# GAMBIA RIVER BASIN DEVELOPMENT ORGANISATION (OMVG)





**OMVG High Commission** 

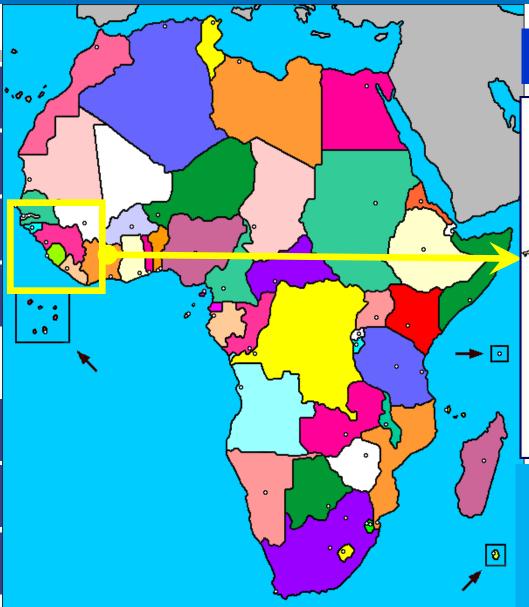
November 2019

# **Presentation plan**

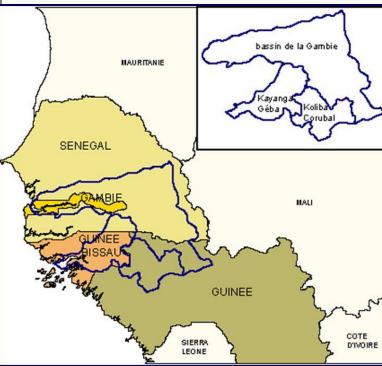
- I. Geographic location
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**XII.Lessons learned** 

# I. Geographic location



## West Africa



4 countries: THE GAMBIA, GUINEA, GUINEA BISSAU, SENEGAL

## II. OMVG river basins



Three river basins: Gambia, Kayanga-Geba and Koliba-Corubal;

Four countries: The Gambia, Guinea,

Guinea-Bissau and Senegal;

Three working languages: English,

French and Portuguese.

## Surface area of the 3 river basins 118,000 km<sup>2</sup>

· Gambia: 77,054 km<sup>2</sup>

• Kayanga-Geba: 15,000 km2

Koliba-Corubal: 25,000 km2

**Population: 6 million inhabitants** 

#### Population in the three river basins

Gambia: 5.1 million inhabitants

Kayanga-Geba: 552,000 inhabitants

Koliba-Corubal: 263,997 inhabitants

**OMVG High Commission** 

No

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#### **II.1. CONVENTIONS**

Creation of the OMVG (30 June 1978)

Identifies the missions, jurisdiction and organs of the OMVG

Legal status of the river Gambia (30 June 1978)

The river Gambia and its tributaries are considered as "international waterways"

Guarantees freedom of navigation and equality in all forms of utilization of the river Gambia waters

Legal status of common structures (29 January 1985)

Determines the legal status of joint structures; Determines the rights and obligations of co-proprietor States

Creation of SOGESART (29 January 2016)

Management Agency of the Sambangalou dam and the Power Transmission Network of the OMVG.

All of these instruments were signed by the Heads of State and ratified by National Assemblies

Adoption by the Council of Ministers of conventions on the legal status of the Kayanga/Geba and Koliba/Corubal rivers (2 August 2008)

Guarantees freedom of navigation and equality in all forms of utilization of the Kayanga/Geba and Koliba/Corubal waters

#### **II.2. OMVG High Commission:**

Implementing organ of the OMVG led by a High Commissioner, assisted by a Secretary General and four operational departments.

# IV. Types of infrastructure

- Dams: Sambangalou;
- 225 kV power transmission network (1,677 km, 15 HV/MV substations and 2 dispatching systems);
- Rural water supply;
- Feeder roads;
- Water crossings.

## V. OMVG financial mechanisms

#### Convention on the creation of the OMVG:

In accordance with this Convention, the Organisation may receive grants and contract loans with the approval of the Council of Ministers.

Financial contributions of member States to the Organisation's budgets are determined by the Council of Ministers.

Decisions of the Council of Ministers are adopted unanimously and are binding on member States.

