



# Mekong River Basin

Mobilising grassroots engagement and facilitating high-level dialogue for transboundary water management



IUCN WATER PROGRAMME – DEMONSTRATION CASE STUDY NO.3



# WATER AND NATURE INITIATIVE (WANI) CASE STUDY

## MEKONG RIVER BASIN

*Authors: Megan Cartin, Rebecca Welling, Ganesh Pangare and Tawatchai Rattanasorn*

The Water and Nature Initiative's (WANI) activities in the Mekong followed a strategy of mobilizing grass-roots engagement of local stakeholders in decision making, while facilitating high-level dialogues. This helped to build networked, multi-stakeholder processes which could begin to bridge local to national and regional decision making in the basin to support improved transboundary basin management.

WANI and partners have further tackled challenges in the Mekong River Basin through supporting knowledge-based approaches and emerging dialogue and consensus building between diverse interests and voices. Local collective action and multi-stakeholder approaches combined with support from national governmental approaches have gained traction in the region and are ongoing. National governments continue to be supported and linkages to regional institutions facilitated. The emerging issues identified in the early years of WANI continue to be relevant and to resonate across the region. These results were achieved through focusing on the interlocking themes of knowledge, ecosystem services, negotiation and multi-stakeholder platforms. This built on the already existing work under the larger UNDP Mekong Wetlands Biodiversity Project.

Many lessons have been identified from WANI's work carried out in the Mekong basin. Among these is the understanding that multi-stakeholder participatory processes are needed to mobilise partnerships and relationships that form the basis for building mutual understanding between multiple partners and interests; for example, among Ministries, local government, NGOs and civil society. Additionally, that community-level research can effectively contribute to knowledge and decision making on IWRM, to ensure the priorities and needs of local people are fully represented. Finally, that widening the scope of environmental flows from a scientific concept to a practical water management tool is challenging and therefore there is a need for a step-by-step approach that gains in-country ownership over time.

New initiatives continue to build on the work that WANI and partners carried out in the region. These initiatives have focused on national multi-stakeholder dialogues and work by National Working Groups in influencing water policy development. Presently, the Mekong Water Dialogues project, started under the first phase of WANI, continues to focus on influencing water policy development through facilitating multi-stakeholder dialogues in the region. The BRIDGE (Building River Dialogue and Governance) Project, launched in 2011, aims to build water governance capacities through learning, demonstration, leadership, and consensus-building.

### Highlights

- Multi-stakeholder platforms: The Mekong Water Dialogues increased civil society participation.
- Grassroots Tai Baan research scaled up to other regions of Thailand and into Lao PDR and Cambodia.
- First environmental flows assessment in Viet Nam and subsequent understanding and scaling up of concept and practice to other regions in the Mekong Basin.
- Better understanding of ecosystem services through aquatic resources, biodiversity and livelihoods assessment in the Attapeu province and Upper Mekong.
- The first in-depth study of national legislation to interpret findings of the World Commission on Dams.
- Ecosystems approach adopted in planning to respond to development challenges.



# 1. WATER GOVERNANCE CHALLENGES AND ENVIRONMENTAL DEGRADATION



**Figure 1.** Map of the Mekong River Basin

(Source: IUCN / Lisa Idris / Map generated through ArcMap 9.3 using data from ESRI, USGS and FAO)

## 1.1 A transboundary river system

The Mekong is the longest river in Southeast Asia, beginning its 4,200 km journey in the mountains of the Tibetan Plateau. From here, it flows through China, Lao PDR, Myanmar, Thailand, Cambodia and Viet Nam, finally reaching the South China Sea. Its annual volume of water (above 475,000 million m<sup>3</sup>) places it eighth in the world table of great rivers. The river and its numerous tributaries, backwaters, lakes, and swamps support many unique ecosystems and a wide range of globally-threatened species.

The productivity of the Mekong River Basin is dependent on a dramatic process of flooding and recession, which endows the basin wide range of habitats. The timing, extent and duration of floods, and the regular inundation of habitats are all important factors in determining the productivity of the river. This ecosystem is fundamental to the viability of natural resource-based rural livelihoods of a population of 55 million people living in the Lower Mekong Basin – equivalent to more than 90% of the population of the entire Mekong Basin, and about one third of the total population of Cambodia, Lao PDR, Thailand and Viet Nam combined.



