2010

Asian River Restoration Network Annual Report





What's ARRN?

ARRN is a non-political organization for exchanging knowledge and technical information on the restoration of rivers and watersheds in Asia. The primary objective is to provide various opportunities for river restoration related organizations and individuals to share and exchange knowledge and experiences through this network, aiming to enrich the participants' knowledge and scientific technology through mutual and multilateral cooperation.



Table of Contents

Message from the ARRN	Chairperson and Secretary General of National RRN	1
Prof. Nobuyuki Tamai	Chairperson of ARRN	
Dr. Dongya Sun	Secretary-General, CRRN	
Dr. Bonghee Lee	Secretary-General, KRRN	
Dr. Junzo Sago	Secretary-General, ARRN/JRRN	
About ARRN		4
Background of ARRN Es	tablishment	
Objectives		
Activities		
Organizational Structur	e	
ARRN Members		
Activities in 2010 (Januar	ry 2010 through December 2010)	6
Website Development		
International Forum & E	Events	
Formulating a Guideline	on River and Watershed Restoration	
Governing Council		
Activity Reports of Nation	nal Networks in 2010	10
China River Restoration	Network (CRRN)	
Korea River Restoration	Network (KRRN)	
Japan River Restoration	Network (JRRN)	
How to become an ARRN m	nember	16

Message from the ARRN Chairperson



Prof. Nobuyuki Tamai

Chairperson of ARRN

Professor, Graduate School, Kanazawa Gakuin University
President of International Association for Hydro-Environment Engineering and Research (IAHR)
Professor Emeritus, University of Tokyo

It is about time for us to release the ARRN Annual Report 2010 to all members. I would like to express our sincere appreciation for the support from members as well as many other people.

In 2010, the "7th International Forum on Waterfront and Watershed Restoration" and the "Roundtable Meeting for Sharing River Restoration Technology in Asia (open discussion meeting)" were held in Seoul on September 14. These two events were held as part of ISE (International Symposium on Ecohydraulics) 2010 held by IAHR (International Association for Hydro-Environment Engineering and Research). Dr. Woo, the former secretary-general of the KRRN Secretariat at the time when ARRN was set up, was the chairperson of the organizing committee for this international symposium. Thanks to his assistance, the above meetings were held as a special session in the programs of the international symposium after a series of deliberations. Not only lecturers but also research workers in ecological hydraulics from IAHR participated in the meetings, and discussed a wide range of topics. Dr. Fokkens, the president of ECRR(European Centre for River Restoration), participated in the meetings as a lecturer of the forum and a panelist of the roundtable meeting.

The open discussion meeting provided an opportunity to examine how we should develop the future activities of ARRN and their perspective from not just an Asian viewpoint, but that of the whole world. The results of the meeting are available to the public on the websites of ARRN and JRRN as a record of the discussions which took place.

At ISE 2010 in Seoul, we were permitted to set up a display booth of ARRN for three days. JRRN, KRRN and CRRN secretariats took turns to manage the display booth, and were able to have technology exchange regarding river restoration with the participants of the international symposium.

We believe that we will be able to enhance the international reputation of our organization by taking all available opportunities, and continuing to make steady efforts. We request your continued cooperation.

Message from the Secretary General of National RRN

CRRN: China River Restoration Network

KRRN: Korea River Restoration Network

Dr. Dongya Sun

Secretary-General of CRRN China Institute of Water Resources and Hydropower Research (IWHR)



Dr. Bonghee Lee

Secretary-General of KRRN
Saman Engineering Ltd.



In 2010, CRRN has achieved marked progress. The relationships with JRRN and KRRN as well as with ECRR are strengthened by taking part in mutual workshops and joining the other activities such as the amending of ARRN River Restoration Guideline. CRRN website is formally open to the public and has received active responses from many institutes related with river training work. CRRN members have been increasing and have extended to grass-roots design institutes. Experts of CRRN are invited for 6 times to give keynote speech in the training courses hold by provincial water management departments. The draft Chinese guideline on river training scheme planning and project design has been worked out. Many items in this guideline are for river ecosystem conservation and restoration.

