



Volume 6 | Issue Q1 2020

Quarterly

Highlight



For International Women's Day 2020, celebrated on 8 March, UN Women chose the theme, "I am Generation Equality: Realizing Women's Rights." GWP reached out to women in its worldwide net-

work, asking them to share stories on what they learned on their journey to taking on leadership roles in the water sector. (PG.4)

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GWP NETWORK STORIES

The LMC Workshop on Integrated Water Resource Management on River Basins

The Lancang-Mekong Center (LMC) Workshop on Integrated Planning and Management of River Basins was held as part of the work plan of the Lancang-Mekong Water Resources Cooperation in the China-ASEAN Maritime Cooperation Project. The workshop was attended by relevant officials, experts, and scholars from Cambodia, China, Laos, Myanmar, Thailand, and Viet Nam. The workshop also invited representatives from International Organizations such as GWP, MRC secretariat, IWMI, AWC, world bank group, and UNDP.

Centered on the theme of 'Integrated Planning and Management of River Basins', the workshop proposed several topics for discussion. Among these topics were: regional water resources cooperation, dam safety, drinking water safety, integrated management of small river basin, and information platform development. The workshop hosted by the Changjiang River Water Resources Commission, and co-organized by the Pearl River Water Resources Commission, Lancang Mekong Water Resources Cooperation Center (LMC Center), and Human Resources Development Center of LMC center.

Held on 8-13 January 2020 at the venue Yanling Hotel, Guangzhou – China, the participants were asked to join the full workshop program such as: shared the on-going research on the topic, develop an action plan for the practical cooperation between China and Mekong countries through group discussion; GEF proposal discussion, and field trip.



Photo 1 Participants of the workshop

The workshop opened by opening remarks from the hosted institution representative, organizers, then followed-up by keynote speeches. The keynote speeches introduced the progress on Lancang Mekong Water Cooperation and the role of the master plan of Yangtze River Basin in river rehabilitation and protection, practical experience of MRC in Integrated Planning and Management of the Lower Mekong Basin, and the GWP-SEA work plan and cooperation with the Lancang Mekong Water Resources Cooperation. The session then continued with shared reports from the IWM, AWC, Nanjing Hydraulic Institute, and case studies from the representative from the Lower Mekong countries. During the focus group discussion, the issue of data sharing for flood forecasting purposes was raised. **AW**



Photo 2 Fany Wedahuditama, GWP-SEA's Regional Coordinator facilitate the group discussion

REGIONAL STORIES

GWP-SEA Looking for a Collaboration with the Dutch Water Sector During the Kingdom of the Netherlands Economic Mission to the Republic of Indonesia

The government of Indonesia hosted King Willem-Alexander and Queen Máxima's visit back to back with Economic Mission. Both country are face several challenges, such as tackling the impact of climate change on coastal protection and water resources, ensuring sufficient food production, making healthcare more accessible, and transitioning to a circular economy. The mission offers the opportunity to share knowledge, build public-private partnerships, and forge business-to-business agreements that will help deliver affordable, scalable, and integrated solutions to these and other challenges. The mission joined by a business delegation of over 130 companies and knowledge institutions from the Netherlands, representing a variety of sectors: agri-food, life sciences

and health, water, and maritime technology, waste management, and the circular economy.



Photo 3 Photobooth at the forum

To this end, GWP-SEA regional secretariat joined the forum to seek collaboration with the respective Dutch business sector in developing a join-proposal on Zero Draft concept note 'Climate resilience city'. Held on 11 March 2020, two institutions have shown their interest, the 'Indonesia Diaspora Networks in the Netherlands (IDN) Livable Cities', and Dutch Consultancy and Engineering company 'SWECO'. The climate resilience city program is developed to accommodate the needs of collaboration between different stakeholders that share a similar interest for better water management. Before this, a Korean and Chinese company have shared their interest to collaborate with GWP-SEA secretariat to implement a pilot project in Indonesia. AW

