

ORGANISATION
POUR LA MISE EN VALEUR
DU FLEUVE GAMBIE

GAMBIA RIVER BASIN
DEVELOPMENT
ORGANISATION

ORGANIZAÇÃO
PARA A VALORIZAÇÃO
DO RIO GÂMBIA

IDMP

Integrated Development Master Plan

Gambia, Kayanga-Geba
& Koliba-Corubal Rivers
2023 - 2040

volume 2

project briefs

Understanding project brief sheet

An example of a measurement form is shown below to explain the methodology used to fill in the measurement forms.

M1.7 ← *M « FO number ». « Measurement number »*
Example M2.11 for measure n°11 of fundamental guideline n°2

sector's pictogram of the sheet ↓



Title of the mesure

Measure N°. in sectoral plan	Sectoral plan from which the measure stems, including : Agriculture, Livestock, Forestry and Fisheries Energy, Mines, Industry and Crafts Transport and Communications Water, Sanitation and Health Environment and ecosystems Knowledge, Management and Governance of BRs
Provision	**DX.X** Name of the provision in which the measure is included
Sub-provision	Name of the sub-provision (if applicable) in which the measure is included
Localisation	Measure location
Objective	Aim of the measure
Owner / Implementer	Sponsor and/or person responsible for implementing the measure
Origin (institution / project / programme)	Institution, project or programme behind the measure
Progression status	Status of measure between: Not started / Study in progress / Implementation in progress
Total cost (USD)	Estimated cost for implementing the measure
Funding	Funding for implementing the measure, if identified
Progression status	Status of measure between: Not started / Study in progress / Implementation in progress
Link to the SDGs (SDG number, max 2 SDGs)	Only the 2 or 3 SDGs most affected by the measure are selected
Targeted issues	In order to be able to group the measures into broad categories of issues addressed, the measures have been divided into 15 issues
Link to the fight against climate change and its impacts	In the same way as for the targeted issue, 10 categories of links with the fight against climate change and its impacts have been defined in order to classify the measures into 10 broad categories
Summary of activities / description of the action	Summary of activities planned to implement the measure
Expected results	Results expected after implementing the measure

Fundamental orientation 1, 2 or 3 : **Title of the basic guideline** ↑

Fundamental orientation among:
1. *Governing & preserving*
2. *Open up & protect*
3. *Sustainable developement*

The 17 Sustainable Development Goals (SDGs) of the United Nations (UN)





The 15 targeted issues

Inadequate knowledge and monitoring of water resources and the environment	Severe low flows, flooding, little control of flows and abstractions	Water pollution	Enclavement of rural areas	Economic vulnerability - lack of economic opportunities
Weak essential services (water supply, sanitation, health)	Poor access to energy, untapped hydroelectric potential	The environmental and human impact of mining is poorly controlled	Under-exploited agricultural potential	Under-exploited pastoral potential
Under-exploited fishing potential	Low protection of biodiversity and ecosystems	Deforestation, pressure on natural resources	Low tourism development	Capacity building and institutional consolidation



The 10 links to the fight against climate change and its impacts

Knowledge - Collection and generation of climatic and hydrological information. Tools for forecasting climatic hazards and decision-support tools	Vulnerability assessment - Communication, education and awareness-raising	Integrating adaptation to climate change into the capacities, bodies and management instruments of national and regional basin institutions	Vulnerability to water stress	Vulnerability to flooding
Vulnerability to soil degradation	Vulnerability to ecosystem degradation	Vulnerability to deterioration in water quality	Building adaptive capacity and resilience	Reducing greenhouse gas emissions

Glossary of project briefs' abbreviations

AFC	Africa Finance Corporation
AfDB	African Development Bank
APD	Detailed Preliminary Design
APS	Preliminary Draft Summary
BEEE	Environmental Design and Assessment Office (Bureau d'Etude et d'Evaluation Environnementale)
BPI	Public Investment Bank (Banque Publique d'Investissement)
DAO	Computer-Aided Design (Dessin Assisté par Ordinateur)
DBSA	Development Bank of Southerne Africa
DEEC	Department of Environment and Classified Establishments
DGA	Deputy Chief Executive
DGRH	Directorate General of Water Resources (Guinea Bissau)
DHPP	Digan Hydroelectric Power Project
DNGR	National Directorate of Rural Engineering (Guinea)
DWR	Department of Water Resources (Gambia)
EAGB	Electricidade e Aguas da Guine-Bissau (Guinea-Bissau Electricity and Water Company)
ha	hectares
HC	High Commission
HPP	Hydroelectric Power Project
JETP	Just Energy Transition Partnership
KHPP	Kourawel Hydroelectric Power Project
M	million
MAEF	Ministry of Agriculture, Livestock and Forestry (Guinea-Bissau)
MHA	Ministry of Hydraulics and Sanitation (Guinea)

MITP	Ministry of Infrastructure and Public Works (Guinea)
MITTD	Ministry of Infrastructure, Land Transport and Accessibility
MTP	Ministry of Public Works
NAWEC	Gambia National Water & Electric Company
NGO	Non Governmental Organization
OFOR	Senegal Rural Drilling Office
OMVG	Gambia River Basin Development Organisation
ONAS	National Sanitation Office of Senegal
PARIIS	Regional Support Project for the Sahel Irrigation Initiative (Projet d'Appui Régional à l'Initiative pour l'Irrigation au Sahel)
PMH	human-powered pumps
PNNK	Niokolo-Koba National Park
SDG	Sustainable Development Goal
SEG	Guinea Water Company
SHPP	Sambangalou Hydroelectric power project
SNAPE	Guinea National Water Supply Service
SODAGRI	Senegal Agricultural and Industrial Development Company
SONES	National Water Company of Senegal
STEP	Pumped Storage Power Station
TOR	Terms of reference
UNCDF	UN Capital Development Fund
WAPP	West African Power Pool
WR	Water Resources
WUA	Water Users' Association

List of priority measures

Fundamental orientation	Sectors	Nb of measures
Governing & preserving	Governance	**2**
	Environment & ecosytems	**2**
Open up & protect	Energy	**10**
	Basic services	**3**
	Transport communication	**2**
Sustainable development	Agricultural production	**7**
TOTAL		**26**

Fundamental orientation 1 :
Governing & preserving



Sectors	Measures
Governance	Construction of OMVG headquarters Reinforcement of rainfall, hydrometric and piezometric networks in the three OMVG basins
Environment & ecosytems	Set up an observatory on the environment and natural resources Set up a program to restore the ecosystems, gallery forests and headwaters of the rivers under OMVG jurisdiction

M1.4

Construction of OMVG headquarters (1/2)

Measure N°. in sectoral plan	1.21 - Knowledge, Management and Governance of Water Ressources
Provision	**D1.4** Strengthen the institutional framework to ensure integrated water resource management
Sub-provision	1.21 Filling vacancies in the revised OMVG HC organization chart
Location	Diamniadio and Lac Rose Urban Area
Objectives	• Provide OMVG with a head office worthy of its international dimension; • Improving working conditions and staff friendliness; • Improve OMVG's visibility; • Enable the High Commission to fill all the positions on its organizational chart.
Owner / Implementer	OMVG High Commission
Origin (institution / project / programme)	OMVG High Commission
Duration	3 years
Total cost (USD)	8,5 M USD
Funding	/
Progression status	Studies geometer and geotechnics, and preliminary design report completed
Link with SDGs	**SDG 8 Decent Work and Economic Growth** **SDG 9 Industry, Innovation and Infrastructure** **SDG 16 Peace, Justice and Strong Institutions**
Targeted issues	**1.** Impossible to fill all the positions on the organization chart; **2.** Difficulties in welcoming service providers and consultants ; **3.** Impossible to hold several meetings simultaneously **4.** Insufficient parking for fleet vehicles **5.** High room rental costs for statutory meetings **6.** Outdated elevators **7.** Reduced visibility of the organization
Link with the fight against climate change and its impacts	Sustainable, eco-efficient construction: • Optimized daylighting and ventilation ; • Use of local, low-carbon materials ; • Integration of energy-efficient technologies. Renewable energies: The building can be equipped with solar panels for electricity and water heating, helping to reduce greenhouse gas emissions. Sustainable resource management : • Installation of rainwater harvesting systems ; • Installation of water-saving sanitary equipment.