*Floating market in the Mekong Delta*

## 1.2 Water Governance Challenges

With a lack of adequate knowledge of basin characteristics and water resources management, the strongly centralized, state controlled systems of Mekong basin governance were wrestling with how to approach development challenges. Whilst policy reforms had been initiated, they were not necessarily appropriate or sufficient. Furthermore, when water related laws had been developed, there were still major gaps in the supporting knowledge and information. Appropriate institutional arrangements corresponding to the policy directives and legal frameworks were not always effectively put in place, resulting in lack of coordination between the various agencies related to management of water resources both nationally and regionally across the basin.

The Mekong River Commission (MRC) was established in 1995 and includes Cambodia, Lao PDR and Viet Nam as members and China and Myanmar as dialogue partners. The MRC's Strategic Plan (2006-2010) presents a shared vision for an economically prosperous, socially equitable and environmentally sound Mekong River Basin, aiming to achieve this through a more integrated approach. The MRC has attempted to engage with various stakeholders as part of its participatory approach to tackling water management issues across the basin.

It is within this context that WANI and partners have attempted to engage both national governments and institutions and regional bodies in tackling water governance challenges.

## 1.3 Environmental degradation, livelihood insecurity and conflict

Within the Mekong Basin there are areas which are predominantly low-level subsistence systems and vulnerable to shocks such as climate variability. Some of the most significant threats to these livelihoods come from environmental degradation and habitat loss. This situation is compounded by a growth in water and energy demands and alteration of natural flows as a result of infrastructure developments along the river. Increasing pressure on already degrading water resources has resulted in an increase in conflicts between upstream and downstream water users. Therefore, a key challenge for the region is to negotiate the reasonable and equitable utilization of water between the riparian States. For this process to succeed, it is crucial that there are effective national and international processes for knowledge sharing on the benefits, impacts and risks of alternative development options.

## 2. TOWARDS SOLUTIONS: ACTIONS AND RESULTS

### 2.1 Overview

The UNDP Mekong Wetlands Biodiversity Programme (MWBP) was undertaken 2003–2006 with the aim of sustaining livelihoods by improving the management of wetlands in the Mekong Basin (see Box 1). The IUCN Regional Office and programme the Water and Nature Initiative (WANI) also provided important assistance to the MWBP. This included building links between the local research conducted in each demonstration site, in assessments (such as environmental flows in the Songkhram Basin, and monitoring of the Upper Mekong region) and in regional multi-stakeholder dialogues.

### 2.2 Knowledge and information as effective decision making tools

As a result of WANI's support to the extension of Tai Baan research (see Box 2), the practice has been 'scaled up' by extending the concept and practice to other parts of Thailand, Lao PDR, Cambodia and Viet Nam. As a result of scaling up within Thailand, participatory assessments in the Songkhram River Basin (a tributary river of the Mekong) were carried out by 240 villagers from 4 villages in partnership with local government, to research ecosystems and livelihoods. In each village teams of 10 villagers addressed one of 6 research topics. Information gathered included the identification of 28 sub-ecosystems, representing a more

sophisticated classification system than had been applied in national wetland classification. In addition, detailed characteristics of the fish populations were gathered, including the identification of 128 fish species with their breeding, spawning and feeding habitats and migration pathways were documented along with the cultural beliefs associated with them.

This village-led research helped to develop a livelihoods focused approach to river basin management that supported local governmental structures working in partnership with local NGOs and village groups. This has resulted in the publication of research findings in 2005 in Thai and the development of a network of Thai Baan researchers who are now actively engaged in the river basin committees established by the state. Two thousand copies of the final report of the Songkhram research have now been published in English providing a summary of the research findings. In 2010 in Thailand, over 180 representatives of local community groups from 10 river basins came together in a workshop and synthesized over a decade of experience in Tai Baan research approaches in relation to water resource management. This valuable compilation is now being used as the basis for developing a training manual and extension efforts to promote the replication of Tai Baan approaches in additional areas both within Thailand and in neighbouring countries.

