



## **BLUE PEACE IN THE MIDDLE EAST SENEGAL RIVER BASIN LEARNING JOURNEY**

*Co-Hosted By*  
Strategic Foresight Group  
*And*

L'Organisation pour la Mise en Valeur du fleuve Sénégal  
(OMVS)

*With Support From*  
Swedish International Development Cooperation Agency (Sida)

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## **OUTCOME REPORT**

On August 9-14, 2015, members of the Blue Peace Middle East Community embarked on a learning journey to explore and understand in detail about cooperation in the Senegal River Basin in West Africa. The 20-person delegation from the Middle East included former ministers, senior policy makers, academic and technical experts and leading members of the Blue Peace Media Network.

Strategic Foresight Group organized the Learning Journey to Senegal River Basin in coordination with the L'Organisation pour la Mise en Valeur du fleuve Sénégal/Senegal River Basin Commission (OMVS). Following the Mekong Learning Mission, which was held in November 2014, the Learning Journey to Senegal River Basin was a continuation of the 'exchange of experience' activities under the Blue Peace Initiative. It was supported by the Swedish International Development Cooperation Agency (Sida).

The journey was conducted over a period of five days in Senegal during which the participants were able to appreciate the functioning of OMVS and derive key learnings for the Middle East. The journey introduced participants to new experiences and gave insights into cooperation and efficient transboundary water management achieved by the riparian countries of the Senegal River basin in West Africa. In the course of the journey, the Water Cooperation Quotient report by Strategic Foresight Group was launched.

The most significant feature, which the participants discovered in the case of OMVS was their emphasis on joint ownership of dams and other assets related to the river and the importance of strong political will despite the problems of poverty, conflict and violence in the region. The participants expressed appreciation for the comprehensiveness and regularity in data collection, the unique cost-benefit sharing formulae and joint ownership of water infrastructure in the Senegal River Basin and cited it as a significant learning for the Middle East.

The initiative was an exercise in intercontinental innovation. It was steered by an entity based in Asia, implemented by an intergovernmental organisation in Africa, made possible by a government agency in Europe and primarily engaged key actors from the Middle East, thus bringing together catalysts from four different regions of the world for public good.

### **EXCHANGE OF EXPERIENCES**

The learning mission began with a presentation on the overview of OMVS, its structure and its historical background by the High Commissioner Mr Kabiné Komara and the director of Environment and sustainable development, Mr Amadou Lamine Ndiaye. The coordinators of national units of OMVS and Director Generals of various corporations responsible for smooth functioning of the organization were also present. A detailed historical background of the formation of OMVS helped the participants better understand the context of cooperation.



Riparian countries of the Senegal River basin have emphasized the importance of finding common goals and working towards them right since the inception of OMVS in 1960s. The founding fathers of OMVS, the then heads of states of Senegal, Mali, Mauritania and Guinea had a common desire to exploit the transboundary Senegal River and its resources for the development and benefit of the people of the region. In the 1960s, right after the independence, the riparian countries of the Senegal River basin had political and ideological differences. At the same time the recurring cycles of drought and floods were affecting the nascent economies and populations of the basin. In order to tackle this issue, the heads of states decided to keep aside their political differences and cooperate on the only common resource they shared: the Senegal River. Consequently, a series of high level ministerial meetings and conventions proved essential for the formation of OMVS. A few key conventions are:

- ◆ Convention related to the general development of the Senegal River Basin, July 26, 1963, signed in Bamako
- ◆ Convention related to the status of the Senegal River as an international river, February 7, 1964, signed in Dakar
- ◆ Convention related to the creation of the Organization of Boundary States of the Senegal River (OERS, Organisation des Etats Riverains du Senegal), March 24, 1968, signed in Labe
- ◆ Convention related to the Legal Status of the River and the establishment of the OMVS, March 11, 1972
- ◆ Convention related to the Legal Status of the Jointly Owned Structures, December 21, 1978
- ◆ Convention related to the financing modalities of the Jointly Owned Structures, May 12, 1982

These conventions have played a major role as a legal and binding framework for cooperation and securing cooperative river basin governance in the long term. In other words, the common vision and foresight shared by politicians for long term development of the basin and people dependent on the basin, has today translated into greater benefit for all stakeholders.

The mandate of OMVS is to:

- ◆ Ensure food security for all people within the river basin and the region;
- ◆ Increase incomes for the basin populations;
- ◆ Preserve ecosystems balance within the basin;
- ◆ Reduce economic vulnerability of OMVS member-states to climate variability and external factors such as climate change;
- ◆ Scale up economic development within the member-states.

