B. Results Monitoring and Evaluation Arrangements

80. **The GoCI will evaluate progress on the indicators presented in the Results Framework and Monitoring section**, through regular reports from the PCU. The GoCI, through its PCU, will be responsible for gathering data, reporting, and using the information for monitoring during implementation. The PCU will be supported by SIAs, which will help collect data within their area of expertise. An M&E specialist will therefore be recruited into the unit and will be supported by the PRICI coordination unit during project preparation.

## C. Sustainability

81. **O&M.** Proper management and effective O&M of drainage systems are key for the sustainability of investments. To this end, an O&M mechanism will be set up with the involvement of project stakeholders and beneficiaries to ensure the effective ownership necessary for its viability. The commitment of beneficiaries is crucial for the change in attitude needed to avoid the dumping of solid



waste into drainage works and the occupation of flood-prone areas (at risk). In addition, institutional and capacity building of relevant stakeholders will improve institutional skills in urban resilience to reduce flood risks.

82. **Sustainability of investments for the improvement of the SWM system.** The current SWM system in Côte d'Ivoire is managed through concessions in which the private sector receives a monthly payment from the Central Government. Revenues for the sector are provided by a percentage of a set of taxes (property tax, IRF, TVHA, TEOM, TSCP, and TSPE, among others), that is, 25 percent of property tax (the land value tax provides the most financially significant amount to the sector). However, a recent study found gaps between costs and resources available. To overcome this deficit and ensure sustainability of another private partnership, the Government has initiated a tax adjustment to increase the share allocated to waste management from 25 percent to 50 percent. An analysis of the firm's viability with a 50 percent share will allow the sector to increase its operating resources and thus ensure the viability and sustainability of the waste management sector. This increase has been approved for the current budget (2020), and this is expected to continue for the next three years, but more long-term financial sustainability actions are needed.

83. **The long-term sustainability will be based on the following points:** (a) the SWM sector is a sensitive public sector that needs the continued support of the state, (b) the involvement of the private sector in the SWM sector which is important to increase the sector's effectiveness and efficiency in optimizing operating costs and collection routes and improving the service, (c) on the financial level, a fair balance between state participation in the form of subsidies and the provision of private capital, and (d) the integration of a circular economy into the current system by developing the recycling and sale of derived products to expand the sources of financing. For example, a waste recovery module will be set up for the new landfill and revenues from product sales (for example, compost, refuse-derived fuel, and biogas) should reduce the cost per ton paid by the public. As part of the PPA, the project is financing a study on sustainable financing, economic viability, and fiscal reforms of SWM in Côte d'Ivoire to put in place measures and recommendations to optimize the sustainability of the sector. IFC will continue to support the World Bank in the pursuit of long-term sector sustainability by trying to find the right balance between minimizing the necessary government subsidy to the sector and open and effective private sector participation.

84. **A guarantee scheme is under consideration for the PPP in Abidjan, in collaboration with the EU, to support the Government's payment security obligations.** If it materializes, the guarantee would further strengthen the financial viability and operational sustainability, decrease the risk of nonpayment or lower revenue generation than projected for the PPP operations, and attract top international private operators to the Ivorian market. Should the guarantee not materialize, the PPP will still be carried out with a payment guarantee from the Government, as already in place within the current concessions. The Multilateral Investment Guarantee Agency will also consider covering eligible investors of the new landfill against political risks.

## IV. PROJECT APPRAISAL SUMMARY

### A. Technical, Economic, and Financial Analysis

#### Technical

85. **Project investments follow methodologies used under other recent operations.** The project will use standard flood management approaches with drainage canals, as well as innovative technologies such as NBSs, which can reduce construction costs and improve livability. In addition, procurement packages have been prepared in advance to ensure bidding by qualified companies/consultants and to avoid delays during construction. Another significant innovation included is the integration of digital technologies in urban planning, the collection and sharing of urban data for digital management, which will allow optimization of targeted investments and create opportunities for job creation. The PPP structure for SWM is based on a model suited to the current needs of the Government. The proposed structure differs from the existing model by minimizing the up-front private sector investment and instead using a Design Build Finance and Operate (DBFO) model.

#### Economic Analysis

86. **A cost-benefit analysis** was undertaken on the first two components to quantify the potential economic effects on the beneficiary population.

#### *Component 1: Flood risk mitigation infrastructure and services*

87. **Under Component 1, approximately 2 million people living in the most affected and flood-vulnerable localities will benefit from a set of interventions that will substantially reduce the risk of flooding.** These interventions include the rehabilitation/construction of primary and secondary canals, basins, and retention ponds as well as nature-based activities for about CFAF 85 billion (US\$150 million). The cost-benefit analysis considered the most significant benefits projected by the project. They include the quantification of the reduction of flood damage and losses and the reduction of costs related to the treatment of malaria. The analysis showed an economic internal rate of return (EIRR) of 28 percent for the drainage activities, calculated with a discount rate of 7 percent.

**Table 2. Cost-Benefit Analysis Results for Component 1**

Investment Costs (US\$, millions)	2026 Benefits		EIRR (%)	NPV (US\$, millions) (at 7%)
	Flood Damages Reduction	Health Benefits		
150	10.4	25.5	28	419.8
<b>Sensitivity tests</b>				
Sensitivity test (+10% on CAPEX)			23	407.4
Sensitivity test (+20% on OPEX)			27	412.3
Sensitivity test (-10% on flood damage reduction)			25	403.9

Note: NPV = Net present value.

**Component 2: Improvement of solid waste management infrastructure and services**

88. **For Component 2, direct costs include the construction of a new landfill and recycling center and three transfer centers, as well as the related O&M costs.** The economic benefits accruing from this operation include avoided leachate pollution by the controlled treatment in the new sanitary landfill, avoided greenhouse gas (GHG) emissions due to more efficient waste management operations (sorting center, organic valorization, and methane capture), decreased harms for the surrounding areas, health benefits due to reduced air pollution as fires are decreased, and creation of jobs from collection to valorization. The economic analysis was conservative and quantified only the benefits related to the reduction of GHGs and avoided costs of landfilling diverted waste through recovery and composting, for which data were available.

89. **The costs and benefits have been evaluated for 17 years** including the construction period (2 years), starting in 2021. Depending on the social cost of carbon (low/high), the EIRR and NPV of Component 2 were calculated using an interest rate of 7 percent. The results are presented in Table 3.

**Table 3. Cost-Benefit Analysis Result for Component 2**

Description	EIRR (%) (at 7%)	NPV (US\$, millions)
<b>Social cost of carbon (low)</b>		
<b>Base</b>	<b>13</b>	<b>75.6</b>
Sensitivity test: +10% investment costs	11	70.4
Sensitivity test: +10% O&M costs	12	68.4
Sensitivity test: -20% benefits	13	60.5
<b>Social cost of carbon (high)</b>		
<b>Base</b>	<b>35</b>	<b>262.0</b>
Sensitivity test: +10% investment costs	32	257.0
Sensitivity test: +10% O&M costs	34	254.7
Sensitivity test: -20% benefits	35	209.5

**Gender**

90. **Considerations on bridging the gender gap.** In the 2015 edition of the Africa Gender Equality Index,<sup>8</sup> out of 52 African countries, Côte d'Ivoire ranked 49 in economic opportunities for women and 29 in terms of possibilities for women to become active and responsible citizens. The project will help reduce the following identified gender gaps.

**Gender gap 1: Gap in voice and leadership to address disaster EWSs**

91. **Analysis.** Natural disasters do not affect all people equally. According to the World Bank report Shockwaves,<sup>9</sup> women and girls are particularly vulnerable during disasters and floods and 14 times more likely to die than men.<sup>10</sup> This can be explained by the fact that natural disasters exacerbate the existing

<sup>8</sup> Africa Gender Equality Index, AfDB, 2015.

<sup>9</sup> Hallegatte, S., et al. 2016. Shock Waves: Managing the Impacts of Climate Change on Poverty.

<sup>10</sup> Reaching Out to Women when Disaster Strikes, K. Peterson, White paper, Soroptimist, 2007.



patterns of discrimination that render females more vulnerable to their fatal impact.<sup>11</sup> Although women tend to be disproportionately negatively affected by disasters, their concerns are least likely to be addressed, in particular because national land laws do not give women the same rights as men. As a result, those who are victims of property loss have more chances to become vulnerable. Women's status and voice in the Ivoirian society are weak, as highlighted by their low (11 percent) political representation.<sup>12</sup> Consequently, very few women are in decision-making positions, and DRR initiatives at the community level are often led by men. However, a gender study on EWSs conducted by the World Meteorological Organization<sup>13</sup> demonstrates that women's involvement at all stages of early warning is critical to help women protect themselves and react appropriately during an emergency. Women are key players for risk reduction, and when they are empowered in EWS management, the whole community benefits from their leadership.

92. **Action.** Based on the gender gap analysis conducted, the project will specifically address the fourth pillar of the World Bank's gender strategy: "Enhancing women's voice and agency." The project will participate in increasing women's voice, leadership, and access to information by involving existing local women's organizations in risk management and EWSs in flood risk vulnerable neighborhoods. As part of the project's Subcomponent 1.3 "*emergency preparedness and early warning systems*", local networks of women leaders for DRR and waste management will be set up, to carry out community educational programs on disaster preparedness, with an emphasis on the prevention of violence against women and girls, during and after disasters. For that purpose, women-only meetings will also be organized to provide a safe space for women and girls to voice their opinions, concerns, and needs. Progress toward women's empowerment will be monitored by assessing not only the percentage of women involved in the DRR committees in each commune but, most importantly, the percentage of women designated as the committee focal point to improve their level of involvement in the decision-making process. Strengthening female representation in early warning and disaster preparedness will increase the population's capacity to prepare for and manage flood emergency to avoid losses and prevent the negative effects that gender-based violence (GBV) in emergency situation can have on the entire populations' recovery.

93. **M&E.** Gender indicators are (a) percentage of DRR committees' focal points who are women and (b) the number of women covered by an EWS to flood risk.

### ***Gender gap 2: Gap in qualifications and entrepreneurship skills to enter the labor market in SWM***

94. **Analysis.** Women in Côte d'Ivoire have difficulties entering the labor market, apart from the agriculture sector, and are largely concentrated in small informal enterprises and low-productivity occupations. There are various reasons for this: their lower level of education, difficulty accessing finance, discriminatory laws and practices, cumbersome business regulations, their household responsibilities, and

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<sup>11</sup> London School of Economics and the University of Essex.

<sup>12</sup> From Crisis to Sustained Growth, Priorities for Ending Poverty and Boosting Shared Prosperity, World Bank Côte d'Ivoire Systematic Country Diagnostic, 2015.

