

#### **PRESENTATION**

ECIA is a private Malian consulting firm which was born from the will of a group of Engineers, anxious to put at the service of their country and Africa as a whole an expertise confirmed by several years of experience acquired both in Mali and in countries of the sub-region such as Burkina Faso, Benin, Senegal and Côte d'Ivoire.

ECIA's objective is to contribute actively to the sustainable development of Africa by providing quality services in terms of studies, advice, assistance and project implementation.

E-mail: ecia@ecia-mali.com Website: www.ecia-mali.com

#### **CORPORATE FACT SHEET**

#### Company name :

ECIA Ingénieurs Conseils,

#### Legal Status :

Limited Liability Company with share capital of CFAF 9 000 000,

#### Adress :

B.P. E 174 Bamako- Mali Hamdallaye ACI 2000, Street 394 Door 1079

Tel.: (223) 20 29 39 57 Fax.: (223) 20 29 39 58

E-mail: ecia@ecia-mali.com,

#### Executive :

Modibo SANOGO,

Creation date: 15 Octobrer 2009

#### Registration :

CR number Ma.Bko.2009B4395

■ TIN: 085115920K

■ INPS number: 83239057/1

OCEM business card number OCEM: 208

#### ■ Bank Reference:

o Account Number: 72505050009 BA Mali

 Account Number: 002001201367 BNDA Mali

## Affiliation with professional associations and organizations:

- Member of OCEM (Order of Consulting Engineers of Mali) and OCEM is a member of GAMA and FIDIC,
- Member of FCIC (Federation of Consultants from Islamic Countries)

#### **SECTORS OF ACTIVITY**

- Urban development, civil and industrial buildings,
- Engineering structures,
- Roads and utilities,
- Water supply and sanitation,
- Rural engineering.

#### **SERVICES OFFERED**

- Pre-feasibility and definition studies,
- Preliminary and final design studies,
- Preparation of tender documents,
- Technical assistance,
- Élaboration de projet d'exécution Preparation of final design,
- Control and supervision of works.

#### **COUNTRIES COVERED**

ECIA aims to intervene in all African countries. He is currently working in Burkina Faso, Côte d'Ivoire, Guinea Conakry, Mali, Sierra Leone, Senegal and Togo.

#### **PARTNERS**

ECIA's partner is:

- State services in charge of civil engineering and rural engineering,
- Development partners of African states: AFD, BOAD, IDA, BIDC, UEMOA, etc,
- Delegated project management agencies: AGEROUTE, AGETIER, AGETIPE, etc,
- Consulting engineer's and architecture offices.
- Civil engineering firm,
- Social actors working in the field of development projects (NGOs, village associations, urban associations, etc.) and,
- Financial institutions in the UEMOA zone.

#### **HUMAN RESOURCES**

ECIA's team consists of highly qualified engineers, technicians, draughftsmen and academics.

In addition to its permanent experts and in order to perfectly implement the projects entrusted to it, ECIA has a vast network network of consultants with great competence and experience in various fields.

#### **TECHNICAL RESOURCES**

#### ELECTRONIC RESOURCES

- A network of Eight (8) computers;
- Two (02) HP Laptops;
- one (01) Sony Viao laptop computer;
- two (02) external backup units (hard disks),
- One (01) A4 Laser network printer: HP Laser Jet CP5225N,
- One (01) A4 Laser network printer: HP Laser Jet CP4525DN,
- One (01) A4 Laser network printer: HP Laser Jet 2055dn,
- One (01) A4 Laser printer: HP Laser Jet 1020,
- One (01) A3/A4 HP Officejet K7100 printer,
- two (02) A3/A4 HP Officejet K7103 printers,
- One (01) HP office jet 5500 printer scanner - copier;
- One (01) HP Scan jet G2710 scanner;
- One (01) A3/A4 CANON IR 2318L copier;
- One (01) A3/A4 CANON IR 2018 copier;
- One (01) A3/A4 CANON IR 2525 copier;
- One (01) Panasonic fax.
- One (01) Samsung WB210 digital camera;
- Two (02) EPSON EB S9 multimedia projectors;
- One (01) Canon IXUS 860 IS digital camera;
- Two (02) binding machines;
- One (01) HP DESIGNJET T770 HDD 44-inch plotter;
- One (01) HP DESIGNJET 111 HDD 24-inch plotter.

