



Asian River Restoration Network

Annual Report 2009



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Message from the ARRN Chairperson

Prof. Nobuyuki TAMAI

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



The Asian River Restoration Network (ARRN) is going to complete the activities of the 3rd year of its foundation. We would like to express our deep gratitude to the many people concerned including our members for their support, and report our activities of this year through the Annual Report 2009.

In March 2009, the 5th World Water Forum was held in Istanbul. Our Secretary-General participated, and talked with the president of the European Center for River Restoration to exchange opinions about international network activities. On September 29, the 6th International Forum on Waterfront and Watershed Restoration was held in Seoul. This forum was co-hosted by ARRN and the 5th International Workshop on River Environment by the Korea Institute of Construction Technology, and many river engineers in Korea participated. In addition to lecturers from ARRN member states, a lecturer was invited from Switzerland. Participants could learn about specific examples concerning environment-oriented flood control measures, and the process of consensus-building with citizens.

Following the forum, a governing council was held on September 30, where we have just started to discuss an action plan for 2010, and the replacement of board members and secretariats for the next 2 years. The action plan for 2010 determines that a new attempt will be made involving the International Association for Hydro-Environment Engineering and Research (IAHR) and the European Center for River Restoration (ECRR). It was decided that a special session organized by ARRN will be given in the 8th International Symposium on Eco-hydraulics (8ISE), which will be held by IAHR in Seoul in September 2010. This resulted from our effort to invite the committee chairperson of 8ISE to the governing council to have a discussion. In this special session, we will hold ARRN's 7th International Forum on Waterfront and Watershed Restoration and a panel discussion with the president of ECRR, and deepen discussions on the future of the international network. As ecologists will also participate in 8ISE, researchers including these ecologists are expected to participate in ARRN's special session. We hope that this will further broaden and deepen the range of ARRN's activity.

Also, our secretariat participated in the World City Water Forum in Incheon, Korea in August 2009, and made a presentation on the current trend of urban waterfront restoration and international network building. To improve our website, it was decided that examples and technical manuals should be collected from member states in a unified way. We aim to issue a newsletter 4 times a year. In 2009, only the 3rd and the 4th issues were published. However, it was improved compared to the previous year.

As mentioned above, we are making steady progress to respond to members' requests, and we want to make efforts to obtain more international evaluation. We would appreciate your kind understanding and cooperation.

Message from the Secretary General of National RRN

KRRN: Korea River Restoration Network



Dr. Changwan KIM

Secretary-General of Korea River Restoration Network (KRRN)
Former Research Fellow, Korea Institute of Construction Technology (KICT)
Director of RiverTek Institute (RTI)

It has become apparent from the fertile activities of ARRN (Asia River Restoration Network) that how river restoration is becoming an increasing common practice. This might be a sign that the efforts of the ARRN to support three member countries, Japan, China, and Korea in promoting river restoration produced good results, and a demonstration of the importance of the ARRN as excellent network organization for the dissemination of knowledge, information and results on river restoration. The ARRN is a non profit organization and operates as a network of both national network centers (JRRN, CRRN, KRRN) and individual members. Its mission is to promote ecological river restoration and sustainable river management throughout Asia, fostering their integration in national and Asian directives.

River Restoration has become an issue at the top of the agenda for water authorities and river managers in Asia who aim at improving the status of fluvial ecosystems in a broad, integrated, ecological perspective. At the same time river restoration is an important tool to implement other function of river, such flood control, water use, aquatic habitat, and aesthetic appreciation. Ecological river restoration is a challenging topic and involves a wide range of themes concerning planning strategies, implementation and project assessment for different types of river systems including upland, lowland and urban rivers. Topic areas addressed include ecology, hydrology, geomorphology and social as, to be successful, restoration of freshwater ecosystems must incorporate all of these subjects within a holistic framework. Introducing the term and concept of river restoration at the policy level would bring into the discussion the worldwide experience on the subject, with its ideas, knowledge from applied research, methodologies and techniques.

The ARRN has published a "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin version 1" as an introductory book to the technical guideline for river restoration in Asia. This effort is a just first step to be a synthetic and integrated guideline of river restoration for whole Asian countries in near future. I anticipate that JRRN, CRRN, and KRRN can help the ARRN publish the world-best guideline.

CRRN: China River Restoration Network



Dr. Dongya SUN

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

Along with the high-speed development of Chinese economy, many problems have occurred including the intensive exploitation of land, water shortage and deterioration of water environment, etc. In addition, there existed the problems of unordered and improper construction of hydraulic and hydroelectric projects. These problems have caused the persistent degradation of river habitat quality, the shrinkage of lake area, as well as the disappearance or degradation of natural wetlands.

To solve these kinds of problems, Chinese government has carried out lots of work on river restoration step by step in a planned way. Major progresses have been achieved in the aspects of policy and regulation, fundamental research, monitoring and assessment, special planning and the construction of river restoration projects. River restoration is one of the important measures to implement the scientific concept of development and new thoughts for water resources management, and to construct ecological civilization. It is also the basic condition and an important component of water resources conservation.

International experiences have been learned in Chinese river restoration practices. In the mean time, Chinese experience can also be referred by the other countries, esp. Asian countries that have similar natural condition with China. Asian River Restoration Network (ARRN) has played very important role in knowledge sharing and technology generalization. I am specially appreciated for the development of Asian Guideline for River Restoration through ARRN network and for promoting cooperation with ECRR and GRRN.

Chinese River Restoration Network (CRRN) has made its efforts to effectively develop various activities. CRRN website had been launched by the end of 2009. The first national workshop on river restoration organized by CRRN is planned to be hold in November of 2010. CRRN will also promote the development of national guideline for river restoration planning and provide technical supports for local river restoration projects.

It is believed that ARRN will continuously contribute to the sustainable development of Asian rivers. I would like to avail myself of this opportunity to express my sincere gratitude to all who have contributed to the efficient operation of ARRN, and to pay tribute to the ARRN secretary group. I wish all our members of ARRN have strong will power and never give-up attitude to face new challenges in the Chinese Year of the Tiger.

JRRN: Japan River Restoration Network



Dr. Junzo SAGO

Secretary-General of ARRN
Secretary-General of Japan River Restoration Network (JRRN)
Foundation for Riverfront Improvement and Restoration (RFC)

Three years have passed since the foundation of ARRN/JRRN in 2006.

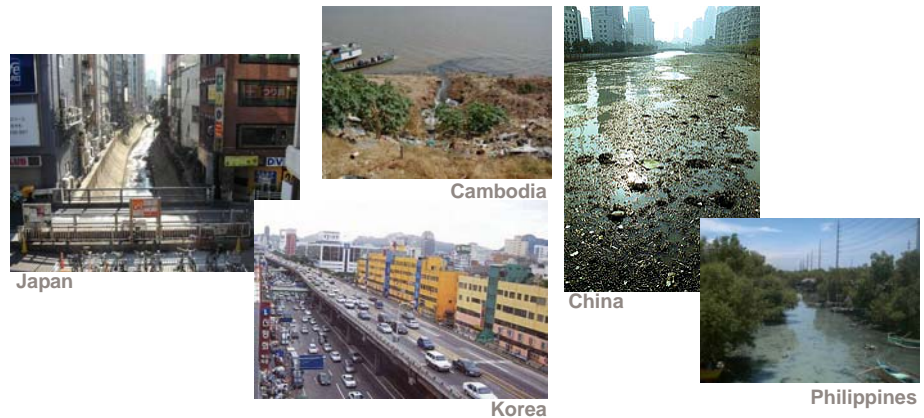
The JRRN secretariat was established within the Foundation for Riverfront Improvement and Restoration. Although the number of staff members and financial resources are limited, we have improved our website, constantly sent newsmails and newsletters, and held small-scale lectures to provide profitable information to members. Also, we have been engaged in collecting information and doing studies of river restoration examples in Japan. We publicize the results in succession domestically and internationally on the website or by other means.