In this Chinese Lunar Year of the Rabbit, I wish ARRN to be much more active than ever before as an international platform and its activities to be crowning success. I am expecting the next ARRN member meeting for that this mechanism will keep improving and growing and inject new dynamism and make new contribution to our mutually beneficial cooperation in river restoration area and to the growth of our positive, cooperative and comprehensive relationship. I would like to express my great thanks to ARRN Secretary by this opportunity for their industrious and effective work in promoting the development of ARRN.

I suddenly assumed the position of Secretary-General of KRRN at 2010 with the resign of Dr. Kim Changwan who was the ex-Secretary General. I feel sorry about the not well preparing of the ARRN & 7th International Forum on Waterfront and Watershed Restoration that was opened in Seoul at September, 2010 since it was not a long time for me to take the position. However, it was really meaningful for me to share the opinions with many people from Japan, China during the forum. Especially, I was so glad to see Prof. Tamai - the Chairperson of ARRN - who taught me about 20 years ago.

As the concerns about the river environment recently get to increase, there are many cases to restore the damaged river. To date, we have managed the rivers in economical view. As a result of such approaches, we are facing many problems such as water pollution, degradation of river environment, larger flood damage, etc. It is no doubt that the river is one of the most important natural resources in human life. From now on, we need to look at the river as the nature itself, not from the human's point of view. I think we need to approach this topic from the new viewpoint that human and nature have to go together. Now Korea is carrying out the 4 Major River Restoration Project which its cost amount to 20 billion U\$ and planning to expand it to the many tributary of major rivers. To share restoring technology and information and lead the sustainable river restoration, the ARRN's role is critical. And I feel so glad to be involved in ARRN. Although KRRN

I wish ARRN's prosperity this year. Thank you.

has not been active so far, from this year, I am ready to build up the KRRN's organization and support restoring

river actively.

JRRN: Japan River Restoration Network

Dr. Junzo Sago

Secretary-General of ARRN Secretary-General of JRRN Foundation for Riverfront Improvement and Restoration



Four years have passed since ARRN and JRRN were established in 2006. Our JRRN has been serving as the secretariat of ARRN since its establishment.

In 2010, the ARRN governing council meeting held regularly every year, was held in Korea in September with the help of KRRN, CRRN and others. The international forum organized by ARRN was held as a special session of ISE 2010, which allowed us to have a productive exchange of views with a wide range of participants. With regard to revision of the ARRN guidelines, which is a pending issue, we are trying to carry the process forward in cooperation with CRRN and KRRN.

Although JRRN has a limited staff and budget, we are involved in various activities useful to members and the many people concerned by putting our heads together, including improvement of the website, delivery of periodic e-mail news and issuing newsletters, and holding mini-seminars. We also focus on collection of case examples of domestic river restoration and research studies, and these results are being made available to the public as they become available at home and abroad through the website, etc. The number of JRRN members has been gradually increasing, and there are about 460 individual members and 24 organization members at present. In our secretarial capacity, we will work harder to provide information mainly to members and to promote productive exchange among them.

We will continue our efforts to ensure further development of ARRN/JRRN and to contribute to river restoration in Asia and Japan, while actively promoting exchange of information with cooperation among RRNs. We appreciate your continued support and cooperation for our activities.



Japa

About ARRN

Background of ARRN Establishment

In the "River Restoration in Asian Monsoon Region" session cosponsored by three countries of China, Korea, and Japan that was held in the 4th World Water Forum in Mexico City in March 2006, the necessity of cooperation among Asian countries was emphasized, and it was recommended that a network and a database should be established to exchange information on river/watershed restoration, and that a technical guideline specifically suitable for the Asian monsoon region should be developed. As a response to this recommendation, the "3rd International Forum on Waterfront and Watershed Restoration" was held in Tokyo in November 2006, and "Asian River Restoration Network (ARRN) " was formally established by concerned organizations of China, Korea and Japan.



Objectives

ARRN aims to contribute to the creation of rich Asian water environment for the following two purposes as a non political organization.

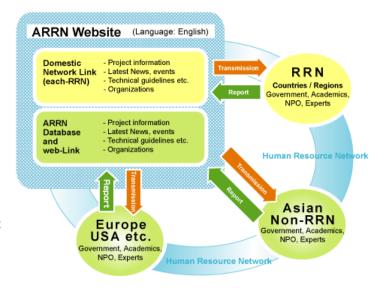
To establish a mechanism to exchange and share case studies, information, technologies, and experiences related to river/waterfront restoration in the world and in the Asian countries, with engineers, researchers, ecologists, government officials and citizens through events and websites.

