

Challenges and Opportunities of Sustainable Socio-Economic Development and Financing for West African Integrated River Basin Development Organizations

Virtual Think Tank Roundtable with



29 September 2022

Background Note and Draft List of Questions

Introduction

River basin organizations are peacemakers and accelerators of sustainable development. National or transboundary, they are by design multi-stakeholder platforms. They are places for dialogue, between countries on a transboundary scale, between users and direct or indirect water stakeholders on a sub-national scale. In a context of crisis of multilateralism, it is therefore fundamental to develop these two scales of sharing and solidarity so that water can fully play its role as an instrument of peace and prosperity, in order to accelerate the achievement of the Sustainable Development Goals (SDGs) as well as resilience to current and future climate challenges.

The mission of the West African Integrated River Basin Development Organizations OMVG (Gambia River Basin) and OMVS (Senegal River Basin) is to accelerate the economic development of Member States through the joint development of the opportunities offered by the Basin. Their integrated development mandate allows them to act in a transboundary, territorial and intersectoral manner to catalyze sustainable and inclusive socio-economic development, to adapt to the effects of climate change, to prevent water-related conflicts, pollution and disasters, and to foster convergence between peace, humanitarian and sustainable development agendas.

Indeed, the core mandate of integrated river basin development organizations like OMVS, OMVG and TVA matches the three founding principles of the upcoming Conference of the United Nations Water Decade 2023 in New York City: they are by design inclusive, actionoriented and cross-sectoral. As expressed in its Vision Statement, the UN 2023 Water Conference *"will be the place where the water sector and especially other sectors will show water as the catalyst for sustainable development: water as dealmaker, because it connects all SDGs".*



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC





Blue Peace

The 2023 UN Water Conference Vision Statement¹ **states further that** "Water can drive the different partners apart – as a scarce resource or even a source of conflict – but water also brings them together, forging partnerships through inclusive collaborations. We need better water governance, finance, assessment and collaborative mechanisms to validate these cross-interest collaborations, ensuring a water secure world for all by all". Switzerland² also emphasized that the UN 2023 Water Conference must "step out of the water box" and "adopt a multi sectoral approach to water by reaching out to other relevant sectors, as water is intrinsically linked to current global challenges, such as health, global trade regulation, food and energy security, environmental sustainability and conflict resolution".

The Dakar Declaration³ (March 2022) that concluded the first ever World Water Forum in Sub-Saharan Africa, called upon the international community to "reinforce basin organizations and support their efforts for inclusive, sustainable and integrated water resources management; to strengthen mutually beneficial cooperation and partnership in the management of transboundary basins, including aquifer basins, in particular by promoting the exchange of information, experience and best practices; and to make dialogue, coordination, and cooperation the core of dispute resolution, in the true spirit of hydro-diplomacy". Further, the Dakar Action Plan⁴ for River, Lake and Aquifer Basins will help translate Dakar Declaration

Both the Mboumba Call⁵ at the Dakar World Water Forum and the Ouagadougou Roundtable⁶ on Water as a Vector for Peace in the Sahel (June 2021) have underlined that to reverse the deterioration of security in the Sahel and prevent the emergence of new areas of fragility, the bond of trust between institutions, local authorities and local populations should be strengthened through the implementation of levers for local socio-economic development.

In this regard, **the Global High-Level Panel**⁷ **on Water and Peace** has underlined the vital role river basin organizations can play to foster people's diplomacy, inter-sectoral water management and decision making provided financial and other incentives are in place to catalyze water cooperation from the local to the transboundary level. In fact, water cooperation should emerge at the grassroots level to generate the political will necessary to reach agreements at a higher level.

To meet the current and future challenges in the Sahelian region, it is therefore necessary to strengthen the technical, human and financial capacities of River Basin Development Organizations such as OMVG, OMVS and the Niger Basin Authority. The virtue of water as a vector of peace is already a historical reality in the OMVG and OMVS basins, where major infrastructures have been or are being built in a collegial manner, benefiting each Member State. The challenge is therefore to enhance these infrastructures through sustainable and inclusive local socio-economic development supporting social cohesion, through community and small private sector development to generate sustainable employment, especially for youth, women and marginalized populations.