#### Box 1: Mekong Wetlands and Biodiversity Project (MWBP)

The MWBP was a programme of partnerships involving a diverse range of local, national and regional actors, with an almost equally diverse source of funding and co-finance. The programme was led and implemented by UNDP, IUCN and the Mekong River Commission (MRC) in partnership with national and local government agencies of Cambodia, Lao PDR, Thailand and Viet Nam and was implemented from mid 2004 until the end of 2006. The programme aimed to strengthen the capacity of organisations and people to develop sustainable livelihoods and manage wetland biodiversity resources wisely. MWBP covered a wide range of issues, including biodiversity and wetland assessments and mapping.

As a result of this initiative, the MWBP website, <http://www.mekongwetlands.org>, was set up and housed a significant body of data and information about wetlands biodiversity and livelihoods in the Mekong Region. These documents raise key findings and recommendations about threats, opportunities, research, governance and policy gaps for improved wetlands management in the Lower Mekong Basin. They illustrate major economic values and worth of the products and services provided by wetlands and surrounding livelihoods in the region. WANI supported the MWBP in its work on livelihoods and wetlands.



## 2.3 Ecosystems services: building an understanding

### *Environmental flows*

The WANI project in the Huong Basin in Viet Nam focused on healthy ecosystems and prosperity for the diverse peoples who depend on them for their livelihoods. The Huong River Basin rapid environmental flows assessment, completed in 2005 and coordinated by WANI, was the first ever undertaken in Viet Nam. Broad interest in the concept emerged, setting off a process of learning and scaling up at national and regional levels. The Huong environmental flows work was instrumental in the environmental flows work in Thailand.



*Fisherman on the Songkhram River*

Work on environmental flows by WANI and partners in Northeast Thailand on the Songkhram River revealed that the water level in the river is controlled by the water level in the Mekong mainstream river. This sheds new light on the importance of recognising the potential impact on the tributaries while modifying flow patterns on the Mekong mainstream river. The findings indicated that the high productivity of the floodplains and rich fisheries are

dependent on the flood pulse derived from within the basin and the Mekong River influenced flows. WANI and partners facilitated the establishment of a joint Basin committee between the four provinces managing the Songkhram River to facilitate joint planning and management of Songkhram River as a Basin.

### **Box 2. What is Tai Baan Research?**

Tai Baan Research or Villagers' Research is when local people themselves define research objectives, agree on methodologies, establish research teams comprising local people, undertake field work and go through a process of peer review. This is an empirical process based on local knowledge and is a process that is owned by local people themselves so that they are better able to learn from each other and document their knowledge and represent their interests in policy and decision-making arenas.

Tai Baan research started in 2000 by local people and Thai NGOs involved in the campaign to mobilise the Thai government to open the gates of the Pak Mun Dam for at least part of the year. This resulted in the opening of the gates for an eleven month trial period. The University of Ubon Ratchathani was contracted to undertake an assessment of the impacts of opening the gates on the fisheries downstream and livelihoods. Local people and NGOs were concerned that such a study would not represent their interests fully and therefore decided to undertake their own research – Tai Baan research. Tai Baan has rapidly gained credibility by 'bringing in' and respecting the knowledge of local fisherman and farmers, and effectively communicating their knowledge to other actors. By mobilizing local communities to record their indigenous knowledge, Tai Baan research has enabled communities to represent their own 'social reality' and through media and public forums, this knowledge can be mainstreamed into water management research and implementation. This approach to research and learning has spread to other regions of Thailand and beyond.

There were important overlaps between the WANI Huong and Mekong river projects. Environmental flows demonstrations in Viet Nam and Thailand were the basis for region-wide awareness raising and capacity building. This focused on the promotion and application of the WANI toolkit FLOW – the essentials of environmental flows and included translation of the toolkit into six regional languages: Vietnamese, Chinese, Thai, Khmer, Lao and Burmese. Translations were led by inter-disciplinary working groups in each case, ensuring translation of the concepts rather than just the words, and successfully building national-level ownership of the concepts and a constituency advocating and promoting flow application in each country.