To establish a river/watershed restoration guideline that can be utilized in the Asian monsoon area with similar social and natural environment, and improve knowledge and skills of network participants.

Activities

ARRN carries out following activities to achieve the above-mentioned objectives.

- Activities involving exchanging and sharing information through newsletters to be distributed on the web-site and by e-mail
- To hold workshops and forums with a view to provide a platform to introduce or compile information on the latest global waterfront situation and case studies of improved waterfront environment
- To draw up or revise guidelines for the restoration of rivers and watersheds
- To conduct joint studies to be undertaken by participating countries to support the provision of information for study purposes
- To exchange lecturers from participating countries
- To translate and publish books on the restoration of rivers and watershed



Outline of ARRN network activities

Organizational Structure

River Restoration Network (RRN)

ARRN is organized with cooperation of national networks in each participating countries / regions, and so called as the management secretariat on a national network in those countries / regions to be "River Restoration Network (hereafter, RRN) " generically. As for a national network, a free activity in home countries or in local region is encouraged.

Governing Council

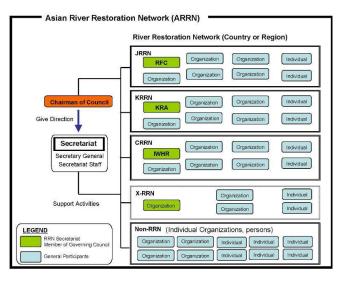
The operating policy of ARRN is decided by "Governing Council" consisting of the representative of the Council in each RRN organization. The Council is summarized by the chairperson approved in the Council, and resolves the activity plan and the budget planning, etc. of the year.

Secretariat

The Council is administrated by the secretariat. The secretariat accomplishes the annual governing council meeting and various ARRN activities.

General Participants

General participants are individuals or groups, who or which participate in event such as forums and uses profit of Web site. General participants need to register participation according to the rule that national RRN organization provides and assumes the generic name of the person who declares participation in ARRN.



ARRN Members (as of December 2010)

ARRN is currently consisted of 3 national networks and 3 organizations as follows.

■ River Restoration Network (RRN)

CRRN: China River Restoration Network

http://www.cnrrc.cn/

CRRN Historation

[Secretariat] Institute of Water Resources and Hydropower Research (IWHR)

[Organization members] 12 group

KRRN: Korea River Restoration Network

http://www.krrn.net/

[Secretariat] Korea River Association (KRA)

[Organization members] 1 group

JRRN: Japan River Restoration Network

http://www.a-rr.net/jp/



[Secretariat] Foundation for Riverfront Improvement and Restoration

[Organization members] 24 groups

[Personal members] 460 people

JRRN Secretariat plays the role of ARRN secretariat from November 2006 to October 2012.

- Individual Organizations (Non-RRN member)
 - Department of Water Resource, Thailand <u>http://www.water.go.th/</u>
 - Federal Flood Commission, Pakistan (FFC) http://www.ffc.gov.pk/
 - Envirosource SDN BHD, Malaysia

Activities in 2010

Website Development

In April 2010, ARRN renewed the ARRN website to enhance information sharing. On the new ARRN website, ARRN's activity reports, publications, news and events concerning river restoration, information sources such as technical policies and books on river restoration, and database functions of river restoration projects in Asia, are opened to the public. We will continue to improve the ARRN website, as well as improve the websites of each national river restoration network (RRN).

International Forum & Events

ARRN's 7th International Forum on Waterfront and Watershed Restoration (Sep. 14, 2010, KOREA)

The 7th International Forum on Waterfront and Watershed Restoration was held in Seoul, KOREA, on September 14, 2010. This event was held at a special session of ISE 2010 (International Symposium on Ecohydraulics). With the participation of Dr. Bart Fokkens, President of the European Centre for River Restoration (ECRR), who gave a keynote speech at the symposium, participants exchanged valuable findings and opinions through pioneering experience in river restoration.