In addition to providing information to members through newsmails and newsletters, we are going to improve our network activities by promoting information exchange among members. There are more than 400 individual members, but it is necessary to continue to increase this number. For this purpose, we are going to actively inform the public about the activities of ARRN/JRRN.

JRRN has acted as the secretariat for ARRN since the foundation of ARRN. In cooperation with KRRN, we were able to hold an international forum and a governing council in Korea in 2009. Moreover, CRRN, JRRN, and KRRN (in alphabetical order) cooperated in preparing "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1", and distributed it to participants in the 5th World Water Forum in Turkey. We are thinking of updating the guideline with the cooperation of each RRN.

Under the instructions of the chairperson, Prof. Tamai, and in cooperation with each RRN, we will make efforts to actively exchange information, so that ARRN can be further developed and contribute to river restoration in Asia. We would appreciate your support and cooperation.

About ARR



Background of ARR Establishment

Besides the object of flood control and water use, primarily rivers support human life as a resource for agriculture, fishery, and navigation, forming the core of social life and productive activities. However, as the population concentrated along rivers in high economic growth, the purification capacity of rivers was impaired. Consequently, water quality worsened, and the river environment, history and culture were lost. In many regions in Asia, similar social problems have surfaced recently.

Meanwhile, in Europe and North America, advanced approaches have been taken to restore original properties of rivers such as the ecosystem and purifying capacity. Also in Asia, many reports start to arrive on the cases of restoring river functions to regenerate river environment where new values in rivers can be found. As such situations go on, some open organization needs to be established around for Asian regions which have similar climate and topography, for the purpose of exchanging information, methods, publications, and academic experts related to river/watershed restoration, and of mutually brewing technologies to restore and preserve high-quality environment.

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.



Korea



China

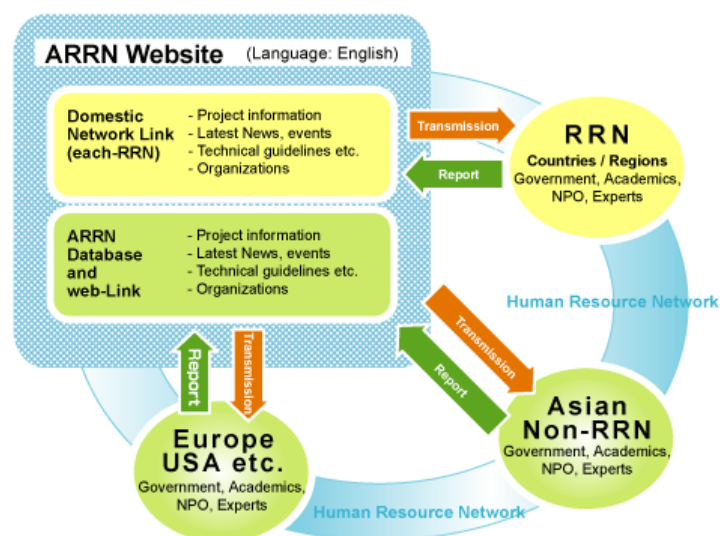


Japan

Activities

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

- Holds international forums and workshops with agenda of river/watershed
- Publicize information related to waterfront restoration through websites and news letters
- Prepares and distributes guidelines related to river/watershed restoration
- Assists plans to dispatch lecturers and experts, and site tours among networks in counties and regions
- Carries out activities of survey/researches, publication, public relations related to river environment



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

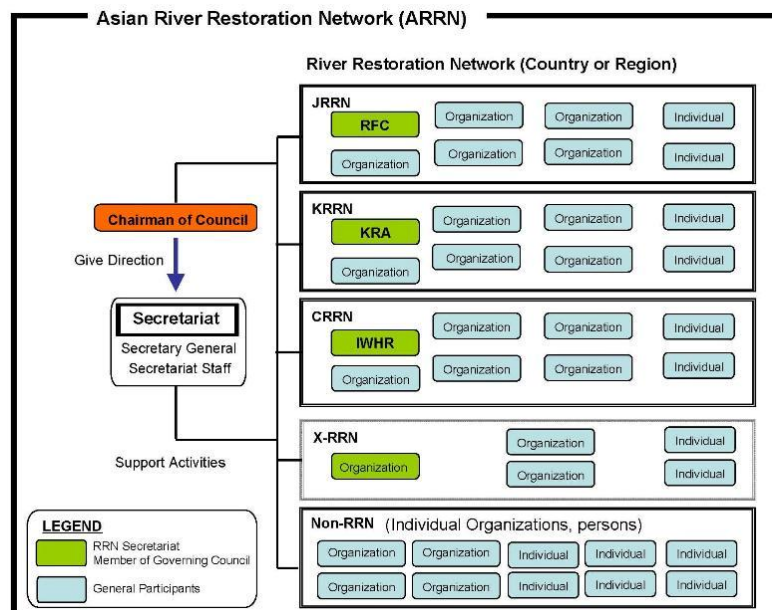
The operating policy of ARRN is decided by "Governing Council" consisting of the representative of the Council in each RRN organization. The Council is summarized by the chairperson approved in the Council, and resolves the activity plan and the budget planning, etc. of the year.

■ 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 2009)

ARRN is currently consisted of 3 national networks and 2 organizations as follows.

■ River Restoration Network (RRN)

KRRN: Korea River Restoration Network

<http://www.krrn.net/>

[Secretariat] Korea River Association (KRA)

<http://www.riverlove.or.kr/>

[Organization members] 1 group

Korea Institute of Construction Technology (KICT)

[Personal members] -

CRRN: China River Restoration Network

<http://www.cnrc.cn/>



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

<http://www.iwhr.com/english.asp>

[Organization members] 2 group

National Research Center for Sustainable Hydropower Development

Institute of Hydroecology, Ministry of Water Resources & Chinese Academy of Sciences

[Personal members] -

JRRN: Japan River Restoration Network

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



[Secretariat] Foundation for Riverfront Improvement and Restoration (RFC)

<http://www.rfc.or.jp/english/>

[Organization members] 18 groups

[Personal members] 401 people

Private companies 51%, Administrative/public organs 20%, Research institutes 14%, Civil groups 8%, Others 7%

JRRN Secretariat plays the role of ARRN secretariat from November 2006 to October 2010.