Cambodia: Progress on GCF Proposal - Strategic Development Plan of the Central Floodplain of Cambodia (CFPC)

Cambodia is one of the most vulnerable countries in the Mekong River Basin that is affected by cumulative impacts at the basin level from upstream hydropower and rapid socioeconomic developments. At the country level particularly the Central Floodplain (CFP), limited integration between land use and water resources planning has led to increasing fragmentation of the floodplain and its vital natural resources namely capture fisheries and agriculture essential for national food security. Floodplains encroachment led to the loss of flood conveyance and storage capacity for flood and drought mitigation. The impacts are amplified by the effect of climate change resulted in extreme floods and droughts events while resilience and governance capacity to disasters management and planning is the lowest in the region. Additionally, climate change-induced sea-level rise, and the loss and fragmented floodplain for flood storage and conveyance would increase the

cost of flood protection and water storage for drought mitigation in the long run. The CFP of Cambodia is the area of concentration of national socio-economic, cultural, urban centers, ecosystem services supporting food security, and communication activities where some 32% of the country's population live will be directly or indirectly affected by the impacts.

Major urban centers including Phnom Penh, Battambang, Kandal, Kampong Cham, Siem Reap, Kampong Chnang are located within the CFP and frequently affected by river floods and intense rainfall. Urban expansion generally extends into the flood risk zone of the floodplain. Newly city developed vital infrastructures such as water treatment plants, electricity networks, pumping stations for sewage drainage, etc. are mostly located based on land availability rather than suitability and safety related to strategic options related to impacts from extreme floods events.

Uncoordinated infrastructure development will reduce opportunities and limit options for future generation to build their living environment sustainably and at a reasonable cost avoiding unnecessary investment.

To this end, Cambodia Water Partnership has developed a GCF proposal that aimed for developing a long term plan as a reference document for sectoral development and management planning in the CFP of Cambodia.

The Central Flood Plain of Cambodia (CFP) plan is aiming to develop a long term strategy towards safe prosperous and sustainable use and manage the natural and socio-economic resources of this area including policy recommendations and roadmaps for solutions. As such the CFP plan is a reference document for the Royal Government of Cambodia in adjusting and adapting existing where necessary socio-economic development planning, spatial planning and sectoral master planning for the CFP as well as a guide for future decision making, legislation and investment in the CFP based on its reconciliation with its past culture of living with water and need for adaptation to current and future changes and uncertainties. **AW**

Special Article

To celebrate International Women Day that hold every 8 March, GWP prepared articles "Women in GWP Share Leadership Journeys", consists of women leaders in the water sector worldwide. The main page of the article can be accessed here.

With the theme, "I am Generation Equality: Realizing Women's Rights." GWP reached out to woman leader in all regions, asking

them to share stories on what they learned on their journey to taking on leadership roles in the water sector. Represented Southeast Asia Region was the article to the story of "Prof. Dr. Khin Ni Ni Thein – A Water Journey of 42 Years" can be accessed here.

GWP-SEA secretariat also prepared additional article to the story 'Prof. Dr. Khin Ni Ni Thein – A Water Journey of 42 Years' that try to discuss more details about her experience in changing the political situation in Myanmar through water sector reform.



"I think that to empower all women and girls we need simple, day-to-day lifetouching, easy-to-dealwith exercises - for example implementing integrated water resources management starting from the household level, to the village tract, to the township - then spiral up."

Prof. Dr. Khin Ni Ni Thein,

Global Water Partnership

GWP Southeast Asia

Woman Leader in the Water Sector Reform in Myanmar

Earlier Career

Her first water journey after received a Bachelor of Engineering degree in 1977 was a trainee engineer in the township water and sanitation office in Gyogone – Insein. Started from January 1978, her office at that time was under the Ministry of Construction. From that experience, She said, "I have learned how important water is for every citizen and I was proud of being an engineer and wanting to learn more about water". From 1979-1983 She continues working for the Irrigation Department under the Ministry of Agriculture and Irrigation. She started her career there as an Assistant engineer for Ngalaik Dam Construction Project, near Pyinmanar Town and Nay Pyi Taw. She then moved to Yangon to support the Design team of hydraulic infrastructures for the Sittaung Valley Project design section.

