Vietnam – Politics and Economics | 1

Pham Quang Minh | Detlef Briesen [eds.]

Collaboration in Water Resource Management in Vietnam and South-East Asia

Nomos

KONRAD ADENAUER STIFTUNG

Vietnam – Politics and Economics

edited by

Prof.Dr. Pham Quang Minh

PD Dr. Detlef Briesen

with the assistance of Nguyen Thi Thuy Trang (Ms)

Volume 1

Pham Quang Minh | Detlef Briesen [eds.]

Collaboration in Water Resource Management in Vietnam and South-East Asia

Nomos

KONRAD ADENAUER STIFTUNG

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.d-nb.de

ISBN 978-3-8487-6772-4 (Print)
978-3-7489-0876-0 (ePDF)

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

ISBN 978-3-8487-6772-4 (Print)
978-3-7489-0876-0 (ePDF)

Library of Congress Cataloging-in-Publication Data
Minh, Pham Quang / Briesen, Detlef
Collaboration in Water Resource Management in Vietnam and South-East Asia
Pham Quang Minh / Detlef Briesen (eds.)
229 pp.
Includes bibliographic references.

ISBN 978-3-8487-6772-4 (Print)
978-3-7489-0876-0 (ePDF)

Onlineversion
Nomos eLibrary

1st Edition 2020

Introduction: Cross Border Cooperation in Water Resources Management

Pham Quang Minh/Detlef Briesen

This publication documents the main results of a workshop on Cross Border Cooperation in Water Resource Management – The Case of the Greater Mekong Sub-region. The conference took place in Hanoi on 16 October 2018 and was attended by large numbers of scientists from Southeast Asia, South Asia and Europe. It is one of the meanwhile numerous results of an excellent and long-term cooperation between Vietnamese and Southeast Asian as well as German and European institutions in the field of science, research and political education. The decisive actors this time were in specific the University of Social Sciences and Humanities, VNU, Hanoi (USSH), in particular the Rector, Pham Quang Minh, who launched the scientific initiative, the German Academic Exchange Service (DAAD), represented by the counsellor of higher education Detlef Briesen (Justus-Liebig Universität Gießen), and above all the Konrad Adenauer Foundation (KAS), headed by Peter Girke in Hanoi. Thanks to its generous support, KAS made it possible for the event to take place at all and for its findings to be published.

The support measures of KAS, for example in the area of the cooperation in water management discussed here, do not stand alone, but are integrated into an entire European-German initiative not only for the Greater Mekong Sub-region, but for the whole of Southeast Asia: The initiation and support of dialogues and cooperation mechanisms for Southeast Asian states, which are to jointly solve the regional problems. The approach therefore forms a clear counterweight to a traditional Great Power policy, the victims of which have been the entire region over many decades. It therefore makes sense to critically review the successes or failures of such a regional cooperation policy at regular intervals.

The more necessary this seems to be, but foreign policy tensions have not inevitably diminished. At the global level, such a trend can certainly be observed in recent years, and it has also had an impact on the Southeast Asian region. On the one hand, a global shift in the balance of power is therefore also having an impact on Southeast Asia – away from the USA, which is declining as a superpower, and towards emerging China. On the

other hand, the explosive power of endogenously caused regional conflicts, which put peaceful and consensual cooperation to a serious test, is also proving its worth. What stands out here is the joint management of the resources of the Mekong, a gigantic river system that has the following riparian states: China, Myanmar, Thailand, Laos, Cambodia and Vietnam. These countries use the river system in many ways as a resource for drinking water, agriculture, fishing, industry and energy production, but also as a transport route and sewer. One of the most important tasks of multilateral cooperation throughout Southeast Asia is therefore to coordinate the use of this resource jointly and at the same time preserve it in terms of environmental protection and nature conservation.