#### PROFESSIONAL SOFTWARE :

- Robot Structural Analysis Professional,
- Graitec Advance,
- Mensura Genius,
- CYPE 2010,
- AUTOCAD 2010.

#### TOPOGRAPHICAL MATERIALS

- One (01) LEIKA TCR 407 total station with accessories,
- One (01) electronic level with its accessories,
- Two (02) GPS Garning etrex Vista HCx.

#### LOGISTICS

- One (01) TOYOTA PRADO TXL vehicle,
- One (01) MITSUBISHI 4X4 L200 vehicle,
- One (01) TOYOTA Land Cruiser HZJ 105L
- Two (02) Toyota Hilux Pickup,
- A Toyota Corolla car
- Two (02) bikes,
- One (1) generator set.

#### **DOCUMENTATION RESOURCES**

ECIA has a thousand bibliographic references, in digital and paper format, covering its entire field of intervention. This documentary collection will be continually enriched by the acquisition of technical works, specialized publications and by the documentation produced during the course of the various projects carried out by ECIA.

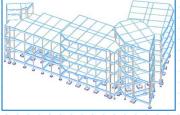
# SOME REFERENCES



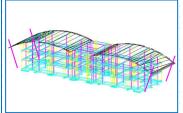


















# **BUILDINGS AND URBAN FACILITIES**

Elaboration of the Detailed Preliminary Project File of the construction project of a commercial building for the account of Mr Mamadou DJIRE at ACI 2000 Bamako including:

- 1,176 m<sup>2</sup> of office space,

 795 m² of accommodation in hotel residence: furnished apartments with 1 or 2 bedrooms,

- 766 m<sup>2</sup> of trade and service,

a courtyard with parking areas and internal service roads,

Client: Mamadou Djiré

Place: Bamako

Date: February 2010

Financing: Own funds

Architect: Audex Agency, Bamako Mali

The services were in the following areas:

Sanitation, drainage,

- Water supply and plumbing,

Earthworks, roads, pedestrian walkways, parking areas,

 Building structure (steel frame and reinforced concrete),

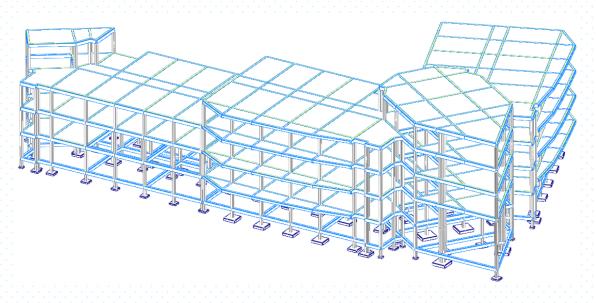
- Fire safety and,

Miscellaneous works.









#### Elaboration of the Detailed Preliminary Project File for the construction of the WAEMU Parliament in Bamako including:

- 10,000 m² hemicycle: distribution hall, session and conference areas, and commercial areas;
- 9 260 m² of office space for committee members, MEPs and other officials, four (04) lifts;
- 11 597 m² of accommodation: one hundred and ten (110) rooms, ten (10) suites, leisure areas around the swimming pool, two (02) lifts extendable to four (04);
- 1,319 m² of restaurants: one (01) self-service restaurant, a room with two hundred and fifty (250) seats and four (04) modular VIP rooms;
- Twenty-five (25) underground parking spaces and external parking areas,
- A network of internal roads and service roads

Client: ARCADE, Bamako Mali

Place: Bamako

Date: March 2010 - December 2011

Financing: WAEMU

Architect: ARCADE, Bamako Mali

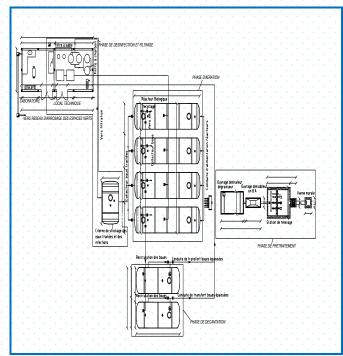
The services are in the following areas:

- Sanitation, drainage,

- Water supply and plumbing,
- Earthworks, roads, pedestrian walkways, parking areas,
- Building structure (steel frame and reinforced concrete structure),
- Fire safety and Miscellaneous works.