• Convention on the legal status of common structures and Fiscal and customs regulations governing contracts for studies and works or common structures:

Any infrastructure which has been declared common and indivisible property by a legal instrument shall be, and shall remain throughout its life span, the common and indivisible property of OMVG member States.

•Firms registered in the member States are exempted from paying turnover taxes, on that part of their revenue generated within the framework of contracts entered into with the OMVG.

## VI. OMVG financial mechanisms (cont'd)

# Resolution on the distribution of costs and benefits among Member States

#### The example of the Sambangalou dam:

- THE GAMBIA: 18%
- GUINEA: 20%
- GUINEA-BISSAU: 14%
- SENEGAL: 48%.

#### For the Interconnection line:

Each member State shall bear the construction costs of infrastructure within its own territory as well as 25% of costs relating to the dispatching centres.

The Gambia: 183 km of lines and 2 substations

Guinea: 575 km of lines and 5 substations

Guinea-Bissau: 218 km of lines and 4 substations

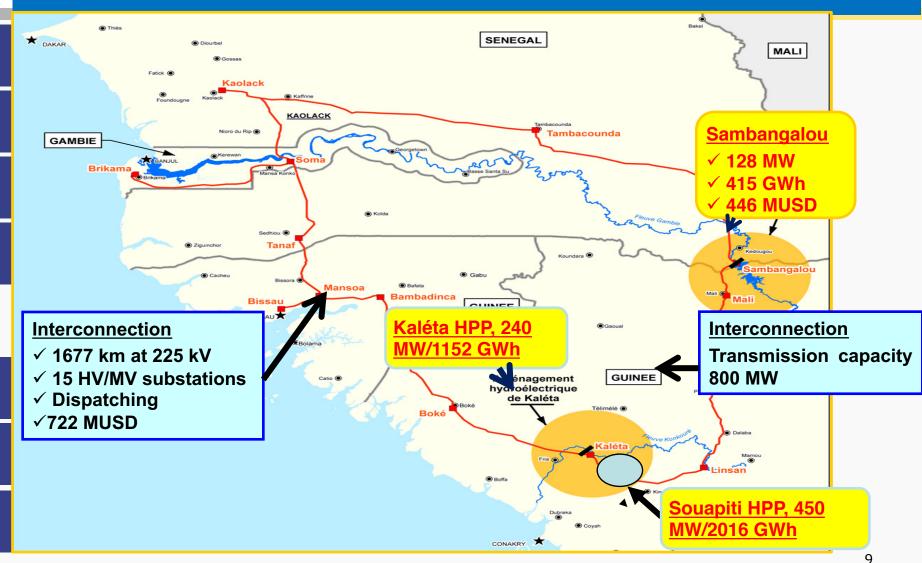
Senegal: 701 km of lines and 5 substations

# VII: Types of financing

- The operating expenses of the High Commission are financed by member States through contributions (25% per country);
- Financing of projects by Technical and Financial Partners (TFPs) and Member States in the form of counterpart contributions. The contribution of each Member State is commensurate with the benefits it derives from the project.
- Financing to conduct studies is provided through grants to the OMVG.
  Governments of Member States act as borrowers and sign the financing agreements with TFPs.
  - The loan is then transferred to the OMVG, the project contracting authority, and loan transfer agreements signed between the OMVG and member countries.
  - There are instances where TFPs give a loan directly to the OMVG. This is the case with KfW for the Energy Project.

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# VIII. Example of a project funded: Energy Project



## VIII.1. Interconnection

- The interconnection line is fully funded through member State contributions and concessional loans from eight (8) donors: IDA, AfDB, IsDB, EIB, AFD, KfW, BOAD and KFAED.
- The interconnection component consists of the construction of a 225 kV power transmission line, 15 high voltage and medium voltage substations and 2 load dispatching centres (Linsan and Tambacounda).
- Mainly located near consumption centres, 15 substations will be built in the OMVG member States (2 in The Gambia, 5 in Guinea, 4 in Guinea-Bissau and 4 in Senegal).
- The substations will divide the line into 16 sections adding up to 1,677 km in length.
- The power transmission line will be equipped with 36 pairs of optical fibre.

