Concept Note: Fostering Solutions and Collaboration for a Sustainable Mekong River Delta

This concept note summarizes the proceeding and results of an event hosted by the U.S. Department of State in cooperation with key stakeholders in the Mekong region on Wednesday, July 15, 2020 from 9:00 am – 10:45 am ICT via the U.S. Department of State Interactive Hub. A recording of the meeting can be found here.

Summary

This event was the first of the **Mekong Virtual Symposium series**, which is hosted by the **U.S. Department of State** in cooperation with key stakeholders in the Mekong region. Future symposium events will be held approximately quarterly to support the **Lower Mekong Initiative (LMI)** and the **Mekong Water Data Initiative (MWDI)**, with the next event to be held in October 2020. Moderated by **Nguyen Huong Thuy Phan of the Graduate Institute of Geneva**, this event focused on solutions and opportunities to address drought and salinity in the Mekong Delta.

Nguyen Huong Thuy Phan provided an overview of drought and salinity intrusion in the Mekong Delta. Drought and salinity intrusion are not new problems in the Mekong River Delta. Drought occurred in 1993, 1998, 2004, 2010, 2016, and 2019-2020; and salinity intrusion occurs every year. In drought years, salinity intrusion becomes more severe. The key factors driving drought and salinity intrusion are rainfall, water discharge to Vietnam, water storage at the end of the rainy season, and water use in the delta. The 2020 drought occurred sooner than expected, is lasting longer than expected, and is worse than the 2016 drought, producing negative socioeconomic and ecological effects. However, damages (to date) from the 2020 drought are lower than 2016, thanks to advance warning enabled by forecasts and interventions from the national government of Vietnam and localities. Population growth, development, water use by upstream countries, and climate change increasingly threaten the Mekong River Delta. In response, the government of Vietnam is implementing a number of structural and non-structural measures to mitigate drought and salinity intrusion.

Four panelists delivered presentations:

- Van Pham Dang Tri, Vice Dean of the College of Environment and Natural Resources at Can Tho University, presented on saline intrusion in Cà Mau Province. Mr. Tri summarized the key factors driving drought and salinity intrusion in the Mekong River Delta: rainfall, water discharge to Vietnam, water storage at the end of the rainy season, and water use in the delta. The government is adapting to drought and salinity intrusion by routing Mekong water down to the Cà Mau Peninsula through Quan Lo Phung Hiep Canal, and is building Cai Lon Cai Be sluices to stop saline water from flowing into the area. How to mitigate the problems resulting from this infrastructure remains an open question. Communities and farmers are adapting by changing planting patterns and decreasing the intensity of cultivation. Can Tho University is working with the government of Vietnam, local communities, and farmers to promote the application of new technologies, data sharing, and stakeholder engagement.
- Nguyen Hong Phuong, Deputy Director General of the Vietnam Mekong Committee, presented on the role of the Vietnam Mekong Committee in addressing drought and salinity issues. Ms. Phuong presented on current conditions in the Mekong Delta: The 2020 dry season started sooner, with longer intrusion time, a larger area affected, and higher saline concentrations than the dry season in 2016. Even so, damages in 2020 have been less than in 2016, thanks to advance warning and mitigation measures by the government and stakeholders. The Vietnam Mekong Committee is an interdisciplinary and intersectoral agency that coordinates and cooperates with relevant ministries, sectors, provinces, and international agencies. The Committee is establishing a database for water and related resources for the Mekong River Basin. This data will be exchanged, shared, and disseminated widely among stakeholders and riparian countries.
- Malcom Wilson, Chief of the Water Resources & Compliance Group at the U.S. Bureau of Reclamation, provided an overview of drought in the Colorado River Basin. Mr. Wilson shared key factors that have motivated cooperation among stakeholders in the Upper and Lower Colorado River Basins: Established water management institutions; Bureau of Reclamation's leverage due to their control of major reservoirs and

deliveries to states; Recognition of drought affecting both basins and the potential of greater reductions of water availability if parties could not come to an agreement; A desire by both basins to have certainty/rules on water availability; The desire of states to keep the dispute out of court; and a history of collaboration between the states since the 1960s. Additionally, data sharing has proven important for promoting trust in the system and facilitating collaboration.

■ Kib Jacobson, Project Manager of the Colorado River Basin Salinity Control Program at the U.S. Bureau of Reclamation, detailed efforts to address salinity issues in the Colorado River Basin. Mr. Jacobson shared that the open sharing of data from a comprehensive monitoring system is a key component of successful salinity management in the Colorado Basin. Data is collected and made public to everyone. Models produced by the Bureau of Reclamation are shared with stakeholders at local, state, and basin-wide levels, which builds trust and helps stakeholders feel like they are part of the solution.

Discussion on Data Collection and Sharing

All of the panelists and many audience members identified data collection and sharing as key priorities for more effective river management in the Mekong. In particular, the following needs were identified:

- Integrated, interdisciplinary research: Mr. Tri, Ms. Phuong, and many members of the audience emphasized the need for multidisciplinary research. "Drought and salinity affect river morphology, ecosystems, fisheries, and agriculture," said Ms. Phuong. "Expanding and integrating monitoring and our knowledge of these impacts will give us a better understanding of the real situation in the Delta."
- Better data for project evaluation: Ms. Phan and Mr. Tri highlighted the need for more research on the tradeoffs involved in infrastructure projects, so that cost-benefit analyses can be performed before projects are initiated. "Right now, it is difficult to assess tradeoffs between projects," said Ms. Phan, "and we only learn a project's impact after it is completed."
- Data sharing: Ms. Phuong described how providing early warning data to farmers helped avoid damages during the 2020 dry period, and said that the Vietnam Mekong Committee is working to expand data sharing. Mr. Wilson and Mr. Jacobson stated that data sharing in the Colorado River Basin has been critical for ensuring more effective river management, and also has helped build relationships and facilitate collaboration to work on solutions. "The Colorado and Mekong river basins are similar in that both are focused on bringing all the stakeholders together, from communities all the way up to the national government," said Mr. Jacobson.

Next Steps

The following potential next steps were identified during the event:

- The Vietnam National Mekong Committee will soon be publishing near real-time monitoring of droughts on its website and is developing other data sharing initiatives. The Committee will also be taking audience input into account to develop new trainings that will be available on its website soon.
- Can Tho University will continue to play a significant role in adaptation measures at a provincial and local level, fulfilling their role as a "knowledge hub" to support sustainable development of the Mekong Delta. In particular, the university is collaborating with the government to promote the application of new technologies, data sharing, and stakeholder engagement.
- The U.S. Department of State posted notes and follow-up information from the symposium at www.mekongwater.org
- The U.S. Department of State will coordinate and plan for the October 2020 (TBC) Mekong Virtual Symposium on the Tonle Sap Lake.

- The U.S. Department of State is transitioning MekongWater.org from its pilot phase and seeking to expand the water data sharing tools and resources hosted on the platform
- The Sustainable Infrastructure Partnership is organizing a training program on groundwater management for government officials in the Mekong Delta, scheduled for September
- The Sustainable Infrastructure Partnership launched the Socio-Economic Data Experts Working Group to build capacity for the collection, use, and sharing of socio-economic data