<sup>13</sup> Review of the EWS in the Caribbean, World Meteorological Organization, Climate Risk Early Warning Systems (CREWS), GFDRR, the World Bank, UN office for Disaster Risk Reduction, 2018.



the fact that they do not benefit from professional and social networks.<sup>14</sup> Even with secondary and tertiary education, they face serious employability challenges because of a mismatch between skills acquired at school and labor market demands.<sup>15</sup> In the urban agglomeration of Abidjan, the private operators of the SWM sector in charge of collecting and transporting solid waste and operating the main landfill currently have, on average, not more than 33 percent of women as part of their workforce. Although the Ivorian legal framework makes positive discrimination toward women employment in the private sector particularly difficult, it is possible to capacitate women so that they can develop tangible business initiatives to provide SWM services through start-ups and small enterprises. Innovative ideas to develop a circular economy and reduce waste ending up in landfills are vitally needed and will provide new business and employment opportunities in the near future. Hence, increasing women's chances to enter the labor market through the development of their technical and entrepreneur skills is identified as a major leveraging instrument in Côte d'Ivoire to support women's role in the rapidly evolving waste management sector.<sup>16</sup>

95. **Action.** Under Subcomponent 2.3, *“Improving solid waste management through citizen engagement, recycling and digital technology”* activities will focus on developing the skills, chances of success, and impact of emerging small and medium enterprises, aimed at operationalizing best practices in waste reduction, recycling, and circular economy. In this context, a support program with a specific focus on women entrepreneurs will be provided, including technical content and trainings to improve their entrepreneurship skills such as the development of business plans and market assessments. The objective is to develop a more professional and larger recycling economy while improving chances for women to enter the waste management sector job market, which is shown to be a major factor to achieve gender equality as it incentivizes women to become economically active. The support program and capacity-building activities will serve as incubators to nurture ideas, creativity, and business abilities, giving young entrepreneurs and particularly women the necessary skills to compete more effectively on the existing SWM market.

96. **M&E.** Gender indicators are (a) number of women in small and medium enterprises completing the support program to enhance their chances to enter the SWM market, and (b) a system monitoring the number of women economically active in the SWM sector is in place.

### Climate Co-benefits

97. **Strengthening climate resilience and co-benefits.** The consequence of climate change in Côte d'Ivoire will induce dramatically increased flooding risks in Abidjan due to the combination of extreme precipitations during the rainy season associated with sea level rise and a greater exposure to those disasters of vulnerable people due to rapidly expanding and uncontrolled urbanization patterns. The project's interventions bring significant benefits to the Government, communities, and population by mitigating and adapting to the consequences of climate change. The project's Component 1 will bring notable adaptation co-benefits to the country by reducing the negative impact of recurrent urban floods

<sup>14</sup> *Evaluation de la participation économique des femmes en Côte d'Ivoire, résultats et recommandations*, Avril 2017, Comité National pour la Mise en Œuvre du Programme Compact de la Millennium Challenge Corporation (CNPC).

<sup>15</sup> *From Crisis to Sustained Growth, Priorities for Ending Poverty and Boosting Shared Prosperity*, World Bank Côte d'Ivoire Systematic Country Diagnostic, 2015.

<sup>16</sup> Terraza, Horacio, Maria Beatriz Orlando, Carina Lakovits, Vanessa Lopes Janik, and Anna Kalashyan. 2020. *The Handbook for Gender Inclusive Urban Planning and Designs*. World Bank.



and integrating climate change scenarios into sanitation and stormwater master plans and disaster risk contingency plans. Subcomponents 1.3 and 1.4 will also allow for adaptation co-benefits by integrating climate change scenarios into disaster risk preparedness and urban development plans with the help of newly developed digital tools and geographic information system (GIS) information made available through project's activities. Education, training, and capacity-building activities of Component 1 will ensure raising citizens' awareness on climate change adaptation and mitigation issues and measures that can be applied to limit carbon emissions.

98. **The project's Component 2 will also bring mitigation co-benefits in that it will significantly contribute to the reduction of the GHG emissions in Abidjan** by (a) streamlining the solid waste sector in the city; (b) promoting reduction, reuse, and recycle of solid waste; (c) allowing for methane emissions capture; (d) reducing open dump-site and burning practices; and (e) contributing to revegetation of canal banks and large thalwegs and creation of green spaces for erosion control that will promote atmospheric CO<sub>2</sub> capture and incentivize the use of soft and nonmotorized transport modes. The existing and potential GHG emissions of waste disposal within the project area were estimated (Annex 3) and the project will result in a net emissions reduction of 6.9 million of tons CO<sub>2</sub> over 15 years. The emissions reduction is primarily driven by the reduction in open dumping sites and the methane gas management systems in the newly constructed sanitary landfill associated with closure of existing open dumping sites. The project also aims at optimizing waste collection routes, which in turn will allow to reduce transport-generated carbon emissions. This target will also be achieved both by improving the collection trucks' fuel efficiency and by partially replacing the fleet with zero-emission vehicles. The intended benefits in carbon emission reduction have been cautiously estimated, as it has been considered, for GHG emissions calculations, that only 10 percent of the waste collection and operational fleet will be replaced (for example, electrical street sweepers or small electrical operating trucks). However, this percentage is likely to be higher.

### Citizen Engagement

99. **The project will (a) employ a proactive communication strategy to explain the benefits of the project to beneficiary communities and the public at large, (b) develop robust information request and grievance redress measures for project activities, and (c) support the engagement of project beneficiaries in the implementation and monitoring of all project activities.** Subcomponents 1.3, 1.4, and 2.3 will carry out extensive citizen consultations for preventive resettlement actions and will seek the involvement of community associations for DRR activities including setting up of contingency plans at the municipal level. Citizen participation will also be allowed using innovative collaborative platform where advanced data collection methods (such as street-level photo data collection) involve the contribution of citizens.

100. **The planned citizen engagement events and communication campaigns will also incorporate a gender approach.** The preparation of events and campaigns will consider venues, timing, and discussion dynamics that effectively enable the participation of both women and men. To reflect this approach, the project includes a gender-disaggregated citizen engagement indicator in the Results Framework: 'Number of beneficiaries consulted during project implementation'.

### B. Fiduciary

#### (i) Financial Management



101. **The FM arrangements for the project** have been designed considering the country's governance situation as well as the World Bank's minimum requirements under World Bank Policy and Directive for IPF and new Guidance issued by OPCS related to COVID-19, which describes the overall FM World Bank policies and procedures.

102. **In 2018, the Government adopted a new strategic framework for reforming public financial management (PFM)** based on the progress made during the implementation of the 2014–2017 PFM reform actions plan and the findings of the 2017 Public Expenditure and Financial Accountability (PEFA) report. Côte d'Ivoire also adopted WAEMU PFM and procurement directives, whose implementation is ongoing.<sup>17</sup>

103. However, there are opportunities to strengthen internal and external audit, procurement, and anti-corruption mechanisms.

104. Thus, at this point the World Bank cannot fully rely on the public expenditure framework for this project. The Government requested using a ring-fenced financing mechanism for the fiduciary aspects of the project. A new PCU anchored within the DGAS at MINASS has been proposed by the Government to manage the project. The FM team of the PCU to be established under the responsibility of the Coordinator for this project will manage the overall FM aspects of the project.

105. The main finding arising from the assessment of the Directorate of Administration and Finance (DAF) of MINASS as well as the FM Unit of the PCU conducted in January 2020 was that the DAF as well as the staff of the DGAS of MINASS are not familiar with World Bank-financed projects including FM procedures. Furthermore, the PCU, especially the FM Unit, was not yet created at the time of the FM assessment.

106. The overall residual FM risk is rated substantial mainly due to the lack of familiarity of the DAF of MINASS and the DGAS with World Bank FM procedures as well as the fact that the PCU is not created yet and the FM Unit is not operational. Furthermore, effectiveness of some of the proposed mitigation measures will be measured during project implementation period.

107. **Due to the critical areas for operationalization of the FM team of the PCU associated with the risk level, the conclusion was that the PCU to be established within the DGAS could manage World Bank funds** once the following measures are implemented before and after the project effectiveness: (a) appoint on a competitive basis, the key FM staff including an FM officer (*Responsable Administratif Financier*, RAF) and an accountant (*comptable*); (b) draft the FM procedures manual; and (c) acquire and install the accounting software and train the users of the software. Finally, the PCU established within the DGAS will be required to prepare and submit (a) an annual work plan and budget (AWPB) not later than November 30 of the year preceding the year the AWPB should be implemented; (b) unaudited interim financial reports (IFRs) on a quarterly basis 45 days after the end of each quarter; and (c) audited annual financial statements (for example, audit reports prepared by independent external auditors) within six months following the end of the period audited.

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<sup>17</sup> 2017 PEFA Assessment for Cote d'Ivoire.



108. **A Designated Account (DA)** in CFA francs managed by the Directorate of Debt (*Direction Générale du Trésor et de la Comptabilité Publique*) will be opened at the Central Bank of West African States (*Banque Centrale des Etats de l'Afrique de l'Ouest*, BCEAO). A PA, managed by the public accountant assigned to the PCU, will be opened in a commercial bank under terms and conditions acceptable to the World Bank.

## (ii) Procurement

109. **Procurement for the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services**, dated July 1, 2016 (revised in November 2017 and August 2018). The Project will be subject to the World Bank's Anti-Corruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions.

110. **A new Procurement Code (Order No. 2019-679 dated July 24, 2019) has been adopted in Côte d'Ivoire**, in line with the WAEMU's procurement directives and international good practices, along with key implementing regulations and documentation. A national procurement capacity-building program exists and is being implemented at the central level and among relevant decentralized entities. An electronic system for collecting and disseminating procurement information and for monitoring procurement statistics has been set up and needs to be mainstreamed in the work of all contracting authorities.

111. General procurement notices, specific procurement notices, requests for expression of interest (REIs), and results of the evaluation and contracts award should be published in accordance with advertising provisions in the procurement regulations mentioned above.

112. **Advertising procedure.** When approaching the international market and seeking requests for proposals that involve international consultants, the contract awards shall be published in the United Nations Development Business (UNDB) online within two weeks of receiving IDA's 'no objection' to the recommendation of contract award. For goods, the information to publish shall specify (a) name of each bidder who submitted a bid; (b) bid prices as read out at bid opening; (c) name and evaluated prices of each bid that was evaluated; (d) name of bidders whose bids were rejected and the reasons for their rejection; and (e) name of the winning bidder, the price it offered, and the duration and summary scope of the contract awarded. For consultants, the following information must be published: (a) names of all consultants who submitted proposals; (b) technical points assigned to each consultant; (c) evaluated prices of each consultant; (d) final point ranking of the consultants; and (e) name of the winning consultant and the price, duration, and summary scope of the contract. The same information will be sent to all consultants who submitted proposals. The other contracts should be published in national gazette periodically (at least quarterly) and in the format of a summarized table covering the previous period with the following information: (a) name of the consultant to whom the contract was awarded, (b) price, (c) duration, and (d) scope of the contract.

113. **Capacity assessment.** The DGAS is responsible for leading the national policy on sanitation, hygiene, and waste management and coordinating the activities of the agencies under its authority. The



PCU established in the DGAS will be in charge of the fiduciary management of the project. An assessment of the PCU’s capacity to implement procurement was carried out by World Bank procurement specialists. A key risk identified by the assessment is that the PCU lacks previous experience with implementing World Bank-financed projects. Consequently, the PCU’s capacity in this area needs to be strengthened, more generally, (a) organize frequent meetings and trainings by the World Bank’s procurement team during the project implementation and (b) if necessary the procurement staff in the World Bank Côte d’Ivoire Country Office will be available to provide hands-on extended implementation support (HEIS) to the PCU. While many audits of single source awarded contracts have been conducted in Côte d’Ivoire in the past years and findings have been published, issues remain and affect the transparency and efficiency of the national procurement system. The procurement risk is assessed as moderate.