# VIII.1.1. Validated line corridors and locations of substation sites



The Gambia: 183 km

Guinea Bissau: 218 km

Guinea: 575 km

Senegal: 702 km

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#### VIII.1.2. State of progress of the Interconnection project

#### Financial component

Preconditions have been lifted by all TFPs.

#### **Environmental and social component**

- Awareness-raising among persons affected by the project (PAP) and right-of-way surveys (substations and lines) conducted along the line corridor in the four countries
- Database including information on PAPs and their assets is operational and online
- Substations of Linsan, Kaléta, Kaolack, Soma, Bissau and Saltinho are free of any encumbrance Forestry protocols have been signed with Forestry Services The sites of substations in Senegal and in The Gambia, where resettlement was required, have been vacated. The relevant authorizations are available for these sites in the 3 countries

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#### **Technical component**

- Signing of 17 contracts with contractors including 9 for the construction of lines, 7 for substations and 1 for the load dispatching centre.
- LIDAR and rights-of-way of power transmission lines delineated at 100%.
- Manufacture, testing, shipment and delivery of materials (towers, conductor cables, conventional overhead ground wires, optical fibre overhead ground wire, isolators, line accessories...) and major equipment (transformers, inductance units, current and voltage transformers, etc.) for substations in the countries.
- Commencement of works on transmission line and substations in the four OMVG member

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countrie

# VIII.2. Sambangalou HPP

#### RCC reservoir dam

- Located in Kedougou, 730 km from Dakar
- Installed capacity: 128 MW and 402 GWh
- Reservoir surface area: 181 km² with a normal water level of 200 m
- Volume: 3.87 billion m3
- Length: 575 m, Width: 75 m and Height: 90 m

Financing cost: 381M euros

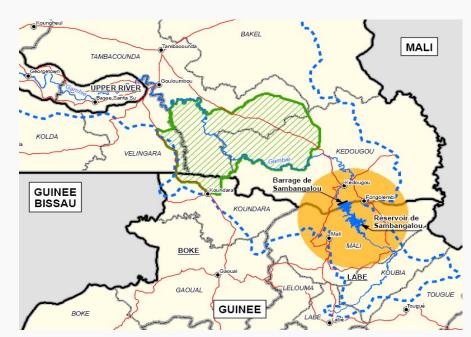
**Dam in Senegal** 

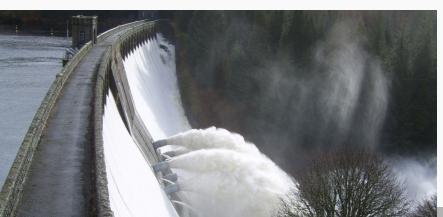
Reservoir

Senegal: 18 % Guinea: 82 %

Commissioning by VINCI/ANDRITZ

HYDRO: 2022/2023





# Sambanaglou HPP (cont'd)

In addition to concessional funding, the OMVG is currently testing the use of commercial loans (buyer-credit and financial credit types) for the financing of the Sambangalou dam.

In this regard, a phased contract was signed with the consortium VINCI Construction/ANDRITZ HYDRO for a construction timeline of 42 months. This multi-purpose dam will, inter alia:

- supply 128 MW of electricity as follows: 18% for The Gambia, 20% for Guinea, 14% for Guinea-Bissau and 48% for Senegal.
- Make it possible to irrigate 90,000 ha of agricultural land of which 50,000 ha are in The Gambia (reduction of salt water intrusion) and 40,000 ha in Senegal.
- Regulate river flow and hence flood reduction downstream.

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# XI. RURAL ELECTRIFICATION OF LOCALITIES IN THE OMVG ZONE

500,000 connections by 2020/2021 contributing to universal access to electricity in OMVG member countries

#### **PHASE I**

 The study on access to electricity in areas surrounding the OMVG substations has been completed with World Bank (WB) financing. The WB has approved financing in the amount of 66 M USD and 60 M USD for The Gambia and Guinea-Bissau respectively. Financing for Guinea and Senegal will be reviewed by the WB soon.