M1.4

Construction of OMVG headquarters (2/2)

Summary of activities / description of action	• Site survey and topographic survey (already completed) ; • Geotechnical reconnaissance study (already carried out) ; • Financial pre-feasibility study (business plan and synoptic sheet) ; • Preliminary design architectural (preliminary draft completed) ; • Environmental study TORs currently being validated by Department of Environment and Classified Establishments In progress : • Obtaining administrative documents for the plot of land (land title and building permit) • Detailed preliminary study after validation of the preliminary draft • Drawing up the CAD after approval of the detailed preliminary study • Mobilizing financing • Company recruitment construction • Construction work • Acceptance of the building • Office equipment and staff installation
Expected results	• Technical and financial feasibility of the project established • Administrative documents for the land obtained (land title and building permit) • All the technical and environmental studies required for construction carried out • Construction company recruited • The headquarters is built • The work are received • The headquarters are equipped and functional

M1.7

Reinforcement of rainfall, hydrometric and piezometric networks in the three OMVG basins

Measure N°. in sectoral plan	1.1.1 - Knowledge, Management and Governance of Water Resources
Provision	**D1.2** Monitor the quantity and quality of water resources
Sub-provision	1.2.b - Monitor and manage the quantity of water resources
Location	OMVG Area
Objectives	Consolidate a network of hydrometric and piezometric stations of sufficient quality and coverage and reduce the risk of flooding by managing the hazard and communicating the risk across the three basins.
Owner / Implementer	OMVG High Commission, National Units and National Directorates responsible for water resources in the 4 States and the National Meteorological and Hydrological Directorates.
Origin (institution / project / programme)	Needs regularly expressed by States
Duration	10 years for rehabilitation and widening Continuous network maintenance
Total cost (USD)	20 M USD
Funding	Financing through projects including early warning (droughts, floods) and climate change monitoring.
Progression status	Basic network in three basins to be strengthened
Link with SDGs	**SDG 13 Climate Action** **SDG15 Life on Land**
Targeted issues	Inadequate knowledge and monitoring of water resources and the environment, as well as severe low-water levels, flooding and a lack of control over flows and abstractions, are aggravating the management of these resources.
Link with the fight against climate change and its impacts	• Knowledge - Collection and generation of climatic and hydrological information. • Weather forecasting and decision support tools • Vulnerability to flooding
Summary of activities / description of action	• Creation/strengthening of forecasting units and of flood management • Development of a national and local alert plan • Communication of forecasts to all stakeholders and populations concerned • Strengthening and developing measurement networks by installing surface and groundwater measurement stations
Expected results	• The measurement networks are operational • The flood forecasting unit is operational • Warning maps and plans are in place.

M1.42

Set up an observatory on the environment and natural resources (1/2)

Measure N°. in sectoral plan	1.1.4 - Environment and ecosystems
Provision	**D1.6** Promote transboundary cooperation on water resources
Sub-provision	/
Location	Observatory hosted within the OMVG
Objectives	Regularly provide data for a good knowledge of the resources of the various segments of the "Ecosystem Capital" of the basins of the 3 rivers under OMVG jurisdiction, with a view to making available to member states and the various partners the information necessary for informed decision-making in the development and enhancement of resources.
Owner / Implementer	OMVG High Commission and member states
Origin (institution / project / programme)	OMVG
Duration	5 years
Total cost (USD)	50 M USD
Funding	To be identified
Progression status	Not started
Link with SDGs	**SDG 15 Life on Land**
Targeted issues	• Insufficient knowledge and monitoring of water resources and the environment • Deforestation, pressure on natural resources
Link with the fight against climate change and its impacts	Vulnerability to ecosystem degradation

M1.42

Set up an observatory on the environment and natural resources (2/2)

Summary of activities / description of action	The observatory will be a web platform that integrates a dashboard for monitoring environmental indicators. Indicators will need to be defined and calculated beforehand, so that the observatory can be regularly updated (annual frequency recommended). Implementing the web observatory will involve (i) carrying out an opportunity study to define the tool's needs and functionalities, (ii) defining the monitoring indicators and their calculation methods, (iii) acquiring the software and developing the web platform, (iv) drafting the application's user manual and a guide to best practices, and (v) providing staff training. Observatory activities : • Organize the collection and processing of the necessary data for environmental monitoring of ecosystems in the 3 basins by working with data producers; • Process and analyze the data collected to produce reliable information on the state of the basin environment; • Disseminate the information obtained. The platform will preferably be developed using ArcGis Online technology. Areas of intervention will include: • Hydrological and quality monitoring of groundwater and surface water; • Vegetation and soil degradation monitoring; • Monitoring of changes in fauna, avifauna, ichthyofauna and fishing activities; • Monitoring of the prevalence of waterborne diseases; • Monitoring demographic trends in the OMVG area.
Expected results	A platform for exchange and consultation between the players involved in the 3 basins is operational, and the staff have been trained on the tool and its maintenance.

M1.50

Set up a program to restore the ecosystems, gallery forests and headwaters of the rivers under OMVG jurisdiction (1/2)

Measure N°. in sectoral plan	1.1.4 - Environment and ecosystems
Provision	**D1.6** Promote transboundary cooperation on water resources
Sub-provision	/
Location	OMVG High Commission
Objectives	Mitigate the causes and impacts of resource degradation on the integrity of ecosystems in the three rivers, by developing sustainable development and management systems and building institutional capacity to increase and enhance ecosystem services in the three basins.
Owner / Implementer	OMVG High Commission and Member States
Origin (institution / project / programme)	OMVG
Duration	5 years
Total cost (USD)	100 M USD
Funding	To search for
Progression status	Not started
Link with SDGs	**SDG 15 Life on Land**
Targeted issues	Deforestation, pressure on natural resources
Link with the fight against climate change and its impacts	Vulnerability to ecosystem degradation
Summary of activities / description of action	• Draw up and implement a five-year development and management plan for the sites in partnership with all stakeholders, including a program to support community development in the area where the river headwaters are located ; • Based on a participatory approach establish agreements on resource exploitation, in the form of a consensual Code of Conduct for the various stakeholders ; • Initiate a process to create protected areas for the headwaters and gallery forests.

M1.50

Set up a program to restore the ecosystems, gallery forests and headwaters of the rivers under OMVG jurisdiction (2/2)

Expected results	• The integrity of the resources of the 3 rivers is ensured by protecting and rehabilitating the headwaters of the springs ; • Galleries forests and riverbanks are restored ; • The basins and wetlands of the river reaches are developed and subject to participatory management ; • Green jobs are promoted in the OMVG area .

Fundamental orientation 2 :

Open up & protect



Sectors	Measures
Energy	Construction of the Saltinho hydropower scheme, with 21.2 MW of installed capacity, 86 GWh/year of producible output (without regulation of the Fello-Sounga AHE) and 107.2 GWh (with Fello-Sounga regulation) Construction of the Digan hydroelectric scheme (AHED), on the Gambia River in the Labé region of Guinea, with 93 MW of installed capacity and 242 GWh/year of producible output Construction of the Kourawel hydroelectric scheme (AHEK) on the Komba river, in the Labé region of Guinea , with 135 MW of installed capacity and 350 GWh/year of producible power Construction of the Fello-Sounga hydroelectric and agricultural scheme, with 82 MW of installed capacity, 339 GWh/year of producible and 2 000 ha of downstream irrigated perimeters in the Koliba/Corubal River watershed

Secteurs	Mesures
Energy	Fello Sounga - Labé interconnection line Construction of the 416 km long 225 kV Guinea - Guinea - Bissau power interconnection line with associated substations Construction of the Sambangalou hydroelectric scheme (AHES) on the Gambia River, in the Kédougou region of Senegal, with 128 MW of installed capacity and 394.3 GWh/ year of producible power Construction of a Pumped Storage Power Station (STEP) in the Sambangalou Hydroelectricity Development reservoir on the right bank of the Gambia River in Senegal, with an installed capacity of 152 MW and a producibility of 243 GWh/year Construction of a Pumped Storage Power Station in the Sambangalou hydroelectricity development reservoir on the left bank of the Gambia River in Guinea, with an installed capacity of 138 MW and a producibility of 221 GWh/year Construction of a 225 kV line between Soma (The Gambia) and Tambacounda (Senegal), with the creation of a 225/30 kV substation at Bansang (The Gambia) and a 225 kV line between Brikama (The Gambia) and Ziguinchor (Senegal)
Basic services	Construction / rehabilitation / reinforcement and monitoring of implementation works for water supply systems, treatment, storage, drinking water networks and connections in urban centers - rehabilitation / reinforcement Construction/rehabilitation/upgrading and monitoring of drinking water infrastructure (borehole, solar pump/ electrical network, chlorination station, water tower, networks and connections for standpipes), for 70% of the village population - rehabilitation/upgrading Construction/rehabilitation and monitoring of sanitation and hygiene infrastructure, off-site in and around the city center, and on-site in peri-urban areas for the population of urban centers
Transport communication	Construction/rehabilitation of 1,600 km of new rural agricultural roads connecting with major asphalt road links Establish 700 km of navigability on three rivers to develop river transport in the three river basins