Mini Sewage Treatment Plant

Elaboration of the Detailed Preliminary Project File for the construction of the new ENA in Bamako.

**Client:** Timbely Architecture Workshop, Bamako

Place: Bamako

Date: Nov. 2010 – Jan. 2011

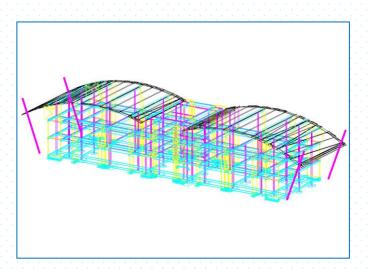
Financing: National Budget

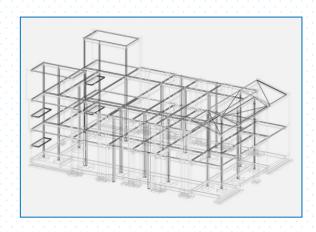
**Architect:** Timbely Architecture Workshop

The services are in the following areas:

- Sanitation, drainage,
- Water supply and plumbing,
- Earthworks, roads, pedestrian walkways, parking areas,
- Building structure (steel frame and reinforced concrete structure),
- Fire safety and,
- Miscellaneous works.













# ROADS AND HIGHWAYS

Updating and implementation of road and drainage studies in communes I, IV, and VI of the district of Bamako within the framework of the urban infrastructure development project.

Client: PDIU / Ministry of Housing, Land Affairs and Town Planning

Place: Bamako Mali

Date: Deember 2010 - March 2011

The services covered by the project consist of updating and carrying out road and drainage studies in Communes I, IV and VI of the District of Bamako.

The expected results of the mission are:

#### For the road section:

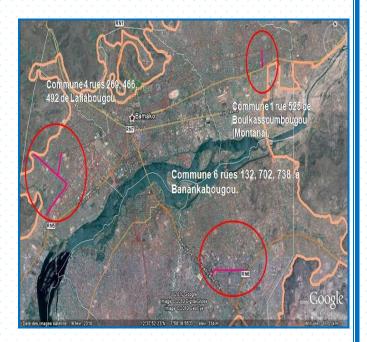
- Updating of the preliminary design, ODA and tender documents for Streets 132, 702 and 738 of the Banankabougou district in Commune VI, on the basis of the updated preliminary design and the available technical studies.
- The preliminary design and detailed design studies for the paving of Streets 466, 492, and 269 in the Lafiabougou district in Commune IV, and of Street 525 (Montana) in the Boulkassoumbougou district in Commune I, and the production of a bidding document for the execution of the works;

#### - For the drainage section :

 Updating of the Summary Preliminary Design, Detailed Preliminary Design and the tender documents for the rehabilitation works of the P7 collector, Place CAF - WOYOYANKO River in Commune IV, in synergy with the development of Streets 466, 492 and 269 planned in the road section;

 the updating of the Detailed Preliminary Project and the tender documents for the rehabilitation works of the collector P19, Street 525 in the district of Boulkassoumbougou in Commune I.

Assistance to the administration for possible clarifications to be provided to companies during the consultation, and support in the evaluation of companies' bids.



Technical and environmental studies for the construction of a modern earth road as a diversion of the RN15 between Ouahigouya and Séguénega.