114. **The Procurement Project Strategy for Development (PPSD) has been developed to analyze the key features of the project and related procurement risks and opportunities, building on the lessons learned from similar projects.** The largest part (around 80 percent) of the project’s investment will be used for the construction of drainage, SWM, and recycling facilities. Also, in a vision of more integrated and managed urban planning, the project dedicates a portfolio for the implementation of digital tools to boost resilience and urban management. While there is a market with qualified national and international contractors, potential risks include the unavailability of specific expertise required for the establishment of the digital geoportal, the designing of innovative and adapted NBSs, delays in receiving imported goods, and delays in national procurement approval channels. For the PPP component, the project will finance a consultancy service to identify appropriate contractual arrangements for the PPP. Several other specialized consultant services requiring highly qualified urban management or sector reform experience will be performed in support of the project activities.

**C. Legal Operational Policies**

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

**D. Environmental and Social**

115. **The project will finance the construction of new primary drainage and associated roadworks and the rehabilitation of existing primary drainage network.** This new operation will also fund the construction/rehabilitation of water retention basins, the construction of micro water retention areas following NBSs in available areas such as parks, parking lots, sidewalks, and playing fields. Moreover, it aims to finance the construction of new solid waste treatment/valorization and disposal facilities for around 600,000 tons per year and associated roadworks and the construction of transfer centers (around 3) in the Abidjan Autonomous District. The project will also finance the construction of SWM infrastructures in selected secondary cities. Some of the mentioned activities are potentially associated with major environmental adverse impacts. However, the expected environmental and social impacts of the project will be overall positive.



116. **Environmental and social risk classification (ESRC) conducted at the concept stage under the new Environmental and Social Framework (ESF) rated the project overall risk as high** and environmental and social standards (ESSs) which are relevant for the project are ESS1: Assessment and Management of Environmental and Social Risks and Impacts; ESS10: Stakeholder Engagement and Information Disclosure; ESS2: Labor and Working Conditions; ESS3: Resource Efficiency and Pollution Prevention and Management; ESS4: Community Health and Safety ; ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and ESS8: Cultural Heritage. Based on this assessment, the Government has prepared the appropriate safeguards instruments including (a) an ESMF, (b) an RPF, (c) two ESIA, and (d) two RAPs. ESIA and RAPs were prepared for Grand-Bassam’s canals and Anonkoua’s canal. In addition to the previous mentioned documents, three other documents which are required under the new ESF have also been prepared: the Environmental and Social Commitment Plan (ESCP), the Stakeholder Engagement Plan (SEP), and the Labor Management Procedures.

117. **Environmental safeguards.** The ESMF and the ESIA have been prepared, in full compliance with national legal and regulatory framework and World Bank ESSs, including a broad consultation framework involving all relevant stakeholder groups, both public and private, as well as civil society organizations. The ESMF describes the procedures and processes to be followed in preparing and disclosing site-specific safeguard instruments, namely, the ESIA, including an Environmental and Social Management Plan (ESMP), as may be required, as soon as the exact locations and scope of a specific activity are known. Any specific ESIA, including the corresponding ESMP, prepared in accordance with the screening result, will be approved in consultation with all the stakeholders before the corresponding activity starts.

118. **As part of the mentioned ESIA’s preparation, soil samples were analyzed and the results have shown the presence of heavy metals (lead, mercury, nickel, and chromium).** However, their concentrations are below the permissible limit values in the soil. Pesticides, cadmium, and arsenic are found in very small quantities below the limit of quantification of the analytical equipment. Therefore, these soils do not pose a risk to their destinations or end uses. Furthermore, the environmental assessment of civil works has shown that the project will deal with three main challenges. These are the land issue, the anarchic occupation of urban space by the populations after the displacement of the populations from the easements of the canals to construct, and the maintenance of sanitation structures once they have been completed.

119. **After their approvals, the ESMF was disclosed** in Côte d’Ivoire on February 4, 2020, and on the World bank website on February 14, 2020, and the two ESIA have also been disclosed within Côte d’Ivoire and on the World Bank website on February 18, 2020.

120. **Guidelines on environmental/occupational health and safety (EHS/OHS) requirements** will be included in bidding documents so that companies take them into account in their companies’ ESMP (Works-ESMP). The PCU and its partners will have to approve Works-ESMPs including those guidelines before the commencement of the works.

121. **To ensure that the safeguard instruments prepared in line with ESSs to apply to the project are implemented properly, the PCU will hire an environmental safeguard specialist and a social safeguards specialist.** The environmental safeguards specialist must have additional experience in EHS/OHS, and the social safeguards specialist in GBV, social inclusion, and labor-related risks management. Both specialists



will be fully in charge of all aspects of environmental and social safeguards aspects and will regularly monitor all safeguard requirements. More specifically, the two specialists, the entire PCU, the implementing agencies, and the other stakeholders will ensure that children under 14 years are not employed in civil works as labor force. For those whose age is between 14 and 18 years, the type of civil works they have to do must be consistent with their age. World Bank implementing support missions will also include environmental and social safeguards specialists to ensure that all safeguard issues are addressed properly and on time.

122. Also, national capacity building will be carried out for all the actors involved in the preparation of safeguarding instruments and the application of environmental and social measures.

123. **Social safeguards.** As part of this project, the client prepared the RPF on the basis of TOR reviewed and approved by the World Bank. The RPF was reviewed and approved by the World Bank team in accordance with the directives of ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement. In this project, social issues are important with regard to land acquisitions and population displacements because most of the work will take place in urban and peri-urban areas.

124. **The social risk assessment on the project shows that there will be potential negative social impacts** relating to the loss of assets (land, infrastructure, trees, and so on), the reduction of means of production, the loss or restriction on sources of income, and so on. The legal and legislative framework for expropriation, land acquisition, resettlement, and stakeholder consultation has been defined in accordance with national laws and the World Bank's ESF guidelines. Thus, for all of sites that will receive the investments, social assessments will be carried out to identify potential social impacts and risks. Whenever necessary, RAPs will be prepared and implemented before the start of works.

125. **To this end, two RAPs have been prepared as the sites have already been identified and the planned investments are known precisely.** These are (a) the RAP for the development of stormwater drainage works in Grand-Bassam and (b) the RAP for the development of the Anonkoua basin of Abobo. These two RAPs were reviewed by the World Bank team and are in advanced acceptable stages. These advanced RAPs (for Abobo and Grand Bassam) were disclosed in-country on April 8, 2020 and at the Bank's website respectively on April 9 and 10, 2020. In addition, despite the World Bank comments on the need to deepen the consultation exercises and to provide additional clarity on the absent RAPs, their negotiation did not happen because of the Government national measures to ban any travel within and outside of Abidjan and restriction of public gathering for any reasons, to increase social distancing in response to the coronavirus pandemic. It was therefore agreed that the RAPs will be published in an acceptable draft form and the Government committed to finalizing and updating these RAPs as soon as the situation is restored and becomes normal for consultation. The updated RAPs will be redisclosed before the implementation and the commencement of any civil works. This commitment made by the Government is also reflected in the ESCP which is updated accordingly.

126. **A GRM** is already set up to allow affected people and other interested stakeholders to report any concerns regarding the project to the PCU to find solutions. This GRM will be operationalized and disseminated in all localities where the project will make investments.

127. **Labor influx will be a constant concern in this project** given the many civil engineering works that will be done and that will require migrations of workers. Regarding potential labor influx, the project will



establish guidelines and rules for contractors to improve ESMPs and workers' contracts will include measures to manage the potential impacts of this outside workforce on the local community. Specific details will be prepared during investment activities for contractors who will bring in workers and operators from outside the area, and these will likely be accommodated in labor camps during construction. On the basis of the risk assessment which will be made at the start of the works, the World Bank may ask the client to prepare a specific plan for managing the labor influx.

128. **An SEP** is also prepared and approved by the client. Its objective is to identify and mobilize organizations and people likely to be directly or indirectly affected (positively or negatively) or to have an interest in the project. During the preparation of the SEP, the identification of stakeholders was done in a participatory and inclusive manner based on their interest in the project, the needs for participation and information, the level of vulnerability, expectations in terms of participation and priorities, and so on. The SEP will be a living document and its implementation will be an opportunity to set up more participatory and more inclusive process and to continuously identify the concerns or priorities of actors with regard to the impacts of the project and mechanisms to resolve all issues. It will also be the most relevant tool to improve the benefits of the project for communities, citizen control, accountability, and so on, which may require different forms of participation and engagement.

129. **Potential environmental and social risks associated with the project could be pollution with the unsafe management of soil** that could be contaminated with heavy metals (lead, mercury, and so on) and impacts on biodiversity due to the discharge of rainwater into rivers and Aghien and Ebrie Lagoons. Additionally, as civils works will take place in inhabited areas, there are risks of accidents and GBV.

130. **The project, in its preparatory phase and during implementation, could involve public consultation activities and, in some cases, stakeholder participation.** The way these are carried out may include public hearings, community meetings, group discussions, field surveys and individual interviews. In view of the growing concern about the risk of COVID-19 virus transmission, arrangements will be made to adapt the working approach and methodology in accordance with the requirements of national legislation. For these activities, the Grievance Redress Service and the planned awareness-raising activities, an action plan will be developed to take into account measures related to the prevention of COVID-19 transmission.

#### **E. Grievance Redress Services**

131. **Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>.

For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## V. KEY RISKS

132. **The overall risk rating of the project is substantial.** While Côte d'Ivoire has a good track record in implementing World Bank and its own investment projects, the substantial risk of the project stems from (a) the potential environmental and social impacts of the project activities, given the high risk category of the project; (b) cumulative impacts of poor waste management and infrastructure maintenance, leading to flooding, groundwater contamination, public health and safety impacts, or even social unrest; (c) the lack of enforcement of the land use rules resulting from urban plans leading to the occupation of thalwegs and storm basins; (d) the lack of coordination of the various institutions at the central and local levels in the implementation of the urban master plan of the Greater Abidjan; (e) the financial and economic viability of the solid waste collection system in Abidjan and in the secondaries cities; (f) the lack of maintenance of the infrastructures built in Côte d'Ivoire constituting a major handicap that can jeopardize the sustainability of investments; (g) capacity constraints of the Government to prepare quality studies, particularly for some complex activities: the quality of technical studies for the preparation of projects is often lacking and leading to several rounds of reviews by the World Bank to prepare bankable projects of an acceptable standard. Table 4 summarizes the rating of each category.

**Table 4. Key Risks**

Risk Categories	Rating (H, S, M, or L)
1. Political and governance	S
2. Macroeconomic	M
3. Sector strategies and policies	S
4. Technical design of project	M
5. Institutional capacity for implementation and sustainability	S
6. Fiduciary	S
7. Environmental and social	H
8. Stakeholders	M
9. Other	
10. Overall	S

Note: H = High; S = Substantial; M = Moderate; L = Low.

133. **Political and governance risk is substantial.** The Government is pursuing its reconciliation agenda with opposition parties. Though the peaceful 2015 presidential election helped further normalize the sociopolitical situation, recent events (including military and civil service financial claims in 2017) have created some uncertainty in the political and social environment. The upcoming presidential elections in 2020 may create further uncertainty and lead to fiscal slippages as well as wait-and-see attitude from the private sector. However, it should be underlined that the fiscal deficit was reduced during the last presidential election in 2015. Moreover, the Government has reiterated its commitment to avoiding the use of extraordinary spending procedures and its commitment to fiscal control as part of a three-year program agreed with the IMF. On the security front, the prospects of future terrorist threats, such as the one in March 2016, could divert financial resources away from the reform program toward security and mitigations measures. Increased security spending could weigh on fiscal balances and weaken the fiscal



consolidation supported by the Development Policy Financing series. Close monitoring of the political and security situation, in collaboration with the IMF and the EU, will help assess those risks and their subsequent impact on the fiscal program.