OMVS is a unique case of transboundary water cooperation where the riparian countries jointly own the water infrastructure and have developed a cost-benefit sharing mechanism. The riparian countries have built a platform for open dialogue, information exchange and joint development regarding the Senegal River Basin. Drawing lessons from the Integrated Water Resources Management (IWRM) model, the member countries have jointly developed comprehensive data collection systems and basin wide models to study irrigation patterns, flooding, navigation and the hydroelectricity potential of the river. These models are used to develop future strategies for agricultural activities, development of navigational potential of the river and other similar plans.

During the course of the day the participants had the opportunity to learn in detail about the various organs of OMVS at its Headquarters in Dakar. The topics covered were Agriculture, Energy, Navigation, Fisheries, Basin Development, Environment and Climate Change. Each session highlighted the role and functions of OMVS in facilitating cooperation between the riparians in these areas.



The participants of the Learning Journey also interacted with OMVS experts. The directors of national cellules and national coordination committees along with the interstate public companies of OMVS such as SOGED – La Société de Gestion et d'Exploitation du Barrage de Diama (Society of Management and operation of Diama dam), SOGEM – La Société de Gestion de l'Energie de Manantali (Electricity Management Corporation of Manantali Dam) and SOGENAV - La Société de Gestion et d'Exploitation de la Navigation (Management Corporation for the Development of Navigation) were present and gave detailed presentations on the role of their corporation with OMVS. These three structures were created by the member states in the form of Inter-State Public Companies. The main aim of these corporations is to manage the jointly owned infrastructures. They are under the supervision of OMVS and each have their own governing bodies like Board of Directors, Executive Management, and General Assembly of Shareholders.

- ◆ *SOGED – La Société de Gestion et d'Exploitation du Barrage de Diama (Society of Management and Operation of Diama dam):* Created in 1997, this interstate company's capital is owned equally by Mali, Mauritania and Senegal. The main objectives of SOGED are the management, maintenance and renewal of existing structures of Diama Dam, containment facilities of the Senegal River and the structures as well as side or secondary equipment. SOGED is also responsible for the design, financing, construction and management of new structures except those related to hydroelectricity production. It receives its financial resources from the water collection fees, payments by shareholders, support from investors and other miscellaneous sources.
- ◆ *SOGEM – La Société de Gestion de l'Energie de Manantali (Electricity Management Corporation of Manantali Dam):* SOGEM is the second interstate company of OMVS created at the same time of SOGED in 1997. It is responsible for operating, maintenance and renewal of public works for the production and transport of electricity. The company also looks after the construction of common facilities for Manantali and Felou hydropower generation units.
- ◆ *SOGENAV - La Société de Gestion et d'Exploitation de la Navigation (Management Corporation for the Development of Navigation):* SOGENAV is responsible for managing and administering navigation and related activities on the Senegal River along with the maintenance and renewal of public works. It aims at ensuring sustainable transboundary growth. The OMVS Multimodal Transport Integrated System (SITRAM) is an important organ of SOGENAV. It is aimed at setting up a sub-regional transport system integrating all modes of surface transport with main focus on river navigation. It has four components: navigation on the Senegal River, access road to the Manantali dam, Rosso – Diama link road and Labe – Tougue – Dinguiraye – Siguiri road link in addition to the access road to Koukoutamba dam.

The participants also learnt about the SITWA Project (Strengthening Institutions for Transboundary Water Resources Management in Africa) which aims at strengthening regional integration at political, economic and local level to ensure sustainable management of transboundary waters in Africa contributing to peace and security, stability and poverty alleviation.

Additionally, the participants got the opportunity to go on a two day field trip which provided them with hands-on experience of the results of previous and on-going cooperation activities of the OMVS and National Cellules of Senegal working on agriculture and urban water supply.

## **FIELD VISITS**

On the first day of the field visit, the participants visited the Diama Dam in Diama, about 290 km north of Dakar. The dam spans the border of Senegal and Mauritania. The functioning of the dam is managed by SOGED. Mr. Madine Ba, the Secretary General of OMVS, along with the Director General of SOGED, Mr. Tasmir Ndiye and the representatives of SOGENAV led a guided tour of the Diama dam.



*Participants at Diama Dam*

The anti-salt dam of Diama was built in 1986 to prevent the saltwater intrusion upstream and to supply water for irrigation. By preventing salt-water intrusion upstream, the dam has played a vital role in the development of irrigated agriculture such as that of rice. Prior to the construction of the dam, the Senegal River delta was characterized by seasonal fluctuations of the stretch of water and by salt intrusion reaching about 200 km upstream in dry season. This hindered the economic activities and drinking water supply in the valley. The construction of the dam has been successful in alleviating these problems to a large extent. Today, thanks to the development of irrigated agriculture, the farmers in the region are allowed three production periods as opposed to only one before the dam was established. This is one step closer to reducing food insecurity in the valley. The resultant development of agricultural activities and restoration of natural environment in the region has helped in enhancing the standards of living of the residents. Various small scale and medium scale agro-industries have also been established thanks to the irrigation facilities and increased production.