For the analysis of this difficult balancing act, the initiators had identified certain highly relevant policy areas in the run-up to the conference, which could be expected to have an influence on regional cooperation or its structures and results. These included in particular the four following:

It was to be assumed that cooperation in the Greater Mekong Sub-region (GMS) would not be influenced solely by the constraints of water management itself. The first hypothesis is that the political and state structures in the region, and in particular their geo-strategic significance as the core countries of Southeast Asia, would also be decisive. On the one hand, this addresses the remarkable ethnic, cultural and political diversity of Southeast Asia and its character as the *Balkans of Asia*. Both are not necessarily factors that facilitate regional cooperation. On the other hand: The situation becomes even more complex as a result of the initial assumptions that Southeast Asia – as so often before – has once again become the focus of the major powers' policy of interests: be it as, to put it bluntly, imperial backyard politics, or as an attempt by a major power with dwindling global political influence to forge new alliances. The workshop therefore asked to what extent such factors have become noticeable in recent years with an increasing tendency.

A second hypothesis resulted from a review of institutional cooperation in the Mekong Region to date. There is no shortage of institutions to promote regional cooperation in water management. Not even a complete historical overview: Mekong Committee (1957–1978), Interim Mekong Committee (1978–1995), FCDI, 1993, QEC, 1993, ASEAN, 1994, AEM-MITI, 1994, MRC, 1995, ASEAN-ME, 1996, and above all the Greater Mekong Sub-region (ADB-GMS, 1992), as an initiative of the Asian Development Bank. GMS unites six countries, Cambodia, China (its provinces of Yunnan and the autonomous region of Guangxi Zhuang), Laos, Myanmar, Thailand and Vietnam. In addition, there is the Hanoi Action Plan 2018–2022 and other institutions such as the regular Leader's Summit, ministeri-

al conferences and working groups and forums in priority areas. In addition, the Greater Mekong Sub-region Academic and Research Network (GMSARN), the Sustainable Mekong Research Network (SUMERNET), and several United Nations organizations, including FAO, UNEP, UNODC, PROFOR, and the Mekong River Commission (MRC), are active. Alongside the MRC, the GMS itself is likely to be the most important institution for cooperation. However, the balance sheet of both organisations so far is not in their favour. Already in 2010 Gerhard Will wrote: "The two organizations are therefore either not willing or not in a position to establish the cooperative relations that are indispensable to provide the entire region with a realistic economic perspective, to guarantee a fair balance of interests between the river riparians and to settle conflicts by peaceful means."[1] Whether this has changed significantly in the last 10 years was therefore also a question raised at the meeting.

A third problem area is specific challenges for the member states, especially for the states on the lower reaches of the river. The Mekong River is an indispensable livelihood for the river's riparians and also provides transport, energy production and tourism infrastructure. Sustainable development is threatened by population growth, deforestation, intensive agricultural use and long-term changes, especially climate change. Above all, the section of the river in Vietnam, the last of the river's adjoining countries, is threatened by the activities of its riparians upstream and by rising sea levels. The question therefore arises as to whether these long foreseeable consequences of a lack of joint management have not led to more collaboration in the region.

Fourthly, conflicts over water resources and issues of multilateral collaboration are by no means specific to the Greater Mekong Sub-region; they are global problems. In this respect, the workshop also aimed at an international comparison, on the one hand in order to determine what is more precise about cooperation in the Mekong Region, and on the other in order to be able to point out threatening further escalations as well as to work out positive examples. This already refers to the results of the joint research work and the lively discussions presented here in this anthology. At the same time, it turned out that the original approach should be considerably expanded in the individual contributions.

---

1 Will, Gerhard (2010): Der Mekong: Ungelöste Probleme regionaler Kooperation. 53. https://www.swp-berlin.org/fileadmin/contents/products/studien/2010_S07_wll_ks.pdf.