134. **Risk related to sector strategies and policies is substantial.** The Government does not have a clear and viable strategy for drainage facilities and SWM system and therefore for improving its resilience capacity. In fact, the new national DRR strategy is not yet operational and as noted previously the institutional context is characterized by a lack of synergy and coherence between the various concerned government institutions. Although the SDAD is in place, there is no clear road map for its implementation. The need to review this strategy is urgent to redefine and adapt actions in a highly evolving context of development, emerging risks, and the dynamism of society. Actions are planned as part of the recently initiated recovery framework and as noted before sectorial activities are prioritized as well. However, through this project, strong emphasis will be placed on building institutional capacity at the central and local levels as well as sharing international good practices to ensure effective coordination.

135. **Institutional capacity for implementation and sustainability risk is substantial.** It is expected that the project will be executed by a new implementation unit under MINASS, which has no track record in managing large multisectoral projects such as the proposed project. However, key project implementation risks will be mitigated through strong capacity building, training, and hands-on support throughout the project cycle. During project preparation and implementation, training will be provided in procurement, FM, contracts management, supervision of works, safeguards, and project management to improve governance at the project level.

136. **Fiduciary risk is substantial.** The overall FM risk for the project is rated substantial (a) due to the lack of experience and familiarity of the DAF with World Bank FM procedures, (b) because the PCU with a dedicated FM staff and FM tools (manual of procedures, accounting software, and so on) is not established yet, and (c) due to the design of the project which involves several subcomponents and activities combined with the multiplicity of actors lacking familiarity with World Bank-financed project procedures. The project will be supervised using a risk-based approach. It is expected that the PCU in the DGAS will be able to manage World Bank funds once the following measures are incorporated before and after project effectiveness: (a) appointment, on a competitive basis, of key FM staff including an RAF and account; (b) drafting of the FM procedures manual; and (c) purchase and installation of the accounting software and the provision of appropriate training to its users. In line with the use of country systems as stipulated in Decree No. 475 governing the modalities of donor-financed project implementation in Côte d'Ivoire, (a) a financial controller and a public accountant (two civil servants from the Ministry of Finance) will be assigned to the new PCU and (b) the internal audit function of the project will be managed by the General Inspectorate of Finance (*Inspection Générale des Finances*, IGF) in line with the Decree No. 106 dated February 20, 2018. Finally, the PCU established within the DGSU will be required to prepare and submit (a) an AWPB not later than on November 30 of the year preceding the year the AWPB should be implemented; (b) unaudited IFRs on a quarterly basis; and (c) audited annual financial statements (for example, audit reports prepared by independent external auditors). The project will comply with the World Bank disclosure policy of audit reports and place the information provided on the official website within one month of the report being accepted as final by the team.

137. **The procurement risk is assessed as moderate. The country is familiar with the Bank's procedures and standard bidding documents. During the implementation the following mitigation**



measures have been proposed to reduce procurement-related risk in the project: (a) a senior procurement specialist familiar with World Bank procurement regulations and with experience in the procurement of works should be recruited by the PCU before project implementation, who should also have knowledge of procurement issues related to PPPs; (b) during project implementation, it may be advisable to hire one or two additional procurement staff to assist the senior procurement specialist; and (c) if necessary the procurement staff in the World Bank Côte d'Ivoire country office will be available to provide hands-on extended implementation support (HEIS) to the PCU.

138. **Environmental and social risks is high.** The project foresees the construction/rehabilitation of primary canals and substantial investments in solid waste sector which could affect the surrounding environment through contamination and pollution. To mitigate these risks, environmental impact studies have been and will be undertaken to specifically identify the risk profile of each activity and propose appropriate and effective mitigation measures. A specialist in environmental protection will be recruited within the PCU to monitor and address any related issues that may arise, with the close support of the World Bank's specialists.



**VI. RESULTS FRAMEWORK AND MONITORING**

**Results Framework**

**COUNTRY: Cote d'Ivoire**

**Urban Resilience and Solid Waste Management Project**

**Project Development Objectives(s)**

The development objectives of the project are to reduce vulnerability to flooding in selected urban areas and improve solid waste management in targeted municipalities.

**Project Development Objective Indicators**

Indicator Name	PBC	Baseline	End Target
<b>Improve resilience to flood risk in vulnerable neighborhoods</b>			
Number of residents protected against flooding (Number)		0.00	800,000.00
Of which women (percentage) (Text)		0.00	50%
<b>Improved solid waste services in the district of Abidjan and targeted secondary cities</b>			
Number of people provided with access to improved solid waste services (number) (Text)		0.00	1,350,000.00
Of which women (percentage) (Text)		0.00	50%

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	End Target
<b>Component 1: Flood risk mitigation infrastructure and services</b>			



Indicator Name	PBC	Baseline	End Target
Primary/secondary drainage network and associated roadworks rehabilitated/built (Kilometers)		0.00	75.00
Hectares of Green spaces and leisure areas created including NBS for erosion control (Hectare(Ha))		0.00	15.00
Number of additional secondary cities provided with Sanitation and Storm Water Master Plans through the project (Number)		0.00	5.00
Operational Drainage Operation and Maintenance strategy (Yes/No)		No	Yes
Number of studies supporting urban planning for municipalities (Number)		1.00	5.00
Number of people covered by an early warning system (number) (Text)		0.00	TBD
Of which women (percentage) (Text)		0.00	50%
Percentage of designated Disaster Risk Reduction committees' focal points who are women (Percentage)		0.00	90.00
Number of cities covered by a digital information system for urban planning created by the project (Number)		0.00	2.00
<b>Component 2 : Improvement of solid waste management infrastructure and services</b>			
Number of Solid waste management infrastructure built and functional (Number)		0.00	7.00
Number of signed delegation contract to the private sector in the waste management sector for the District of Abidjan (Number)		0.00	1.00
Number of people trained on solid waste management (number) (Text)		0.00	TBD
Of which women (percentage) (Text)		0.00	50%
Number of women in small and medium enterprises completing the support program to enhance their chances to enter the SWM market (Text)		0.00	TBD
A system monitoring the number of women economically active		No	Yes



Indicator Name	PBC	Baseline	End Target
in the SWM sector is in place (Yes/No)			
Number of digital information systems for solid waste management created by the project (Number)		0.00	1.00
Number of beneficiaries consulted during project implementation (Number)		0.00	200.00
Of which women (percentage) (Text)		0.00	50%
Grievances registered related to project that are actually addressed (Percentage)		0.00	100.00
Percentage of workers recruited under the project who signed a Code of Conduct (Percentage)		0.00	100.00

**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Number of residents protected against flooding	Number of additional residents living in the expanding flood areas along the drainage network rehabilitated by the project protected against flooding	Semi annual	Progress reports by PCU	GIS analysis based on the report from the construction supervision firms	PCU
Of which women (percentage)	Percentage of additional women living in the expanding flood areas along the rehabilitated drainage	Semi annual	Progress reports by PCU and surveys.	GIS analysis based on the report from the construction supervision firms	PCU



	network, protected against flooding				
Number of people provided with access to improved solid waste services (number)	Number of additional people benefitting from improved collection of solid waste and recyclable materials, including the transport of these materials to an appropriate location where the waste is disposed and processed adequately	Semi annual	Progress reports by PCU and surveys.	GIS analysis of population living in areas serviced by the improved solid waste collection network made under the Project	PCU
Of which women (percentage)	Percentage of women benefitting from improved collection of solid waste and recyclable materials, including the transport of these materials to an appropriate location where the waste is disposed and processed adequately	Semi annual	Progress report by PCU and Surveys	GIS analysis of population living in areas serviced by the improved solid waste collection network made under the Project	PCU

**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Primary/secondary drainage network and associated roadworks rehabilitated/built	Total number of kilometers of drainage primary and secondary network rehabilitated or rebuilt including adjacent roadworks.	Semi annual	Project implementation report based on reports from the	Declared length of networks constructed or rehabilitated in the reports from the construction supervision firms	PCU/ONAD



			construction supervision firms		
Hectares of Green spaces and leisure areas created including NBS for erosion control	Cumulated surface of planted areas on roadsides alley works and slopes along the drainage network rehabilitated, and on erosion control areas	Semi annual	Project implementation report based on reports from the construction supervision firms	Project implementation report based on reports from the construction supervision firms	PCU/ DAUD
Number of additional secondary cities provided with Sanitation and Storm Water Master Plans through the project	Number of secondary cities that have approved a Sanitation and Storm Water Master Plan.	Semi annual	Project implementation report by PCU and surveys.	Municipal reports	PCU
Operational Drainage Operation and Maintenance strategy	Strategy describing the methodology and organization of the drainage network operation and maintenance including the annual allocated budget	Annual	Project implementation report from PCU	Municipal reports mentioning the adopted O&M plan	PCU
Number of studies supporting urban planning for municipalities	Studies supporting Urban planning (including a study on urban informal settlement) in Abidjan and secondary cities have been conducted and results are	Semi annual	Project implementation reports	Municipal reports and final reports for the studies	



	made available				
Number of people covered by an early warning system (number)	Number of people living in areas covered by a Flood Early warning system, including those who benefited from a training in disaster risk and participated into focus groups to create contingency and emergency plans in flood prone areas. The final target for this indicator will be determined within the first year after project effectiveness.	Annual	Project implementation reports	GIS and statistical analysis of the population in areas where Flood early warning information is disseminated, including population trained in disaster risk reduction.	PCU
Of which women (percentage)	Percentage of women living in areas covered by a Flood Early warning system, including those who benefited from a training in disaster risk and participated into focus groups to create contingency and emergency plans in flood prone areas	Annual	Project implementation reports	GIS and statistical analysis of the population in areas where Flood early warning information is disseminated, including population trained in disaster risk reduction.	PCU
Percentage of designated Disaster Risk Reduction committees' focal points who are women	Percentage of women designated as the focal point in the Disaster Risk Reduction and solid waste committees created in each commune to improve solid	Annual	Project implementation reports	Disaster risk reduction and solid waste committees surveys or reports	PCU



	waste good practices, risk management and early warning systems information in flood risk vulnerable neighborhoods				
Number of cities covered by a digital information system for urban planning created by the project	Number of cities covered by digital tools created to help managing and facilitate urban planning	Semi annual	Implementati on reports	Project implementation reports	PCU
Number of Solid waste management infrastructure built and functional	Number of solid waste management facilities constructed under the project and operational	Twice - at mid-term and completion	Progress reports from PCU	Reports from work supervision firms	PCU
Number of signed delegation contract to the private sector in the waste management sector for the District of Abidjan	Number of contracts concluded by engaging the private sector in construction or operation & maintenance of solid waste services including collection, transfer, recycling or disposal system in the district of Abidjan, under the project.	Annual	Progress reports from PCU and contract	Monitoring of project activities	PCU
Number of people trained on solid waste management (number)	Cumulative number of people who benefitted from professional trainings on solid waste management under the Project. The final target for this indicator will be determined within the first year after project	Semi annual	Progress reports from PCU and surveys	Monitoring of institutional capacity building activities and surveys	PCU



	effectiveness.				
Of which women (percentage)	Percentage of women who benefitted from professional trainings on solid waste management under the Project.	Semi annual	Project implementation report	Monitoring of institutional capacity building activities and surveys	PCU
Number of women in small and medium enterprises completing the support program to enhance their chances to enter the SWM market	Number of women completing the non-financial support program including technical content on Solid waste management and trainings to improve their entrepreneurship skills such as the development of business plans and market assessments. The final target for this indicator will be determined within the first year after project effectiveness.	Semi annual	Progress reports from PCU and surveys	Monitoring of institutional capacity building activities and surveys	PCU
A system monitoring the number of women economically active in the SWM sector is in place	A system monitoring the number of women economically active in the solid waste sector in the Abidjan region covered by the project, including accessible data from the public, private, small and medium-sized enterprises and self-entrepreneurship	Annual	Project implementation reports	Desk reviews of available information on the SWM market, public statistics, survey of private operators	PCU