M2.27

Construction of the Saltinho hydropower scheme, with 21.2 MW of installed capacity, 86 GWh/year of producible output (without regulation of the Fello-Sounga AHE) and 107.2 GWh (with Fello-Sounga regulation)

Measure N°. in sectoral plan	1.1.2 - Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large-scale renewable electricity generation facilities
Location	Saltinho, Koliba-Corubal river, Guinea-Bissau
Objectives	• To contribute to the expansion of the electricity trading system, facilitate energy trade and improve the quality of electricity supply in the OMVG member countries. • To provide renewable energy at a competitive price, to slow down the increase in fossil fuel consumption and, consequently, in greenhouse gas emissions. • To develop a major infrastructure to supply the industrial sector of the Corubal River basin.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project (2nd generation works)
Duration	5 years (2027-2031)
Total cost (USD)	162 M USD (estimate in project preparation phase); AfDB intention to finance construction work at Salthino AHE
Funding	Member States, African Development Bank (AfDB)
Progression status	Feasibility studies: preliminary design study, final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy, and CAD have been completed with funding from the African Development Bank (AfDB); AfDB financing intention: The AfDB has carried out an identification and preparation mission for the project appraisal for the construction of the Salthino hydropower development.
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	Construction of the Saltinho hydroelectric scheme
Expected results	The Saltinho dam is built and contributes to the socio-economic development of the OMVG member countries as well as to the improvement of the living conditions of the beneficiary populations (better access to electricity and water).

M2.28

Construction of the Digan hydroelectric scheme (AHED), on the Gambia River in the Labé region of Guinea, with 93 MW of installed capacity and 242 GWh/year of producible output

Measure N°. in sectoral plan	1.1.3 - Energy, Mines, Industry and Crafts
Provision	D2.3 Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large scale renewable electricity generation facilities
Location	Digan, Gambia River, Guinea
Objectives	• To contribute to the expansion of the electricity trading system, facilitate energy trade and improve the quality of electricity supply in the OMVG member countries. • To provide renewable energy at a competitive price, to slow down the increase in fossil fuel consumption and, consequently, in greenhouse gas emissions. • Establish a major infrastructure to supply the industrial sector of the Gambia River basin, increase agricultural productivity • Regulate the flow of the Gambia River resulting in a reduction in flooding
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project (2nd generation)
Duration	5 years
Total cost (USD)	400 M USD
Funding	African Development Bank (AfDB): preliminary design study, final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy, and CAD. Identify donors or investors to finance construction work
Progression status	Evaluation of the technical and financial proposals of the current shortlist
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	Construction of the Digan hydroelectric scheme
Expected results	The Digan dam has been built and contributes to the socio-economic development of the OMVG member countries, as well as improving the living conditions of the beneficiary populations (better access to electricity and water).

M2.29

Construction of the Kourawel hydroelectric scheme (AHEK) on the Komba river, in the Labé region of Guinea , with 135 MW of installed capacity and 350 GWh/year of producible power

Measure N°. in sectoral plan	1.1.4 - Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large scale renewable electricity generation facilities
Location	Komba River (Guinea)
Objectives	• To contribute to the expansion of the electricity trading system, facilitate energy trade and improve the quality of electricity supply in the OMVG member countries. • To provide renewable energy at a competitive price, to slow down the increase in fossil fuel consumption and, consequently, in greenhouse gas emissions. • Establish a major infrastructure to supply the industrial sector of the Komba/ Koliba river basin, increase agricultural productivity • Regulate the flow of the Komba/Koliba River resulting in a reduction in flooding
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project (2nd generation)
Duration	5 years
Total cost (USD)	432 M USD
Funding	African Development Bank (AfDB): preliminary design study, final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy, and CAD. Identify donors or investors to finance construction work
Progression status	Evaluation of technical and financial proposals for the current shortlist
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	Construction of the Kourawel hydroelectric scheme
Expected results	The Kourawel dam has been built and contributes to the socio-economic development of OMVG member countries, as well as improving the living conditions of beneficiary populations (better access to electricity and water).

M2.30

Construction of the Fello-Sounga hydroelectric and agricultural scheme, with 82 MW of installed capacity, 339 GWh/year of producible and 2 000 ha of downstream irrigated perimeters in the Koliba/Corubal River watershed

Measure N°. in sectoral plan	1.1.5 - Energy, Mines, Industry and Crafts, Agriculture
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large scale renewable electricity generation facilities
Location	Tominé River (Guinea)
Objectives	• Contribute to the extension of the electricity exchange system, facilitate energy trade and improve the quality of electricity supply in OMVG member countries; • Increase agricultural productivity and production ; • Supply renewable energy at a competitive price, slow the increase in fossil fuel consumption and, consequently, greenhouse gas emissions; • Set up a major infrastructure to supply the industrial sector of the Koliba river basin, increase agricultural productivity; • Regulate the flow of the Koliba River, reducing flooding.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project (2nd generation)
Duration	5 years
Total cost (USD)	450 M USD
Funding	UNCDF Funding of preliminary design study, final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy, and CAD. Identify donors or investors to finance construction work
Progression status	Evaluation of the technical and financial proposals of the current shortlist
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	Construction of the Fello-Sounga hydroelectric scheme
Expected results	The Fello-Sounga dam has been built and contributes to the socio-economic development of OMVG member countries, as well as improving the living conditions of the beneficiary populations (better access to electricity and water).

M2.35

Fello Sounga - Labé interconnection line

Measure N°. in sectoral plan	/ Energy, Mines, Industry and Crafts, Agriculture
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.c - Connect populations by raising awareness of energy issues
Location	Bambadinga-Gabou (Guinea-Bissau) / Koungala (Guinea) / Fello Sounga (Guinea) / Boké (Guinea) and associated source stations
Objectives	Supplying urban areas with electricity
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG
Duration	5 years
Total cost (USD)	346 M USD
Funding	Member States
Progression status	Evaluation of the technical and financial proposals of the current shortlist
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	Creation of the 225 KV electrical Fello Sounga - Labé interconnection line
Expected results	The entire urban population of the region and part of the rural population are supplied with electricity (around 1.5 M inhabitants).

M2.32a

Construction of the 416 km long 225 kV Guinea - Guinea - Bissau power interconnection line with associated substations

Measure N°. in sectoral plan	1.2.2 - Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.b - Complete the construction of the interconnection lines
Location	Guinea and Guinea-Bissau
Objectives	This project is part of efforts to strengthen electricity transmission capacity between Guinea and Guinea-Bissau. It will connect eastern Guinea-Bissau with communities in the Gaoual and Koundara areas of Guinea.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project (2nd generation)
Duration	3 years
Total cost (USD)	278.19 M USD (estimate for construction)
Funding	USD 2.23 million from the ADB for pre-investment studies for the Saltinho AHE project. AfDB for construction financing.
Progression status	Not started
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	• Construction of a 416 km long 225 kV power line on the sections Boké-Gaoual-Koundara-Guinea-Bissau border in Guinea and Guinea-Guinea-Bissau border-Gabu-Bafata-Bambadinca in Guinea-Bissau. • Construction of associated substations: (i) extension of the Bambadinca and Mansoa substations, new substation at Gabu in Guinea-Bissau and (ii) extension of the Boké substation, new substations at Gaoual (Fello Sounga) and Koundara in Guinea.
Expected results	• The energy trade is facilitated and the quality of electricity supply improved in OMVG member countries. • The consumption of fossil fuels is reduced and, as a result, so are greenhouse gas emissions. • A competitively priced renewable energy is available. • The socio-economic development of OMVG member countries is stimulated by improving people's access to energy. • The electricity exchange system is strengthened. • A major infrastructure is being set up to supply the industrial sector of the Gambia River basin. • The living conditions of the beneficiary populations are improved.