Client: DGR / Burkina Faso

Place: Yatenga province Burkina Faso

**Date: 2012** 

The construction of the Guitti dam will result in the flooding of part of the RN 15, including some structures, between Ouahigouya and Séguénégua, when it is due to be impounded in 2011. The purpose of the studies is to quantify the overflow of the dam and the water level reached on the RN15, the search for an optimal solution both from the point of view of the dam and the road, as well as the technical study of the solution proposed for the restoration of traffic on the RN15 between Ouahigouya and Séguénégua.

The studies include the Pre-Project Summary and Detailed Pre-Project and Bidding Documents stages and the following sector studies:

- topographic,
- geotechnical,
- hydrology and hydraulics,
- ...on the road,
- environmental and social aspects of the solution selected at the end of the preproject phase Summary;
- environmental aspects of the drinking water supply project for the city of Ouahigouya,
- Updating of the Environmental and Social Management Plan of the Environmental Impact Assessment of the Guitti Dam.



Technical-economic, environmental and social impact studies and preparation of the tender documents for the rehabilitation work on the Saint-Louis Hydrobase road located between Pointa Pitre Square and the Polish port (approximately 4,100 km).

**Client:** Ministry of Infrastructure, Transport, Land and Opening-up / AGEROUTE Senegal



Place: Saint Louis, Sénégal

Date: 2014
Financing: AFD



The project falls within the framework of the tourist development policy of Saint - louis, and in particular its fishing component implemented by the Ministry of Infrastructure, Transport, Land and Opening up, through AGEROUTE SENEGAL with funding from the French Development Agency and the Senegalese State.

The specific objectives of this study, without being exhaustive, are to make complete and detailed studies:

- the socio-economic and environmental feasibility of the rehabilitation work on the section from the Point à pitre square to the Polish port (about 4,100 km)
- various landscaping and street lighting along this section









Economic, environmental and social studies and Detailed Preliminary Design (PDD) of urban road rehabilitation works in the District of Bamako.

Client: AGETIPE Mali/ Ministry for Equipment

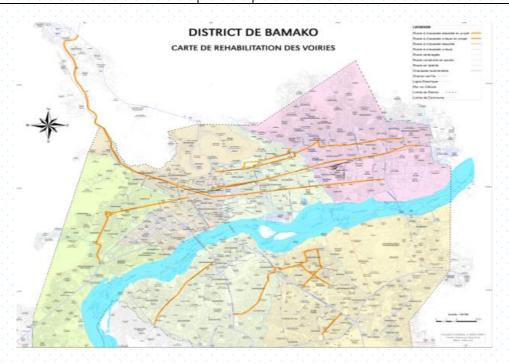


Place : Bamako District, Mali Date : April 2017 – ongoing

- Urban mobility in the District of Bamako is improved;
- the quality of life and living environment of the people of the District of Bamako is improved;

- the quality of life and the living environment of the populations of the District of Bamako is improved;
- the urban environment and sanitation in the District of Bamako is improved;
- the safety of users and the population in general is improved;
- Access to the new centres of activity is facilitated;
- the fluidity of traffic and the level of service on urban roads is increased;
- social centres and centres of economic and cultural interest are served;
- air pollution is reduced
- rainwater drainage to eliminate recurrent flooding in the District of Bamako is improved.

Rehabilitation of roads on the left bank (41 Km)				Rehabilitation of roads on the right bank (24 Km)		
	Description	Linear in ml		Description	Linear in ml	
1	Cheick Zahed Avenue	7 000	1	Street 883 "Tour de l'Afrique – Intersection Avenue CEDEAO"	4 700	
2	PDUD route ( Médine Market at Boulassoumbougou market)	7 500	2	Intersection Avenue " CEDEAO" – limit Baco- Djicoroni/kalaban	4 200	
3	RN3 (Section of Avenue Kassé KEITA and Samé)	6 487	3	Street of Gouverneur	1 000	
4	RN3 (Samé-Kati section)	5 744	4	Martin luter King Avenue	3 800	
5	Nelson Mandela Street	4 000	5	RN7 – Sogoniko – Magnambougou Market	4 000	
6	Van Vollemhoven Avenue	700	6	OA Faso Kanu –Cheick Anta Diop School– Magnambougou Market	2 600	
7	Shopping mall (Place Liberté)-Bougouba (UMPP Bridge)	8 400	7	Street 345 Daoudabougou	3 000	
8	RN27-Sangarébougou (Street 623)	1 500				
Total Left Bank		41 311		Total Right Bank	23 300	