Number of digital information systems for solid waste management created by the project	Number of digital tools created to help managing and monitoring Solid waste	Semi annual	Implementati on reports	Project implementation reports	PCU
Number of beneficiaries consulted during project implementation	Number of beneficiaries consulted at each steps of the project implementation, including citizen consultation before construction works, focus groups for disaster risk reduction and population covered by a feedback mechanism for suggestions or complaints related to public services	Semi annual	Project implementati on reports	Focus groups reports, municipal reports on public consultations	PCU
Of which women (percentage)	Percentage of women consulted at each steps of the project implementation, including citizen consultation before construction works, participation to focus groups for disaster risk reduction and population covered by a feedback mechanism for suggestions or complaints related to public services	Semi annual	Project imple mentation reports	Focus groups reports, Municipal reports on public consultations	PCU
Grievances registered related to project that are actually addressed	Percentage of grievances related to the project sufficiently addressed out of all registered grievances in	Semi annual	Grievance Redress Mechanism, Implementati	Analysis of Grievance Redress Mechanism data and any other potential sources	PCU



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	the GRM		on report		
Percentage of workers recruited under the project who signed a Code of Conduct	Number of workers hired by the construction firms/ work supervision firms that have been explained and have signed the code of conduct which addresses GBV/SEAH and regular worker training	Semi annual	Reports from construction firms, contracts mentioning the clause.	The clause should be included in all contracts with firms. Municipalities will be responsible for enforcing this rule.	Municipalities / PCU

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## ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Côte d'Ivoire

Urban Resilience and Solid Waste Management Project

### A. Project Institutional and Implementation Arrangements

1. The implementation of IDA-funded projects involves the daily monitoring of project activities, the validation of AWPBs, the review and validation of annual reports, the resolution at the highest level of issues, and the involvement and coordination of several agencies. To ensure effective implementation, the project adopts an institutional arrangement combining central and local levels and composed of (a) a Steering Committee, (b) a PCU, and (c) different SIAs. At the central level, MINASS, Chair of the Steering Committee, will be the main interlocutor of the World Bank to discuss strategic issues for the achievement of development objectives. The coordination unit will be created within the DGAS of MINASS for the day-to-day monitoring of the project.

2. **The Steering Committee** was established to ensure high-level coordination of the project. Given the predominant aspect of sanitation and hygiene in the project, the Steering Committee will be chaired by the Minister of Sanitation or his representative and will include the following ministers or their representatives: the Minister of Economy and Finance; the Secretary of State to the Prime Minister in charge of the budget and the state portfolio; the Minister of Construction, Housing, and Urban Development; the Minister of Digital Economy; the Minister of the City; the Minister of Territorial Administration and Decentralization; the Governor of the Abidjan Autonomous District; the President of the UVICOCI; and the mayors or representatives of involving municipalities. The Steering Committee ensures consistency of activities with the sectoral strategy and intersectoral coordination for subcomponents of other ministerial departments and local authorities. It will also validate the AWPBs. Its modalities of operation will be defined through a decree.

3. **PCU.** An implementation unit hosted in the DGAS will be created within MINASS. It will be made up of competitively recruited staff and will coordinate project implementation and management activities. The MINASS institutional chain involved in the implementation of the project will receive capacity building through training and support of consultants that it will receive from the preparation and throughout the implementation of the project. The PCU will be composed of a project coordinator; an environmental safeguard specialist; a social safeguard and gender specialist; a digital and geospatial technology specialist; an FM specialist; an M&E specialist; an accountant; a procurement specialist; an urban drainage engineer; a waste specialist; and a communications, social marketing, and community development specialist. To ensure better ownership of the project by the unit, the following minimum staff will be recruited during the preparation phase: a project coordinator, an environmental safeguard specialist, a social safeguard and gender specialist, an FM specialist, an accountant, and a procurement specialist. For the technical aspects, the PCU will be supported in its task by various SIAs.

4. **SIAs.** The technical responsibility for each component will be entrusted to one or more government agencies whose institutional mandate falls to the component's sector of intervention. The implementing agencies will be responsible, among other things, for establishing the TOR of the project



activities and reviewing feasibility, viability, and technical studies. The PCU will sign delegated management contracts with selected agencies identified by the project, which will define the scope of each agency's role and responsibilities. Table 1.1 summarizes the SIAs by component.

Table 1.1. Distribution of SIAs per Project Components

Project Components/Activities	SIAs
<b>Component 1: Flood risk mitigation infrastructure and services</b>	
Subcomponent 1.1: Urban drainage and associated roadworks	ONAD
Subcomponent 1.2: Nature-based solutions for erosion and landslide control	ONAD
Subcomponent 1.3: Emergency preparedness and early warning system	SODEXAM, ONPC, DAA
Subcomponent 1.4: Resilient urban planning	MCLU
<b>Component 2: Improvement of solid waste management infrastructure and services</b>	
Subcomponent 2.1: Strengthening solid waste management capacities in the Abidjan Autonomous District and two selected intercommunal groups of secondary cities	DGAS
Subcomponent 2.2: Strengthening sector governance and institutional capacity	DGAS, ANAGED
Subcomponent 2.3: Improving solid waste management through citizen engagement, recycling, reuse, composting, and digital technology	DGAS, ANAGED, DAA
<b>Component 3: Project management</b>	PCU
<b>Component 4: Contingent Emergency Response Component (CERC)</b>	PCU

## B. Financial Management

5. The FM arrangements for the project have been designed considering the country's governance situation while also taking into account the World Bank's minimum requirements under World Bank Policy and Directive for IPF, which describes the overall FM World Bank policies and procedures. The FM system of the project must be capable of (a) correctly and completely recording all transactions related to the project; (b) facilitating the preparation of regular, timely, and reliable financial statements; and (c) safeguarding the project's assets. The FM system can be subject to auditing diligences as required by the World Bank. The arrangements also aim to facilitate disbursements and ensure effective use of project resources while using the country's own systems to the extent possible.

6. In 2018, the Government adopted a new strategic framework for reforming PFM based on the progress made during the implementation of the 2014–2017 PFM reform actions plan and the findings of the 2017 PEFA: Côte d'Ivoire PFM counts in particular with strong legal and institutional framework, effective PFM planning and budget system, and strong internal control system with clear and relevant segregations of duties at each step of the budget execution. Budget execution and internal control systems are computerized and interlinked with procurement and treasury systems. There is an adequate legal and institutional framework for fraud and anti-corruption in line with international standards. Côte d'Ivoire also adopted WAEMU PFM and procurement directives, whose implementation is ongoing.<sup>18</sup>

7. However, there are opportunities to strengthen internal and external audit, procurement, and anti-corruption mechanisms. The internal audit functions need to adopt international standard and increase the number of staff and capacity, and a reform is ongoing for this purpose. While the Court of Accounts (Social Accountability International [SAI]) created in 2014 is operational, it is affected by human

<sup>18</sup> 2017 PEFA Assessment for Cote d'Ivoire.



and financial resources challenges to comply with SAI international standards and the ability to conduct performance audit. Procurement timeliness could be improved by streamlining processes, and enforcement of sanctions could be enhanced, particularly in the infrastructures sector where it remains challenging. Finally, the level of enforcement of anticorruption mechanisms could be enhanced.

8. **Thus, at this point the World Bank cannot fully rely on the public expenditure framework for this project.** The Government requested using a ring-fenced financing mechanism for the fiduciary aspects of the project. A new PCU including an FM Unit anchored within the DGAS at MINASS has been proposed by the Government to manage the project. The FM team of the PCU to be established under the responsibility of the project coordinator will manage the overall FM aspects of the project.

9. **An assessment of the DAF of MINASS including the FM Unit of the PCU was conducted during the project preparation to check whether this directorate and the FM team of the PCU could manage the proposed project.** The main finding arising from this assessment conducted in January 2020 was that the DAF of the DGAS at MINASS is not familiar with World Bank-financed projects including FM procedures. Furthermore, the PCU including the FM Unit was not created yet. However, the assessment revealed that the DAF follows the country public expenditure chain for budget execution and financial reporting through the SIGFIP and ASTER software, the government budget, and accounting software. None of the staff of the DAF including the financial controller (*Contrôleur financier*) and the public accountant (*Agent comptable*) assigned to the DGAS within MINASS are familiar with World Bank-financed project procedures and requirements. It is worth pointing out that the assessment revealed that part of the PPA has been allocated to support the creation of the PCU including the staffing and the development of FM tools (for example, accounting software and manual of financial procedures). The selection of the PCU key FM staff has already been launched and is well advanced.

### ***Risk Assessment and Mitigation***

10. The World Bank's principal concern is to ensure that project funds are used economically and efficiently for the intended purpose. Assessment of the risks that the project funds will not be so used is an important part of the FM assessment work. The risk features are determined over two elements: (a) the risk associated with the project as a whole (inherent risk) and (b) the risk linked to a weak control environment of the project implementation (control risk). The content of these risks is described in table 1.2.

11. The overall residual FM risk for the project is rated Substantial (a) due to the lack of experience and familiarity of the DAF with World Bank-FM procedures; (b) because the PCU with a dedicated FM staff and FM tools (manual of procedures, accounting software, and so on) is not established yet; and (c) due to the design of the project which involves several subcomponents and activities combined with the multiplicity of actors lacking familiarity with World Bank-financed project procedures. Consequently, additional mitigation measures will be incorporated into the design of the project FM arrangements as described in table 1.2.