■ Individual Organizations (Non-RRN member)

Department of Water Resource, Thailand <http://www.water.go.th/>

Federal Flood Commission, Pakistan (FFC) <http://www.ffc.gov.pk/>

Main Activities in 2009

Summary of ARRN Activities (November 2008 through December 2009)

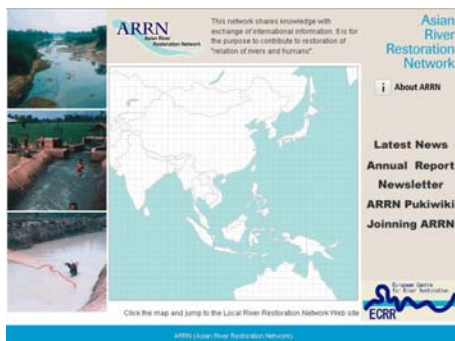
Year	Date	Type of activity	Activities	Place
2008	Nov. 4	Event Holding	The 5th International Forum on Waterfront and Watershed Restoration	China (Beijing)
	Nov. 4	Meeting	3rd ARRN Governing Council	China (Beijing)
	Nov. 5	PR & Exchange	Attending the 4th APHW International Conference	China (Beijing)
	Dec. 25	Reporting	ARRN Newsletter Vol.2	-
2009	Feb. 27	Reporting	ARRN Annual Report 2008	-
	Mar. 16-20	PR & Exchange	Attending the 5th World Water Forum	Turky (Istanbul)
	Mar. 16	PR & Exchange	Discussion with ECRR President	Turky (Istanbul)
	Apr. 6	Publication	Publication of "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1"	-
	Jun. 10 -13	PR & Exchange	Supporting delegates from Korea River Association	Japan (Hokkaido)
	Jul. 17	Reporting	ARRN Newsletter Vol.3	-
	Aug. 17	Meeting	2nd ARRN Information & Technical Committee Meeting	Korea (Incheon)
	Aug. 18-21	PR & Exchange	Attending the World City Water Forum WCWF2009	Korea (Incheon)
	Sep. 29	Event Holding	The 6th International Forum on Waterfront and Watershed Restoration	Korea (Seoul)
	Sep. 30	Meeting	4th ARRN Governing Council	Korea (Seoul)
	Dec. 11	Reporting	ARRN Newsletter Vol.4	-



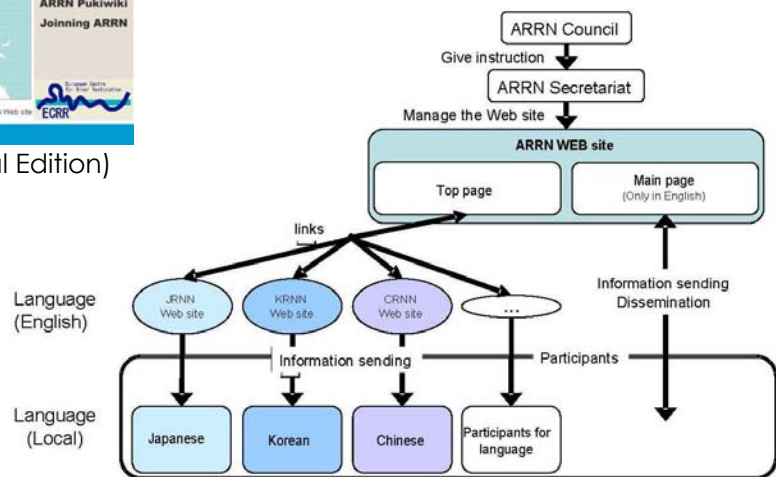
Website Development

ARRN Website

In the special session of the 4th World Water Forum (March 2006), which served as a springboard for the establishment of ARRN, it was suggested to improve the base for information-sharing (website) on river restoration. In 2006, the current ARRN website was created, and published as a trial edition. ARRN Home Page (<http://www.a-r-r.net/>)



ARRN home page (Trial Edition)



Basic structure of ARRN website

In the 3rd ARRN governing council (November 2008), it was decided that restructuring should be carried out while focusing on improved operability and increased information volume of the ARRN website. In 2009, pages exclusively for ARRN were temporarily set upon the English website of "Japan River Restoration Network (JRRN)" to reorganize information on ARRN.

At present, the entire ARRN website is being revamped with the target time for completion set for the end of March, 2010. On the new ARRN website which will start to operate in April 2010, 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, will be added.

We will continue to improve the web environment of ARRN, as well as improve the websites of each national river restoration network (RRN).

Newsletter / News mail

ARRN Newsletter

Since July 2008, the ARRN newsletter has been published in English every 6 months. In 2009, it was published twice – in July (vol. 3), and in December (vol. 4). It is an effective means to share ARRN activities with members.

From 2010, it is scheduled to be published every 3 months. It will introduce articles contributed by ARRN members, and those involved in river restoration worldwide. Back issues can be downloaded from the website.



Volume 3



Volume 4

Back number URL: <http://www.a-r-r.net/publication/newsletter/>

ARRN New mail

At the 3rd ARRN governing council (November 2008), it was decided that, in order to share activities of each national network, the JRRN newsmails regularly issued by Japan River Restoration Network (JRRN), which acts as the secretariat of ARRN, should also be issued in English on an irregular basis.

In 2009, the English version of the 200th issue of JRRN newsmail was delivered in June, and the English version of the 250th issue was delivered as a trial in November.

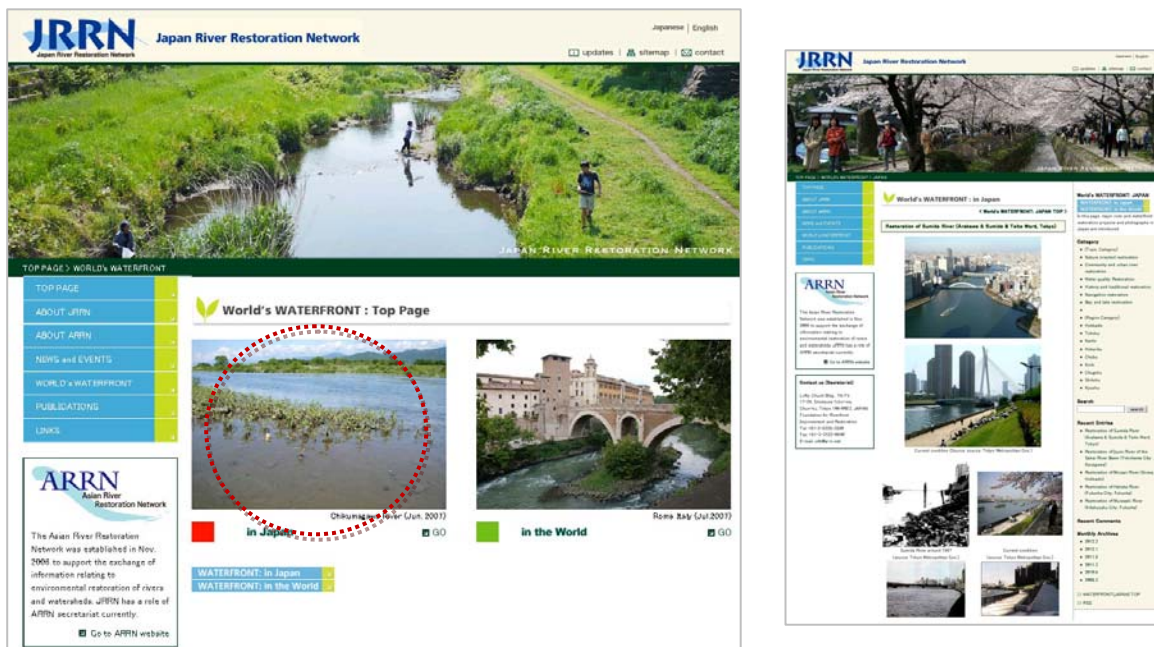
From 2010, we will aim to deliver a newsmail monthly, so that the newsmail will become a medium for the immediate dissemination of information provided by ARRN members and those involved in river restoration. Back issues are available from the ARRN website.