## Supervision of the rehabilitation of the National Road 2 and the opening up of Morphil Island :

- Lot N°4: Ndioum-Halwar-Démeth (70 km) + Ndioum outfitter (3km) including Podor-Tarédji (29km) and Podor road (3km) + 32.5 km of related tracks
- Lot N°5: CFRN2-Médina Ndiathbé-Cas Cas-Saldé-Pété (67km).

Client: AGEROUTE Senegal



Place: Région de Matam, Sénégal

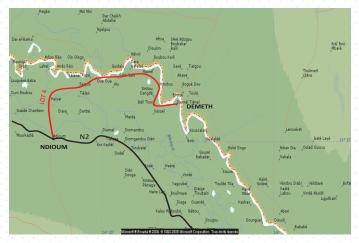
Date: Mars 2017- 2020 Financing: WADB



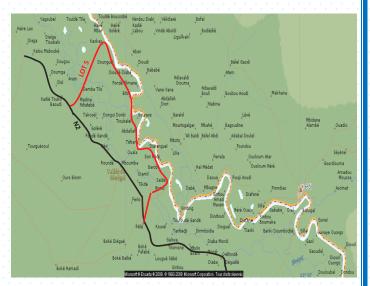
Rehabilitation work on the Ndioum-Ourossogui-Bakel road (Thilogne-Ourossogui section 50km and Hamady Ounaré-Bakel section 99km) and opening up the Île à Morphil (about 137 km) divided into five lots.

The project consists of the rehabilitation of lots n°4 and 5. These two lots include the following sections:

- Lot N°4: Ndioum-Halwar-Démeth (70 km)
   + Ndioum outfitter (3km) including Podor-Tarédji (29km) and Podor road (3km) +
   32.5 km of related tracks including:
  - RN2-Mbantou and Mbantou-R40 : 4Km
  - o Fondé Ass-Podor : 5 Km
  - Donay Walo-Piste Halwar Diattar:0.5 Km
  - o Ndioum-Thialaw : 13 Km et
  - Podor-Ngaoulé : 10Km
- Lot N°5 : CFRN2-Médina Ndiathbé-Cas Cas-Saldé-Pété (67km).



Location map of the LOT 4 project area



Location map of the LOT 5 project area

#### Supervision of rehabilitation works on National Road 2 (Ndioum-Thilogne): Lot 1 Ndioum-Goléré (69km)

Client: AGEROUTE Senegal



Place : Région de Matam, Sénégal

Date: Mars 2017- 2020 Financing: ISDB



The Government of SENEGAL obtained a loan (N°2SE-0152) from the Islamic Development Bank (IDB) to finance the rehabilitation works of National Roads 2 (NDIOUM-THILOGNE 127km) and 7 (PK120-Mako). The rehabilitation works of National Road 2 Ndioum-Thilogne divided into two (2) lots.

lot 1: Ndioum-Goléré (69km)

• lot 2: Goléré-Thilogne (68km)

The project consists of the rehabilitation of Lot 1 Ndioum-Goléré (69km).

Enterprise: SINTRAM/HOUAR









### **BRIDGES**

Detailed Engineering Design for the construction works of the 2nd Kayes Bridge and its access roads - Mali

Client: MINISTRY OF EQUIPMENT AND DEVELOPMENT / National Road

Directorate Mali

Place: Kayes, Mali

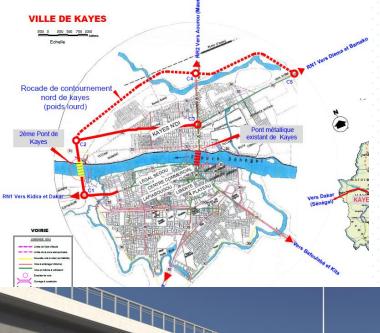
Date: 2016 -2017

The project for the construction of a bridge with a span of 535 m and **16,926.67 ml** access and connecting roads in the town of Kayes will ensure the permanent and safe crossing of the Senegal River and play a decisive role in the development and interconnection of national and regional road networks.