Since the construction of the Diama dam, the supply conditions of drinkable water to large urban centers such as Saint Louis, Richard Toll, Dagana, Rosso, Podor, Bouge, Dakar and Nouakchott have improved. The water intake infrastructure on left and right bank dikes of the

river has fed a thick network of floodways, basins and ponds of the delta of the Senegal River with fresh water. As a result two renowned national parks have been established: Djoudj Park in Senegal (UNESCO World Heritage site) and Diawling Park in Mauritania (RAMSAR site). Other socio-economic impacts of the dam include the improvement of navigability of the Senegal River in its influence zone.

Despite the benefits however, the dam has, to a certain extent, adversely impacted the biodiversity in the region. One of the major impacts is the expansion of invasive water plants and increase in waterborne diseases. Several programs have been implemented by OMVS to mitigate these adverse impacts.

On the second day of the field visit participants were taken to the water treatment plant of Keur Momarsarr and the Fédération des Périmètres Autogérés du Sénégal – FPA (Federation of Self-managed areas of Senegal). The water treatment plant at Keur Momarsarr is located about 230 km from the capital of Dakar. More than half of the drinking water supply to Dakar comes from this water treatment plant. The head of the plant and representatives of SONES - Société nationale des Eaux du Sénégal (Senegal National Drinking Water Authority) explained the functioning of the plant and gave a guided tour of the plant to the participants from the Middle East.



*Participants at Keur Momarsarr Water Treatment Plant*

Later, the participants had a chance to interact with the local farmers at the office of the Federation of Self-managed areas of Senegal (FPA). The organization was established owing to the motivation of the residents to contribute to the socio-economic development of their country in 1993. Today, the main objective of the organization is to help the National Programme of Self-Sufficiency in Rice Production in Senegal (Programme National d'Autosufisance en Riz PNAR), which aims at self-sufficiency in rice production in Senegal by 2017. It is important to note that similar grass-root level initiatives also exist in Mauritania, Mali and Guinea.

## WATER COOPERATION QUOTIENT

The launch of the Strategic Foresight Group (SFG) report "Water Cooperation Quotient" took place at the OMVS headquarters in Dakar, Senegal on August 11, 2015 as part of the Learning Journey exercise of the Middle East Blue Peace community. The launch was attended by Mohamed Salem Béchir, Mauritanian Minister of Petroleum, Energy and Mines, also President of the Council of Ministers of OMVS; Mansour Faye, Senegalese Minister Water and Sanitation; Kabine Komara, High Commissioner of OMVS and Former Prime Minister of Guinea and Madine Ba, Secretary General of OMVS. The event helped to explain how quality of water cooperation can be measured and why the OMVS leads the Water Cooperation Quotient, a tool that the countries in the Middle East can use to foster cooperation in their own region.



*L-R: Sundeep Waslekar; Kabine Komara, Mohamed Salem Béchir, Mansour Faye, Madine Ba*

Minister Mohamed Salem Béchir, the President of the Council of Ministers recalled that OMVS owes much of its success as an organization to the avant-garde vision of the founding fathers, "who built on a single legal base, making our organization a rare model of sub-regional integration and shared management of water resources."

Minister Mansour Faye echoed the same sentiments, while stressing the openness and availability of OMVS to share its experience, but also to learn from others. "We will spare no effort to inform you about our texts, our methods, know-how we have developed over time, our joint achievements that are the bedrock of our success as an envied organization" the minister said.

The High Commissioner of OMVS, Kabine Komara, recalled that this desire for integration requires the strategic guidance of Heads of State and consistency in vision. He insisted, "We must thank all Ministers and former High Commissioners, all executives who have made every effort to send us the torch symbol of cooperation, integration and brotherhood of our four peoples."



## KEY MESSAGES

Every institution is unique. It is shaped by its context. Therefore, the OMVS model cannot be exported to the Middle East. However, there are specific lessons that can be drawn for the benefit of states and people in the Middle East.