URL: http://www.a-rr.net/



The 7th International Forum on Waterfront and Watershed Restoration

Time and Date: September 14, 2010 14:00 – 15:30, Venue: COEX complex, Seoul KOREA Chair: Dr. Naoki Shirakawa (Tsukuba Univ. Japan), Co-Chair: Dr. Sukhwan Jang (Daejin Univ. Korea)

Program

Opening Address Dr. Nobuyuki Tamai (Chairperson of ARRN)

Lecture 1 Dr. Bart Fokkens (European Centre for River Restoration, Netherlands)

River Restoration in Europe and the European Centre for River Restoration

Lecture 2 Dr. Wang Xingong(Yellow River Water Resources Protection Scientific Institute, China)

Study On Environmental Flows and Eco-Restoration Practice In Yellow River Delta Wetlands

Lecture 3 Dr. Masatoshi Denda (Water Environment Research Group, Public Works Research Institute, Japan)

Improvement of Individual-based Models by Using GIS and a Wild Animal Auto-Tracking System

Lecture 4 Dr. Sunok Jeon (Eco-STAR Project, Korea)

Development of Technology for Aquatic Ecosystem Restoration in Korea

Lecture 5 Dr. Weon Jae Kim (Korea Institute of Construction Technology, Korea)

A Prototype of Decision Support System for Ecological Urban River Restoration

URL: http://www.a-rr.net/report/international forum/

ARRN's Roundtable Meeting, How to develop technology and guidelines for river restoration through networks (Sep. 14, 2010, KOREA)

ARRN's Roundtable Meeting for sharing river restoration technology in Asia was held in Seoul, KOREA on September 14, 2010. This event was held following the 7th ARRN International Forum. Under the theme of "How to develop technology and guidelines for river restoration through networks," open discussions were held actively with Dr. Bart Fokkens, President of the European Centre for River Restoration (ECRR) and other invited panelists who are experts from Japan, China, and Korea.

The minutes of the Roundtable Meeting is opened in the ARRN website, and discussion outputs are reflected in the updated Guideline for River Restoration Ver. 2 drawn up by ARRN.





ARRN's Roundtable Meeting:

ARRN

ARRN's Roundtable Meeting

How to develop technology and Guideline
for plug sectoration through naturalise

How to develop technology and guidelines for river restoration through networks
Time and Date: September 14, 2010 16:00 - 17:30, Venue: COEX complex, Seoul KOREA
Chair: Dr. Nobuyuki Tamai (ARRN Chairperson), Co-Chair: Dr. BongHee Lee (Secretary General of KRRN)

Discussion Points

- Role of River Restoration network
- Development of ARRN River Restoration Guideline

Panelist

- Dr. Bart Fokkens (President of European Centre for River Restoration, ECRR)
- *Dr. Dongya Sun* (China Institute of Water Resources and Hydropower Research, Secretary General of China River Restoration Network)
- Dr. Naoki Shirakawa (Tsukuba University, JRRN Technical Committee)
- Dr. Sukhwan Jang (Daejin University, KRRN Technical Committee)







Dr. Bongee Lee



Dr.Bart Fokkens



Dr.Dongya Sun



Dr.Sukhwan Jang



Dr.Naoki Shirakawa

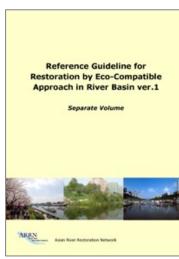
URL: http://www.a-rr.net/publication/2011/01/report on arrns roundtable mee.html

Formulating a Guideline on River and Watershed Restoration

In 2010, ARRN published a "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1, Separate volume" as a supporting material of the "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1" published in March 2009.

Based on the discussion in the ARRN Technical Committee Meeting and ARRN Governing Council Meeting, ARRN is undertaking update of the guideline ver.1 supervised by the ARRN technical committee for 2011.





Interim Goal

- Guideline will be updated and published every year as the interim report.
- ARRN's Guideline will be distributed at the 6th World Water Forum (March 2012).

Main Update Contents (for ver.2)

- General information on river will be added sufficiently.
- More photographs which describe our message will be added.
- Good practices / examples of river restoration project in Asian countries will be included, and not only good examples but also information/technology/photographs about problems with difficulty for solution will be included.
- Detailed explanations on a rough framework, manualized methodologies and concepts, as well as general information related to rivers will be included.
- Existing technical guidelines and reference materials such as books introducing general information about river and basin in each country will be introduced as reference material.