Back issues URL: http://www.a-r-r.net/publication/news_mail/

Accumulation of River/Watershed Restoration Projects

ARRN considers it one of its major activities to build a database to share good examples of river and waterfront restoration projects in Asia with each nation and region.

In 2009, Japan River Restoration Network (JRRN), which acts as the secretariat of ARRN, played a central role in collecting and organizing about 200 examples of restoration projects in Japan, and publishing them through the JRRN website.



URL: <http://www.a-rr.net/jp/en/waterside/domestic/>

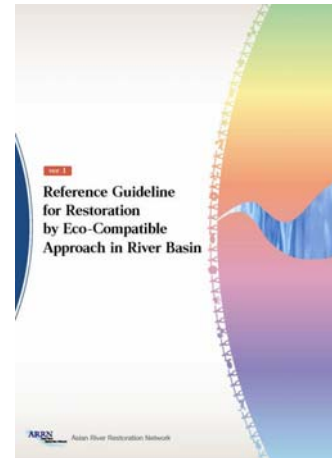
In 2010, each national river restoration network (RRN), which makes up ARRN, will collect and organize examples of river and waterfront restoration projects in each area. They will be introduced on the various RRN websites and on the new ARRN website, as a database of river restoration projects in Asia.

Formulating a Guideline on River/Watershed Restoration

ARRN published a “*Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1*” in March 2009 as an introductory book to the technical guideline for River Restoration in Asia which ARRN is going to establish in future.

http://www.a-r-r.net/publication/reference_guideline/

Based on the discussion in the 2nd ARRN Technical Committee Meeting (Aug. 2009) and 4th ARRN Governing Council Meeting (Sep. 2009), ARRN is undertaking update of the guideline ver.1 supervised by the ARRN technical committee in 2009.



■ Interim Goal

- Guideline will be updated and published after the technical committee meeting every year as the interim report. (ver.2 in 2010, ver.3 in 2011)
- 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.

Background of ARRN guideline establishment

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 Forum.

“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.

(1) Objective

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

(2) Users/Customers

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

(3) Language

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

(4) Task force

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

International Forum

5th International Forum on Waterfront and Watershed Restoration (Nov. 4, 2008, Beijing CHINA)

On Nov. 4, 2008 (Tue.), the 5th International Forum on Waterfront and Watershed Restoration was held by ARRN and CRRN in Tsinghua University in Beijing, China. The past four international forums were held in Tokyo, but this international forum was held in Beijing as a special session of the 4th International Conference of the Asia Pacific Association of Hydrology and Water Resources (APHW) on Nov. 3 - 5. Many people participated in the forum from many countries mainly from Asia. In the forum, the lecturers (one Korean, one Japanese, and three people from China, the host country) introduced recent research themes and movements related to river environment restoration in each country.



Opening



Lecturers and ARRN members

Program

8:45-10:15

Facilitator: Prof. Nobuyuki Tamai (Chair person of ARRN)

Opening Address Wang Xiaogang (IWHR)

Lecture 1 Dr. Chang Wan Kim (Research Fellow, River & Coast Research Division, Korea Institute of Construction Technology)

Correlation between Biotic Factors and Abiotic Factors - Focused on the Case Streams in Gyeonggi District, Korea

Lecture 2 Prof. Yuji Toda (Nagoya University)

Development of Eco-compatible River Basin Management toward Nature Restoration - Case of Ise Bay River Basin -

10:30-12:00

Lecture 3 Prof. Dong Zheren (China Institute of Water Resources and Hydropower Research)

Theories and practices of river restoration

Lecture 4 Prof. Wang Zhaoyin (State Key Laboratory of Hydrosience and Engineering, Tsinghua Univ.)

River training and restoration

Lecture 5 Prof. Chang Jianbo (Institute of Hydroecology, Ministry of Water Resources and Chinese Academy of Sciences)

Ecological Requirements in Operation of the Three Gorges Project

Closing Address Prof. Nobuyuki Tamai (Chair person of ARRN, Professor Emeritus of The University of Tokyo)

6th International Forum on Waterfront and Watershed Restoration (Sep. 29, 2009, Seoul KOREA)

On September 29 (Tue.), 2009, the Sixth International Forum on Waterfront and Watershed Restoration was held by the Asian River Restoration Network (ARRN) in Seoul, Korea.

This year's international forum was co-held with the Fifth KICT International Workshop on River Environment, which was organized by the Korean Institute of Construction Technology (KICT). It allowed us to make ARRN known to concerned parties in Korea, and exchange information and opinions on river environment with them.

6th International Forum on Waterfront and Watershed Restoration

Time and Date: September 29, 2009 15:00 – 18:00

Venue: KOFST International Convention Center, Seoul KOREA

Organizer: ARRN, Korea Institute of Construction Technology (KICT), Korea River Association (KRA)

Program

Opening Address Dr. Samhee Lee (Vice President of KICT), Dr. Nobuyuki Tamai (Chairperson of ARRN), Dr. Kook Il Kim (President of KRA)

Lecture 1 Dr. Naoki Shirakawa (Tsukuba University, JAPAN)

Flow Regime Restoration in Japan - Past, Present and Future

Lecture 2 Dr. Dongya Sun (Institute of Water Resources and Hydropower Research, CHINA)

Progress of River Restoration in China

Lecture 3 Dr. Marco Baumann (Canton Thurgau, SWITZLAND)

River Engineering and Management

Lecture 4 Dr. Hong Koo Yeo (Korea Institute of Construction Technology, KOREA)

Master Plan for Four River Restoration Project in Korea



Governing Council

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

ARRN Governing Council member (as of Sep. 2009)

Chairperson of ARRN:

Prof. Nobuyuki Tamai
Kanazawa Gakuin Univ., President of International Association for Hydro-Environment Engineering and Research (IAHR)

Secretary General of ARRN:

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

KRRN(Korea River Restoration Network):

(Secretariat organization)
Korea River Association (KRA)
(Secretary General)
Dr. Changwan Kim, Korea Institute of Construction Technology (KICT)
(Information Committee)
Prof. Jeong Seok Yang, Kookmin Univ.
(Technical Committee)
Mr. Ji Won Lee, Korea Engineering consultants Corp.

CRRN(China River Restoration Network):

(Secretariat organization)
Institute of Water Resources and Hydropower Research (IWHR)
(Secretary General)
Prof. Dongya Sun, Institute of Water Resources and Hydropower Research (IWHR)
(Information Committee)
Prof. Wengen Liao & Dr. Chong Li, Institute of Water Resources and Hydropower Research (IWHR)
(Technical Committee)
Prof. Hao Wang & Prof. Kewang Tang, Institute of Water Resources and Hydropower Research (IWHR)

JRRN(Japan River Restoration Network):

(Secretariat organization)
Foundation for Riverfront Improvement and Restoration (RFC)
(Secretary General)
Dr. Junzo Sago, Foundation for Riverfront Improvement and Restoration (RFC)
(Information Committee)
Dr. Kazumasa Ito, CTI Engineering Co.,LTD. / Foundation for Riverfront Improvement and Restoration (RFC)
(Technical Committee)
Dr. Naoki Shirakawa, Tsukuba Univ.

Note) JRRN has a role of ARRN secretariat currently.

3rd ARRN Governing Council Meeting (Nov. 4, 2008, Beijing CHINA)

On Nov. 4, 2008 (Tue), the 3rd ARRN Governing Council Meeting was held at the China Institute of Water Resources and Hydropower Research (IWHR), the CRRN secretariat in Beijing. At the beginning of the meeting, the current chairperson, Prof. Nobuyuki Tamai was reappointed as the incoming chairperson at the expiration of his term of office (two years) under the agreement of Japan, China, and Korea. The activities in 2008 were reported and discussions were held in terms of ARRN charter, policy for activities in 2009, the place to hold the international forum next year, and how to establish the river restoration guideline.