Her five years of professional achievement in the development sector lead to a position as an instructor in the Rangoon Institute

of Technology (which is now known as Yangon Technological University) since February 1983. She also continued further study and obtained Master of Water Resources Planning, Development, and Management Engineering (WRDE) in 1984 and got promoted to Assistant Lecturer, then to Lecturer in the following years.

Since she began her water study, her single-minded goal was aimed to develop the Ayeyarwady River Basin and the River.

Ayeyarwady River Basin considers as a nationally important as it covers nearly 60% of the total land area of Myanmar.

To be able to do that, she started her capacity-building journey start from 1987 in Delft, the Netherlands. In 1987 she won the Netherlands Scholarship and enrolled in 11 months postgraduate diploma course in Computational Hydraulic at IHE Delft and continue further study to obtain a second master's degree in 1989. After obtained financial assistance from the Danish Hydraulic Institute, she did a collaborative Ph.D. program between the Netherlands and the Danish Government. She was the first Ph.D. holder in Hydroinformatics at IHE Delft which developed by Prof. Dr. Michael Abbott in 1991 and graduated on 30 May 1994.

Water and Peace

Her passion to bring peace in Myanmar through water encourage her to produce a documentary entitle "Water and Peace". However, it took 10 years from 1991 to convince the authority until the film was shot in April 2001. When the National Leader Daw Aung San Suu Kyi was under house arrest, the production of the documentary was halted. The documentary never completed since the National Leader was not allowed to meet anyone, although the script was already accepted by the Prime Minister. This situation had led her to travel back to Delft – the Netherlands and later in 2002, the UNEP offered a position as a Senior Advisor to Dams and Development Project, located in Nairobi – Kenya. During this period, the UNEP actively promoted the "Dams and Development Project (DDP)" as an effort to reducing poverty through environmentally and socially sustainable development of water and energy resources.

The Dams and Development Project (DDP) was prepared by the United Nations Environment Programme in support of the efforts of countries and the international community directed towards achieving internationally agreed development goals for reducing poverty through environmentally and socially sustainable development of water and energy resources. This integrated approach also includes dealing with the entire basin when planning,

developing, and managing water resources, recognizing upstream and downstream interlinkages, and being aware of particular stakeholder interests and areas of potential conflict. Thus, the DDP was considered as an appropriate approach to dealing with the internal conflict in Myanmar.

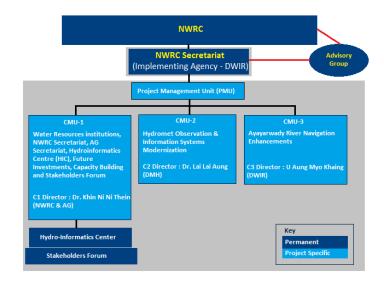
The internal conflict in Myanmar is a series of primarily ethnic conflicts within Myanmar that began shortly after the country, then known as Burma, became independent from the United Kingdom in 1948. Prof. Dr. Khin Ni Ni Thein believed the discontent and tension and frustrations came from an unfair share of natural resources and not recognizing the fact that the natural resources of Myanmar are own by all citizens of Myanmar. In her argument, she argued, "We have to see what the root cause of discontent, mistrust, and frustrations is, tension and oppression". She added, "The tension between Ruling class and normal citizens is obvious; the added layer of tension is between rulers and ethnic groups - this second layer broke out in fighting - rulers call the ethnic fighters the insurgents. As a result, this situation often led to a civil war between rulers of Myanmar and Ethnic Groups in Myanmar. Furthermore, the dictators usually handle this situation by ultimate oppression and control - turning Myanmar into a Police State." She added, "In my view, we can do better. Natural resources management is everybody's business; however, it is too far to change that practice overnight and in a short time". She replied, "Therefore I propose to begin with Water; Water Sharing, fair allocation".