URL: http://www.a-rr.net/publication/2011/01/reference guidel for restor 1.html

About ARRN's River Restoration Guideline

(1) Background

The necessity of cooperating network, data base of the river restoration and river restoration technical guideline suits for an Asian monsoon region was proposed in the "River Restoration in Asian Monsoon Region" session on 4th World Water Form.

"It is urgent to establish a river restoration guideline suitable for the Asian monsoon region as a reference for countries with similar social and natural conditions."

Based on the above proposal, ARRN regards preparing/updating/distributing river restoration guideline as one of main activities.

(2) Objective

To establish the suitable methodology and technology for river restoration in Asian monsoon region

(3) Users/Customers

General public making efforts for river restoration activity (not specialist)

(4) Language

ARRN publishes the guideline in English, and ARRN member promotes and uses the guideline after translating it into own language.

(5) Task force

ARRN technical committee initiates the update operations while getting cooperation of ARRN and each RRN secretariat.

Governing Council

ARRN Charter provides that policies for actions shall be decided by the Governing Council consisting of representatives from each national RRN. This meeting is normally held once annually to coincide with the ARRN's International Forum.

5th ARRN Governing Council Meeting (Sep. 15, 2010, Seoul, KOREA)

The 5th ARRN Governing Council Meeting was held in Seoul, Korea, on September 15, 2010. At the beginning of the meeting, Prof. Nobuyuki Tamai was reappointed as Chairperson of the ARRN, and JRRN was reappointed as the ARRN Secretariat. After a report was made on network activities over the last year, discussions and exchanges of opinion took place about holding events (e.g. forums and workshops), developing websites, preparing a guideline for river restoration, and cooperation with other networks.





URL: http://www.a-rr.net/report/2010/09/5th arrn governing council sep.html

ARRN Governing Council member (as of Dec. 2010)

Chairperson of ARRN:

Prof. Nobuyuki Tamai, Kanazawa Gakuin Univ. JAPAN, President of IAHR

Secretary General of ARRN:

Dr. Junzo Sago, Foundation for Riverfront Improvement and Restoration JAPAN

CRRN(China River Restoration Network):

(Secretary General)

Prof. Dongya Sun, China Institute of Water Resources and Hydropower Research (IWHR) (Information Committee)

Prof. Wengen Liao & Dr. Chong Li, China Institute of Water Resources and Hydropower Research (IWHR) (Technical Committee)

Prof. Hao Wang & Prof. Kewang Tang, China Institute of Water Resources and Hydropower Research (IWHR)

KRRN(Korea River Restoration Network):

(Secretary General)

Dr. Bonghee Lee, Saman Engineering Ltd.

(Information Committee)

Prof. Jeong-Seok Yang, Kookmin Univ.

(Technical Committee)

Prof. Suk Hwan Jang, Daejin Univ.

JRRN(Japan River Restoration Network):

(Secretary General)

Dr. Junzo Sago, Foundation for Riverfront Improvement and Restoration

(Information Committee)

Dr. Kazumasa Ito, CTI Engineering Co,LTD.

(Technical Committee)

Prof. Naoki Shirakawa, Tsukuba Univ.

Activity Reports of National Networks in 2010

CRRN: China River Restoration Network





CRRN Website

The website of CRRN (http://www.cnrrc.cn) has been uploaded, which includes twelve sections, namely, industry dynamics, meeting information, project progress, projects, product, publications and papers, experts, BBS, related links, about CRRN, members, contact us.



River Restoration Guideline Development

CRRN makes contribution to the separate volume of ARRN river restoration guideline: "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1" published in 2010, which include some contents about geographical features of rivers in China and case studies of river restoration in China.

Participation in the 7th ARRN International Forum and Roundtable Meeting in Seoul, KOREA

CRRN participated in the 7th International Forum on river restoration in South Korea. CRRN participated in the forum on behalf of China. At the same time, the 5th ARRN Governing Council Meeting (5th-GCM) and round-table meeting in the ISE2010 were held.



Dr. Wang Xingong's presentation in ARRN forum



Dr. Dongya Sun, Secretary General of CRRN in ARRN roundtable meeting $\,$



Participation in the ISE2010 (8th International symposium on Ecohydraulics)

Three CRRN secretariat member took part in the ISE2010, 8th International symposium on Ecohydraulics, held in Seoul, KOREA. During this symposium, CRRN operated ARRN's exhibition booth together with KRRN and JRRN, and publicized ARRN activities extensively for participants.