**Table 1.2. Risk Assessment and Mitigation Measures**

<b>Risk</b>	<b>Risk Rating</b>	<b>Risk Mitigating Measures Incorporated into Project Design</b>	<b>Conditions for Effectiveness (Yes/No)</b>	<b>Residual Risk</b>
<b>Inherent risk</b>	S			<b>S</b>
<b>Country level</b> The PEFA and Public Investment Management Assessment undertaken, respectively, in 2018 and 2016 have highlighted some strengths as well as some areas of weaknesses in PFM that the Government needs to address (see above)	H	Beyond the control of the project. The Government is committed to a reform program that includes the preparation of a strategic framework for PFM reforms in Côte d'Ivoire. However, there are still weaknesses. Use of IDA FM procedures supported by the Decree 475 is required for this project.	No	H
<b>Entity level</b> MINASS and the DAF are not familiar with World Bank-financed FM procedures. A new PCU will be created; hence, the FM team is not established and operationalized yet.	S	The recruitment of a RAF by effectiveness and an accountant two months after effectiveness and the adoption of an FM procedures manual one month after effectiveness will mitigate internal control and financial reporting weaknesses.	No	S
<b>Project level</b> The resources of the project may not be used for the intended purposes. Complex design; delays in the reporting system and auditing due to the lack of familiarity of the DAF and the new PCU with the World Bank FM procedures. The numerous stakeholders would possibly negatively affect the implementation of the project.	S	For efficiency purposes, the DAF (FM team of the PCU) will strengthen ex ante and ex post control of activities implemented by SIAs. The scope of audit will include review of expenditures incurred by implementing entities as well as physical inspections of works completed.	No	<b>S</b>
<b>Control risk</b>	<b>S</b>			<b>S</b>
<b>Budgeting</b> (a) Weak capacity at the PCU and implementing entities to prepare and submit accurate work program and budget; (b) weak consolidation of budgets; (c) weak budgetary execution and control; and (d) cost overrun or underrun and reasons not detected/justifications not provided on time	S	AWPB required each year and proclaimed. AWP reviewed and approved by the Steering Committee. The project FM procedures manual will define the arrangements for budgeting, budgetary control, and the requirements for budgeting revisions. IFRs will provide information on budgetary execution and analysis of variances between	No	S



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Yes/No)	Residual Risk
<p><b>Accounting</b>            Poor policies and procedures, lack of qualified accountant staff (capacity staff), and no familiarity with SYSCOHADA<sup>a</sup> system and World Bank requirements; delays in recruitment of the FM team</p>	H	<p>actual and budget.            FM aspects handled by the FM team of the PCU to be set up within the DAF: (a) the project will adopt the SYSCOHADA accounting system; accounting procedures will be documented in the procedure's manual, (b) the FM team will be headed by an RAF recruited on a competitive basis, and (c) training on IDA FM procedures will be provided to the staff.</p>	Yes	S
<p><b>Internal control</b>            Internal control system may be weak due to weak FM capacity of the team. The lack of procedures manual may lead to inappropriate use of the funds and delays in financial report. The Steering Committee may not be effective; the manual may not be available at project effectiveness.</p>	H	<p>(a) Preparation of the FM procedures manual and training on the use of the manual will be a dated covenant.            (b) The IGF will play the internal audit function and report to the coordinator of the PCU, who will in turn share the report with the Steering Committee and IDA.</p>	No	H
<p><b>Funds flow</b>            (a) Risk of misused of funds and delays in payment of invoices/expenditures of activities implemented by various actors; (b) delays in transfers of funds from the DA to the PA by the SIA; and (c) ineffectiveness of public accountant and financial controller functions leading to payment of ineligible expenditures or works not completed</p>	S	<p>(a) Payment requests, per the PCU manual, will be approved by the coordinator before payment of funds to contractors or consultants and implementing entities.            (b) Compliance with Decree 475 by all actors (financial controller and project public accountant).            (c) Scope of work of the IGF as well as the external auditors includes regular field visits (physical controls of works, goods, and services acquired).            (d) Adequate budget allocated to the IGF to conduct periodic controls and training of financial controller and public accountant on</p>	No	S



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Yes/No)	Residual Risk
<p><b>Financial reporting</b> Inaccurate and delay in submission of IFR due to delays from SIAs and weak capacity of actors; lack of familiarity of PIU team leading to some delays in recording of expenditures as well as preparation of periodic financial reports</p>	S	<p>World Bank FM procedures</p> <p>(a) A computerized accounting system will be used. (b) IFR and financial statements formats have been agreed on at project negotiations. (c) FM team of the PCU recruited on competitive basis and capacity building planed before project effectiveness (hands on support and training of the preparation team of the DGAS).</p>	No	S
<p><b>Auditing</b> Delays in submission of audit report. The scope of the mission may not cover expenditures incurred by implementing entities.</p>	S	<p>The project’s institutional arrangements allow for the appointment of adequate external auditors and the TORs (to be reviewed by IDA) will include field visits and specific report on findings of physical controls of goods, services, and works acquired by implementing entities.</p>	No	S
<p><b>Fraud and corruption</b> Possibility of circumventing the internal control system with colluding practices such as bribes, abuse of administrative positions, misprocurement is a critical issue; lack of demand-side for accountability</p>	S	<p>(a) The TOR of the external auditor will comprise a specific chapter on corruption auditing. (b) The IGF will report to the coordinator of the PCU and the Head of the IGF, who in turn will report directly to the Steering Committee. (c) Copy of IGF reports will be submitted to the World Bank. (d) FM procedures manual is approved before project effectiveness and there will be quarterly IFRs including budget execution and monitoring and physical progress. (e) Technical auditing if required. (f) Measures to improve transparency such as</p>	No	S



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Yes/No)	Residual Risk
		providing information on the project status to the public and to encourage participation of civil society and other stakeholders are built into the project design.		
<b>OVERALL RESIDUAL FM RISK</b>				<b>Substantial</b>

Note: SYSCOHADA = West African Francophone countries accounting standards.

**Strengths and Weaknesses**

12. The design of the project follows existing FM arrangements to implement World Bank-financed projects in Côte d’Ivoire which include partial use of country systems (Decree 475) for the following FM components (for example, planning, budgeting, accounting, disbursement, procurement, financing reporting, and internal control).

13. The country political situation has had an impact on governance and affected the corruption environment. However, significant improvements have been noted in the recent years, in the context of the project, the main weaknesses include the lack of familiarity and lack of experience of MINASS and the DGAS in World Bank FM procedures. Furthermore, the PCU, including the FM Unit, is not created yet. However, effective implementation of FM mitigation measures as well as strengthened and effective oversight of the Steering Committee and the involvement of the country institutions of control (for example, IGF) would contribute to mitigate the weaknesses identified at country, entity, project, and control levels.

**FM Action Plan**

14. The FM action plan described in table 1.3 has been developed to mitigate the overall FM risks.

**Table 1.3. Action Plan**

Issue/Topic	Remedial Action Recommended	Responsible Body/Person	Completion Date	FM Effectiveness Conditions
Staffing	Finalize the selection and appointment of the Financial management specialist (RAF)	PCU within DGAS	<b>By effectiveness</b>	<b>Yes</b>
	Finalize the selection and appointment of the accountant	PIU within DGAS	Two months after effectiveness	No
	Appoint the financial controller and public accountant ( <i>Agent comptable du Projet</i> ) in accordance with Decree 475	PCU within DGAS	One month after effectiveness	No
Information system accounting	Acquisition and installation of an accounting software for the project and training of the users	PCU within DGAS	Two months after effectiveness	No



Issue/Topic	Remedial Action Recommended	Responsible Body/Person	Completion Date	FM Effectiveness Conditions
software				
Administrative accounting and financial manual	Finalize and disseminate the FM and procurement procedures manual	PCU within DGAS	One month after effectiveness	No
Internal auditing	Discuss with the IGF, the government institution of control in charge of the internal audit function in World Bank-financed operations, to agree on the modalities of its interventions including allocation of adequate resources (HR and financial) to fulfill its mandate	PCU within DGAS	Three months after effectiveness	No
External auditing	Appointment of the external auditor completed and contract signed	PCU within DGAS	Five months after effectiveness	No

15. **Internal control system and internal audit.** An internal control system is aimed to ensure (a) the effectiveness and efficiency of operations, (b) the reliability of financial reporting, and (c) the compliance with applicable laws and regulations. An FM procedures manual should be developed and adopted one month after project effectiveness. The accounting, financial, and administrative procedures manual including procurement document explains and describes work processes, information flow, authorization and delegation of authority, timing, job segregations, auto and sequential controls, compliance with project objectives, and micro and macro rules and regulations. In line with the new Decree No. 475 governing the modalities of donors-financed project implementation in Côte d’Ivoire and the Decree No. 106, the IGF will oversee the internal audit function of the project managed by the PCU. Once the IGF is appointed, the PCU within the DGAS and IGF will discuss to agree on the modalities of IGF interventions including the necessary human and financial resources to fulfil its mandate.

16. **Planning and budgeting.** The PCU within the DGAS will prepare a detailed consolidated AWPB for implementing the activities of the project. The AWPB will be submitted to the project Steering Committee for approval and thereafter to IDA for ‘no objection’, not later than November 30 of the year preceding the year the work plan should be implemented.

17. **Accounting policies.** The prevailing accounting policies and procedures in line with the West African Francophone countries accounting standards—SYSCOHADA—in use in Côte d’Ivoire for ongoing World Bank-financed operations will apply. The accounting systems and policies and financial procedures used by the new project will be documented in the project’s administrative, accounting, and financial manual. The PCU within the DGAS will acquire and install a project accounting software to meet the project requirements.

18. **Interim financial reporting.** The unaudited IFRs will be prepared every quarter and submitted to the World Bank regularly (for example, 45 days after the end of each quarter) and on time. The consolidated quarterly IFR for the project includes the following financial statements: (a) Statement of Sources of Funds and Project Revenues and Uses of funds; (b) Statement of Expenditures (SoE) classified



by project components and/or disbursement category (with additional information on expenditure types and implementing agencies as appropriate), showing comparisons with budgets for the reporting quarter, the year, and cumulatively for the project life; (c) cash forecast; (d) explanatory notes; and (e) DA activity statements.

19. **Annual financial reporting.** In compliance with International Accounting Standards and IDA requirements, the PCU within the DGAS will produce annual financial statements. These include (a) a balance sheet that shows assets and liabilities; (b) a statement of sources and uses of funds showing all the sources of project funds and expenditures analyzed by project component and/or category; (c) a DA activity statement; (d) a summary of withdrawals using SoEs, listing individual withdrawal applications by reference number, date, and amount; and (e) notes related to significant accounting policies and accounting standards adopted by management and underlying the preparation of financial statements.

20. **External auditing.** The PCU within the DGAS will submit audited project financial statements satisfactory to the World Bank every year within six months after closure of the fiscal year (see table 1.4). The audit will be conducted by an independent auditor with qualifications and experience acceptable to the World Bank. A single opinion on the audited project financial statements in compliance with the International Federation of Accountants will be required. In addition, a Management Letter will be required. The Management Letter will contain auditor observations and comments and recommendations for improvements in accounting records, systems, controls, and compliance with financial covenants in the Financial Agreement. The report will also include specific controls such as compliance with procurement procedures and financial reporting requirements and consistency between financial statements and management reports as well as findings of field visits (for example, physical controls and works completed). The audit report will thus refer to any incidence of noncompliance and ineligible expenditures and misprocurement identified during the audit mission. The project will comply with the World Bank disclosure policy of audit reports and place the information provided on the official website within two months of the report being accepted as final by the team and the World Bank.

**Table 1.4. Due Dates of the Audit Report**

Audit Report	Due Date	Responsible Party
Audited financial statements including audit report and Management Letter	(a) Not later than June 30 (2,000 + N) if effectiveness has occurred before June 30 (2,000 + N-1). (b) Not later than June 30 (2,000 + N+1) if effectiveness has occurred after June 30, (2,000 + N-1)	PCU/DGAS

**C. Disbursement**

21. Upon credit effectiveness, transaction-based disbursements will be used. The project will finance 100 percent of eligible expenditures inclusive of taxes. A DA will be opened at the BCEAO and a PA in a commercial bank under terms and conditions acceptable to IDA. The PA will be managed by the public accountant (*Agent Comptable du Projet*) assigned to the PCU by the Minister of Finance. The ceiling of the DA will be stated in the Disbursement and Financial Information Letter. An initial advance up to the ceiling of the DA will be made and subsequent disbursements will be made against submission of SoE reporting on the use of the initial/previous advance. The option to disburse against submission of quarterly unaudited IFRs (also known as report-based disbursements) could be considered, as soon as the project



meets the criteria. Other methods of disbursing the funds (reimbursement, direct payment, and special commitment) will also be available to the project. The minimum value of applications for these methods is 20 percent of the DA ceiling. The project will sign and submit withdrawal applications electronically using the e-Signatures module accessible from the World Bank’s Client Connection website.