M2.26

Construction of the Sambangalou hydroelectric scheme (AHES) on the Gambia River, in the Kédougou region of Senegal, with 128 MW of installed capacity and 394.3 GWh/year of producible power (1/2)

Measure N°. in sectoral plan	1.1.1 - Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large-scale renewable electricity generation facilities
Location	Sambangalou, Gambia River (Senegal)
Objectives	• Supply renewable energy and improve the quality of electricity supply in OMVG member countries, guaranteeing better access for populations to energy and water. • Slowing the growth in fossil fuel consumption and, consequently, greenhouse gas emissions. • Increase agricultural productivity by irrigating 90,000 ha of farmland (50,000 ha in The Gambia and 40,000 ha in Senegal). • Regulate the flow of the Gambia River, thereby reducing flooding. • Reverse the salt wedge 60km downstream of the dam between Kaur and Kuntaur in the Republic of The Gambia.
Owner / Implementer	OMVG and Ministries in charge of energy
Origin (institution / project / programme)	OMVG Energy Project
Duration	48 months. Start of construction: 26 September 2022
Total cost (USD)	687,11 M USD Funding acquired: 490,00 M USD Member State funding: 38,11 M USD Additional funding to be sought: 159 M USD
Funding	Private banks: AFC, DBSA, BPI France financing and buyer credit (BPI Assurance export and OeKB): 547.45 M ; Member States for implementation of the environmental and social action plan: 42.58 M; Identify donors or investors to finance additional services and construction work: 177.64 M.
Progression status	Ongoing implementation
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions

M2.26

Construction of the Sambangalou hydroelectric scheme (AHES) on the Gambia River, in the Kédougou region of Senegal, with 128 MW of installed capacity and 394.3 GWh/year of producible power (2/2)

Summary of activities / description of action	• Construction of the Sambangalou hydroelectric development • Work on the access road on the left bank, including a crossing structure • Work to reinforce the excavation slopes on the right bank • Modification of the departure point • Additional drilling and injection due to geological hazards • Drinking water intake • Pumped storage power stationwater intakes • Consulting engineer • Sambangalou project management unit
Expected results	The dam is built and contributes to the socio-economic development of the OMVG member countries as well as to the improvement of the living conditions of the beneficiary populations (better access to electricity and water).

M2.60

Construction of a Pumped Storage Power Station (STEP) in the Sambangalou Hydroelectricity Development reservoir on the right bank of the Gambia River in Senegal, with an installed capacity of 152 MW and a producibility of 243 GWh/year (1/2)

Measure N°. in sectoral plan	1..... Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium and large-scale renewable electricity generation facilities
Location	Right bank of the Gambia River (Senegal)
Objectives	• Increase the productive capacity of Sambangalou • Contribute to the expansion of the electricity exchange system, participate in the development of the WAPP energy market, improve the quality of electricity supply in OMVG member countries and the stability of the interconnected network. • Provide renewable energy at a competitive price, slow the growth of fossil fuel consumption and, consequently, greenhouse gas emissions. • Increase access to electricity for populations in the OMVG area.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project
Duration	3 years (2029-2031)
Total cost (USD)	317,3 M USD
Funding	EU Energy Facility for pre-feasibility and feasibility studies Funding to be identified for construction
Progression status	• Site identification study for the project already completed • The project has been submitted to Senegal for inclusion in the Just Energy Transition Partnership (JETP) • Pre-feasibility study, including environmental and social impact assessment, is currently underway • Funding for feasibility studies is available
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions

M2.60

Construction of a Pumped Storage Power Station (STEP) in the Sambangalou Hydroelectricity Development reservoir on the right bank of the Gambia River in Senegal, with an installed capacity of 152 MW and a producibility of 243 GWh/year (2/2)

Summary of activities / description of action	Construction of a Pumped Storage Power Station on the right bank of the Gambia River, in the Sambangalou reservoir.
Expected results	The pumped storage power station will contribute to the socio-economic development of OMVG member countries and improve the living conditions of beneficiary populations (better access to affordable electricity and water). It will also reduce greenhouse gas emissions, improve the security of electricity supply for the population, stabilize the grid, and contribute to the development of the electricity market of the West African Power Pool (WAPP).

M2.61

Construction of a Pumped Storage Power Station in the Sambangalou hydroelectricity development reservoir on the left bank of the Gambia River in Guinea, with an installed capacity of 138 MW and a producibility of 221 GWh/year (1/2)

Measure N°. in sectoral plan	1..... Energy, Mines, Industry and Crafts
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.a - Continue the plan to build new medium- and large-scale renewable electricity generation facilities
Location	Left bank of the Gambia River (Guinea)
Objectives	• Increase Sambangalou's productivity • Contribute to the extension of the electricity exchange system, participate in the development of the WAPP energy market, improve the quality of electricity supply in OMVG member countries and the stability of the interconnected network. • Provide renewable energy at a competitive price, slowing the rise in fossil fuel consumption and, consequently, greenhouse gas emissions. • Increase access to electricity for populations in the OMVG area
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project
Duration	3 years (2029-2031)
Total cost (USD)	260,32 M USD
Funding	EU Energy Facility for pre-feasibility study and feasibility study Funding to search for construction
Progression status	• Site identification study for the project already completed • The project has been submitted to Senegal for inclusion in the Just Energy Transition Partnership (JETP) • Pre-feasibility study, including environmental and social impact assessment, is currently underway • Funding for feasibility studies is available
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions

M2.61

Construction of a Pumped storage power station in the Sambangalou hydroelectricity development reservoir on the left bank of the Gambia River in Guinea, with an installed capacity of 138 MW and a producibility of 221 GWh/year (2/2)

Summary of activities / description of action	Construction of a pumped storage water station on the left bank of the Gambia River, in the Sambangalou reservoir.
Expected results	The pumped storage power station will contribute to the socio-economic development of OMVG member countries and improve the living conditions of beneficiary populations (better access to affordable electricity and water). It will also reduce greenhouse gas emissions, improve the security of electricity supply for the population, stabilize the grid, and contribute to the development of the electricity market of the West African Power Pool (WAPP).

M2.32b

Construction of a 225 kV line between Soma (The Gambia) and Tambacounda (Senegal), with the creation of a 225/30 kV substation at Bansang (The Gambia) and a 225 kV line between Brikama (The Gambia) and Ziguinchor (Senegal) (1/2)

Measure N°. in sectoral plan	1.2.2 - Energy, Mining, Industry and Craft
Provision	**D2.3** Develop hydropower and ensure basin connectivity
Sub-provision	2.3.b - Finalize the construction of the interconnection network
Location	Senegal and The Gambia
Objectives	The project is part of a program to reinforce power transmission capacity between The Gambia and Senegal. It will secure the power supply to the Gambian capital Banjul, the Lower Casamance region and the Ziguinchor region in Senegal.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project
Duration	3 years
Total cost (USD)	123.06 MUSD World Bank: Financing of technical feasibility studies (preliminary design study, final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy and CAD) for an amount of 879,530 USD. Identify donors or investors to finance construction works for an amount of 131.16 M USD.
Funding	World Bank: Financing of technical feasibility studies. The World Bank is identified for the financing of construction work.
Progression status	Feasibility study (preliminary design study) approved and final design study, environmental and social impact assessment, environmental and social management plan, environmental and social policy and CAD in progress
Link with SDGs	**SDG 7 Affordable and Clean Energy**
Targeted issues	Poor access to energy, untapped hydroelectric potential
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions
Summary of activities / description of action	The project involves the construction of: • A 225 kV line between Ziguinchor (Senegal) and Brikama (Gambia) with a length of 130 km; • Another 225 kV line between Soma (Gambia) and Bansang (Gambia), 127 km long, and between Bansang and Tambacounda (Senegal), 123 km long, intended to supply a transformer station in Bansang (Gambia). This substation will be able to gradually increase its high-voltage/low-voltage transformation capacity in order to adapt as closely as possible to changes in actual demand.