■ Participants

Chairperson:

Prof. Nobuyuki Tamai (ARRN Chair,)

CRRN(China River Restoration Network):

Dr. Dongya Sun(IWHR), Dr. Wengen Liao (IWHR), Dr. Kewang Tang(IWHR)

KRRN(Korea River Restoration Network):

Dr. Chang Wan Kim (KICT), Dr. Hong Koo Yeo (KICT)

JRRN(Japan River Restoration Network):

Dr. Junzo Sago (RFC), Dr. Kazumasa Ito (RFC)

ARRN Secretariat:

Mr. Masafumi ITO, Mr. Akira WADA, Mr. Michiya TANNAI

Observer:

Dr. Xiaogang Wang (IWHR), Dr. Zheren Dong (IWHR), Dr. Peng Jing (IWHR)

4th ARRN Governing Council Meeting (Sep. 30, 2009, Seoul KOREA)

On September 30 (Wed.), 2009, the 4th Governing Council Meeting was held in Seoul, Korea. First, each secretariat made a report on the activities of ARRN, as well as JRRN, KRRN and CRRN, after the Third Governing Council Meeting up to the present date. After that, Prof. Tamai chaired the meeting to hold deliberations and exchange opinions. Through deliberations and exchange of opinions, we discussed various issues, including details of the International Forum for next year, the action plan for 2010 based on the policy of updating river restoration guidelines, and ARRN's organizational framework, such as the chairperson and secretariat for next year.

■ Participants

Governing Council Member:

Nobuyuki Tamai (ARRN Chairperson),

Junzo Sago (ARRN/JRRN Secretary General), Chang Wan Kim (KRRN Secretary General), Dongya Sun (CRRN Secretary General),

Jeong Seok Yang (KRRN Information Committee), Dongsheng Wang (CRRN deputy Information Committee), Fang Wang (CRRN deputy

Technical Committee), Kazumasa Ito (JRRN Information Committee),

Naoki Shirakawa (JRRN Technical Committee)

ARRN Secretariat:

Sayumi Numata (JRRN), Akira Wada (JRRN)

Observer:

Kookil Kim (KRA: Korea River Association), Hyo Seop Woo (KICT: Korea Institute of Construction Technology), Hong Koo Yeo (KRRN secretariat, KICT), Jing Zhang(IWHR: China Institute of Water Resources and Hydropower Research), Marco Baumann(Canton Thurgau, Switzerland)



Standing Committees

At the 2nd ARRNGoverning Council held in December 2007, the decision was made to establish two standing committees namely, the **Information Committee** for discussing ARRNG future activities and means to circulate information, and the **Technical Committee** for discussing required expertise for ARRNG and the Asian version guideline. ARRNG Information Committee and Technical Committee were established in July 2008.

2nd ARRNG Information & Technical Committee Meeting (Aug. 17, 2009, Incheon KOREA)

On August 17 (Mon.), 2009, the Second ARRNG Information Committee Meeting and the Second ARRNG Technical Committee Meeting were held in Incheon City, Korea.

In the Information Committee Meeting, discussions were held with regard to the ARRNG mid-term action plan until the Sixth World Water Forum (March 2012), the organizational framework for network expansion, and future collaboration with the European Centre for River Restoration (ECRR).

In the Technical Committee Meeting, there were active exchanges of opinions mainly on how we should upgrade the "ARRNG River Restoration Guidelines Ver. 1" issued in March 2009, after a presentation of the latest report on river environment in each country.

Based on the results of these discussions, the ARRNG Secretariat promoted coordination with related organizations in Japan, China and Korea, and submitted the future activity policies of ARRNG to the Fourth ARRNGoverning Council Meeting held in Seoul City, KOREA at the end of September 2009.

■ Participants

(Committee Members)

Naoki Shirakawa (Tsukuba Univ.), Kazumasa Ito (RFC, CTI), Hongkoo Yeo (KICT as proxy for KRRN), Hongkyu Ahn (KICT as proxy for KRRN)

(ARRNG Secretariat)

Sayumi Numata, Katsuhiro Goto, Akira Wada (Japan River Restoration Network)

(Observers)

Changwan Kim (KICT, Secretary General of KRRN), Kookil Kim (President of Korea River Association)



Public Relations / International Exchange

With the aim to increase members in Asia by promoting ARRn activities extensively, PR activities of ARRn are continued through international meetings, academic activities and international exchange with relevant organizations related to rivers.

Attending the 4th APHW Conference (Nov. 3-5, 2008, Beijing, CHINA)



The 4th APHW (Asia Pacific Association of Hydrology and Water Resources) conference was held on 3-5, November 2008 in Beijing CHINA, and ARRn secretariat presented network activities and trend of Asian river restoration. Participants held interest in the presentation, and expectations to the ARRn were described by many Asian specialists in the conference.

Attending the 5th World Water Forum (Mar. 16-22, Istanbul, TURKEY)

From March 16 to March 22, the Fifth World Water Forum was held in Istanbul, Turkey under the theme of "Bridging Divides for Water." More than 30,000 people from over 150 countries concerned about water gathered together. They discussed various solutions for water problems at more than 100 sessions. Partly in view of the fact that ARRn was established based on the recommendation of a special session co-hosted by Japan, China, and Korea in the last Fourth World Water Forum (March 2006, Mexico), two members of the ARRn Secretariat took part in the forum to do PR for ARRn for other participants, give opinions, and promote the "Reference Guideline for River Restoration ver.1" published by ARRn.



Information exchange on river restoration experience with the ECRR President (Mar. 16, Istanbul, TURKEY)



ARRn secretariat exchanged information and opinions about future collaboration with ECRR and the activities of ARRn with Dr. Bart Fokkens, President of ECRR, which is a model organization of ARRn. This meeting was held at the site of the Fifth World Water Forum, when the ECRR President and ARRn/JRRN Secretary General participated in the forum.

Assisting delegates from Korea River Association (June 10-12, 2009, Hokkaido, JAPAN)

From June 10 (Wed.) to 12 (Fri.), 2009, a technical mission of the Korea River Association (53 members) came to Japan in order to observe river improvement work, flood control projects, and the river environment in Hokkaido, mainly in Sapporo City. The Korea River Association also serves as the secretariat of KRRN, which is a contact organization of ARRN in Korea. The ARRN Secretariat offered cooperation to the association, including schedule coordination



with each river management agency regarding visitation sites and preparation of explanatory materials, and also accompanied the group on observation tours to the Moizari River in Eniwa, the Ishikari River, the Toyohira River and the Chitose River.

Attending the World City Water Forum (Aug. 18-21, 2009, Incheon, KOREA)

From August 18 (Tue.) to 21 (Fri.), 2009, the "World City Water Forum 2009 (WCWF 2009)" was held at the Songdo Convensia in Incheon City, Korea. It brought together about 5,000 specialists involved in city water issues, who exchanged information on up-to-date technologies and experiences. The ARRN/JRRN Secretariat member took part in the forum, and Ms. Numata (JRRN secretariat, Planning division, Foundation for Riverfront Improvement and Restoration) gave her presentation, entitled "Trends for Urban River Restoration in Asia and Efforts toward Establishing an International Network", at a technical session of "Restoration of Urban Stream Amenity". During the forum, there were other sessions related to river environment on the theme of aquatic ecological restoration, regional revitalization through riverboat transportation, etc., in addition to urban river restoration, which introduced diverse case examples in Korea as well as other countries.