¹ <u>https://sdgs.un.org/sites/default/files/2021-11/Vision_Statement_UN2023_Water_Conference.pdf</u>

² https://sdgs.un.org/sites/default/files/2022-03/Switzerland proposals thematic dialogues UN2023WC.pdf

³ <u>https://www.worldwaterforum.org/en/practical-information/dakar-declaration</u>

⁴ <u>https://www.riob.org/en/news/support-dakar-action-plan-lake-river-and-aquifer-basins</u>

⁵ <u>https://www.ipar.sn/IMG/pdf/appel_de_mboumba_-_voix_du_fleuve_voie_de_la_paix.pdf</u>

⁶ <u>https://genevawaterhub.org/resource/report-round-table-local-actors-water-vector-peace-sahel</u>

⁷ <u>https://genevawaterhub.org/sites/default/files/atoms/files/a_matter_of_survival_www.pdf</u>

River Basin Development Organizations can and should take advantage of recent advances in integrative approaches especially between water and land⁸, digital platforms and the network economy, innovative financing mechanisms, and best practices for representation and participation of local stakeholders in basin development. It is therefore necessary to build capacity and develop new economic and financial instruments so that River Basin Development Organizations can fully play their role as convener, facilitator and catalyst of local initiatives.

Back in the 1960s, the Tennessee Valley Authority (TVA) served as a model for the development of the Niger, the Gambia as well as the Senegal River Basin Development Organizations (US National Academy of Sciences, 2003). Half a century later, an exchange of experiences could help them inspire each other, learning from their challenges while valuing their successes, to chart an inclusive and sustainable course to prosperity and peace for the coming decades. Indeed, as the Vision Statement of the upcoming UN 2023 Water Conference in New York City indicates, their integrated river basin development model aimed at making water a catalyst for sustainable development and peace has never been more relevant and should inspire the world.

This exchange would be particularly timely as these transboundary river basin development organizations have recently undertaken strategic development actions – notably the OMVG Integrated Development Master Plan⁹ (2022) as well as the first OMVS Senegal River Basin Economic Forum¹⁰ (2021) – and are exploring new participatory and community financing mechanisms such as the OMVS Financing and Support Platform¹¹ to Promote Local Entrepreneurship and Job Creation as well as new ways¹² for OMVG to access the bond market to finance capital investments (Blue Peace Financing Initiative).

The Integrated Functions of the Tennessee Valley Authority (TVA)

The Tennessee Valley Authority (TVA) is a federally owned corporation in the United States created by congressional charter on May 18, 1933, to provide general economic development to the Tennessee River Basin through power generation, flood control, navigation assistance, fertilizer manufacturing, agricultural development, and to eradicate malaria that affected at that time a third of the population in the Tennessee basin. The TVA was one of the most successful and ambitious of President Franklin Roosevelt's New Deal programs, who envisioned TVA as "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise."

TVA's service area is transboundary and covers 7 American States (see map below). Despite its shares being owned by the federal government, TVA operates exactly like a private corporation and receives no taxpayer funding. Instead, it finances its operations through the sale of energy and through the sale of TVA bonds (more than US\$1 billion of TVA bonds issued every

⁸ <u>https://cda-omvs.org/wp-content/uploads/2021/12/14904_charte_fonciere_</u> <u>bassin_du_fleuve_senegal_0.pdf</u>

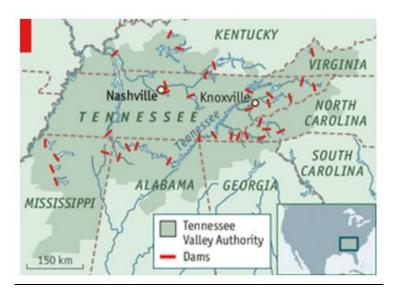
⁹ <u>https://www.uncdf.org/fr/article/6745/un-mcanisme-de-financement-innovant-pour-la-gestion-des-ressources-naturelles-transfrontalieres-et-la-mise-en-uvre-du-pddi-de-lomvg</u>