A first group of contributions therefore deals with the regional institutions for collaboration within the framework of the GMS. Vannarith Chheang presents the previous forms and tasks of cross-border cooperation in the form of an overview; at the same time he points out the necessity to bind the existing institutions more strongly to ASEAN in order to give it a real power base. Tran Diep Thanh, who again points out the considerable deficits of the previous cooperation, and Nguyen Thi Thuy Trang, who focuses more on the role of ASEAN, also argues in exactly this direction. Nguyen Ngoc Tran's contribution takes stock of what has been achieved so far and argues impressively for the necessity of regional cooperation, above all because of China's hydraulic engineering projects.

A second group of essays focuses on the above-mentioned role of the Mekong in international relations. In Trinh Van Dịnh, the focus is on aligning China's geopolitics and its tradition of territorial expansion and order with river and canal systems. Nguyen Thi Thanh Thuy takes a closer look at the role of the USA in the implementation of the Lower Mekong Initiative; Pham Quang Minh/Pham Le Da Huong argue against it in the direction that Japan in particular could fill the strategic vacuum left behind by the collapse of the USA's position in Southeast Asia.

The third part of the anthology deals with specific problems of the management of the resource Mekong. Bui Chi Trung deals with a problem that is likely to be politically highly explosive in the future, the feared increase in the negative effects that threaten the failure of cooperation efforts: environmental disasters and the necessary abandonment of human settlement areas. Nguyen Minh Nguyet, on the other hand, deals with the current practice of irrigation in the south of the river. The Myanmar-based Khin Ma Ma and Win Maung, on the other hand, focus on environmental and nature conservation issues and are therefore conducting an international comparative study on the Chindwin River.

The fourth section comprises two external perspectives. In his analysis of the problems of water distribution in South Asia, Kumaresan Raja comes to the conclusion that conflicts over this resource will increase in the future. Detlef Briesen, who also points to the intensification of internal and external water conflicts that have taken place in the Global South in recent decades, argues in a similar direction.

The two international contributions also relate internal and external water conflicts to each other, which is not reflected in the other essays. Put simply: The more governments come under pressure domestically on the problem of sufficient water supply, the more aggressive they become externally. This does not tend to be a good thing for the future of multilateral relations in Southeast Asia. It would therefore be all the more important

for the states concerned to overcome their national egoisms and work on joint solutions that would benefit all and all sectors, including development and the environment.

Hanoi/Gießen in April 2020
Pham Quang Minh/Detlef Briesen

References

Will, Gerhard (2010): Der Mekong: Ungelöste Probleme regionaler Kooperation. 53. https://www.swp-berlin.org/fileadmin/contents/products/studien/2010_S07_wll_ks.pdf

Inhalt

III. Problems of Transnational Water Managements

IV. Views from Outside

V. Appendix

I. Regional Institutions of Collaboration

Water Resource Security in Mainland Southeast Asia

Vannarith Chheang

1. Introduction

Resource security, particularly water resource security, is a critical source of sustained economic growth. However the risk of water-related conflict is aggravated and competition to get access to water resources is exacerbated by rapid population growth, urbanisation, industrialisation, intensive agriculture development, energy demand and climate change. The United Nations forecasts that by 2050, three out of four people around the globe could be affected by water scarcity and water-related issues are most acute in Asia.[1] As the economic and strategic value of water is increasing so does competition to get access to this scarce resource. Water resource security, which involves the sustainable use and protection of water systems, the protection against floods and droughts, the sustainable development of water resources, and the safeguarding access to water functions and services for humans and the environment, increasingly matter for regional security in mainland Southeast Asia.[2]

The Mekong River, running across six countries, provides critical sources sustaining the livelihood and food security of more than 70 million Chinese, Burmese, Laotian, Thai, Cambodian, and Vietnamese. However, the mismanagement of this transboundary water resource and other related resources has been a source of tensions and conflicts between the riparian countries. Various mechanisms have been established to provide solutions for a fair and sustainable development of the Mekong River; however, there are still some gaps such as institutional gap, knowledge gap, and implementation gap that need to be addressed.