**Table 1.5.**

<b>Category</b>	<b>Amount of the Credit Allocated (expressed in EUR)</b>	<b>Percentage of Expenditures to be Financed (inclusive of Taxes)</b>
(1) Goods, works, non-consulting services, consulting services, Training and Operating Costs for Parts 1, 2 and 3 of the Project	281,180,750	100%
(2) Emergency Expenditures under Part 4 of the Project	0	100%
(3) Refund of Preparation Advance	5,800,000	Amount payable pursuant to Section 2.07 (a) of the General Conditions
(4) Front-end Fee	719,250	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 3.08 (b) of the General Conditions
(5) Interest Rate Cap or Interest Rate Collar premium	0	Amount due pursuant to Section 4.06 (c) of the General Conditions
<b>TOTAL AMOUNT</b>	<b>287,700,000</b>	

22. **Payments to implementation agencies and services providers:** The PCU within the DGAS under the responsibility of the public accountant will make payments to contractors, services providers, and implementing agencies with regard to the specified activities in the components of the project. Payments will be made in accordance with the payment modalities, as specified in the respective contracts/conventions. In addition to these supporting documents, the PCU within the DGAS will consider the findings of the IGF while approving the payments. The PCU within the DGAS will reserve the right to verify the expenditures ex post, and refunds might be requested for noncompliance of contractual/convention (for example, MOD) clauses. Misappropriated activities could result in the suspension of financing for a given entity. All payments will be made by the PCU within the DGAS for the activities directly related to specific components. Therefore, in line with the country PFM system, a finance controller and a public accountant will be appointed before disbursement of the initial advance to the DA. In line with the use of country systems as stipulated in the new Decree No. 475 governing the modalities



of donors-financed project implementation in Côte d’Ivoire, the two (civil servants should be involved in the management of the project funds mainly undertaking prior review and check of effectiveness of physical delivery of goods, work, and services and making all payments based on supporting documents (contracts, invoices, and so on) validated by the financial controller ‘*visa services faits*’ (service provided).

23. **Local taxes.** Funds will be disbursed in accordance with project categories of expenditures and components, as shown in the Financing Agreement. Financing of each category of expenditure/component will be authorized as indicated in the Financing Agreement and will be inclusive of taxes according to the current country financing parameters approved for Côte d’Ivoire. However, the Government will allocate some budgets to support the operating costs of civil servants involved in the implementation of the project. The use of such budget should comply with the FM procedures approved by the World Bank and applicable to the project.

24. **Support to the implementation plan.** FM supervisions will be conducted over the project’s lifetime. The project will be supervised on a risk-based approach taking into account the alternative options developed in OPCS Guidance issued on March 24, 2020 (Streamlined Fiduciary Implementation Support Measures for Active Bank-financed Operations given Travel Limitations due to COVID-19 Pandemic) and the Guidelines IPF Projects under the Global MAP. Based on the outcome of the FM risk assessment, the following implementation support plan is proposed. The objective of the implementation support plan is to ensure the project maintains a satisfactory FM system throughout its life.

**Table 1.6. FM Implementation Support Plan**

<b>FM Activity</b>	<b>Frequency</b>
<b>Desk reviews</b> IFRs’ review Audit report review of the program Review of other relevant information such as interim internal control systems reports and IGF reports	Quarterly Annual Continuous, as they become available
<b>On-site visits</b> Review of overall operation of the FM system (Implementation Support Mission on a risk-based approach and OPCS new flexibility due to COVID-19) Monitoring of actions taken on issues highlighted in audit reports, auditors’ Management Letters, internal audits, and other reports Transaction reviews	Every six months for Substantial risk  As needed  As needed
<b>Capacity-building support</b> FM training sessions	Before project effectiveness and during implementation as needed

**D. Procurement**

25. **A new Procurement Code (Order No. 2019-679 dated July 24, 2019) has been adopted in Côte d’Ivoire**, in line with the WAEMU procurement directives and international good practices, along with key implementing regulations and documentation. A national procurement capacity building program exists and is being implemented at the central level and among relevant decentralized entities. An electronic system for collecting and disseminating procurement information and for monitoring procurement statistics has been set up and needs to be mainstreamed in the work of all contracting authorities.



26. **The Procurement Plan and PPSD.** A PPSD has been developed to analyze the key features of the project and related procurement risks and opportunities, building on the lessons learned from similar projects. The largest part (around 80 percent) of the project's investment will be used for the construction of drainage, SWM, and recycling facilities. Also, in a vision of more integrated and managed urban planning, the project dedicates a portfolio for the implementation of digital tools to boost resilience and urban management. While there is a market with qualified national and international contractors, potential risks include the unavailability of specific expertise required for the establishment of the digital geoportal, the designing of innovative and adapted NBSs, delays in receiving imported goods, and delays in national procurement approval channels. For the PPP component, the project will finance a consultancy service to identify appropriate contractual arrangements for the PPP. Several other specialized consultant services requiring highly qualified urban management or sector reform experience will be performed in support of the project activities. A Procurement Plan detailing the first 18 months' activities was agreed upon during the credit negotiations. The Procurement Plan will be updated annually in agreement with the World Bank or as required to reflect the actual project implementation needs and improvements in institutional capacity.

### ***Market Approach Options***

#### *Goods, Works, and Non-consulting Services*

27. **Open competition - International Competitive Bidding (ICB).** Approaching the international market will be appropriate when the participation of foreign firms will increase competition and may ensure the achievement of best value-for-money and fit-for-purpose results. The time allowed for the preparation and submission of bids/proposals shall be determined with due consideration of the particular circumstances of the project and the magnitude, risk, and complexity of the procurement. The minimum period allowed for preparation of bids/proposals shall be 30 business days for open ICB, unless otherwise agreed with the World Bank. For complex procurement, the borrower may arrange a pre-bid/pre-proposal conference in which potential bidders/proposers/consultants may meet with borrower representatives to seek clarifications. The borrower should also provide reasonable access to project sites for prospective bidders/proposers/consultants.

28. Open ICB for which international advertisement is required (in accordance with Procurement Regulations) is the preferred approach for complex, high-risk, and/or high-value contracts. The World Bank has set specific thresholds for this purpose (see table 1.7).

29. The deadline and place for the receipt of bids/proposals shall be specified in the Specific Procurement Notice and the request for bids/request for proposal document.

30. **Open competition - National Competitive Bidding (NCB).** Approaching the national market may be appropriate when the procurement is unlikely to attract foreign competition because of

- (a) The size and conditions of the market;
- (b) The value of the contract;
- (c) Activities that are scattered geographically, spread over time, or are labor-intensive; or



- (d) The fact that goods, works, or non-consulting services are available locally at prices below the international market.

31. If foreign firms wish to participate in open national competitive procurement, they can do so on the terms and conditions that apply to national firms.

32. **Limited competition - Direct Contracting: A limited competitive approach to market is by invitation only, without advertisement.** It may be an appropriate method of selection where there are only a limited number of firms or there are other exceptional reasons that justify departure from open competitive procurement approaches.

33. These procurement features, procedures, and approaches are applicable to the following: (a) competitive dialogue, (b) PPPs, (c) commercial practices, (d) UN agencies, (e) e-reverse auctions, (f) imports, (g) commodities, (h) community-driven development, and (i) force accounts.

34. **Particular type of contractual arrangements.** During project implementation, particular types of contractual arrangements may be used: (a) Framework Agreements (FAs) and (b) performance-based contracts.

#### *Consulting Services*

35. **During project implementation, firms and individual consultants (ICs) can be selected.** The following are approved selection methods for consulting firms: (a) Quality and Cost-Based Selection (QCBS), (b) Fixed Budget Selection (FBS), (c) Least-Cost Selection (LCS), (d) Quality-Based Selection (QBS), (e) Selection Based on the Consultants' Qualifications (CQS), (f) Direct Selection, and (g) Commercial Practices.

36. ICs are selected for an assignment, for which (a) a team of experts is not required, (b) no additional home office professional support is required, and (c) the experience and qualifications of the individual are of paramount importance.

37. **Open competition - consulting firms.** An open competitive approach to market provides all eligible prospective firms or ICs with timely and adequate advertisement of the borrower's requirements and an equal opportunity to provide the required consulting services. Open and competitive procurement approaches, including the advertisement for expression of interest, are preferred for World Bank-financed selection of consultants.

38. An open international competitive bidding/selection market approach, with mandatory international advertisement in accordance with Procurement Regulations, is used when the participation of foreign firms is most likely to achieve the best fit for purpose and value for money.

39. As agreed in the Procurement Plan, national selection through advertisement in the national media/press may be used when the nature, scope, and value of the consulting services are unlikely to attract foreign competition and there are adequate qualified national consultants to carry out the assignments. If foreign consultants wish to participate in national selection, they may do so. When



approaching the national market, the country's own procurement procedures may be used, as specified in paragraphs 5.3 to 5.6 of the Procurement Regulations.

40. **Limited competition - consulting firms.** The limited competition approach exists when the borrower prepares a short list without advertising. It may be appropriate when there are only a limited number of qualified consultants that can carry out the subject assignment or other justifiable exceptional reasons. Borrowers shall seek expressions of interest from a list of potential consultants that is broad enough to ensure adequate competition.

41. **Project implementation support personnel.** Project implementation staff and individuals contracted by the borrower to support project implementation, other than individual consulting positions identified in the Legal Agreement, may be selected by the borrower according to its personnel hiring procedures for such activities, as reviewed and found acceptable by the World Bank.

42. **Particular type of contractual arrangements - FAs.** During the project, implementation FAs may be used. An FA is an agreement established with firms or ICs (panel of consultants), as required, over a specified period. The FA sets out terms and conditions under which specific consulting services (call-off contracts) can be provided directly or competitively throughout the term of the agreement. FAs may be appropriate for the recurring selection of consulting services or to consolidate requirements when different entities of the Borrower procure the same types of consulting services.

#### *Consulting Individuals*

43. **Open competitive.** Advertisement through REoIs is encouraged, particularly when the borrower does not have knowledge of experienced and qualified individuals, or of their availability, the services are complex, there is potential benefit from wider advertising, or advertising is mandatory under national law. REoIs shall include a complete TOR. ICs are selected from those that expressed interest in response to an REoI.

44. **Limited competitive - Direct Selection.** When the borrower has knowledge of experienced and qualified individuals and their availability, instead of issuing an REoI, it may invite those ICs that it deems qualified to provide the required consulting services. The complete TOR shall be sent with the invitation. ICs shall be selected from those that expressed interest in response to the invitation.