M2.32b

Construction of a 225 kV line between Soma (The Gambia) and Tambacounda (Senegal), with the creation of a 225/30 kV substation at Bansang (The Gambia) and a 225 kV line between Brikama (The Gambia) and Ziguinchor (Senegal) (2/2)

Expected results	• Facilitation of energy exchanges and improvement of the quality of electricity supply in OMVG member countries (Senegal and Gambia); • Slowdown in the growth of fossil fuel consumption and, consequently, greenhouse gas emissions; • Competitively priced renewable energy; • Contribution to the socio-economic development of OMVG member countries by improving access to energy for the population; • Contribution to the expansion of the electricity exchange system; • Development of major infrastructure for supplying the industrial sector in the Gambia River basin; • Improvement of living conditions for beneficiary populations.

M2.1

Construction / rehabilitation / reinforcement and monitoring of implementation works for water supply systems, treatment, storage, drinking water networks and connections in urban centers - rehabilitation / reinforcement

Measure N°. in sectoral plan	1.1.1 - Water, Sanitation and Health
Provision	**D2.1** Develop essential services in a safe and sustainable way by raising awareness of environmental and health issues
Sub-provision	2.1.a - Ensure safe and sustainable access to drinking water
Location	Urban centres in the OMVG area
Objectives	To improve the drinking water service in urban centres in the OMVG area through the construction of new drinking water infrastructure and the rehabilitation and/or strengthening of existing infrastructure; ensuring that infrastructure is robust and resilient to the impacts of climate change.
Owner / Implementer	The Gambia: NAWEC, DWR; Guinea: SEG; Guinea Bissau: EAGB; Senegal: SONES
Origin (institution / project / programme)	SDG 6 target 6.1
Duration	18 years (2023 to 2040)
Total cost (USD)	513.6 MUSD (The Gambia: 102.7 MUSD / Guinea: 56.1 MUSD / Guinea Bissau: 78.9 MUSD / Senegal: 275.9 MUSD)
Funding	To search for
Progression status	Not started
Link with SDGs	**SDG 6 Clean Water and Sanitation**
Targeted issues	Fragile essential services (water supply, sanitation, health)
Link with the fight against climate change and its impacts	• Strengthening the resilience of drinking water services • Adapting infrastructures to climatic hazards • Equitable access and sustainable management of water resources • Reducing indirect greenhouse gas emissions
Summary of activities / description of action	• Construction / rehabilitation / reinforcement and monitoring of localized facilities: water catchments, treatment plants, pumping stations and reservoirs, and water towers • Construction/rehabilitation and monitoring of linear facilities: water transfers, conveyances and drinking water networks, including house connections and standpipes
Expected results	The availability and access to drinking water supply services is considerably improved for the entire population of urban centers in the OMVG area compared with the current situation.

M2.2

Construction/rehabilitation/upgrading and monitoring of drinking water infrastructure (borehole, solar pump/electrical network, chlorination station, water tower, networks and connections for standpipes), for 70% of the village population - rehabilitation/upgrading

Measure N°. in sectoral plan	1.1.2 -Water, Sanitation and Health
Provision	**D2.1** Develop essential services in a safe and sustainable way by raising awareness of environmental and health issues
Sub-provision	2.1.a - Ensure safe and sustainable access to drinking water
Location	Villages with 400 or more inhabitants (2020) in the OMVG area
Objectives	Improve the availability of and access to drinking water supply services for villages with more than 400 inhabitants in the OMVG area, through the construction of new drinking water infrastructures and networks and the rehabilitation / reinforcement of existing infrastructures and networks; ensuring that infrastructures are robust and resistant to the impacts of climate change.
Owner / Implementer	The Gambia: DWR and NAWEC; Guinea: SNAPE; Guinea Bissau: DGRH; Senegal: OFOR
Origin (institution / project / programme)	SDG 6 target 6.1
Duration	18 years (2023 to 2040)
Total cost (USD)	799.2 MUSD (The Gambia: 139.9 MUSD / Guinea: 253.8 MUSD / Guinea Bissau: 92.8 MUSD / Senegal: 312.7 MUSD)
Funding	To search for
Progression status	Not started
Link with SDGs	**SDG 6 Clean water and sanitation**
Targeted issues	Fragile essential services (water supply, sanitation, health)
Link with the fight against climate change and its impacts	• Strengthening the resilience of drinking water services • Adapting infrastructures to climatic hazards • Equitable access and sustainable management of water resources • Reducing indirect greenhouse gas emissions
Summary of activities / description of action	• Construction / rehabilitation / reinforcement and monitoring of localized facilities: water catchment, chlorination and iron removal plants, and water towers • Construction/rehabilitation/reinforcement and monitoring of linear works: drinking water conveyance and networks, including individual connections and standpipes
Expected results	Availability and access to drinking water supply services is considerably improved for the entire population of the most populated villages (over 400 inhabitants) in the OMVG zones compared with the current situation.

M2.9

Construction/rehabilitation and monitoring of sanitation and hygiene infrastructure, off-site in and around the city center, and on-site in peri-urban areas for the population of urban centers

Measure N°. in sectoral plan	2.1.1 - Water, Sanitation and Health
Provision	**D2.1** Develop essential services in a safe and sustainable way by raising awareness of environmental and health issues
Sub-provision	2.1.b - Ensure safe and sustainable access to sanitation and promote hygiene
Location	Urban centers in the OMVG area
Objectives	Improve sanitation and hygiene services in urban centers in the OMVG area, by ensuring that infrastructures are robust and resistant to the impacts of climate change.
Owner / Implementer	The Gambia: NAWEC; Guinea: MHA/DGA; Guinea Bissau: DGRH; Senegal: ONAS
Origin (institution / project / programme)	SDG 6 target 6.2
Duration	18 years (2023 to 2040)
Total cost (USD)	505.8 MUSD (The Gambia: 80.6 MUSD / Guinea: 43.1 MUSD / Guinea Bissau: 61.4 MUSD / Senegal: 320.7 MUSD)
Funding	To be identified
Progression status	Not started
Link with SDGs	**SDG 6 Clean water and sanitation**
Targeted issues	Fragile essential services (water supply, sanitation, health)
Link with the fight against climate change and its impacts	• Strengthening the resilience of drinking water services • Adapting infrastructures to climatic hazards • Equitable access and sustainable management of water resources • Reducing indirect greenhouse gas emissions
Summary of activities / description of action	• Construction/rehabilitation and follow-up in town centers with a conventional reticulated/simplified network solution and individual connections to houses and buildings. The wastewater generated in these areas is conveyed by interceptors/ pump stations to the treatment plant to be built around the urban centers. • Construction/rehabilitation and monitoring in peri-urban areas of low-flow flush toilets with washbasins, at a rate of one toilet per 15 inhabitants, sludge pits and infiltration wells, sludge treatment plants and a sludge management system for transporting sludge to the treatment plant.
Expected results	Sanitation and hygiene services have improved considerably compared to the current situation in urban centers.

M2.16

Construction/rehabilitation of 1,600 km of new rural agricultural roads connecting with major asphalt road links

Measure N°. in sectoral plan	1.1.1 - Transports and Communications
Provision	**D2.2** Open up and interconnect basins
Sub-provision	2.2.a - Develop rural roads
Location	OMVG Area
Objective	Ensure a proper level of service for rural populations through the construction of high-quality rural roads to ensure internal opening-up and regional integration.
Owner / Implementer	The Gambia: MTP; Guinea: MITP; Guinea Bissau: MTP; Senegal: MITTD
Origin (institution / project / programme)	OMVG
Duration	16 years (2023 – 2038)
Total cost (USD)	115,5 M USD
Funding	To be identified
Progression status	Not started
Link with SDGs	**SDG 8 Decent work and economic growth** **SDG 9 Industry, Innovation and Infrastructure**
Targeted issues	Rural isolation
Link with the fight against climate change and its impacts	1. Reducing greenhouse gas emissions from transport 2. Adapting infrastructures to climatic hazards 3. Strengthening the resilience of rural communities 4. Reducing informal deforestation and preserving ecosystems 5. Environmental monitoring and compensatory measures
Summary of activities / description of action	• Technical and financial feasibility and environmental studies • Contracting for rural road works • Construction/rehabilitation/maintenance of 400 km of rural roads per country over 16 years (according to priorities and agricultural production centers) • Routine and periodic maintenance every two years • Quarterly monitoring of the measure's progress by the OMVG Transport Unit in liaison with the national authorities of each member state. • Quarterly report to OMVG management
Expected results	1,600 km of new rural agricultural roads, linked to major asphalt road links, are being built/rehabilitated and maintained.