PHASE II

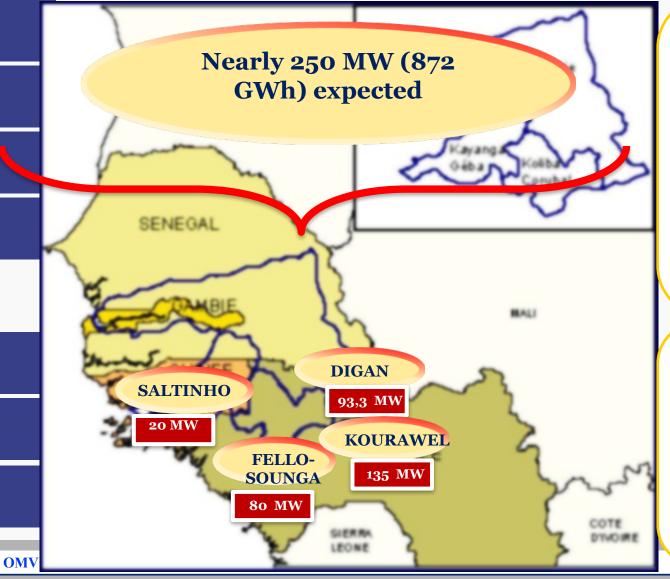
 AfDB-financed study on access to electricity for localities along the entire stretch of the OMVG's power transmission line (Universal access): Commencement scheduled in December

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## X. ENERGY PROJECT STAKEHOLDERS

- I. Contracting authority: GAMBIA RIVER BASIN DEVELOPMENT ORGANISATION (OMVG) ASSISTED BY ITS ADVISERS (Contracting authority's representative: GAUFF and Owner's Engineer: AECOM)
- II. Financing: AFD, ADF (AfDB), EIB, IsDB, IDA (WB), BOAD, KFAED, KfW and OMVG Member States.
- III. Contractors: 17 contracts were signed with 6 companies:
  - 1. SIEMENS (Dispatching centre at Linsan and Tambacounda)
  - 2. KEC International (Lines and substations in Senegal)
  - 3. VINCI/CEGELEC (lines in The Gambia, Guinea, Guinea-Bissau and Senegal)
  - 4. SUMEC/XD (Lines in Guinea)
  - 5. EIFFAGE/ELECNOR (substations in The Gambia, Guinea and Guinea-Bissau)
  - **6. NCC (substation in Guinea)**
  - Works are underway and gradual commissioning from April to September 2020.

# XI. SECOND GENERATION WORKS IN PREPARATION



Energy Programme 2nd generation:

- Digan HPP in Guinea on the river Gambia
- Fello-Sounga in Guinea on the river Koliba/Corubal
- Kourawel HPP in Guinea on the river Komba
- Commencement of studies (3rd quarter 2019)
- Saltinho/Cussilinta in Guinea-Bissau on the river
   Koliba/Corubal
- 225 kV power transmission lines stretching across a distance of approximately 500 km
- Studies underway for 18 months

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#### XII. ENERGY COOPERATION IN THE OMVG ZONE

With the support of China, Guinea built the Kaléta dam (commissioned in September 2015) and is currently building the Souapiti dam.

As part of sub-regional efforts to foster energy cooperation, Guinea has reserved 1,174 GWh/270 MW of the Kaleta-Souapiti production for the other 3 OMVG member countries as follows:

The Gambia : 204 GWh/ 47 MW

Guinea-Bissau: 167 GWh/ 39 MW

Senegal : 803 GWh/ 184 MW

This production will be transmitted through the OMVG interconnected network which links the power grids of its 4 member countries.

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## XIII. Lessons learned

## Strong points

- Forty (40) years of constructive and non-confrontational cooperation between the 4 member States;
- Solidarity between the member States and enhanced sub-regional integration;
- Consensus-based legal framework facilitating the mobilization of significant funding in a regional context;
- Debt reimbursement guaranteed by the OMVG through revenue from its implementing agencies;
- Rational, harmonious and equitable use of shared basin resources.

#### Challenges

- The multiplicity of donors and the numerous loan conditions lead to protracted project implementation schedules;
- Technical and financial partners do not grant loans directly to the High Commission.

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# Thank you for your attention

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# ANNEX

# **Unloading of transformers and inductors - Labé and Mali (Guinea) substations**







#### **Commencement of works – Senegal**



## Erected pylon – Senegal





# Commencement of works – Saltinho (Guinea Bissau) site





# Commencement of works – Soma (The Gambia) site 23 February 2019