Welcome Speech by Prof. Tamai, ARRN Chairperson



ARRN's Exhibition booth

Technical Support by CRRN Experts

In 2010, experts of CRRN were invited for 6 times to give keynote speech in the training courses hold by provincial water management departments.

Advisory Meeting on River Restoration Project

In Aug. 26, 2010, China Institute of Water resources and Hydropower Research held check meeting in Beijing on the project of adaptive decision support system of river restoration, which is one of Special Funds for Scientific Research of Public Industry of Ministry of Water Resources.



KRRN: Korea River Restoration Network

KRRN's Website Development

The meeting for the homepage (KRRN) was held in December 2010. The funding for design, web hosting, and maintenance fee was discussed. The list of the contents of webpage could be similar to other countries' RRN websites however the design will be slightly different. The draft of the homepage will be made in March 2011. The KRRN's website will be open in the first half of 2011.

Preparation of the ARRN events in Korea (Preparatory Meetings)

Three important ARRN events (Governing Council Meeting, Roundtable Meeting, and the 7th International Forum on Waterfront and Watershed Restoration Forum) were held in the sessions of ISE 2010 (International Symposium on Ecohydraulics) in September 2010. KRRN members held several meetings for the preparation of the events. The secretariat of the ISE was very cooperative to KRRN's activities.

The details of the events are shown in the previous part of this report (ARRN Activities) or the ARRN Newsletter for November 2010 (Volume 5).

Other KRRN's event

International symposium of river management in the Asia region (Southeast and Middle Asia: Cambodia, Indonesia, Laos, Mongolia, Uzbekistan, and Vietnam) was held on October 29th, 2010. The purpose of this symposium was to establish international network for collaboration to provide better solution for river problem in the Asian region. The symposium was jointly sponsored by the Han River Flood Control Office and the Ministry of Land, Transport and Maritime Affairs. This symposium was also organized by Korea River Association (KRA) and KRRN. Seven representatives from six countries were invited and made presentation about river management and watershed investigation methods, ecological and environmental restoration methods, the laws and systems for river restoration, citizen participation or governance plan, and international cooperation and/or network for river restoration. The Figure 1 to 5 are slide samples during the presentation.



Photo Commemorative photograph after the symposium with the participants

Major Topics in the symposium

WATER RESOURCES AND QUALITY CHARACTERISTICS OF MONGOLIA

Water resource distribution, quality and contents vary significantly depending on location, natural zones, sediments formation and compounds of water.



About 70% of Mongolia's surface water resource are concentrated in Altai, Khangai a Khentii mountain ranges, as well as Khuvsgul and Great Khyangan mountains, mostly in high land of mountainous areas which cover 30% of the entire territory.

Figure 1 Water resources and quality characteristics of Mongolia

Direction and long-term objectives of Water quality management in Viet Nam

- 1. Improvement of legislation, policies and institutional arrangement
- Revise the Law on Water Resource to incorporate integrated water resources management concepts
- Promulgate a Decree on the management of river basins
- Establish and effectively operate of river basin Committees

Develop a systematic integrated planning on water resources utilization with taking into consideration of waste water discharge for each river basin

Result Reform

Promulgated Decree 120/2008 on river basin plan
Established: Committees in Cau, Dong Nai river basin (2007)

Figure 2 Direction and long-term objectives of water quality management in Viet Nam

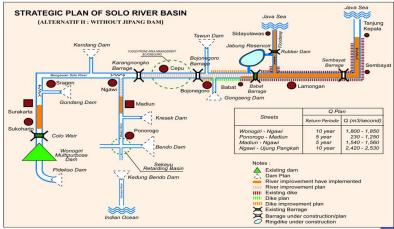
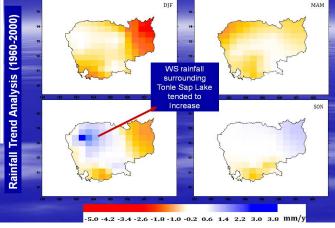


Figure 3 Strategic plan of Solo river basin (Indonesia)



The Nam Ngum River Basin

Figure 4 Trend analysis of precipitation due to climate change effects (Cambodia)