1. It is necessary to shift the mind-set from obsession with potential losses to the consideration of potential benefits. The discourse in the Middle East is excessively concerned with national interest and national security. Water is considered to be a sensitive issue. The discourse is primarily governed by the question of adequacy of supply for each country from its national perspective. It is concerned about potential losses of trans-boundary exchanges and agreements. Since any agreement is about give and take, the elite in the Middle East tend to worry about what they have to give and what they should take from a narrow national perspective. In West Africa, there is equal concern about national security and national interest. However, the West African decision makers in the OMVS countries have been able to treat negotiations on trans-boundary water from the perspective of how to generate benefits for all parties, rather than a perspective of how to avoid losses for each party. With the shift of mind-set from a focus on losses to a focus on benefits, OMVS is able to harness a river to produce electricity, irrigation, and navigation opportunities. Thus the OMVS countries are not bothered about allocation of shares for each country; they are more engaged in the discussion on the sharing of benefits for all countries. The Middle East needs a fundamental shift from the psychology of losses to the psychology of benefits. Once this is done, precise institutional structures and processes can be determined as per the local realities.
2. In the OMVS countries, data is seen as scientific material, which is enriched through sharing. In the Middle East, data is seen as a strategic asset, which is compromised if shared. It is primarily a question of political approach. The data of water flow and quantity is not any different in the OMVS countries, Middle East, or for that matter any other river basin in the world. However, what is seen as a scientific asset and used positively for the benefits of states in West Africa has become a strategic asset and protected from the eyes of the people in West Asia. Again, the Middle East needs a change of mind-set.
3. The OMVS has created an institutional structure consisting of a Permanent Commission with a high level political staff, three companies responsible for the management of dams and navigation, national interlocutors, and other bodies. The structure survives short term political changes as it is created through a series of legal instruments and formation of committees. It does not depend on priorities of incumbent government leaders. Each sub-structure has representation of all the countries and clear policies to look at the basin as one entity. As a result, the decisions are taken on the basis of sectoral allocation rather than national allocation. In the Middle East, when heads of government came together in 2010 to create a Free Trade Area, it was very much treated as a project of the incumbent political

leaders without a strong institutional structure. In the water sector, there have been several bilateral and trilateral agreements, but without the establishment of any supporting institution. As a result, whenever there is a political change, cooperation does not progress. In the absence of regional institutions, decisions on trans-boundary water are monopolised by national bureaucracies. The focus of national officials is on allocation on the basis of national rather than sectoral considerations. This gives rise to rivalry between states. A key lesson from OMVS is that regional institutional mechanisms are absolutely essential.

4. In the OMVS countries, water cooperation is a subject matter of initiative by Heads of State and Heads of Government. While institutional structures are created, they are complemented by personal engagement of the Heads of Government on a regular basis. The Presidents and Prime Ministers of Senegal, Mauritania, Mali and Guinea took initiative to create the OMVS. The governance of the organisation includes a Conference of Heads of States and a Council of Ministers. The current High Commissioner of OMVS is a former Prime Minister of Guinea and the current Secretary General is a former Cabinet Minister of Mauritania. In the Middle East, trans-boundary water relations are substantially left to Ministers and Officials of the Ministry of Water. There is no pro-active and personal engagement of the Heads of State and Government in efforts to foster water cooperation. In the absence of political impetus, cooperation does not progress. If the Middle East wants to convert water into an instrument of cooperation, it is imperative for Heads of States and Government to take the initiative, not as an ad hoc effort, but a political exercise supported by healthy and robust institutional structures.
5. The OMVS countries negotiate with donors from a psychology of benefits rather than psychology of losses. They secure concessional loans and not grants to meet 80-85 per cent of the cost of the projects, with remaining funds coming from national treasuries. They do not look at advice from donors automatically in a negative light. Rather they have developed an objective and dispassionate approach in their negotiations with international donors. In the Middle East, there is a certain tendency to look at the role of the international community as intrusion or infringement of national sovereignty. Some of the elite in the Middle East are passionately opposed to any advice from external donors, even while they welcome financial input. If the Middle East has to benefit from the international community, it needs to shed its insecure and suspicious attitudes in favour of an objective approach. It is obvious that donors will have their priorities and perspectives, anywhere in the world. It is a question of the recipients having a constructive and confident approach to negotiate with donors in a way that will lead to harnessing of benefits from the river.

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## LIST OF PARTICIPANTS

### FROM THE MIDDLE EAST

1. Dr Yasar Yakis, former Minister of Foreign Affairs, Turkey
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3. Dr Mysoun Zoubi, Former Secretary General, Ministry of Water Resources, Jordan
4. Dr Muhammad Saidam, Chief Science Officer, Jordan
5. Prof Dr Ahmet Saatci, President, Turkish Water Institute, Turkey
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16. Ms Sara Mattar, Senior Columnist, Future Newspaper, Lebanon
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18. Mr Adel Fakhir, Baghdad International News Agency
19. Mr Duraid Abhraham, Al Zawraa newspaper
20. Mr Omar Ali Ihsan Alkeshti, Journalist, Ministry of Water Resources

### OMVS

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3. Mr Mansour Faye, Minister of Water and Sanitation, Senegal
4. Mr Madine Ba, Secretary General
5. Mr Mamadou Diaby, Coordinator for OMVS Guinea
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7. Mr Mohamed El Mokhtar M. Mahmoud, Coordinator for OMVS Mauritania
8. Mr Ababacar NDAO, Coordinator for OMVS Senegal
9. Mr Tamsir Ndiaye, Director General, SOGED

10. Mr Mamadou Fayé, Director General, SOGENAV
11. Mr El Wely Bouhebeyni, Director General, SOGEM
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