¹⁰ <u>https://www.omvs.org/evenement/forum-dechange-economique-sur-le-bassin-du-fleuve-senegal/</u> and <u>https://bassindufleuveforum.com/</u>

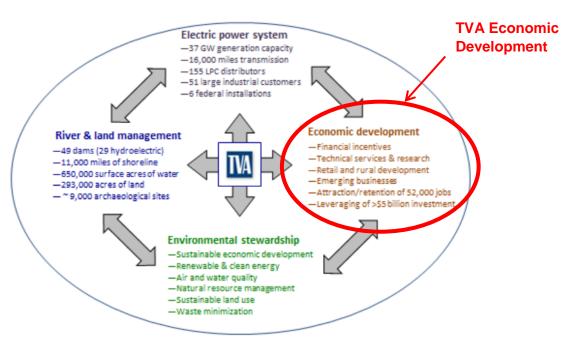
¹¹ <u>https://www.voixdufleuve-voiedelapaix.org/_files/ugd/0d06bc_e0f79a4bfbbb47aa8c4b54217fa12fe3.pdf</u>

¹² <u>https://www.uncdf.org/article/7635/9th-world-water-forum-successful-launch-of-the-blue-peace-financing-initiative-through-a-high-level-panel</u>

year without any explicit sovereign guarantee, but with a legal cap fixed at US\$30 billion). Its overall goal is to remain profit-neutral and to offer inexpensive energy to the area, which in turn attracts industry and jobs to the region.



Since the Great Depression years, TVA has developed primarily into a power utility, contributing to major economic development in the region through electrification and provision of cheap energy enabling private sector development. TVA now provides electricity to approximately ten million people, selling its power to 154 local power utilities, 5 direct industrial and institutional customers, and 12 area utilities. In addition to power generation, TVA provides flood control with 29 hydroelectric dams. Resulting lakes and other areas also allow for recreational activities. The TVA provides navigation and land management along rivers within its region of operation. As the diagram below indicates, environmental stewardship is a central mandate of TVA, as well as energy, economic development, water and land management.



TVA's integrated power and nonpower functions

Economic Policy Institute

Local Economic Development and Private Sector Development

Globally, it is a challenge for many River Basin Organizations to connect more with local communities, the private sector, local and international investors/financiers in order to create a virtuous cycle of local investments and job creation to support sustainable development of the river basin. In this respect, past and ongoing experiences of TVA with regional economic development, electrification, community development, and investor engagement notably through its digital platforms could be particularly inspiring.

Through its Economic Development department (<u>tva.com/economic-development</u>) and its more than 50 staff members, the TVA provides economic development assistance to local governments, rural communities and private companies. In FY 2021¹³, working with local power companies and other agencies, TVA helped create or retain nearly 81,000 jobs – a single year record for TVA's economic development team – and attract more than US\$8.8 billion in capital investment to the Tennessee River Basin. These totals do not include the recent Ford Motor Company announcement of a major electric vehicle and battery manufacturing complex in western Tennessee near Memphis – the single largest economic development investment in Tennessee history. In the past 5 years, TVA Economic Development has contributed to the creation of 341,000 jobs and US\$45.4 billion in private sector investment in the Tennessee River basin.

The TVA serves as a catalyst for sustainable economic development in the region and notably its rural areas, consistent with its environmental stewardship mission, and benefiting directly from access to competitively priced, reliable electricity. It works with strategic partners to recruit new companies and investments, providing a variety of incentives and services to attract and retain companies and help communities benefit from economic growth opportunities. A basin-wide digital investment platform (www.tvasites.com) offers a suite of services that can be accessed at any point in a business or community's development plan.