*Intensive use of the river banks of the Mekong for cultivation*

### ***Aquatic resources and livelihoods***

WANI and partners worked with local villagers in the Attapeu Province, Lao PDR to determine the nutritional value of their wetland resources and demonstrate how to better conserve and harness these resources. People from the three communities of Tamoyot Village, Sanamsai District, Saisi Village, Saisetha District, and Gayeu Village, Samakisai District participated in the research. The success of the research process carried out in the Attapeu Province, Lao PDR encouraged a complementary study which was carried out in the Stung Treng

Province in Cambodia on integrating wetlands economic values into river basin management, as a means to further understand the crucial role that wetlands play in livelihood sustainability. The subsequent report was an important contribution to basin knowledge and understanding as it introduced ecosystem valuation as an approach to understanding how to manage wetlands as well as the contribution to livelihoods by ecosystems.

### ***Biodiversity and livelihoods***

The Upper Mekong region of Lao PDR, is undergoing rapid ecological, economic and social changes that are driven by many disparate forces:

the opening of river navigation to commercial vessels; the development of roads and the construction of hydropower dams on the mainstream Mekong in south-western China. These changes and the way that they are managed have significant implications for both the Upper Mekong and the Mekong region as a whole.

As a response to this situation, WANI helped facilitate two biodiversity scoping surveys in the Upper Mekong. The first of these surveys was carried out in collaboration with the Lao National Mekong Committee. In a follow-up survey, WANI, in collaboration with Environmental Research, as well as other Lao national and provincial government agencies conducted a further scoping study on the Upper Mekong. The synthesis report produced, entitled "An Uncertain Future: Biodiversity and Livelihood along the Mekong River in Northern Lao PDR," provides a solid

knowledge base for understanding the linkages between ecosystems and local livelihoods.

Through this work WANI has supported awareness raising of the rapid and profound changes taking place in the river amongst inhabitants in the region. This has led to reassessment of how they use resources from the river. For example, in 2006, with guidance from WANI and partners in the Mekong Wetlands Biodiversity Programme, fishermen on the Thai side of the Upper Mekong placed a moratorium on fishing of the Giant catfish, a highly prized but increasingly rare endemic species in the region.



## 2.4 Building national capacities: Moving forward from the World Commission on Dams

The World Commission on Dams (WCD) report articulates a decision making framework for 'large dams', or 'large water projects and water-related energy projects'. It is a guide, not a blue-print, offered by the commissioners as their contribution to the ongoing, worldwide debate over this type of 'development' project. Of course, there are other valuable viewpoints being expressed by governments, scholars, activists, developers and funders. Some of these can be used to strengthen and build upon the framework offered by the WCD. Since its formulation and release, the 'WCD framework' has been evaluated for use as both an implementation and advocacy tool. It is complex. WANI has carried forward the WCD ideas into national and regional discussions in the Mekong Region from 2001–2004.

WANI oversaw the design and implementation of the 'Regional Interpretation of the findings of the World Commission on Dams in the lower Mekong River Basin' 2003-4. The objective of the project was to build capacity in two ways: provide tools to assist governments in implementing the Strategic Priorities of the 2004 Report and to build capacity of national experts through the research process.

The project supported the translation, publication and dissemination of the Strategic Framework of the Report in Cambodia, Laos and Thailand. In Cambodia and Lao PDR, a Working Group was established with representatives from a range of government agencies and NGOs to jointly undertake translation and editing of the Strategic Framework and other key sections of the report. This project was the first in-depth study of national legislation in Mekong riparian countries and regional agreements applicable to the Mekong Basin, and their relationship to the Strategic Priorities identified in the Dams and Development Report. As such, it was a significant contribution both for its usefulness as a reference and as a benchmark for future analysis.

It should be noted that while dams can alter the flow of the river with an array of consequences, they can also bring benefits in terms of raising living standards, increasing access to electricity for many households and infrastructure and development opportunities. The subject of dams and other



*Mekong Water Dialogues multi-stakeholder meeting in Cambodia*

structures continues to be an ongoing issue in the debates about the Mekong and their impending development is a main driver in developing approaches linking national and regional concerns.