M2.21

Establish 700 km of navigability on three rivers to develop river transport in the three river basins (1/2)

Measure N°. in sectoral plan	1.3.1 - Transports et Communications
Provision	**D2.2** Open up and interconnect basins
Sub-provision	2.2.b - Develop inland waterway transport
Location	OMVG Area
Objective	Promote river traffic and its development as an alternative to road transport, integrate multimodal transport into all transport sectors (road, rail , river, air) and optimize transport logistics in all sectors of activity (agriculture, mining , industry , trade, tourism).
Owner / Implementer	Ministries responsible for inland navigation
Origin (institution / project / programme)	OMVG
Duration	10 years (2023 – 2032)
Total cost (USD)	2,64 M USD
Funding	To be identified, may come from states, international donors, river tax, Waterways Maintenance Fund.
Progression status	Not started
Link with SDGs	**SDG 9 Industry, Innovation and Infrastructure**
Targeted issues	Rural isolation
Link with the fight against climate change and its impacts	Reducing greenhouse gas emissions

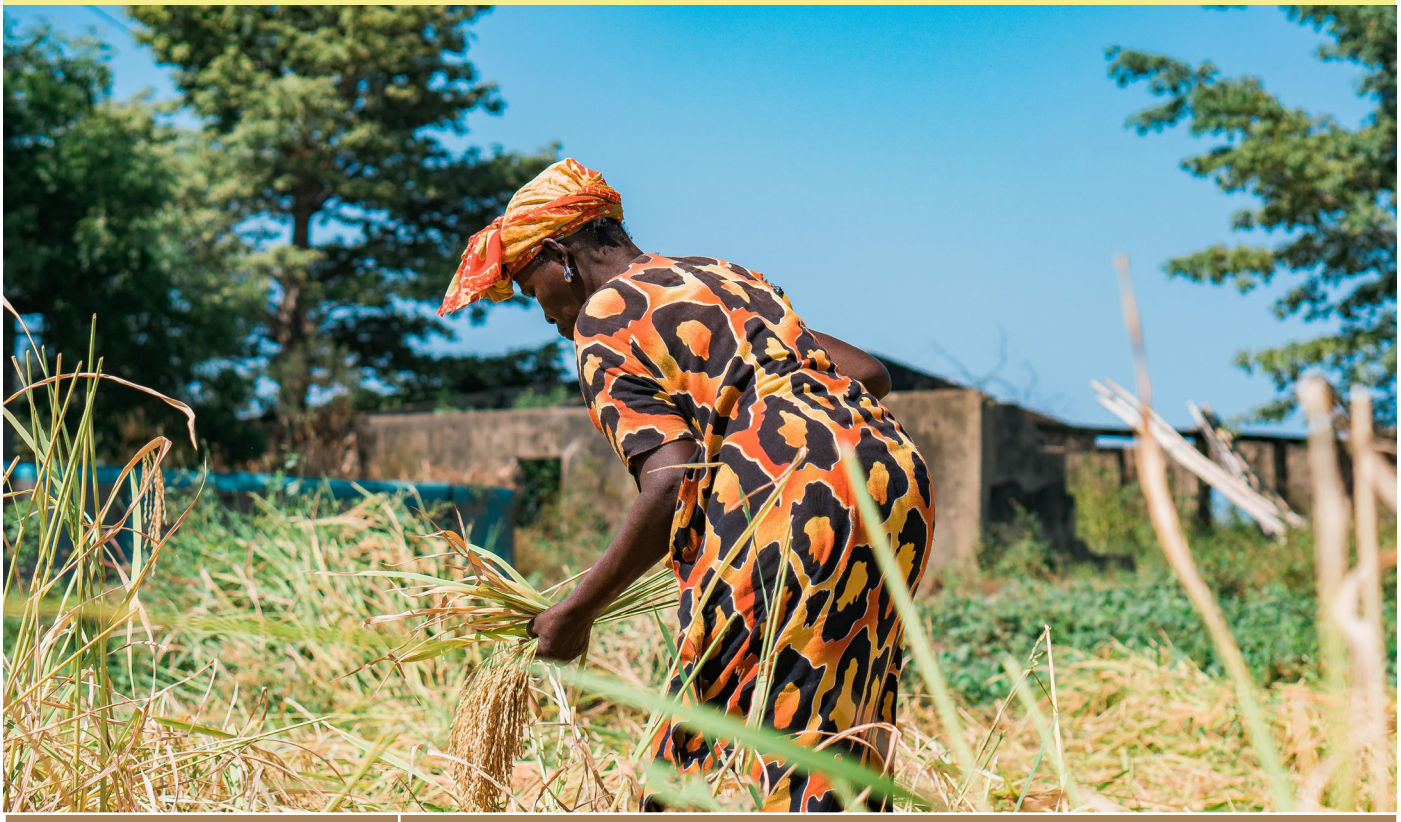
M2.21

Establish 700 km of navigability on three rivers to develop river transport in the three river basins (2/2)

Summary of activities / description of action	• Technical and financial feasibility study for the implementation of navigability on the three rivers of the OMVG area • Consultation of the OMVG Transport Unit with the national authorities in charge of this mode of transport and the private sector (river transporters, agricultural pro-ducers, distributors) • Awareness campaign and training for the development of navigability • Procurement of technical assistance • Implementation of technical assistance for the implementation of the navigability plan • Cartographic work and creation of a computerised database updated periodically or in real time, geodetic studies and work, hydrometric and limnimetric work • Rehabilitation of the navigability of 1200 kms of waterways (400 kms per river, Gambia, Kayanga & Corubal) through actions on (i) hydrographic, hydrological and bathymetric measurements as well as (ii) marking and mapping of water-ways, and (iii) dredging • Sustainability of navigability and organisation of the maintenance mechanism of rehabilitated waterways. • Quarterly follow-up of the evolution of the measure by the OMVG Transport Unit in liaison with the national authorities of each Member State • Quarterly report to management OMVG
Expected results	Inland waterway transport is being developed with cost-effective and efficient solutions in all three river basins. Navigation is becoming a good alternative to other modes of transport.

Fundamental orientation 3 :

Sustainable devlopment



Sectors	Measures
Agricultural production	Rice cultivation (12,500 ha)
	Development/rehabilitation and infrastructure management (SODAGRI - 10,200 ha)
	Construction/rehabilitation of hydro agricultural schemes in Guinea Bissau in the OMVG area (16,100 ha)
	Construction of the Campossa hydro agricultural scheme (1,000 ha), in Guinea-Bissau, on the Géba river
	Development and expansion of hydro agricultural schemes in Guinea in the OMVG area (10,500 ha)
	Program to develop pastoral hydraulics (facilities), manage agro-sylvo-pastoral areas and resources and improve cross-border transhumance
	Expansion of irrigated agriculture in The Gambia in the OMVG area (23,000 ha)

M3.5

Rice cultivation (12,500 ha) (1/2)

Measure N°. in sectoral plan	1.1.5 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.a - Promote increased and sustainable agricultural production
Location	• In Guinea: Parabanta Moussouly Koto, Missira, Tiéwiré, Souléré, Doundounk Saara and Tembouguidaré. • In Senegal: Sambangalou, Niambara, Néoudou, M'bara, Roundé M'bara, Tépéré Diantou and Kédougou. • In The Gambia: from Kunkafo Swamp (PK 478) to Banatenda (PK 362) in Banjul. • In Guinea Bissau: Contuboel, Batafa and Carantaba.
Objectives	Mitigate the negative impacts of the dam by: • setting up hydro-agricultural schemes upstream of the Sambangalou reservoir in Guinea and ensuring that displaced populations have access to basic social services; • setting up hydro-agricultural schemes downstream of the Sambangalou reservoir in Senegal and ensuring access to basic social services for displaced populations; • the development of flooded basins following the rolling of Sambangalou in The Gambia; • rehabilitation of the rice fields in Bafata.
Owner / Implementer	Ministries of Agriculture of Guinea, Senegal, The Gambia and Guinea Bissau
Origin (institution / project / programme)	Master Plan for the Agricultural and Forestry Sector in the Gambia River Basin
Duration	5 years (2023-2027)
Total cost (USD)	124,5 M USD
Funding	To be found
Progression status	Not started
Link with SDGs	**SDG 3 Good health and well-being** **SDG 6 Clean water and sanitation** **SDG 2 Zero hunger**
Targeted issues	• Fragile essential services (water supply, sanitation, health) • Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience

M3.5

Rice cultivation (12,500 ha) (2/2)