The management of the Mekong River Basin matters for ASEAN community building, particularly in narrowing the regional development gap, as it involves four less developed economies of ASEAN (Cambodia, Laos,

1 Asia Society (2009): Asia's Next Challenge: Securing the Region's Water Future. https://asiasociety.org/files/pdf/WaterSecurityReport.pdf.

2 Council for Security Cooperation in Asia Pacific (CSCAP) (2014): Enhancing Water Security in the Asia Pacific, CSCAP Memorandum No. 23, January 2014.

Myanmar, and Vietnam), and a critical regional security issue. This chapter aims to shed light on the importance of the Mekong River Basin, explain the issues and challenges of resources management, analyse key stakeholders, and suggest relevant policy recommendations to offset the impacts of unsustainable development of the Mekong River Basin and prevent resource conflicts.

2. *Background*

Originating in the Chinese Tibetan plateau, the Mekong River crosses the boundaries of five other riparian states – Myanmar, Thailand, Laos, Cambodia, and Vietnam. With a unique ecosystem and the world's largest inland fishery, the Mekong River plays a vital role in sustaining the livelihoods of more than 60 million people. Tonle Sap Lake in Cambodia of example is the world's largest freshwater fishery. In the Mekong Region, competition to get access to and optimise the use of the common river is accelerating. Four of the six countries sharing the Mekong River (Cambodia, Laos, Myanmar and Vietnam) agreed to establish Mekong River Commission (MRC) in 1995 to manage this transboundary water resource in a sustainable and fair manner. However, national sovereignty remains a challenge for this inter-governmental organisation to agree on any binding policy or principle to guide the management of the river.

The increasing need for energy and economic revenues is driving riparian countries to pursue policies which threaten regional food security and stability.[3] The race to build hydropower dams has colossal impacts on ecology, fishery sector, sediment flows, and food security. Eleven dam projects on the main stem of the river have been planned and another seventy seven dams planned in the Basin by 2030. However, it is widely acknowledged that, "poorly coordinated hydropower planning on the Mekong mainstream and its tributaries will lead this resource rich region into a water and food security crisis."[4]

Dams affect fish stock and trap the nutrient-rich sediments that flow downstream – these events are threatening economic productivity of the downstream countries. For instance, the ecosystem of Tonle Sap Lake in

3 Stimson Center, Mekong Policy Project. https://www.stimson.org/programs/mekong-policy-project#smooth-scroll-top.

4 Stimson Center, Powering Mekong Basin Connect. https://www.stimson.org/content/powering-mekong-basin-connect.

Cambodia, the main fish nursery, is being threatened by hydropower dam projects, overfishing, and climate change. Hydropower projects create fish migration barriers and upset regional fish productivity, hydrologic regime and water quality.[5] Studies found that basic food security is at high risk of disruption if the planned dam projects are realized.[6] An analyst argues, "Food and economic security of the majority of the local population is inextricably intertwined with the integrity of the natural environment. Therefore, continued hydropower development will have a devastating impact on the livelihoods of millions of the basin's inhabitants."[7]

3. Issues and Challenges

The main challenges facing the management of water resources in the Mekong River Basin stem from population growth, rapid development and industrialisation, increasing need for water, food and energy security, unsustainable use of water resources, and climate change. The Mekong countries are much vulnerable to climate change. Rising temperatures, unpredictable rainfall and extreme weather events, such as typhoons, are increasing in frequency, leading to droughts and floods.

Water resource security is intertwined with other security issues such as food security and energy security. Energy demand leads to the development of hydropower dams. But we can find alternative sources of energy, such as solar energy, in order to deal with energy stress as well as to reduce adverse impacts on water and food security. It is necessary thus to develop a holistic approach to address these intertwined issues. However, at this stage, there is a lack of policy coordination between regional mechanisms at the regional level and state agencies at the national level. The existing regional mechanisms, to be discussed below, tend to function in silo – leading to the lack of coordination and implementation as well as inefficiency and waste of resources.