Rural and Community Development Programs

Community development programs play a vital role in TVA Economic Development, including such programs as Rural Leadership Institute, Rural Certified Communities Program, Valley Workforce Institute, Young Talent Initiative, Community Livability and Valley Sustainable Communities:

- **The TVA Rural Leadership Institute** provides professional leadership training to rural community economic development professionals in the Tennessee River basin, including focused skills development in areas such as leadership, organizational effectiveness and communication.
- The TVA Rural Certified Communities program helps rural communities to develop economic development strategies and budgets, to enhance retention programs, recruiting efforts, and community livability initiatives. Organizations who complete this program are recognized as being prepared to compete for job creation and investment, based on third-party evaluation of their organizational strategic planning efforts, operational effectiveness (workforce, sites and buildings) and other criteria.

¹³ <u>https://s25.q4cdn.com/191816265/files/doc_news/2021/11/TVA-Board-Recognizes-Performance-Looks-to-Future-FINAL-111021.pdf</u>

- **The TVA Valley Workforce Institute** is designed to assist economic developers in understanding and selling their workforce assets and address talent pipeline challenges in today's economy. This includes focused skills development in areas such as workforce data analysis and application, identifying and addressing labor force challenges and opportunities and developing creative labor force solutions.
- **The TVA Young Talent Cabinet** is a working think tank that provides ongoing input and guidance to TVA Economic Development regarding opportunities to strengthen the success of the Young Professionals in Economic Development Network. The Young Talent Cabinet assists in recommending, developing and implementing ideas and initiatives.
- **The TVA Community Livability Initiative** is designed to map and showcase livability assets in an effort to attract economic growth in the TVA river basin and highlight talent attraction assets. It helps local leaders being prepared, having product available and understanding their workforce story and livability assets in order to compete, gain jobs and attract economic investments.
- The TVA Valley Sustainable Communities Program is designed to assist communities in evaluating existing sustainable programs, cataloging sustainable assets and increasing future commitments to sustainability. Grants reward community-wide sustainability initiatives, to attract jobs and investment. For instance, many companies have selected the Tennessee River basin to do business because of TVA's low-cost, reliable and clean energy. For example, in April 2022, Envision AESC, a world-leading electric vehicle battery technology company, announced a 2,000 job, US\$2 billion investment to build a new factory because of TVA's renewable energy programs.

Economic and Financial Incentives for Entrepreneurship and Job Creation

Through the Valley Investment Program (VIP), TVA offers a range of economic and financial incentives for enterprise development and job creation. They include a Performance Grant program where TVA invests directly in company projects, TVA Loan funds to reduce interest costs or fill a funding gap in a project, Investment Credits, Security deposit coverage, as well as grants to communities and territorial actors to develop small infrastructures (water, energy, roads, sites) in order to attract businesses and create jobs (agriculture, industries, services).

- <u>TVA Performance Grants.</u> Through the Performance Grant Program, TVA makes an investment in competitive economic development projects in the TVA region. Award amounts are paid directly to the company and are flexible for approved purposes. Funding amounts are based upon the five-year economic impact of the project. Capital investment during a five-year period after the incentive is awarded must equal 25 percent of the company's book value or \$2.5 million for a new facility. Companies are measured on capital investment, jobs added or retained, average wages, energy usage and "smart energy" commitment. Incentives are paid in credits over five years. TVA has put in place processes and procedures for awarding Economic Development grants and has established performance metrics to determine if grant program objectives are met.
 - Workforce+ is a Performance Grant option that allows TVA to make an investment in competitive economic development projects, which are focused on building a highly skilled and qualified workforce. Award amounts are paid directly to the company and are contingent on companies meeting the minimum requirements of the Performance Grant Program.

Funding amounts are based upon approval of the company's talent pipeline development plan.