Activity Reports of National Networks in 2009

KRRN: Korea River Restoration Network

About KRRN

Korea River Restoration Network (KRRN), as a liaison organization of ARRAN, brings circulation of useful information on river and waterfront restoration and assists personal exchange in Korea, and contributes to development of suitable river restoration technology and a mechanism for each region.

Major Activities in 2009

The 5th International Workshop on River Environment (Sep. 29, 2009, Seoul KOREA)

The 5th International Workshop on River Environment was co-held with the 6th International Forum on Waterfront and Watershed Restoration by Korea Institute of Construction Technology (KICT) and Asian River Restoration Network (ARRN) On September 29, 2009 in Seoul, Korea. KICT used to organize the International Workshop every year to share the lessons and knowledge about river restoration with foreign countries. The workshop aims at the target as follows;

- Acquisition of advanced knowledge and experience on river environment management from USA, Western Europe and Japan through a small informal workshop guided by specialists selected from those regions (Open to practicing engineers, researchers, professionals, and students in those fields)
- Providing the researchers in KICT working on river environment including river restoration, weir (small dam) removal, design of riparian buffer zone, nature-friendly river management with such chances through this workshop and small group meetings with the invited specialists during their visit

The detailed information about the 5th International Workshop is shown on the page of ARRAN Activity - the 6th International Forum on Waterfront and Watershed Restoration.

International Symposium on River Restoration Providing for Climate Change (Aug. 11, 2009, Seoul, Korea)

KRRN sponsored "the International Symposium on River Restoration Providing for Climate Change."

International Symposium on River Restoration Providing for Climate Change

Time and Date: August 11, 2009 14:00 - 17:50

Venue: Seoul Press Center, International Conference Room (20F), Seoul KOREA

Organizer: Ministry of Land, Transport and Maritime Affairs (MLTM) / Ministry of Environment (ME) / Chosun Ilbo

Sponsor: Korea Institute of Construction Technology (KICT) / Korea River Restoration Network (KRRN)

Program

Opening Address: Dr. Y. J. Cho (President of KICT)

Congratulatory Speech: Dr. M. P. Shim (Chief of Four-River Restoration Project Headquarters) / Mr. B. W. Lee (Vice-minister of Ministry of Environment)

Lecture 1: Mr. S. K. Ahn (General Team Leader, Four-River Restoration Project Headquarters) Four-River Restoration Project in Korea

Lecture 2: Mr. H. Nijland (Senior project manager, Room for the River Programme Department, Ministry of Transport, Public Works and Water Management, The Netherlands) Room for the River in The Netherlands

Lecture 3: Dr. Y. Ishii (Chairman, CTI Engineering Co., Ltd.) Integrated River Basin Management against Climate Change in Japan

Lecture 4: Dr. P. Julien (Professor, Department of Civil Engineering, Colorado State University, USA) Prospective Climate Change Impact on Large Rivers in the US and South Korea



News of KRRN

KRRN became the special committee of Korea River Association

Korea River Restoration Network (KRRN) has been managed by Korea Institute of Construction Technology (KICT) since November 9, 2006. KRRN became the special committee of Korea River Association (KRA) in the beginning of 2009 and has been managed by KRA from that time. In other words, KRRN equals to the special committee of KRA. Chairperson of the special committee of KRA have to be in charge of the secretary-general of KRRN.

KRRN secured the budget for making homepage

Korea River Association (KRA) approved the budget for making homepage of KRRN in October. The homepage will be shown in middle of the next year. The address of KRRN's homepage is "<http://www.krn.net>".



CRRN: China River Restoration Network

News of major activities by CRRN and the projects in which the staffs of CRRN secretariat are involved:

Advisory meeting on the project of adaptive decision support system of river restoration

In April 28, 2009, China Institute of Water resources and Hydropower Research held advisory meeting in Beijing Railway Hotel 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. Leaders from the Department of International Cooperation, Science & Technology of the Ministry of Water Resources (MWR), invited experts and leaders and experts undertaking the project attended the meeting.

In April 29, 2009, project team held a working meeting, experts from China Institute of Water resources and Hydropower Research, Institute of Hydroecology, Ministry of Water Resources, Chinese Academy of Sciences, Beijing Normal University, Department of Water Resources of Guangxi, and Lishui Bureau of Water Resources have participated in the conference, directed by professorate senior engineer Peng Jing and professorate senior engineer Sun Dongya. According to the improved technical outline, the thematic project implementing Agencies launched a full discussion on the specific contents, further refined the technical outline and cleared the division of tasks. Meeting summary was formed, which was meaningful for the following smooth implementation of the project.

CRRN Investigation into Lijiang River in Guangxi

Lijiang River in Guangxi is one of the pilot projects of adaptive decision support system of river restoration, Special Funds for Scientific Research of Public Industry of Ministry of Water Resources. In October, CRRN Secretary-General, Professor Sun Dongya and his group of twelve people, went to Guangxi Guilin, where they had a talk with the participated stuff from the Department of Water Resources of Guangxi, Guilin hydrology bureau on the summary, objectives and progress of the project. They have investigated six sites including the Huixian wetland in Lingui, Guilin hydrology bureau.

Participation in the Sixth International Forum on river restoration in South Korea

In September 29, 2009, sixth International Forum on river ecological restoration, was held in Seoul, Korea. CRRN participated in the forum on behalf of China. Specialists of river restoration from China, Japan, South Korea have made special reports in the Forum. The participants shared the latest information and useful experience with Asian river restoration. In-depth discussions were conducted on the related issues about the Asian river restoration network. And the participants

visited the Yangjae-cheon River ecological restoration projects after the meeting.

Participation in the training classes of water ecological monitoring and protection

During December 19-20, 2009, Dr. Zhao Jinyong, from CRRN Secretariat, together with other two members took part in training classes of water ecological monitoring and protection, co-organized by the Institute of Hydroecology, Ministry of Water Resources, Chinese Academy of Sciences, and hydroecology Professional Committee, Chinese Hydraulic engineering society.

Third seminar on comprehensive management of rivers and lakes in Chinese cities

CRRN took part in the third seminar on comprehensive management of rivers and lakes in Chinese cities. Experts on the comprehensive management of lake and river management, planning, design, construction, from home and abroad, have attended the meeting to explore the science, cutting-edge issues in this field. The meeting shared the achievement of comprehensive management of Chinese rivers and lakes. Dr. Sun Dongya, secretary-general of CRRN, gave a report of the introduction of CRRN.

CRRN website establishment

CRRN has built up Chinese rivers restoration collaborative network with the domain name <http://www.cnrrc.cn/>. The website will try to realize information sharing with professional website network including the Asian river restoration network. Chinese river restoration network includes twelve sections, namely, industry dynamics, meeting information, project progress, projects, product, publications and papers, experts, BBS, related links, about CRRN, members, contact us.

Modern water science and technology innovation project "research and demonstration on key technology of river restoration- Technical guidelines for river restoration"

In January 8, 2010, the Department of International Cooperation, Science & Technology of the Ministry of Water Resources (MWR) held the check and acceptance meeting about the Modern water science and technology innovation project "research and demonstration on key technology of river restoration- Technical guidelines for river restoration". After the discussion, experts all agreed that the research project fully completed the tasks under the contract. Given China's current urgent needs of small and medium river regulation, the Group recommends relevant departments should continue to increase support for the follow-up work of the project, and the technical Guidelines for river restoration of in China should be promulgated as soon as possible.