Summary of activities / description of action	In Guinea: • Land development and hydraulic equipment for 5,000 ha • Construction and equipping of 2 community health centers with independent water supply and sanitation services • Construction and equipping of 2 community schools with independent water supply and sanitation services • Drinking water supply - 7 boreholes equipped with human-powered pumps (PMH) • Construction of rural tracks (30 km) linking displaced villages with engineering structures Senegal: • Land development and hydraulic equipment for 5,000 ha • Construction and equipping of 2 community health centers with independent water supply and sanitation services • Construction and equipping of 2 community schools with independent water supply and sanitation services • Construction of 7 boreholes equipped with PMH for drinking water supply • Construction of rural tracks (30 km) linking displaced villages with engineering structures The Gambia: • Reclamation of 1,850 ha of flooded basins following the Sambangalou milling operation Guinea Bissau: • Rehabilitation of 595 ha of rice fields in Bafata
Expected results	• Rice production and productivity have been improved with the development of 5000 ha in Guinea and 5000 ha in Senegal for irrigated rice cultivation and the construction of rural tracks; • Household quality of life is improved with: ✓ the construction of social facilities in Guinea: 2 community health centers, 2 community schools, 7 boreholes equipped with PMH to supply drinking water; ✓ construction of 30 km of rural tracks linking displaced villages in Guinea; ✓ construction of social facilities in Senegal: 2 community health centers, 2 community schools, 7 boreholes equipped with PMH to supply drinking water in Senegal; ✓ construction of 30 km of rural tracks linking displaced villages to Senegal.

M3.7

Development/rehabilitation and infrastructure management (SODAGRI - 10,200 ha) (1/2)

Measure N°. in sectoral plan	1.2.2 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.b - Increase irrigated land
Location	Senegalese regions of Kédougou, Tambacounda and Kolda (Vélingara) Areas: The Gambia Upstream - Fouta-Djalon, The Gambia - PNNK - Intermediate Valley, The Gambia Downstream - Wetlands and Kayanga Upstream
Objectives	Increase agricultural productivity and production in Senegal through the development of sustainable production systems, so as to restore the balance of trade deficit in the short and medium term.
Owner / Implementer	SODAGRI
Origin (institution / project / programme)	SODAGRI's strategic plan Priority 2: Support for rural development Action Line 1: Construction/rehabilitation of facilities and infrastructure management
Duration	5 years - 2023 to 2027
Total cost (USD)	102 M USD
Funding	To search for
Progression status	Not started
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience

M3.7

Development/rehabilitation and infrastructure management (SODAGRI - 10,200 ha) (2/2)

Summary of activities / description of action	• Rehabilitation of facilities and pumping stations on the Anambé (sector 5, then 1, 2, 3 and 4) • Development or rehabilitation of valleys and lowlands: ✓ Sédhiou region: 500 ha at Diopcounda (PARIIS); ✓ Rehabilitation of the Diopcounda dam (PARIIS); ✓ Identification of sites in progress for 1,460 ha (2nd phase of PARIIS); ✓ Department of Kédougou: 295 ha (Sambagara) under construction; ✓ Vélingara Department: 140 ha in Temento and 90 ha in Saré wogna, under construction; ✓ Studies underway for the development of 1,030 ha of lowlands in the departments of Kédougou, Tambacounda and Vélingara. • Support for the development and operation of market gardening schemes (1,000 ha): agricultural boreholes in areas where the quality of the groundwater is favorable to irrigation and where the operating flow makes market gardening schemes profitable. Drip irrigation systems will be preferred; • Support for the development and operation of 1,300 ha of banana perimeters: rehabilitation and extension of banana perimeters (planting, installation of under-plant irrigation systems, way cables and fencing); • Construction or rehabilitation of tracks to open up production areas: 46.4 km of tracks to open up production areas (first-generation tracks), including 5.3 km in Tambacounda and 41.1 km in Vélingara; studies underway for 73.82 km of tracks (second-generation tracks), including 46.32 km in Vélingara and 27.5 km in Tambacounda; 23.1 km to facilitate access to Anambé irrigated areas; • Implementation of studies, works and supervision of works for the construction of 400 km of tracks to open up production areas to be developed or rehabilitated during the implementation of SODAGRI's strategic plan. • Rehabilitation of structuring hydraulic structures: rehabilitation of the Niandouba and Confluent dams, apart from the channel dams (Anambé basin); • Implementation of a strategy for the upkeep and maintenance of hydro-agricultural facilities and equipment and access roads.
Expected results	• Anambé pumping stations and facilities rehabilitated; • Rehabilitated or developed valleys and lowlands (7871 ha); • Developed and exploited market garden areas (1,000 ha); • Developed and exploited banana areas (1,300 ha); • Access roads built or rehabilitated production areas; • Niandouba and Confluent dams rehabilitated, apart from those in the channels; • Strategy for the maintenance of hydro-agricultural facilities and equipment, and access roads implemented.

M3.8

Construction/rehabilitation of hydro agricultural schemes in Guinea Bissau in the OMVG area (16,100 ha) (1/2)

Measure N°. in sectoral plan	1.2.3 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.b - Increase irrigated land
Location	• Guinea- Bissau • Mainly in the Kayanga Aval - Géba zone, but also in the Corubal Aval - Wetlands zone
Objectives	Controlling water for a more productive, diversified and sustainable agriculture with a view to reducing food insecurity and poverty in Guinea-Bissau
Owner / Implementer	The Ministry of Agriculture, Livestock and Forestry (MAEF) of Guinea Bissau
Origin (institution / project / programme)	National Agricultural Investment Plan (2nd Generation)
Duration	19 years (2022-2040)
Total cost (USD)	161 M USD
Funding	To search for
Progression status	Not started
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience

M3.8

Construction/rehabilitation of hydro agricultural schemes in Guinea Bissau in the OMVG area (16,100 ha) (2/2)

Summary of activities / description of action	Realisation / rehabilitation of hydro agricultural schemes in Guinea- Bissau in the OMVG area (16 100 ha): Vale de Gambiel - 10 000 ha, Xaianga/Badora - 180 ha, Malandi/ Finet - 350 ha, Nimpala/Bidjine - 10 ha, Sintcham Bonco - 150 ha, Gandjara - 200 ha, Waquilare - 65 ha, Bancuma - 28 ha, Candjadude - 30 ha, Gã-Sisse - 5 ha, Carantaba - 180 ha, Sintcham Iero Djadja/Pirada - 20 ha, Holoto/Pitche - 20 ha, Cantente - 15 ha, Tcheual/Mafanco - 15 ha, Copiro/Pitche - 100 ha, Padjama/Pitche - 30 ha, Bidinga Na Nhasse - 750 ha, Ufra Samba-Djau/Pitche - 20 ha, Coatche /Pitche - 100 ha , Buruntuma - 225 ha , Pirada - 135 ha, Kopa Mangui/Pirada - 200 ha : • Inventory and diagnosis of existing infrastructures; • Assessment of the extent to which beneficiaries make use of existing infrastructures ; • Assessment of infrastructure upkeep and maintenance by local communities; • Identification of problems related to management, related to land , related to the environment , etc. ; • Support to producer organizations for better management of irrigated areas; • Capacity-building for the upkeep and maintenance of infrastructure and equipment; • Support for the organization and management of producer organizations and value chain stakeholders in irrigation-related activities; • Studies and inventory of the potential of existing water resources and agricultural areas; • Capacity building for stakeholders in the agricultural and rural sector; • Extension of irrigation equipment and materials, such as treadle pumps, tubular boreholes, PVC and drip micro-irrigation kits; • Construction of simple infrastructure for lowland development ; • Construction of simple rainwater and runoff collection and storage structures.
Expected results	• The most accessible water resources are developed through the large-scale dissemination of efficient techniques and technologies for the conservation of rainwater and the use of surface and groundwater, at low cost and appropri-ate to the beneficiaries (farmers, stockbreeders, fishermen) • Simple infrastructures carried out with the participation of the population for the development of lowlands and mangroves and the construction of surface water collection and storage structures.