- Through the *InvestPrep Program*, the VAT provides grants to local actors to develop sites for future economic activities (SMEs, agriculture etc.). This includes local infrastructure such as access to water, sanitation and energy, access roads, environmental measures etc. TVA subsidizes 60% of the costs with a maximum of US\$ 750,000, the community or local government being responsible for co-financing 40% of the costs.
- Through the Special Opportunities Counties (SOC) Performance Grant Program, TVA assists smaller economic development projects that will be impactful for vulnerable or distressed communities with greater economic needs, notably youth.
- <u>TVA Loan Funds.</u> Financing is available for companies from TVA Loan Funds to stimulate job growth and leverage capital investment. TVA seeks to fill a funding gap or lower interest costs of project funding, thereby enhancing the opportunity for success. The maximum loan amount is \$3 million and is determined primarily by jobs and capital investment. Loan terms may be from five to 20 years based on collateral.
- <u>TVA Investment Credit</u>. The Investment Credit is an economic development incentive program jointly offered by TVA and participating local power companies. This performance-based program rewards companies for the five or ten-year economic and energy benefits associated with their new/expanded operations. Awards are applied as a credit to monthly power bills. Most companies can expect a 15-30 percent savings annually over a five or ten-year period.
- <u>TVA Security Deposit Coverage</u>. The Security Deposit Coverage program gives qualifying businesses an alternative to tying up valuable capital as they locate or expand in the TVA region. It is available to new or expanding commercial and industrial electric customers through a partnership between TVA and participating local power companies. The program allows the waiver of electric utility deposits to qualifying customers for up to five years, and the application process is simple and quick.

Energy Systems, Electrification, Innovative Technologies and Cybersecurity

TVA champions promoted the vision that economic development depended on the provision of lowcost, accessible power. Thus they worked both on the demand (by providing cheap appliances and easy access to credit) and supply (with the concept of centralized power generation by TVA and decentralized distribution through locally owned municipal electric systems and rural electric cooperatives). They constructed an extensive transmission system to ensure rural access to electricity. With electricity, farms could be provided with lights and modern home appliances, making the lives of residents easier and farms more productive. The available electricity attracted new industries to the region, providing desperately needed jobs. TVA successful experience was then rolled out across the USA through country-wide rural electrification programs.

Nowadays, TVA is working to meet future demand for cleaner, leaner power by developing innovative technologies, including digitalization. It comprises electric transportation, renewables including solar, storage technologies to notably unlock the full potential of solar energy, microgrids and energy efficiency measures. In the face of ever-increasing cybersecurity threats worldwide, TVA recently established a Cybersecurity Operations Center especially for its power operations.

In June 2021, TVA joined forces with the University of Tennessee, Oak Ridge National Laboratory and Techstars to create the **Industries of the Future Accelerator** to attract high-quality startups focused on solving the world's most pressing environmental and economic challenges. The accelerator will work with 30 startups over the next three years that use clean energy, AI, big data, cybersecurity, digital currency, 5G and other innovations to transform society.

Mobilizing Finance, Increasing Creditworthiness & Non-Sovereign Borrowing through TVA Bonds and Green Bonds

TVA has been able over time to improve its creditworthiness by increasing stable revenues and cash flows directly from its energy operations, and indirectly through its local economic development program. Presently, TVA is probably the only river basin development organization in the world able to access directly the capital markets, with more than US\$20 billion of bonds outstanding. The TVA sells four kinds of bonds which are issued domestically and internationally and carry a wide variety of maturities (from less than a year up to 50 years), terms, returns and currency denominations. These bonds and notes are available to investors through banks, brokers and investment dealers.

A digital financial information platform (<u>www.tva.com/investors</u>) enables stakeholders to easily access information and various news and events for investors including company filings, credit ratings, financial statements, investment opportunities such as bonds and other innovative financial instruments, ESG (Environmental, Social and Governance) sustainability reports etc.

Legally, the TVA cannot have more than US\$30 billion of debt outstanding at any one time, and it can only issue bonds to fund its power program or refinance existing debt. The TVA is also legally required to set its power rates at a level sufficient to repay its debt. Because of the TVA's operating history and its status as a government-sponsored enterprise, TVA securities are generally very highly rated (AA+ to AAA).