JRRN: Japan River Restoration Network

About JRRN

Japan River Restoration Network (JRRN), as a liaison organization of ARRN in Japan, brings circulation of useful information on river/watershed restoration and assists personnel exchange in Japan, and contributes to development of suitable river restoration technology and a mechanism for each region while enlarging the network. JRRN has acted as the secretariat for ARRN since the foundation of ARRN.

■ Visions of JRRN activities

■ Network Expansion

We increase the number of people who are interested in river/watershed restoration. In addition, we establish a mechanism so that individuals, civil groups, and private firms are able to participate in restoration projects other than officials and personnel who played a pivotal role in such projects.

■ Information Circulation

We establish a mechanism in which participants provide information on river /watershed restoration and such information are equally distributed to those who need it. We also establish a mechanism to accumulate circulated information in a systematical manner.

■ Community Establishment

We develop personal relations within river/watershed restoration community aiming for free exchange of individuals and organizations. We also create opportunities for people in any field to participate in the network to facilitate collaboration in river/watershed restoration.

■ Event Planning/Holding

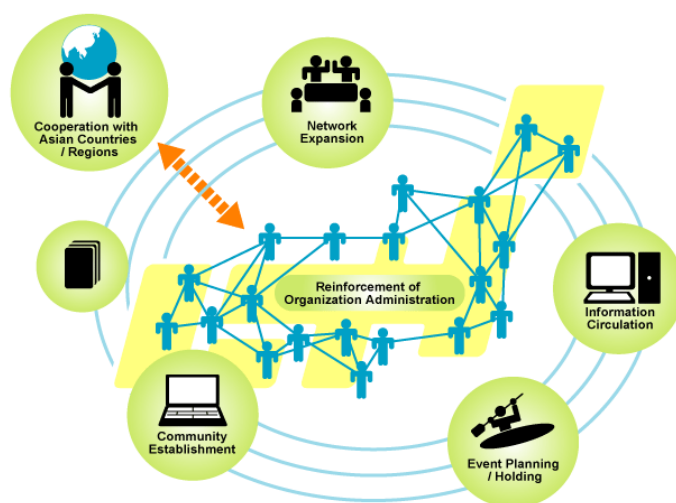
We plan various events to raise awareness and recognition of river/watershed restoration among public. We also take these opportunities to expand JRRN activities.

■ Cooperation with Asian Countries

As a liaison organization of ARRN, we strengthen coordination with countries in the Asia monsoon region including China and Korea and create a mechanism for mutually sharing information on river/watershed restoration as well as issues/solutions related to network management in each country.

■ Reinforcement of Organization Administration

We aim to make this organization highly transparent and reliable by consolidating organizational structure and action plans so that actions towards river/watershed restoration can be taken smoothly in line with our principle.

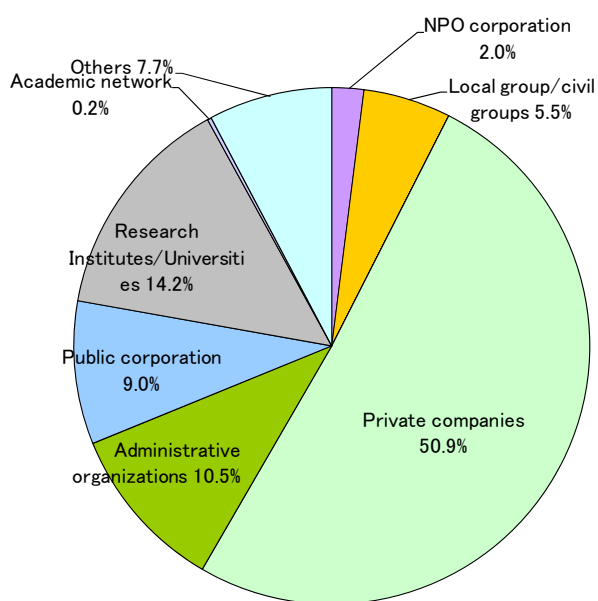


JRRN vision

■ Constitution of JRRN members (as of December 2009)

[Personal member] 401 members

Private companies 51%,
Administrative/public organs 20%,
Research institutes 14%, Civil groups 8%,
Others 7%



Composition of JRRN personal

[Organization member] 18 members

Private Companies 50%,
Administrative/public organs 22%,
Civil groups/NPOs 28%

JRRN Organization members (in alphabetical order)

- Kanamegawa Basin Network
- Kankyo Kogaku Co.,Ltd.
- Kurashiki City
- CTI Engineering International Co., Ltd.
- Community Development Partners
- Streamgraph inc.
- Taiyo Doboku Consultant Co., Ltd.
- Geosphere Environmental Technology Corporation
- DE-Link Co., Ltd.
- Tokai Tanago Kenkyuukai
- Docon Co.,Ltd., River Engineering Division
- Nikken Kogaku .Ltd
- Japan River Association
- NPO Matchdukuri-net Kumatori
- Japan Water Agency (JWA)
- NPO Mizubenasobu-kai
- NPO Ryuuki Chouseisitsu
- Foundation for Riverfront Improvement and Restoration

Main Activities of JRRN (November 2008 to December 2009)

Year	Date	Type of activity	Activities	Place
2008	Nov. 4	Event Holding	5th Forum on Waterfront and Watershed Restoration	China (Beijing)
	Nov. 4	Meeting	3rd ARRN Governing Council	China (Beijing)
	Nov.25 - 26	PR & Exchange	Assisting Taiwanese public sector specialists with inspection tours	Japan (Tokyo)
	Dec. 1	Reporting	JRRN Newsletter vol.18	-
	Dec. 10	Event Holding	2nd JRRN River Environment Mini Lecture	Japan (Tokyo)
2009	Jan. 5	Reporting	JRRN Newsletter vol.19	-
	Feb. 2	Reporting	JRRN Newsletter vol.20	-
	Feb. 20	PR & Exchange	Assisting delegates from Hong Kong government	Japan (Tokyo)
	Feb. 27	Reporting	ARRN/JRRN Annual Report 2008	-
	Mar. 2	Reporting	JRRN Newsletter vol.21	-
	Apr. 6	Reporting	JRRN Newsletter vol.22	-
	Apr. 6	Publication	Publication of "Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1"	-
	May 7	Reporting	JRRN Newsletter vol.23	-
	May 13	Event Holding	3rd JRRN River Environment Mini Lecture	Japan (Tokyo)
	May 20	PR & Exchange	Assisting training program of Japan International Cooperation Agency JICA (Pakistan)	Japan (Tokyo)
	May 25	Reporting	JRRN News mail Issue 200	-
	May 28	Reporting	JRRN Newsletter vol.24	-
	Jun. 10-13	PR & Exchange	Assisting delegates from Korea River Association	Japan (Hokkaido)
	Jul. 3	Reporting	JRRN Newsletter vol.25	-
	Jul. 8	PR & Exchange	Assisting Taiwanese technical training program	Japan (Tokyo)
	Jul. 28	Reporting	JRRN Newsletter vol.26	-
	Aug. 17	Meeting	2nd ARRN Information & Technical Committee Meeting	Korea (Incheon)
	Aug.18 - 21	PR & Exchange	Attending the World City Water Forum WCWF2009	Korea (Incheon)
	Sep. 3	Reporting	JRRN Newsletter vol.27	-
	Sep. 11	PR & Exchange	Attending the 17th RFC research symposium	Japan (Tokyo)
	Sep. 29	Event Holding	6th Forum on Waterfront and Watershed Restoration	Korea (Seoul)
	Sep. 30	Meeting	4th ARRN Governing Council	Korea (Seoul)
	Oct. 7	Reporting	JRRN Newsletter vol.28	-
	Nov. 2	Reporting	JRRN Newsletter vol.29	-
	Nov. 13	PR & Exchange	Assisting delegates from Hubei Provincial Water Resources Bureau in China	Japan (Tokyo)
	Nov. 20	Reporting	JRRN News mail Issue 250	-
	Nov. 30	PR & Exchange	Assisting visiting researchers from Chinese Government	Japan (Tokyo)
	Dec. 7	Reporting	JRRN Newsletter vol.30	-