---

5 Lin, Zihan/Qi, Jiaguo (2017): Hydro-Dam – A Nature-based Solution or an Ecological Problem The Fate of Tonle Sap Lake. In: Environmental Research, Volume 158. 24–32.

6 Orr, S./Pittock, J./Chapagain, A./Dumaresq, D. (2012): Dams on the Mekong River: Lost Fish Protein and the Implications for Land and Water Resources. In: Global Environmental Change, Volume 22, Issue 4. 925–932.

7 William, S./Pearce-Smith, D. (2012): The Impact of Continued Mekong Basin Hydropower Development on Local Livelihoods. In: Consilience: the Journal of Sustainable Development, Volume 7, Issue 1. 73.

Increasing geopolitical competition to get access to water resources due to growing demand and the complexity of resource conflicts mainly driven by unfair resource capture by more power riparian states make conflict management and resolution more difficult. In terms of water resource management in the Mekong Region, there is considerable lack of strategic trust among the riparian countries, due to the lack of information sharing and transparency. Distrust remains a key constraint in promoting regional cooperation and developing regional solutions. Information sharing on transboundary phenomena remains limited, given that riparian countries preferring to keep or hide domestic data for their national security reasons. A lack of political trust leads to tensions and conflicts. In addition, the region does not have effective mechanism and sufficient institutional capacity to prevent and mitigate resource-driven tensions or conflicts.

Water resource security in mainland Southeast Asia has direct correlation with ASEAN community building. First, more than 80 percent of natural disasters in Southeast Asia relates to hydro-meteorological catastrophes such as floods, droughts, and landslides.[8] The resource-driven conflicts in the Mekong Region will harm cooperative and friendly relations among countries in the region, which directly affect ASEAN political security community building and destabilise the whole region.

4. Gaps

There are four main gaps in addressing water resource security, in particular the institutional connectivity gap, and the implementation gap. Stakeholders here refer to the main institutional or organizational actors that have valid views, relevant knowledge and experiences, and resources to implement regional projects. There are four types of regional stakeholders, consisting of regional institutions (Mekong River Commission and Greater Mekong Sub-region), international cooperation mechanisms (Mekong-Ganga Cooperation, Japan-Mekong Cooperation, South Korea-Mekong Cooperation, US's Lower Mekong Initiative, Lancang-Mekong Cooperation), development partners (individual donor country and multilateral development partners), and civil society groups.

8 RSIS (S. Rajaratnam School of International Studies) (2017): Achieving Water Security in Disaster Situations: The ASEAN Experience. NTS Bulletin, September 2017. https://www.rsis.edu.sg/wp-content/uploads/2017/09/NTS-Bulletin-September-2017.pdf.

4.1 Regional Institutions

Mekong River Commission

The Mekong River Commission (MRC) founded in 1995 aims to sustainably and fairly develop the Mekong River. Cambodia, Lao PDR, Thailand, and Vietnam are the four members of the MRC, while Myanmar and China became the dialogue partners in 1996. The Mekong Agreement in 1995 clearly stipulates the responsibilities of the riparian countries and the rules of using the Mekong River Basin. Areas of cooperation include sustainable development, utilisation, management and conservation of the water and related resources of the Mekong River Basin. The MRC members shall cooperate on the basis of sovereign equality and territorial integrity in the utilization and protection of the water resources of the Mekong River Basin.

In its five-year work plan, 2016–2020, MRC focuses its work on four key areas, namely enhancement of national plans, projects and resources based on basin-wide perspectives, strengthening regional cooperation; better monitoring and communication of the Basin conditions; and bureaucratic capacity. In terms of study and consultation, in 2011 the MRC Council which composed of representative ministers from MRC member countries agreed to establish *Council Study* to provide reliable scientific environmental, social, and economic impacts of water resources development in the Mekong River encompassing cross-cutting sectors and impacts.[9] In addition, the MRC also promotes stakeholder engagement in order to share information, listen to feedback and inputs and address those comments in a meaningful way. The collection of the knowledge and perspectives of all interested stakeholders contribute to the assessment process of the Council Study. Regional stakeholder forums have been held to inform the design, methods, and plans for implementation for the Council Study to all interested stakeholders.