Even though TVA securities carry no explicit guarantee by the U.S. government, the TVA is owned by the government and its securities are therefore considered less risky. As a result, TVA bond yields are typically higher than Treasuries but lower than corporate bonds. For instance, in 2017 TVA priced US\$1billion of 10-year global power bonds carrying an interest rate of 2.875%.

Green Bonds

In September 2021, TVA launched an <u>inaugural \$500 million Green Bond</u> offering, setting a record for the lowest interest rate ever achieved by TVA. Proceeds from the sale will fund TVA's capital investment in renewable energy projects, energy storage, development of advanced clean energy technologies, and transmission system enhancements. A potential TVA solar project in northern Alabama and a potential TVA energy storage project in eastern Tennessee – both still undergoing detailed environmental reviews – are two possible uses of the funding. Similar financial instruments developed under TVA's Sustainable Financing Framework will support the implementation of TVA's aspirational goal of net-zero carbon emissions by 2050.

The bonds carry a **coupon interest rate of 1.500%**, which sets a record for the lowest rate ever achieved by TVA on a 10-year financing. TVA's previous record on a 10-year maturity was set in

2012, with a rate of 1.875%. The record low rate on the bonds will save TVA over \$15 million in annual interest expense compared to bonds that matured earlier in 2021.

TVA's green bond offering drew over \$2 billion in initial orders from a variety of investors, including money managers, state governments, insurance companies, and others. Bank of America Securities served as Green Structuring Agent for the transaction, and joint book-running manager. Barclays, Morgan Stanley, RBC Capital Markets, and TD Securities, also served as joint book-running managers for the transaction.

Cross-Subsidization Mechanisms

TVA's threefold mission entails inherent cross-subsidies. Its main mission profit-wise is to provide clean, reliable energy at the lowest possible cost, but generate enough profit to cross-subsidy its second mission to maintain environmental sustainability in the Tennessee River basin. Its third mission -- diligently support economic development activities that draw new jobs and investment to the region, or help companies stay here and grow – supports the cross-subsidization scheme by generating more wealth, part of which can be reinvested in TVA loss-making activities (notably through the sale of energy to the private sector).

Sustainable Environmental Stewardship and Public Participation

Sustainable environmental management is a core mandate of TVA, together with energy and economic development (the three Es). According to the recently released TVA Sustainability Report¹⁴ 2020, the utility reduced its carbon output by nearly 60% in the past 15 years by boosting power generation from carbon-free nuclear, hydro and solar sources. This year, TVA is on track to have over 60% of its electricity come from carbon-free generation. **TVA's Environmental stewardship mission is carried out through the adoption of policies, strategies and programs, which all make extensive use of digital technologies including:**

- **Environmental Policy** for environmental stewardship and compliance, technology innovation and a growing renewable energy portfolio.
- **Natural Resource Plan** addressing TVA's management of biological, cultural and water resources; recreational reservoir land planning; and public engagement.
- Climate Change Adaptation Action Plan to identify possible impacts, to assess potential consequences and ability to mitigate climate change and develop adaptation planning action.
- **Integrated Resource Plan** to provide a roadmap for making decisions about how TVA can meet future demand for power in new and innovative ways, considering costs, environmental factors, reliability, regulations and energy efficiency.
- In 2018, TVA published its first Environmental, Social, and Governance (ESG) report

Solar energy. As West African RBDOs seek to expand and diversify their renewable energy sources, lessons can be learned from TVA recent expansion into solar energy production, procuring more than 1.3 GW of energy through recent agreements with private developers to develop 484MW in 2019, and in 2018 the largest solar installations in Tennessee (150MW) and Alabama (227MW) at the time, to help support Facebook's data center with 100% renewable energy sources.

