

The Workshop on “River Basin Management with Science and Technology”

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KEYNOTE SPEECH

Cultivating “Tradition of working with River Basin Organizations” for the sustainability and productivity of River Systems in Myanmar

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The history of water management in Myanmar dates back to the First Century BC during the Pyu era. For example, **Beikthano** city situated in the irrigated Minbu region (near present-day Taungdwingyi) with direct land access to the **well-watered** Kyaukse plains to its northeast, is the oldest urban site so far discovered and scientifically excavated site—**date from 200 BCE to 100 CE**.

As the principal axis of the old Myanmar kingdom, the Ayeyarwady River has shaped the country’s history, settlement patterns, and economic development. The Pyu, earliest inhabitants and ancestors of the Myanmar arrived from the China-Tibet border area using the rivers, Shweli and Tapain, to reach the Ayeyarwady valley. They became the major power in the rice-growing region of the north. Since then one way or the other water management began in the heart of the nation. Recognizing the main reason for the act of migration, a Myanmar proverb was born and used until present time -- it says, “moving towards the land of clean water and fresh grass” - ရေကြည် ရာ မျက်နှာ လို ဆိုရိုးရှိပါတယ်။ According to the legend of Beikthano City, whenever enemies approached the city, the big drum would be sounded making the water of the Yan Pe (Repelling enemies) river to rise rapidly and flood the surrounding plain so that no attacking army would cross it. Though it may sound like a fairy tale, in fact, Chinese war weapons in the ancient time are water and fire. The story of Beikthano Drum has a greater meaning than possession of magical power as children were told to believe, in fact, it is “**utilizing the knowledge of hydraulics (or) water to build a defense system**”.

During the 12th century, the Bagan gained control over the Ayeyarwady and Sittaung river valleys and the trade routes between India and China. The Bagan supported a flourishing civilization through rice cultivation and **a well-developed network of irrigation canals**. The water management system is obviously a sub-system of the rule of the King who owns

everything and anything of his Kingdom including the life of his subjects who are populace of the country. King also owns air, water and land plus all natural resources on, above and underneath the Earth and Water Body. Therefore, the system is very simple, straightforward, and depends on the ultimate decision of the King.

In the 13th century, the area dissolved into a number of states, however, Myanmar kingdoms reunified the Ayeyarwady Basin time and again. Beginning in the 16th century, European interests set up trading companies in ports along the coast of Myanmar. By 1886 the British had gained control of Myanmar and along with it shipping rights on the Ayeyarwady, which also had been sought by the French in an effort to gain a direct route to China. **Since then water management system was adapted to British system of that time.** Yangon city drinking water supply system and sewerage system were built under the British rule.

From the physical and geographical side, the Ayeyarwady river rises high in the glaciers of Myanmar's northern mountains and flows about 2170 kilometers to the Andaman Sea. Ayeyarwady river basin constitutes 61% of the total land area of Myanmar. There are other major river basins called Chindwin, Sittaung, and Thanlwin. Other medium size river basins include Kalatan, Mu, Mone, Mann, Bago, Pun Hlaing, Myit Nge, Hlaing, Tanintharyi, Dawei, Patheingyi, Ngazun, Dagaon, Pyawbwe, Zawgyi, Paung Laung, Naf, Mayu, Kaleindaung, and many more.

Among all other river systems in Myanmar, Ayeyarwady is the historical lifeline of Myanmar. The first 550 kilometers in the northern part, the waters are icy cold until Myittha and the nature of flow is brisk current, the soft blue waters winding toward distant hills. Gratefully, the river Ayeyarwady knows nothing of politics. It is 2170 kilometers of indifference to such things. No matter what happens, one can count on it to carry our needs, as if it were a good Buddhist. All that arises passes away. These waters speak of glacial beginnings in the snow-covered peaks of the Himalaya below Tibet. They have surged through jungle-covered highlands to emerge in the sun-baked plains of central Myanmar, where they will continue to the wet delta and then to the ocean, releasing finally into the Andaman Sea.

From the spiritual points of view, Ayeyarwady is less a river than a test of faith, receding during the country's dry season until its banks sit exposed and cracking in the sun, only to return each spring with the monsoon, coming to life, flooding fields, replenishing the country with water, fish, and fertile soil. The Ayeyarwady has never disappointed the peoples of Myanmar. It is where they wash, what they drink, how they travel. Inseparable from their spiritual life, it is their hope. The extraordinary sentiment, ownership and concerns over the health and sustainability of the Ayeyarwady river basin were expressed whenever the development projects are planned for Ayeyarwady and other rivers in Myanmar. The President of Myanmar has taken into account of all these concerns and halted the Myittha Dam project, which will inundate the cultural and natural heritage of Myanmar (being recognized by the native peoples and many Myanmar peoples). The issue is still alive and peoples wonder how Myanmar would manage such controversial projects constructively and peacefully.

On the other hand, except this Myittha Dam project, there are many controversial projects still exist in Myanmar. It is neither possible to halt all the controversial projects nor to continue as

they were planned. It is really a source of conflict between authorities and communities. This conflict propagates so far and deep to potential donors. Potential donors use a number of indicators of success for Myanmar’s reform process and better and inclusive water management is one of the key indicators.