Physical Features		
Area	16,800 square km (7% of national area)	
Length	354 km	
Water Resources	•	
Average Flow to Mekong River	22 billion m3 / year (14% Mekong Flow)	
Annual Water Use	9.1 billion m3 Agriculture: 99% Urban: 0.5% Industrial: 0.1%	
Land Cover and Use	•	
Natural Forest	47%	
Shrub land / Re-growth	34%	
Agriculture	8%	
Grassland	7%	
Water surface	3%	
Urban area	0.02%	
Administration	•	
No. of provinces	4	
No. of District	19	
Population	502,000 persons (9% of Lao PDR)	

Figure 5 About Nam Ngum river basin (Laos)



JRRN: Japan River Restoration Network

Website, Newsletter, News-mail

JRRN published "JRRN Newsletter" once per month, and distributed "JRRN News-mail" twice a week. (Total 12 newsletter, 102 newsmail in 2010). All back numbers are available from JRRN website.

JRRN's Seminar on River Environment

JRRN held the "JRRN Mini-Seminar on River Environment" four times in 2010 to provide opportunities for JRRN members and non members to share and exchange their knowledge and experiences on river restoration.





URL: http://www.a-rr.net/jp/

- The 4th Seminar: "Common points between objectives of river improvement and public participation, river environments and flood control, and disaster prevention" (Feb 23, 2010)
- Lecturer: Mr. Shozo Yamamichi (Representative Director, National Association for Local Water Environment Groups)



The lecture started by introducing the history of citizens' activities in rivers over about 50 years in Japan. It was followed by systematic descriptions of the activities of citizens in rivers and waterfronts, using typical case examples nationwide. After that, based on his experience in rivers for about 35 years, the lecturer talked about the objectives and meaning of public participation in river development (which is the main subject of this lecture), as regards: developing an attachment to the region and improving a sense for avoiding disasters; achievement of a safe and comfortable lifestyle; and developing new public management.

The 5th Seminar: "*River restoration through watershed cooperation: Mersey Basin Campaign, U.K."* (May 11, 2010)
- Lecturer: Mr. Walter Menzies (Chief Executive, Mersey Basin Campaign, U.K)



The lecture started with historical descriptions of the industrial revolution in Liverpool, Britain where the Mersey runs, to its decline. He described the water deterioration of the Mersey around the 1980s, using pictures from those days. Then, he discussed the Mersey Basin Campaign with three central pillars: economics, society, and restoration of natural environment. He explained its objectives, concept, and strategies in detail, as well as specific activities over the past 25 years and key factors for the success of the campaign.

The 6th Seminar: "*China's challenge: against flood, drought and water pollution under climate change*" (Sep 8, 2010)
- Lecturer: Prof. Xu Zongxue (Professor at Beijing Normal University/Deputy Dean, College of Water Sciences, China)



First, the lecturer introduced the latest situation of damage caused by floods and droughts in China, using pictures. In addition, he outlined water resource management in China, explained flood and drought control in detail, and measures for water quality; he also explained the future direction and ideas of the Chinese government's water resource management policy.

- The 7th Seminar: "Rivers in Taiwan: Lessons learned from typhoon disaster experience and flood control measures."
 (Dec 21, 2010)
- Lecturer: Mr. Yao Cheng Chuang (Water Resource Agency, Ministry of Economic Affairs, Taiwan)



First, the nature of rivers in Taiwan and general water issues, river management systems, etc., were discussed. Next, based on lessons learned from a series of water disasters in the past, a detailed explanation of the concept of river planning and management under extreme weather conditions, and the direction for flood control measures that Taiwan should take in the future, were given together with a presentation of projects in progress.

JRRN Japan River Restoration Network

JRRN's Technical Exchange

JRRN holds technical exchange with foreign organizations as an open discussion program for JRRN member. In 2010, JRRN supported five technical exchange prpgrams

- 1) Dalian Water Resources Bureau, China (Jun. 11)
- 2) Future Resources Institute, Korea (Jul. 6)
- 3) River Associated mission, Taiwan (Aug. 16)
- 4) University of Leeds, UK (Sep. 3)
- 5) Pingtung County mission, Taiwan (Oct. 25)

Public Relations

JRRN secretariat participated in technical/academic conferences in Japan and other countries to introduce JRRN/ARRN activities and exchange with experts of river restoration.