The objectives consist essentially of carrying out the tasks in the following two main phases:

- Phase 1: Detailed Preliminary Design Technical Studies;
- Phase 2: Drawing up of Tender Documents for the construction of the engineering structure as well as its access roads and the establishment of confidential estimates for the works.







## Construction of a 174.4 m long bridge over the Baoulé River - Mali.

Client: MINISTRY OF EQUIPMENT AND DEVELOPMENT / AGETIPE Mali

Place: Dioila Région Koulikoro, Mali

Date: 2013 (preliminary project studies) and

2016-2018 (work supervision)

The construction and asphalting of the Fana-Dioila road (40 km) and the construction of a 174.4 m long bridge over the Bagoé are part of the policy of opening up the country internally and externally and to ensure national cohesion.

The existing structure remains functional and with some rehabilitation work it will be able to fully ensure its function for several years to come. However, its width of 4m remains insufficient to cope with the current traffic. With the construction and asphalting of the Fana - Dioila link, it then becomes necessary to widen the existing structure to bring it up to standard and to have a 7m pavement.

The simplest solution envisaged is the duplication of the existing structure by the construction of a new bridge. In view of the future development planned for the Fana - Dioila road, the route of which serves the project site, the planned engineering structure will be a bridge with the following minimum geometric and technical characteristics:

• bridge length: approx. 175 ml

width of wheels: 7 m

• sidewalk width: 2 x 1.50 m

• transverse slope: 2.5 %

Variants that have been the subject of the tender documents: VIPP post-tensioned prefabricated girder bridge and Unibridge type steel-concrete composite bridge.

ECIA is in charge of the complete project management:

- In 2013, ECIA carried out the detailed preliminary design studies and the preparation of the tender documents.
- ECIA in consortium with ACE ensures since 2016 the control and supervision of works.







Technical, economic, environmental and social impact studies for the construction of 113 open access engineering structures in the Republic of Côte d'Ivoire \_ Phase 2: construction of one hundred (100) engineering structures \_ Batch 3

Client: AGEROUTE RCI / Ministry of Economic Infrastructure



Place: Bere, Worodougou, Tonkpi, and Kabadougou Region

RCI

Date: December 2016 - August 2017

The project consists in carrying out technical studies for 15 structures (lot 3) within the framework of phase 2 (construction of one hundred (100) engineering structures) of the Technical, Economic and Environmental and Social Impact Studies for the construction of 113 opening-up engineering structures in the Republic of Côte d'Ivoire.

The objectives essentially consist of carrying out the tasks in the following two main phases:

- the Preliminary Project Summary (PPS) study with a view to selecting development options compatible with the technical, environmental and financial constraints of the project;
- the economic study of the project in order to evaluate the benefits and determine the economic profitability of the project;
- the environmental and social impact study to estimate the potential impacts associated with the execution and operation of the project in order to identify mitigation measures for potential nuisances created by its implementation;
- Detailed Preliminary Design Studies (DPS) to further develop the options resulting from the PSA studies phase;
- the technical files for the preparation of the Tender Documents (DAO).









#### **Tassiga Bridge auscultation studies**

Client: CNREX BTP / Direction Nationale des Routes

(DNR) Mali

Place : Région de Gao, Mali

Date: September 2016-October 2016

The Tassiga Bridge was built between 2006 and 2008 as part of the construction and asphalting work on the Gao-Ansongo-Labbézanga road.



Following the invasion of the northern regions of Mali in March 2012 by armed groups, the Tassiga Bridge was blown up by jihadists or terrorists, which partially damaged the right abutment, the ends of the beams and the bridge deck. In May 2013, the 31st Military Engineering Regiment of Force Serval installed a Mabey-type metal structure to handle traffic on the RN 17 national road.