To mainstreaming good water governance, hence, the National Water Resources Committee (NWRC) has been established on 25 July 2013 for the first time. The NWRC was established by Presidential decree to manage the broad inter-related risks and opportunities of Myanmar's water resources that consisted of surface water, groundwater, marine, and coastal water and river systems including the Ayeyarwady River. The first term of the NWRC ceased to function on 29 March 2016 by the immediate past government. The reason for this since the NWRC was established with the Presidential Decree and it was used as an instrument for the former President to manage the Myanmar Water Sector, and therefore he has to leave a clean slate for the incoming President. Prof. Dr. Khin Ni Ni Thein successfully convinced the new government for the essence of the establishment of the NWRC and therefore the new President re-established again on 20 June 2016.

To ensuring its function, the NWRC supported by three main pillars, there are Secretariat, Hydro-Informatics Center (HIC), and

Advisory Group. In addition to that, a multi-stakeholder forum established as the fourth pillar (see figure 1).

Figure 1 Chart of National Water Resources Committee (Source: https://www.airbm.org/nwrc/)



The very first sketch of HIC in Myanmar was created by Prof. Dr. Michael Abbott in 1991 with key inputs from her as a means to provide a useful tool for Myanmar Water Sector Reform - to create a smooth transition from dictatorship to democracy by means of good water governance.

The Hydro-Informatics Centre (HIC) was established with the aid of the World Bank Project called Ayeyarwady Integrated River Basin Management (AIRBM) and tender winning consortium DHI JV that consists of four major partners representative from Denmark, Netherlands, Australia, and Finland. The project consists of three components. The first component 'Water Resource Management Institutions, Decision Support Systems and Capacity Building' is under her leadership that acts as the Director of the AIRBM Project, and Lead Person of the Hydro-Informatics Centre.

To date, HIC has produced the Decision Support System and Ayeyarwady Basin Development Master Plan. The basin covers nearly 60% of the total land area of Myanmar. The HIC does the capacity building of national counterparts who will continue using the DSS and BMP after the project is finished. The HIC carried out ground-truthing in three aspects, economy, environment, and social situation of present Myanmar to match with experts builds "DSS and BMP" of the Ayeyarwady Basin. In this exercise, our pilot project towards "Good Water Governance in Myanmar" already covers 60% of land areas and the whole of the institutional domain.

42 years of water journey achievement

Following her 42 years water journey, Prof. Dr. Khin Ni Ni Thein believes, "My biggest achievement is that the transition from dictatorship to democracy was in action without any theoretical preaching activity". The smooth transition was done by water science and the universal value of water. She also led to the development of essential documents to support water reform.

Her achievement in supporting the smooth transition to democracy with water reform was done through the enactment of policies and laws. By 2014, the National Water Policy was published in two languages (Myanmar and English) and approved by the Cabinet in 2015. After the policy was established, she led the development of the Myanmar Water Framework Directive that acts as umbrella principles towards the National Water Law. She also drafted the National Water Resources Committee (NWRC) Law to prevent it from disbanded between one government and the next like in 2016. In the second quarter of 2020, the NWRC law has been submitted and hopefully to be enacted within a few months.

Understanding and practicing IWRM in Myanmar is done through the establishment of the NWRC and its 3 pillars, multi stakeholder forum so the decision by water projects in Ayeyarwady River Basin can always be checked and balance. In the Ayeyarwady River Basin, all significant projects will have to use the DSS and IWRM approach as water resources of Myanmar belong to the peoples of Myanmar. She added, "All water projects will be checked by triple bottom line - (i) economically viable or not, (ii) Environmentally sustainable or not, and (iii) Socially inclusive or not. This is the essence of **DEMOCRACY** in water governance". **AW**



Photos: GWP flickr

Quote of the day

"You don't drown by falling into water. You only drown if you stay there."

-Zig Ziglar-

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