The shortcoming of the MRC is the lack of effective mechanism and legal instruments to enforce the Mekong Agreement and the MRC has been stalled by different interests (donors' interests in the Secretariat against those of the member countries in the Council and Joint Committee). It is argued, "The chief problem of the MRC is that it is donor-driven and does not reflect the governance experiences and development concerns of na-

9 Mekong River Commission (MRC). http://www.mrcmekong.org/assets/Uploads/Council-Study-briefs-August.pdf.

tional governments."[10] And the main challenge for the MRC is the lack of sustainable source of funding. The MRC needs US$65 million to fund the operations under this plan, with US$15 million coming from member countries, US$9 million from the existing fund, while the balance of US $41 million will require external support from the donor community. The member countries have approved the financial contribution formula towards equal sharing by 2030 in order to ensure future financial sufficiency and sustainability.

Greater Mekong Sub-region (GMS)

The Greater Mekong Sub-region, consisting of Cambodia, China (specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Lao PDR, Myanmar, Thailand, and Vietnam, was created in 1992 with the support from the Asian Development Bank. GMS aims to foster regional cooperation and integration by strengthening infrastructure linkages, facilitating cross-border trade and investment, and tourism, enhancing private sector participation and competitiveness, developing human resources, and protecting the environment and promoting sustainable use of shared natural resources.[11]

In the strategic plan 2012–2022 developed by the ADB, the GMS program covers multi-sector cooperation schemes including developing the major GMS corridors as economic corridors; strengthening transport linkages, developing an integrated approach to deliver sustainable, secure, and competitive energy; improving telecommunication linkages and information and communication technology applications among the GMS countries; developing and promoting tourism in the Mekong as a single destination; promoting competitive, climate-friendly, and sustainable agriculture; enhancing environmental performance in the GMS; and supporting human resources development and initiatives that facilitate the process of

10 Hensengerth, Oliver (2009): Transboundary River Cooperation and the Regional Public Good: The Case of the Mekong River. In: Contemporary Southeast Asia: A Journal of International and Strategic Studies, Vol. 31, 2. 342.

11 Asian Development Bank (2002): Building on Success: A Strategic Framework for the Next Ten Years of the Greater Mekong Sub-region Economic Cooperation Program. Manila.

GMS integration while addressing any negative consequences of greater integration.[12]

GMS is a functional regional cooperation mechanism as it does not have binding rules or strict procedures or regulations imposing upon state members. Therefore, the political will and capacity of the state to implement regional project are critical. Multi-stakeholder partnerships, particularly public-private partnership, are crucial in realizing regional initiatives. The enabling factors that have been identified include

- generating synergies with the Association of Southeast Asian Nations and other regional initiatives,
- effective private sector engagement,
- innovative approaches to project design and institutional arrangements,
- technology enabled processes,
- knowledge linkages and use.[13]

ADB is the main funding agency for the infrastructure development. China and Japan are the other two actors in proving loans and grants to support regional integration in the GMS and transform the sub-region into economic corridors. In terms of partnerships, the private sector is encouraged to participate in the sector working groups in specific initiatives as well as increase collaboration with local governments and local communities.[14]

4.2 International Cooperation Mechanisms

Mekong-Ganga Cooperation (MGC)

India has been actively involved in the Mekong sub-region since early 1990 s. In 1989, India introduced *Look East Policy* to engage with ASEAN. In 2014, President Narendra Modi upgraded the *Look East Policy* to *Act East*

---

12 Asian Development Bank, GMS Program. http://www.adb.org/sites/default/files/gms-ec-framework-2012-2022.pdf.

13 Asian Development Bank (2018): The Hanoi Action Plan 2018-2022, https://www.adb.org/sites/default/files/institutional-document/409086/ha-noi-action-plan-2018-2022.pdf.