## 2.5 Multi-Stakeholder Platforms (MSPs): Mekong region water dialogues

The six countries sharing the Mekong River face similar challenges with water governance. However, different priorities cause conflicting management and decision making, resulting in risks to equitable development. As a response, the WANI-supported Mekong Region Water Dialogues Project aimed to develop country-led and regional dialogue processes enabling better flow of information and knowledge, greater stakeholder participation, and an increased appreciation of the inter-dependence of issues. Multi-Stakeholder Platforms (MSPs) assist society to reflect on the wisdom of past actions, more comprehensively explore and assess future options, and more openly negotiate workable strategies and agreements. Transboundary water development in the Mekong Region affecting livelihoods and ecosystems needed to be more informed and influenced by public participation in decision-making and information sharing. Democratic regional water governance through multi-stakeholder platforms provides space for the scrutiny of different perspectives and development scenarios as well as a more participatory approach to decision-making.



*Girls in traditional costume watching the boat parade held to open the annual Giant Catfish Festival Chiang Khong, Thailand*

WANI co-convened the 'Mekong Region Waters Dialogue: Exploring Water Futures Together' multi-stakeholder platform in 2006 to put the principles of sustainable development of water resources into practice. This was a regional multi-stakeholder platform organized to provide opportunity for a high quality, multifaceted debate and learning aiming to improve water governance in the Mekong Region. In addition, National Working Groups, comprising representative experts from government, civil society/non-government organisations, the private sector and academia/research sector were formed to guide the implementation of the Mekong Region Water Dialogues in each country.

The project has been very successful in providing an opportunity for increased awareness and understanding of relevant decision-making frameworks. It was the first such dialogue that set a precedent for governments and organizations to move towards more accountability and transparency in their activities. Concretely, it allowed them to learn

about the roles of the Development Banks, and Mekong River Commission and comment on their draft strategic plans. The increased public scrutiny was very challenging for actors, such as World Bank and Asian Development Bank with their process and products being publicly evaluated. The Dialogue was appreciated by all participants as a 'first step in a difficult road' to enhance water governance in the Mekong region. Participants affirmed that the Dialogue '...was a meaningful and important initiative' which resulted in 'a shared learning' and 'a clearer and deeper understanding of water and water-related issues in the Mekong region', as it

provided a common platform for interaction among stakeholders who seldom meet to discuss their common concerns about water resource use and development in the region.

Presently, the Mekong Water Dialogues continue to build on the work that WANI and partners carried out in the region. In 2010, results focused on local multi-stakeholder dialogues and work by National Working Groups in influencing water policy development. For example, the new Lao Water Policy (2010–2020) and Water Strategy (2010–2015) were developed by the Water Resources and Environment administration of Lao PDR, using the National Working Groups as a platform for compiling a wide range of stakeholder inputs. Also with strong support from the Mekong Water Dialogues project, the Government of Lao PDR acceded to the Ramsar Convention on Wetlands. In Viet Nam, mirroring development in Lao PDR, the National Working Groups mobilized stakeholder inputs into the new National Target Programme on Water, which incorporates the implementation of water allocation and protection plans for Vietnamese rivers.