8th International symposium on Ecohydraulics, ISE2010 (Sep. 13-16, 2010, Seoul, KOREA)



The 8th symposium was held in Korea as an event hosted by the Korea Water Resources Association. The former Secretary-General of KRRN, Dr. Hyoseop Woo, served as the chairperson of the local committee in Korea. JRRN Secretariat had a presentation entitled "Characteristics of River Restoration in Japan and Case Studies" in the section meeting under the theme of "River Restoration", and set up an exhibition booth for ARRN where outline of ARRN and domestic networks, and case examples of river restoration in Japan, China, and Korea were introduced.





13th International Riversymposium (Oct.11-14, 2010, Perth, Australia)



The 13th International Riversymposium was held in Perth, Australia, from 11th to 14th of October 2010. The JRRN Secretariat presented a paper entitled "Development of the Asian River Restoration Network for Knowledge Sharing" in the section called "Moving water through cities", and mingled with river restoration organizations such as the Australian River Restoration Centre (ARRC).

How to become an ARRN member

Joining the ARRN is Free!

To become member of ARRN, please read the following instruction, and send a membership application form to secre@a-rr.net by email.

Membership Benefits

- Easy obtaining of domestic and foreign information on river restoration through website, email, and direct contact to ARRN secretariat or other ARRN members as following;
 - Latest news, topics, projects, experiences, lessons, case studies
 - International and domestic events such as seminar and workshops
 - Standard books, technical guidelines, video images, etc.
- (2) Holding opportunity to introduce member's organization and their activities to other ARRN members
- (3) A coordinated business with various foreign countries or organizations
- (4) Holding management support such as international seminar, workshops and establishment of regional river restoration network by ARRN secretariat

Possible Tasks

- (1) Members will participate in ARRN with commitment to use their own resources and to work effectively in partnership with other members that are collaborating in the network. Members will support the objectives of ARRN described in the charter. (http://www.a-rr.net/charter.html)
- (2) Members can freely inspect the Web site, and moreover, useful information on river restoration in your organization and your region can be freely sent through the Web site for other members.
- (3) Members positively join for ARRN events such as international forum and the workshop by each RRN sponsoring. Also, every member can hold original workshop by receiving the backup of ARRN or RRN.

- (4) Members cooperate positively when the specialist's technical advice is required or the advanced case investigation committee is sent to another region.
- (5) Members share the information sent by ARRN with related persons in your organization.

Procedure for joining ARRN

- (1) An organization which wants to join ARRN is requested to submit a membership application form by email.
- (2) The membership application form submitted by the organization is judged by the Secretary General and the Chairperson of ARRN.
- (3) After the Chairperson of ARRN approves the membership application form, the organization becomes the ARRN member as a Non-RRN organization.
- (4) ARRN secretariat will send email soon to the contact person named in the application form.
- (5) When plural groups gathered in a certain country or regions, the ARRN secretariat supports the establishment of each RRN. The establishment of new RRN will be judged by ARRN governing council meeting.

Note)

In a country/region which RRN secretariat has already established, applicants to ARRN should be registered through the RRN secretariat. (China, Korea, and Japan) For further information, please contact to secre@a-rr.net by email.

ARRN Membership Application Form for organization(WORD:601kB) is available here. http://www.a-rr.net/membership/registration.html



Asian River Restoration Network secretariat

Foundation for Riverfront Improvement and Restoration (RFC) Shinkawa Chuoh Bldg., 7th Flr. 17-24, Shinkawa 1cho-me, Chuo-ku, Tokyo, JAPAN, 104-0033

TEL: +81-3-6228-3862 FAX: +81-3-3523-0640 E-mail: <u>secre@a-rr.net</u>

Website: http://www.a-rr.net/

Secretariat member: Junzo Sago (Secretary-General), Tatsushi Kimura, Sayumi Numata, Katsuhiro Goto, Akira Wada



Japan River Restoration Network (JRRN) has a role of ARRN secretariat from Nov. 2006 to Oct. 2012. Secretariat of ARRN and JRRN is operated by **Foundation for Riverfront Improvement and Restoration** and **CTI Engineering Co., Ltd.** as joint study on development of Asian River Restoration network. http://www.a-rr.net/jp/en/