14 Asian Development Bank (2018): The Hanoi Action Plan 2018-2022, https://www.adb.org/sites/default/files/institutional-document/409086/ha-noi-action-plan-2018-2022.pdf.

Policy to give more impetus to India's regional integration strategy with ASEAN and East Asia. In 2000 the Mekong-Ganga Cooperation mechanism was established to promote regional cooperation. There are six members in MGC, namely, Cambodia, India, Laos, Myanmar, Thailand, and Vietnam. MGC focuses on four cooperation areas including tourism, culture, capacity building, education, and connectivity. However, due to the lack of leadership and resources, MGC has produced limited results. At the 6th MGC Ministerial Meeting in 2012, India announced the establishment of Quick Impact Projects with an annual budget of US$1 million to fund the projects in areas such as connectivity, education, social infrastructure, health, agriculture, farming and animal rearing.

Japan-Mekong Cooperation

Japan reached out to the Mekong countries in 2007 through the Japan-Mekong Regional Partnership Program. Japan-Mekong cooperation has been intensified since 2008 when the first foreign ministers meeting between Japan and the Mekong countries took place in Tokyo. A year later in 2009, Japan-Mekong Submit kicked off. Japan has supported the Mekong countries in the fields of hard infrastructure development, logistics and transport, institutional building, human resources development, and regional community building. In 2015, Japan and the Mekong countries adopted Tokyo Strategy 2015 with the financial commitment from Japan of US$110 million over a period of five years, focusing on four pillars of cooperation:

- hard efforts (concentrating on industrial infrastructure development and strengthening, and physical infrastructure connectivity);
- soft efforts (advancing industrial structures and human resources development, and strengthening soft connectivity);
- sustainable development and green Mekong (focusing on disaster risk reduction, climate change, water resource management, and conservation and sustainable use aquatic fishery resources);
- multi-stakeholder coordination (including institutional coordination among various regional initiatives, relevant private sector, NGOs, and other development partners).

South Korea-Mekong Cooperation

South Korea started engaging with the Mekong Region in 2011. The foreign ministers from South Korea and the Mekong countries adopted the Mekong-Korea Comprehensive Partnership for Mutual Prosperity with an emphasis on connectivity, sustainable development, and people-oriented development. The Mekong-Korea Plan of Action (2014–2017) prioritizes six areas: infrastructure, information technology, green growth, water resources development, agriculture and rural development, and human resources development. South Korea has provided US$3.4 billion to ASEAN, 72 percent of which has injected to the less developed economies in the Mekong Region (Cambodia, Laos, Myanmar, and Vietnam) with a focus on capacity building and systematic infrastructure development.

The US's Lower Mekong Initiative (LMI)

The US initiated the Lower Mekong Initiative (LMI) in 2009, prioritizing agriculture food security, connectivity, education, energy security, water security, environmental issues, and public health. The US approach is to strengthen public institutions, empower civil society, promote social justice and human rights, and support sustainable and inclusive development. In 2016, the US stressed sustainable infrastructure and narrowing the development gap within ASEAN. The signature program of the LMI include Connect Mekong, Smart Infrastructure for the Mekong, Connecting the Mekong through Education and Training, Professional Communication Skills for Leaders, Women's Entrepreneurial Center of Resources, Education, Access, and Training for Economic, and One Health Program. Some other specific cooperation projects include the LMI are the US has assisted the Mekong Region in addressing the impact of climate change and other challenges to the sustainable development of the Mekong River Basin. And the Mekong River Commission and the Mississippi River Commission signed a *sister-river* agreement to exchange experiences and build partnership in the management of transboundary water resources.

Langcang-Mekong Cooperation (LMC)

The Lancang-Mekong Cooperation (LMC) was launched in 2015 at the first LMC foreign ministers' meeting. LMC focuses on three areas of coop-