### 3. RESULTS AND LESSONS LEARNED

#### 3.1 Synopsis of results

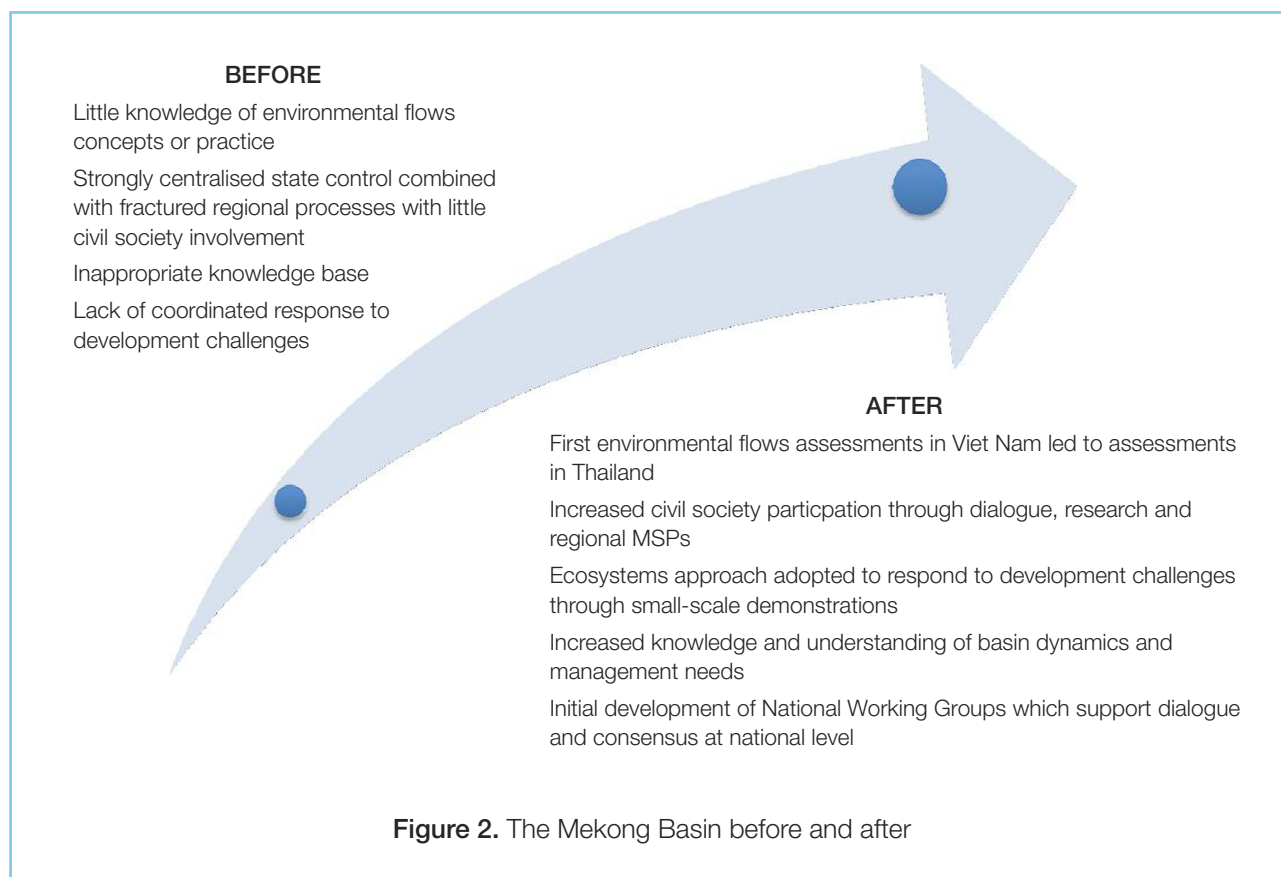
A lack of adequate knowledge about basin characteristics and water management coupled with a centralized water governance system meant that the management of the Mekong River Basin as a whole was fragmented with conflicting priorities. This impeded responding to development challenges such as environmental degradation and conflict between water users over diminishing resources.

WANI and partners have attempted to tackle these challenges through supporting knowledge-based approaches and emerging dialogue and consensus building between diverse interests and voices. Although the impact on such a complex river basin is difficult to assess, the Tai Baan and multi-stakeholder approaches and support to national governmental approaches have gained traction in the region and are ongoing. National governments continue to be supported and linkages to regional institutions facilitated. The emerging issues identified in the early years of WANI continue to be relevant and to resonate across the region.

#### 3.2 Lessons learned

Many lessons have been identified from WANI's work carried out in the Mekong basin. The main lessons are:

1. Multi-stakeholder participatory processes are needed to mobilise partnerships and relationships that form the basis for building mutual understanding between multiple partners and interests for example, between Ministries, local government, NGOs and civil society. This is a complex and time consuming process that evolves over many years, but is vital to establishing actions to tackle large, complex issues. The Mekong Water Dialogues in 2006 were one of the first steps in a process to initiate a wider regional dialogue that now aims to link national water priorities to basin and regional realities.
2. Community-level research can effectively contribute to the knowledge and data that informs decision making on IWRM, ensuring that





the needs and priorities of local people are fully represented. This approach can be successfully applied in other basins if it is tailored to local contexts and the results and benefits are clearly articulated. The Tai Baan model of village research was successfully applied in the Songkhram basin and has resulted in the establishment of a Tai Baan network that is promoting the approach throughout Thailand and other Mekong countries.