45. Direct selection can be mobilized under the following circumstances:

- (a) Tasks that are a continuation of previous work that the IC has carried out after being selected competitively
- (b) Assignments with a total expected duration of less than six months
- (c) Urgent situations
- (d) When an IC has relevant experience and qualifications of exceptional worth to the assignment



Table 1.7. Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold, US\$)	Procurement Method	Contract Subject to Prior Review
Works	≥10,000,000	RFB	US\$15,000,000 and above
	<10,000,000 (*)	NCB	
	<200,000	RFQ	
	No threshold	Direct Selection	
Goods	≥1,000,000	RFB	US\$4,000,000 and above
	<1,000,000 (*)	NCB	
	<200,000	RFQ	
		Direct Selection	
<b>Consultants</b>			
Firms	>300,000	QCBS FBS QBS CQ LCS	All of US\$2,000,000 and above
		Direct Selection	
Individuals	>100,000	IC (RoEI)	All of US\$400,000 and above
	<100,000	IC (At least 3 CV)	
		Direct Selection	
<b>All TORs regardless of the value of the contract are subject to prior review.</b>			

Note: All TORs regardless of the value of the contract are subject to prior review.

a. In specific circumstances, for example, when there is no sufficient number of qualified firms to ensure competition in the local context, ICB will apply even if the estimated amount is below the thresholds.

46. **Procurement of consulting services other than those covered.** Eventually, those might include designing, editing, and printing project promotion supports and providing logistic support such as car rental for field visits, travel services, and logistic support for workshop and the like; LCS or shopping will be used.

47. **Training, workshops, and conferences.** Training (including training material and support), workshops, and conference attendance will be carried out based on an approved annual training and workshop/conference plan. A detailed plan specifying the nature of training/workshop, number of trainees/participants, duration, staff months, timing, and estimated cost will be submitted to IDA for review and approval before initiating the process. The appropriate methods of selection will be derived from the detailed schedule. After the training, the beneficiaries will be requested to submit a brief report indicating which skills have been acquired and how these skills will contribute to enhance their performance and contribute to the attainment of the project objective.

48. **Operating costs.** Operating costs financed by the project are incremental expenses, including office supplies, vehicles O&M, maintenance of equipment, communication costs, supervision costs (that is, transport, accommodation, and per diem), and salaries of locally contracted staff. They will be procured using the procurement procedures specified in the Project Financial and Accounting Manual.

49. **Procurement documents.** For international competitive bidding, the borrower shall use the World Bank’s Standard Procurement Documents, available on its external website.<sup>42</sup> For procurement



involving NCB, the borrower may use its own procurement documents, acceptable to the World Bank. The recipient will develop standard documents based on the World Bank's Standard Bidding Documents for NCB for goods and works and the World Bank's RFP for the selection of consultants through methods other than QCBS, with modifications that will be submitted to the IDA for prior approval.

50. The different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the recipient and the World Bank in the Procurement Plan.

51. Country Overall Procurement Risk Assessment: moderate

### **E. Strategy and Approach for Implementation Support**

52. The implementation support strategy is based on the nature and complexity of the project. It describes how IDA and other development partners will ensure the successful implementation activities and risk mitigation measures and provide the expertise and technical support necessary to achieve the project's development objectives. Supervision and field visits will be carried out semiannually and will focus on the following aspects:

- Close coordination between the World Bank, the implementing agencies, and development partners.
- **Technical.** The World Bank will provide a comprehensive set of instruments and expertise and advice on project activities throughout implementation. It will work closely with the implementing agency to ensure achieving PDOs.
- **Fiduciary.** The FM and procurement specialists will (a) support the PCU in its familiarization to World Bank guidelines and procedures, (b) train the PCU staff to work with any updates to procurement guidelines, and (c) ensure that the PCU has capacity to manage flow of funds and accounting procedures in line with FM guidelines. Supervision of the project's fiduciary arrangements will be conducted semiannually over the project's lifetime and will focus on PCU's performance in managing contracts, procurement, and financial matters, as well as on completing the agreed implementation plans.
- **M&E.** The World Bank will review the updated Results Framework submitted semiannually by the PCU during supervision missions. The leaders will evaluate the progress toward achieving the PDO and will identify any areas where additional help is needed.
- The World Bank will develop a comprehensive communications strategy and implementation of responsive feedback mechanisms for quality assurance.



**F. Implementation Support Plan and Resources Requirements**

**Table 1.8. Implementation Support Plan**

Time	Focus	Skills Needed	Number of Trips	Resource Estimate (Staff Weeks)	
First 12 months	Project management, coordination, and supervision	Team task leader (TTL) and Co-TTL	4	30	
	FM experience, knowledge of World Bank FM norms, and training	FM specialist	0	4	
	Procurement experience, World Bank's procurement norms knowledge, and training	Procurement specialist	0	4	
	Environmental and social safeguards, World Bank norms knowledge	Social/environmental safeguards specialist	0	5	
	Implementation support and monitoring		Solid waste specialist	2	4
			DRM specialist	2	4
			Digital technology specialist	2	2
			Drainage specialist	2	6
12-72 months	Project management, supervision, and coordination	TTL and Co-TTL	15	150	
	FM (FM reviews and supervision, training, and monitoring)	FM specialist	0	20	
	Procurement management (reviews and supervision, training as needed)	Procurement specialist	0	20	
	Environmental safeguards, supervision and monitoring, training as needed	Social/environmental safeguards specialist	0	25	
	Implementation support and monitoring		Solid waste specialist	10	30
			DRM specialist	10	30
			Digital technology specialist	10	10
			Drainage specialist	10	30

**Table 1.9. Skills Required**

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
TTL and co-TTL	180	19	(TTL in Abidjan, Co-TTL in Accra)
FM specialist	24	0	Based in Abidjan
Procurement specialist	24	0	Based in Abidjan
Social safeguards specialist	30	0	Based in Abidjan
Environmental safeguards specialist	30	0	Based in Abidjan
Solid waste specialist	34	12	Based in Washington, DC
Disaster risk specialist	34	12	Based in Washington, DC
Digital technology specialist	12	12	Based in Washington, DC
Drainage specialist	36	12	Based in Washington, DC



## ANNEX 2: GHG Emission Analysis

### COUNTRY: Côte d'Ivoire Urban Resilience and Solid Waste Management Project

1. **Solid waste management is a universal issue affecting every single person.** Individuals and governments make decisions about consumption and waste management that affect the daily health, productivity, and cleanliness of communities. Poorly managed waste contaminates oceans, clogs drains and causes flooding, transmits diseases through breeding of vectors, increases respiratory problems through airborne particles from burning of waste, harms animals that consume waste unknowingly, and affects economic development such as through diminished tourism, as well as increases GHG emissions. In line with the World Bank Group's environmental strategy since FY13 (see box 3.1), an analysis of GHG emissions generated by waste management investments has been conducted.

#### Box 3.1. World Bank Group Environmental Strategy

**The Board endorsed the World Bank Group environment strategy, which includes a proposal for the World Bank to start undertaking GHG analysis of investment projects starting in FY13.** The new environment strategy, released on June 5, 2012, provides an overview of the progress made at IFC and the World Bank in the development and application of methodologies and tools for GHG analysis. While IFC began estimating GHG emissions for all new real sector projects in 2009, the environment strategy proposed that World Bank should start undertaking GHG emissions analysis in mid-FY13 for all energy, transport, and forestry projects that have agreed methodologies and tools while continuing to test and develop approaches for additional sectors. It is envisaged that GHG assessments for investment lending operations will be phased in as a World Bank business requirement over two years starting in mid-FY13. This exercise will help the World Bank understand its portfolio's impact on GHG emissions and learn from such analysis; it is not intended to guide project selection.

2. The analysis relied on the results of the economic and financial analyses of PricewaterhouseCoopers that studied the current waste sector in Abidjan as well as the trends and components of the investments planned by the project. Most of the data and inputs will refer to its report, especially since all the data used have been discussed and validated by the Directorate General of Sanitation.

#### Methodology

3. The analysis was based on two scenarios (the baseline scenario [the non-project situation] and the project scenario) to estimate the net emission that could result from the project activities. It relied on The Climate Action for Urban Sustainability (CURB) Tool used to assess existing and potential emissions of waste treatment in the waste intervention area, following the methodology of the IPCC.

#### Analysis Boundary

4. The project covers the Abidjan Autonomous District and three surrounding localities: Grand-Bassam, Dabou, and Sikensi.



**Time Frame**

5. The analysis was conducted over a 15-year period, starting from 2023.

**Scenarios and Assumptions**

*Baseline Scenario*

6. **Since 2018, solid waste of the 13 communes of the Abidjan Autonomous District is managed by a set of private operators and its destination is a landfill in the locality of Kossihouen.** This landfill does not yet have optimal facilities for the effective treatment of methane emissions from landfill. For the purpose of the analysis, the baseline situation is considered static and therefore assumed to be the same throughout the study. The following inputs and assumptions were used for the modelling of the baseline scenario:

- For waste management purposes, the Abidjan Autonomous District has been divided into three sectors (Sector 1 [Abobo, Anyama, Bingerville, Cocody, the Plateau]; Sector 2 [Koumassi, Marcory, Port-Bouet, Treichville]; Sector 3 [Adjamé, Attécoubé, Yopougon and Songon]). Approximately 1,510,247 tons of waste was sent to the Kossihouen landfill in 2019.
- Waste from the cities of Grand-Bassam, Dabou, and Sikensi is deposited in open dumps.
- The existing landfill (Kossihouen) does not operate as a sanitary landfill (no methane capture/no waste recovery facility) at present. This situation was assumed to be constant throughout the analysis.
- The composition of the waste, described in table 3.1, was used for the different localities.

**Table 3.1. Waste Composition in Côte d’Ivoire**

Components	Abidjan District (%)	Other Municipalities (%)
Organic	61.45	64.45
Vert	5.00	5.00
Plastic	6.99	5.49
Papers	6.66	5.16
Textiles	2.65	2.15
Metals	1.03	0.53
Glass	0.71	0.21
Inert materials	15.51	17.01
Total	100.00	100.00

Source : Directorate General of Sanitation (*Direction générale de la Salubrité*).

*Project Scenario*

7. **The project foresees the implementation of a new sanitary landfill site that complies with standards and good practices for landfill treatment.** The landfill will be composed of a sorting module, a



composting module, waste disposal cells and a methane recovery module, and a composting module. The inputs and assumptions used are as follows:

- Waste from Sector 1 in Abidjan, as well as from Grand-Bassam, Dabou, and Sikensi, will be transported to the new sanitary landfill. Approximately 657,588 tons of waste will be treated and disposed of at the new landfill.
- Calculation assumptions:
  - Through the activities of Component 3 of the project, an IT system will be put in place to optimize the itineraries and hence the fuel consumption of the mobile equipment needed for the collection and transport of waste. To be conservative, it has been assumed that this system will result in a 10 percent optimization in fuel consumption.
  - Due to the sorting that will take place at the entry of the landfill, the portion of plastics will no longer be landfilled but transferred to the recycling module.
  - About 10 percent of the organic material (including green waste) will be transferred to the composting module.
  - Considering the potential leaks and probable imperfections of the equipment, it was assumed that about 90 percent of the methane can be captured and controlled, with a minimum of 20 percent, so that it will not come in contact with the atmosphere.

**Results**

**Table 3.2. GHG Emissions Analysis Results**

Economic lifetime (years)	15
Gross emissions over economic lifetime (tCO <sub>2</sub> e)	42,223,632
Net emissions over economic lifetime (tCO <sub>2</sub> e)	6,993,304
Average annual emissions (tCO <sub>2</sub> e) <sup>a</sup>	2,354,689

*Note:* a. Average annual emissions of the project are reduced by 16 percent compared to the average annual emissions in the ‘business as usual’ scenario (gross emissions over economic lifetime divided by 15 years).