M3.10

Construction of the Campossa hydro agricultural scheme (1,000 ha), in Guinea-Bissau, on the Géba river

Measure N°. in sectoral plan	1.2.4 - Agriculture, Elevage, Forêts et Pêche
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.b - Increase irrigated land
Location	• Guinea-Bissau • The future Campossa site is located in Bafatá - Area Kayanga Aval - Géba
Objectives	Construction of the Campossa hydro agricultural scheme in Guinea-Bissau, with the aim of irrigating farmland, supplying water to the surrounding population and halting the advance of salt water.
Owner / Implementer	OMVG
Origin (institution / project / programme)	OMVG Energy Project
Duration	To be determined
Total cost (USD)	89 M USD
Funding	To search for
Progression status	Under study
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience
Summary of activities / description of action	Construction of the Campossa hydro-agricultural scheme
Expected results	• Campossa dam built • 1,000 ha irrigated • Improved agricultural productivity • Improved living conditions for beneficiaries • Progression of salt water halted

M3.11

Development and expansion of hydro agricultural schemes in Guinea in the OMVG area (10,500 ha) (1/2)

Measure N°. in sectoral plan	1.2.5 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.b - Increase irrigated land
Location	Guinea Koliba Upstream - Fouta-Djalon, Koliba-Corubal Intermediate valley and The Gambia Upstream - Fouta-Djalon
Objectives	Build sustainable hydro-agricultural schemes based on sound technical, socio-economic and environmental principles, involving local communities from the outset (participative approach) to produce market-oriented agricultural products.
Owner / Implementer	Ministry of Agriculture of Guinea
Origin (institution / project / programme)	Irrigation Development Master Plan (Guinea)
Duration	19 years (2022-2041)
Total cost (USD)	105 M USD
Funding	To be identified
Progression status	Not started
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience
Summary of activities / description of action	• Site selection, decision making, appraisal by DNGR and its decentralised services • Feasibility studies (consultancy firm (CF)) • Environmental and Social Impact Assessment carried out by a consultancy firm under the supervision of the DNGR and the BEEE • Detailed preliminary studies carried out by a consultancy firm under the supervision of the DNGR • Resettlement studies carried out by a consultancy firm under the supervision of the DNGR, the BEEE and the Prefecture • Procurement of works carried out by the Directorate General of Public Procurement with or without delegation to the DNGR and its decentralised services • Work and control carried out by a company. Control will be carried out by engineering offices and/or the decentralised services of the DNGR • Creation of Water Users' Associations (WUAs) by NGOs/CFs • Training and consolidation of WUAs by NGOs • Monitoring - Control - Audit carried out by the DNGR and its decentralised services.

M3.11

Development and expansion of hydro agricultural schemes in Guinea in the OMVG area (10,500 ha) (1/2)

Expected results	• Irrigation Development Master Plan strategy implemented • Actual irrigated area of 10,500 ha in 2040, of which 8,000 ha in the Koliba-Corubal river basin and 2,500 ha in the Gambia River basin • Irrigated agriculture developed and secured

M3.24

Program to develop pastoral hydraulics (facilities), manage agro-sylvo-pastoral areas and resources and improve cross-border transhumance (1/2)

Measure N°. in sectoral plan	1.3.4 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.2** Sustainable development of the livestock and fisheries sectors
Sub-provision	3.2.a - Develop livestock farming while limiting risks
Location	OMVG Area
Objectives	• Improve and secure livestock feed for pastoral/agropastoral livestock through development and better management of space and resources • Reduce conflicts over the use of land, water and grazing resources
Owner / Implementer	Ministries in charge of agriculture, livestock and the environment's Member states
Origin (institution / project / programme)	National programs of OMVG member countries
Duration	5 years (2024-2028)
Total cost (USD)	20 M USD
Funding	To be identified
Progression status	Feasibility studies, detailed preliminary design, tender documents, environmental and social impact assessment, and economic and social management plan availables; and construction work not yet started.
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited pastoral potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience
Summary of activities / description of action	• National level • Creation of the baseline situation: maps of pastoral land resources, inventory of all available pastoral infrastructures and their condition, analysis of pastoral resource management methods. • Analysis of organizational forms and partnerships • Setting up or rehabilitating hydraulic infrastructure (development of natural pools, creation of wells and boreholes) for livestock watering. • Drawing up a land-use plan using an inclusive approach. • Implementation and validation of a management plan (rangelands, pastures, ponds, structures and hydraulics, etc.). • Installation of firewalls and equipping of management bodies with bushfire-fighting equipment. • Establishment and capacity-building of resource and facility management bodies. • Setting up a credit system adapted to income-generating activities.

M3.24

Program to develop pastoral hydraulics (facilities), manage agro-sylvo-pastoral areas and resources and improve cross-border transhumance (2/2)

Summary of activities / description of action	• Production unit animation: information, awareness-raising, facilitation and animation of discussions, training capacity building, communication, advocacy , conflict management. • Monitoring and evaluation of implementation : (i) data collection on transhumance trends, level of use and management of boreholes, recurrence of conflicts, etc., (ii) timely transmission of data to higher levels and (iii) appropriate processing of data , so that adjustments can be made to correct any shortcomings. Cross-border transhumance management • Capacity building for transhumance stakeholders • Capacity-building for livestock breeders' and pastoralists' organizations: training program in negotiation, advocacy and lobbying; sessions on the legislative and regulatory framework governing transhumance; training program on the design and implementation of livestock development actions, support for the creation and operation of transhumance committees and consultation frameworks, support for training programs on pastoralism . • Creation of a sub-regional observatory on transhumance. • Support for research and development programs on pastoralism. • Updating, marking out and protecting transhumance corridors. • Construction of related facilities and infrastructure : every 25 kilometers or so, installation of facilities and infrastructure designed to improve feeding and watering conditions during transhumance: rest areas, watering points, feed stores. • Setting up zoo-sanitary infrastructures at border crossings: veterinary posts with vaccination pens and quarantine pens. • Facilitating the use of the International Transhumance Certificate. • Setting up an epidemiosurveillance network. • Harmonization of texts regulating transhumance. • Pastoral development in reception and transit zones, and in departure zones for transhumant herders. • Set up a monitoring and early warning system for forage and water crises. • Promote the integration of agriculture and livestock farming in start-up areas (manure pits, collection and storage of agricultural by-products for animal feed, development of forage plots, rehabilitate tutoring, enter into manure contracts to fertilize farmland, etc.). • Setting up conflict prevention and resolution commissions.
Expected results	• Good management of pastoral resources has been initiated and livestock feed secured. • The conflicts over the use of shared resources are reduced.

M3.12

Expansion of irrigated agriculture in The Gambia in the OMVG area (23,000 ha)

Measure N°. in sectoral plan	1.2.6 - Agriculture, Livestock, Forestry and Fisheries
Provision	**D3.1** Develop agriculture while limiting its impact on the environment
Sub-provision	3.1.b - Increase irrigated land
Location	The Gambia The Gambia Upstream - Fouta-Djalon, The Gambia - PNNK - Intermediate Valley, The Gambia Downstream - Wetlands, The Gambia Downstream - Estuary and mangroves, Kayanga Upstream
Objectives	Implement sustainable hydro-agricultural schemes, based on sound technical, socio-economic and environmental principles, involving local communities from the outset (participative approach) for the production of market-oriented agricultural products
Owner / Implementer	Ministries of Agriculture of The Gambia
Origin (institution / project / programme)	OMVG
Duration	19 years (2022-2041)
Total cost (USD)	300 M USD
Funding	To be identified
Progression status	Not started
Link with SDGs	**SDG 2 Zero hunger**
Targeted issues	Under-exploited agricultural potential
Link with the fight against climate change and its impacts	Building adaptive capacity and resilience
Summary of activities / description of action	Development of new hydro-agricultural areas, up to a maximum of 23,000 ha in The Gambia. • Selection of sites • Feasibility studies (consultancy firm) • Environmental and Social Impact Assessment • Preliminary design of the facilities • Procurement of works • Work and control • Creation of Water Users' Associations (WUA) • Training and consolidation of WUAs by NGOs • Monitoring - Control - Audit
Expected results	• Resilient and sustainable agriculture strategy implemented • Irrigated agriculture developed and secured

ORGANISATION
POUR LA MISE EN VALEUR
DU FLEUVE GAMBIE

GAMBIA RIVER BASIN
DEVELOPMENT
ORGANISATION

ORGANIZAÇÃO
PARA A VALORIZAÇÃO
DO RIO GÂMBIA

IDMP

Integrated Development Master Plan

Gambia, Kayanga-Geba
& Koliba-Corubal Rivers
2023 - 2040

volume 2

project briefs

https://www.omvg.org