*Lao woman fishing in the Mekong*

3. Widening the scope of environmental flows from a scientific concept to a tool for water management is challenging. There is a need for a step-by-step approach that gains in-country ownership over time. Environmental flows applications help to mobilise partnerships and relationships that are the basis for developing longer - term water management strategies. The translations of FLOW into 6 regional languages

considerably helped to promote environmental flows at national and basin level.

4. Livelihoods are dependent on local resources which are supplied by functioning ecosystems. This is often overlooked and undervalued and cannot always be seen in terms of direct economic benefits. The relationship between local stakeholder and the resources provided by

the Mekong waters is complex and undergoing rapid local changes as completion for resources intensifies. However, local actions can quantify and reassess how resources are used. Studies, surveys and assessments have underpinned the relationship between ecosystems and livelihoods which is now being mainstreamed livelihood security and poverty reduction projects.

5. The size and complexity of river basins such as the Mekong are major issues as it is much more difficult to generate longer term impacts at larger basin scales. Working across scales from mobilising grassroots stakeholders to

advocating and facilitating for high level dialogues requires 5-10 years of on-the ground actions with an array of partners. Demonstrating approaches and solutions at discrete, local levels and negotiating for region wide dialogues was a sound strategy. These were scaled up and proved to be a successful approach to coping with complexity and initiating further leverage for actions and interventions that have rippled out across the basins of the Mekong.