¹⁴ www.tva.com/environment/environmental-stewardship/sustainability/sustainability-report

Water quality and groundwater monitoring. TVA has a long history of monitoring water quality conditions in reservoirs, as well as the streams and rivers that flow into them, to understand the health of aquatic resources and maintain updated information on current and trending reservoir conditions. TVA has monitored groundwater quality for decades. However, in relation to a major contamination incident at a TVA coal-fired power plant, a new 2015 federal rule sets forth a specific process for monitoring, investigating, and addressing any groundwater issues. The process requires groundwater monitoring through multiple phases: baseline sampling, detection monitoring, and assessment monitoring.

Flood control. TVA flood control operations (through the TVA's River Forecast Center) are estimated to save every year in the basin about \$300 million in estimated flood damages. In 2019, the Tennessee River swelled due to the wettest February in recorded history; TVA's 49 dams stored enough water to avoid an estimated \$1.6 billion in flood damages. In fiscal year 2021, TVA managed another above-normal rainfall year along the Tennessee River system, helping prevent about \$170 million in flood damage.

Questions for the TVA Expert Panel (to be completed)

Questions on TVA Economic Development Activities

- What are the 3 or 5 most important lessons learned from TVA Economic Development experience to catalyze entrepreneurship and jobs in the Tennessee River basin? What could be their relevance to West African River Basin Development Organizations, and notably for the OMVS Incentive and Proximity Financing Platform under development?
- How are TVA Economic Development's activities financed, including grants to communities and the private sector, and operating costs of the TVA Economic Development team (over 50 employees)?
- How to take into account local interests in the sustainable development of local communities and the private sector?
- How to create a digital platform bringing together investors, project promoters and local actors? What are the lessons learned from the TVASites digital platform?
- Based on the experience of TVA Economic Development, how can rural development programs coupled with economic and financial incentives strengthen the core mission of integrated development of West African River Basin Development Organizations such as the OMVG and OMVS?
- How can these incentives be structured so that rural development programs support social and environmental sustainability, inclusion and climate resilience?

Questions on TVA Investment Financing

- What success factors have enabled TVA to issue bonds to finance its investments? What lessons can be learned for West African River Basin Development Organizations?
- More specifically, how did TVA secure legal rights to issue bonds? How does TVA secure debt securities?

- The Gambia River Basin Development Organization (OMVG) is developing a joint cross-border and multi-sectoral Investment Plan composed of lucrative and less profitable projects. Through the Blue Peace financing initiative, OMVG plans to access capital markets to finance this investment plan. Based on your experience, what advice or suggestions would you give to OMVG to better manage risks and potential obstacles?
- OMVG observes that the TVA enjoys 2 major advantages for its financing: (i) The TVA holds assets as an agent of the U.S. Government, (ii) The TVA holds the authority to set the rates at which it sells electricity to its customers, and the TVA's electricity revenues must cover its debt service. Without these 2 elements, could the TVA have directly accessed and issued bonds in the financial markets?
- We understand (unless we are mistaken) that TVA's debt securities are not guaranteed by the U.S. government, yet the TVA has U.S. Agency status. What role as "lender/guarantor of last resort" does the U.S. Government play in the financing mechanism (bond issuance) of the TVA?
- In the current context, OMVG's assets are held by OMVG Member States, not by the OMVG High Commission. In your opinion, what are the limitations, advantages and disadvantages of this governance model for a river basin development organization?

Questions on Integrated Resource Planning and Management in the TVA River Basin

- Exchanges with TVA could be useful for the elaboration of the OMVG Integrated Basin Development Master Plan and capacity building especially by sharing experiences and ideas on critical issues related to the analysis of the water-energy-agriculture-environment nexus, as well as to the process of modeling the management of the resources of the three OMVG river basins:
 - o How does TVA sustain water resources data collection?
 - How does TVA ensure the decision making process' robustness regarding water resources allocation to different water demands?
 - Does Tennessee Valley watershed share groundwater resources with neighboring watersheds? If yes, how does TVA approach their common stewardship?
 - How does TVA assess/improve hydraulic infrastructure resilience to climate hazard?

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