The structure is a single-span reinforced concrete girder bridge with a length of 20 metres and a width of 10 metres. It is

Located at PK136 on the national road number 17 (RN17) between Ansongo and Labbézanga, about 40 km from the town of Ansongo.

In view of the importance of this road in the economic, social and cultural development of Mali in general and the Gao region in particular, on the one hand, and on the other hand, in order to ensure the continuity of traffic in all seasons on this axis that links our country and Niger, it is urgent to undertake auscultations on the bridge in order to determine the anomalies and propose appropriate solutions.

The objectives essentially consist in the achievement of the following tasks:

- Production of the technical report of auscultation;
- Elaboration of Tender Documents (DAO).





Detailed technical studies and elaboration of a Tender File for the construction works of the Lally Bridge and access roads in the district of Kéniéba (Tambacounda Region)

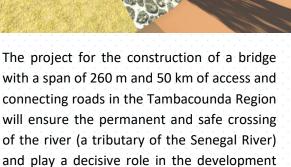
Client: AGEROUTE Senegal



Place : Région de Tambacounda, Sénégal

Date: 2016-2017





The objectives consist essentially in carrying out the tasks in two main phases :

and interconnection of national and regional

road networks.

- Phase 1 : Techno-economic feasibility and environmental and social impact studies;
- Phase 2: Technical execution studies and preparation of the Tender Documents (DAO) for the construction of the engineering structure and its access roads and the preparation of the confidential estimate of the works.









# RURAL AND AGRICULTURAL DEVELOPMENT

Studies and control of the development works of 4000 ha of new valleys in the Regions of Sédhiou and Kolda in Senegal.

Client: PAPSEN (Support Programme for the National Agricultural Investment Programme) / Ministry of Agriculture and Rural Equipment



Place: Sedhiou and Kolda Region, Senegal

Date: March 2017- ongoing

The Programme d'Appui aux Programme National d'Investissements Agricoles (PAPSEN) is a Programme financed by the Republic of Italy and the State of Senegal for a total cost of 30 million euros, its duration is three (03) years and its area of intervention is: Thiès, Diourbel, Fatick, Sédhiou and Kolda.

Its overall objective is to contribute to the achievement of the first Millennium Development Goal by increasing agricultural production and improving the income of rural populations, increasing food security and promoting local economic development.

Its specific objective is therefore to increase the incomes of the rural populations living in the programme's intervention regions by increasing and diversifying agricultural production through the dissemination of modern farming practices such as irrigation, but also by improving the technical and entrepreneurial capacities of the farmers involved.







## DRINKING WATER SUPPLY AND SANITATION

Control and supervision of sanitation works in the towns of KAOLACK and TOUBA-Pole 3 in Senegal.

**Client**: National Sanitation Office of Senegal / Ministry of Hydraulics and Sanitation



Place: Touba, Diourbel Region and Kaolack, Fatick Region,

Senegal

Date: 2018- 2020

Financing: WADB



The Programme aims at building in ten (10) cities in Senegal: (i) wastewater collection and treatment systems comprising seven (07) wastewater treatment plants (WWTPs), 30 pumping stations (PTPs), 268,000 ml of 16,000 sewerage network and sewer connections; (ii) a rainwater drainage network comprising 8,000 ml of gutters, one (01) PTP and a retention basin with a storage capacity of 39,000 m3; and (iii) autonomous sanitation systems comprising 503 multi-cabin school buildings. The cities concerned by the Programme are : Dakar, Kaolack, Louga, Matam, Pikine, Rufisque, Saint-Louis, Tambacounda, Tivaouane, and Touba.

The present project concerns the cities of Kaolack and Touba (Pole 3, Centre zone).

The general objective of the project of which this contract is a part is to implement wastewater and rainwater treatment infrastructures in the cities of Kaolack and Touba including the following development provisions:

- Collective wastewater treatment system: Networks, Interceptors, pumping stations (STAP), treatment plant (STEP),
- Storm water drainage system; and
- Autonomous collective sewerage system: sewage sludge station (STBV) and public kiosks.