Fortunately, Myanmar peoples gained limited political space to voice their opinion on water projects; however, it is mostly in the media (or) in the form of protest. In fact, Myanmar peoples need a system to express their concerns, opinion and to give their intellectual and experiential inputs/contributions to help build **the inclusive decision making tradition** on water resources development projects, programmes, action plans, policies, and laws

To build such a system, we should begin with establishment of **River Basin Organisations** in Myanmar as they are **effective tools for multi-stakeholders participation**. The national Water Resources Committee is very willing to support such initiatives as quoted in the National Water Policy Book. The Chairperson of NWRC, Vice President U Nyan Tun, said **“The vision of the NWRC is Myanmar to become a water efficient country by implementing Integrated Water Resources Management system together and to bring benefits of income generation, better quality of life, greener environment and peace and stability of Myanmar people.”** To implement such a grand vision, the focal Minister, Minister of Transport and Vice Chairperson of NWRC called for coordination among all water related Ministries, quote, **“As population growth and economic development in urban and rural area increase water demand in the country, it is important for all water related Ministries to collaborate and coordinate to set up strategies and action plans to implement for integrated Water Resources Management.”**, unquote.

Following this important call, the Secretary of NWRC declared that **“River Basin Organizations are needed to be established in order to enable the active participation of all peoples of Myanmar in the implementation process of the IWRM.”** With these official statements, we are truly encouraged by the willingness of the Government. At this stage, what we all need is awareness on how to establish the River Basin Organizations for the peoples by the peoples, which is totally in line with the farsighted statement made by the Chairperson of the Expert Group, quote, **“Water is a natural legacy, we received from our ancestors. We must also leave behind us natural legacy to our future generations, clean and potable water guarded by National Water Policies and lawful practices.”** unquote.

Therefore, it is more and more obvious that now is time to cultivate the tradition of working with river basin organizations. The main objectives of RBOs in general are, (i) to study and analyze existing policies, (ii) to stimulate discussions on the issues that are either positively or negatively impact the economy, society and environment, (iii) to empower the communities, and (iv) to help establish the communities of practice for public policy making. However, the tasks of RBOs are much more – for example, monitoring the air and water quality of the neighborhood, early warning for water related natural disasters, actively cooperating in the development projects,

information and knowledge sharing, water stewardship activities, environmental conservation activities, water security plan implementations, water regulations, and law enforcement, etc. etc. etc., which depends on the scope chosen by the actors.

There are about (9) different ways to form a river basin organization from the 100% government entity to 100% peoples led non-state actor entity. For the sake of time, I will not make a long elaboration on types of river basin organizations here. However, the reference documents are available by request plus one-on-one discussions. The most important point is that Integrated Water Resources Management (IWRM) is recognized by many as the paradigm for establishing good water governance and putting water resources on the recovery path. There are over hundreds of river basin organisations around the world and a number of Networks of River Basin Organisations coordinated those RBOs. The nature of RBOs is different from one country to another and also from region to region. They represent at the various levels to various constituencies.

The **International Network of Basin Organizations (INBO)** was established in 1994 and its headquarters is in Paris. As of 2000 INBO included 134 members or observers. INBO and its member organizations support the application of Integrated Water Resources Management.

According to the International Network of River Basin Organizations (INBO), there are 11 European River Basin Commissions and 50 Extra-European Freshwater Bodies Commissions. Other regional networks of RBOs include **Network of Asian River Basin Organizations (NARBO created in 2004)**, Eastern and Central Europe (CEENBO, created in 2001), Sub-Saharan Africa (ANBO, created in 2002), the Mediterranean (MENBO, created in 2004), Latin America (LANBO, created in 2008) and North America (NANBO, created in 2009).

One can start from small and continue taking small steps like the Ayeyarwady River Basin Research Organization (ARBRO), which was established on 10 May 2012 to share knowledge and build capacity for IWRM in Ayeyarwaddy River Basin and other three major basins in Myanmar. International River Basin Organization (RBO) database exists and one can be referred to more information on RBOs. **ARBRO is an official member of NARBO!** Again, I will not elaborate about ARBRO and NARBO here since there are separate presentations to be made during this workshop.

In conclusion, the key to successful implementation of RBOs in Myanmar depends on **great tolerance, enthusiasm, transparency and honest communication** to make a difference. Change is much easier said than done. When we face with the difficulty, one thing to make sure is not to react in the same way as in the past. New way of reaction can be employed and practiced and this act in itself is accepting the democratic participation. The peoples and public at large will give acceptance to development projects when they are allowed to involve in the following stages. These are:- (please read the texts in the figure).

PROCEDURE AND COMPONENTS FOR PROJECT ACCEPTANCE

The first step in gaining public acceptance is winning **trust and confidence building**. These come about by listening to people's needs and causing appropriate interventions.

We listen to people during the various stages of the projects and give feedback at every stage:

- **Identification/Planning**
- **Pre and Feasibility Studies**
- **Environmental Impact Assessment Studies**
- **Design and Implementation**
- **Monitoring and Evaluation**

(Source: UNEP-DDP Project, UNEP HQ, Nairobi, Kenya)

Hence cultivating the tradition of working with RBOs means working with new values and mandate towards the sustainable development of Myanmar through IWRM.

Thank you.