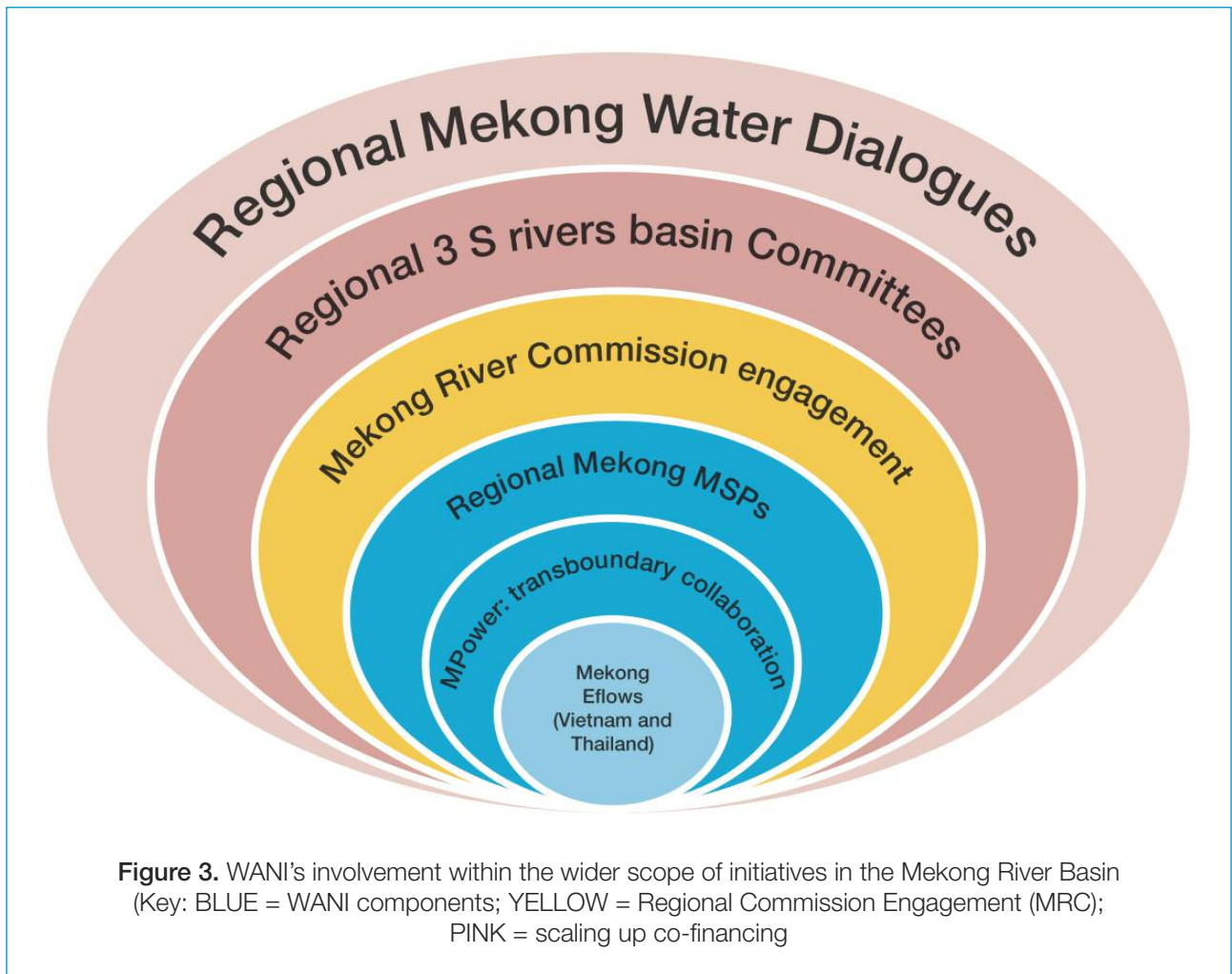
# NEXT STEPS

## 4.1 Further governance initiatives

WANI began its attempts to improve water resources management for the Mekong River through several, initial small interventions which have resulted in attracting support for larger interventions and this has laid the foundations for further work (see Figure 3). IUCN has made considerable headway in addressing water governance issues in the Mekong Region. WANI's activities can be seen to have created a ripple effect, spreading information and knowledge to inform new initiatives and projects along the Mekong.

## 4.2 Mekong Water Dialogues

The Mekong Water Dialogues, supported under WANI, has become a fully fledged initiative implemented by IUCN and funded by the Ministry for Foreign Affairs of Finland. Under this initiative, IUCN works with Cambodia, Lao PDR, Thailand and Vietnam to improve water governance by facilitating transparent and inclusive decision making to improve livelihood security, human and ecosystem health. The initiative aims to provide an opportunity for government, the private sector and civil society in the region to participate in dialogues and to enable different perspectives about water related development to be considered.



### 4.3 Building River Dialogue and Governance (BRIDGE) project

The BRIDGE (Building River Dialogue and Governance) Project, launched in 2011 aims to build water governance capacities through learning, demonstration, leadership, and consensus-building. In the Mekong region this includes the following rivers: Sekong (Vietnam-Lao PDR), Sre Pok (Vietnam-Cambodia), Sesan river (Vietnam-

Cambodia) which are important tributaries of the Mekong and contribute 20% of the total flow of the mainstream Mekong. The process has started by focusing on building up national commissions to manage each basin which will eventually be scaled up to a basin wide commission.



*Floating Village in Tonlé Sap, Cambodia*



## **Donor support**

DGIS (WANI), UNDP, Wetlands International, World Bank, Government of Finland, Swedish Environmental Secretariat for Asia (SENSA).



**INTERNATIONAL UNION  
FOR CONSERVATION OF NATURE**

WORLD HEADQUARTERS  
Rue Mauverney 28  
1196 Gland, Switzerland  
water@iucn.org  
Tel +4122 999 0000  
Fax +41 22 999 0002  
[www.iucn.org/water](http://www.iucn.org/water)  
[www.waterandnature.org](http://www.waterandnature.org)

Design: Tim Davis, DJEnvironmental, UK  
Print: GPS Printing, France  
Photo credits: Cover IUCN/Taco Anema,  
p.3, p.6, p.7 IUCN/Ganesh Pangare,  
p.5, p.10 Wayne Arnold, p.12 Claire Warmenbol