JRRN Website <http://www.a-r-r.net/jp/>



JRRN website provide various information in Japanese and English to concerned people who engage in river/watershed restoration such as civil groups, government officials, private personnel, researchers, etc. Available information from this website include: topics related to river restoration in Japan and in other countries, examples of restoration projects, local activities, technologies, news, books, papers, and recreations.

Introduction of JRRN	Waterfront activities
Objectives, activities of JRRN and member registration	Report on waterfront activities from civil groups and schools
Latest topics and news	How to enjoy waterfront
Latest news and topics related to river/waterfront restoration	Tips to enjoy waterfront environment through games, sports and culture
Event information	Getting familiar with waterfront
Event information bulletin showing events and seminars related to river/waterfront restoration	Facilities offering experience-based education and interesting websites
Information exchange/communications	Publications
Page for information exchange with you	Books, manuals, articles on rivers and waterfronts
Waterfronts in Japan and in the world	Links
View photos of beautiful waterfront sites and examples of waterfront restoration in Japan and in the world	Links to rivers and waterfronts in and out of country

Menu of JRRN website

JRRN Newsletter

JRRN Newsletter is published once per month as an effective means to share JRRN activities with its members. Back issues can be downloaded from the website. For details, please visit the following URL. Back number URL: <http://www.a-r-r.net/jp/info/letter/newsletter/>

Covers of back issues (November 2008-December 2009)



JRRN News mail

JRRN Newsmail is issued and sent to JRRN members twice per week. This mail consists of topics and news related to river restoration in Japan and in other countries, information from JRRN members, message from the secretariat, and events to be held in future. All back issues are available from the following address. Back numbers URL: <http://www.a-r-r.net/jp/info/letter/newsmail/>

Sample of JRRN News Mail (Issue 200 issued on May 25, 2009)

JRRN News mail, Issue 200 (May 25, 2009)

Japan River Restoration Network (JRRN: <http://www.a-r-r.net/jp/>) is sending a news mail.

Today we successfully deliver the 200th issue, two years and a half after we published the first issue on December 18, 2006. We will continue to send domestic and overseas information concerning the restoration of river environments. We would like to ask for your continuous support and cooperation.

---Menu for this week-----

<1>Latest articles about rivers and basins (for four days from May 22to May 25, 2009)

<2>Information from JRRN Secretariat

- May 20 Report on the acceptance of JICA Training Program (Pakistan)
- May 13 Report on the Third JRRN Mini-seminar on River Environments
- Information on benefits to individual and group members of JRRN

<3>Information from JRRN members

Nothing in particular

<1>Latest articles about rivers and basins (for four days from May 22to May 25, 2009)

[Waterfronts in general]

- Glut of water? Riparian work - examining the Tokuyama Dam Channel Project / Tokyo Shimbun -May 25, 2009
<http://www.tokyo-np.co.jp/s/article/2009052590102816.html>
- The Chinese eco-electric power generation business fell short of expectations because of local governments' putting priority on economic growth / nikkei BPnet - May 25, 2009
<http://www.nikkeibp.co.jp/article/column/20090522/154728/>
- Sport Fishing Festival in Koitogawa River, Kimitsu City / Tokyo Shimbun - May 25, 2009
<http://www.tokyo-np.co.jp/article/chiba/20090525/CK2009052502000072.html>
- Former President Park Chung-hee restored mountains, while President Lee Myung-bak restores rivers / Chosun Daily News - May 22, 2009
<http://www.chosunonline.com/news/200905230000028>
- Creating an artificial shore in Toyoda, Suwa City - the final area for the Lake Suwa Waterfront Improvement / Nagano Nippo - May 23, 2009
<http://www.nagano-np.co.jp/modules/news/article.php?storyid=14364>
- Creating waterfronts on roofs in the city - the emergence of a biotope-type circulatory rooftop gardening system / Mainichi Communications Journal - May 25, 2009
<http://journal.mycm.co.jp/news/2009/05/25/033/>
- Beautiful riverside district in early summer - experiencing the Hita River Opening Festival / Oita Godo Shimbun - May 25, 2009
http://www.oita-press.co.jp/localNews/2009_124321741798.html
- Learning about a river environment and the preciousness of life / Kyoto Shimbun - May 22, 2009
<http://www.kyoto-np.co.jp/article.php?mid=P2009052300054&genre=K1&area=S10>

[Nature restoration]

- Aiming to creating woods to regenerate a wetland - NPO Trust Sarun Kushiro Kushiro Shimbun - May 25, 2009
<http://www.news-kushiro.jp/news/20090525/200905253.html>

[Urban waterfronts]

- Considering regeneration of the Horikawa River for the first time in half a century - "More attachment to rivers" --- Kyoto prefectural government / Mainichi Shimbun - May 25, 2009
<http://mainichi.jp/area/kyoto/news/20090525ddlk26040191000c.html>
- Forum: Thinking about the restoration of rivers at Chiyoda today (Tokyo) / Mainichi Shimbun - May 22, 2009
<http://mainichi.jp/area/tokyo/news/20090523ddlk13040304000c.html>
- The Ministry of Land, Infrastructure, Transport and Tourism suggests river creation in collaboration with regions / EIC Net - May 22, 2009
<http://www.eic.or.jp/news/?act=view&serial=20704&oversea=0>

[Ecosystem]

- 30 members of a conservation group releasing marsh snails (feed for fireflies) - Minami-Ichihashi Ogaki City, Gifu / Mainichi Shimbun - May 23, 2009
<http://mainichi.jp/area/gifu/news/20090524ddlk21040026000c.html>
- Know the water environment and clean the river - school children in Nagahama form an aquatic life investigation team / Chunichi Shimbun - May 22, 2009
<http://www.chunichi.co.jp/article/shiga/20090523/CK2009052302000009.html>
- Discovering many creatures in tidal wetland - a parent-and-child event in the Yoshino River, Tokushima / Yomiuri Shimbun - May 25, 2009
http://osaka.yomiuri.co.jp/edu_news/20090525kk04.htm
- Learning how to grow firefly larvae in the village of fireflies / Chugoku Shimbun - May 23, 2009
<http://www.chugoku-np.co.jp/News/Tn200905240137.html>
- Improving the rearing environment for aquatic creatures - Baba Area Conservation Group / Shimotsuke Shimbun - May 25, 2009
<http://www.shimotsuke.co.jp/town/life/volunteer/news/20090525/152204>

[Water quality]

- Policy recommendation on water environment preservation - A symposium will be held on June 4. / Sankei Kansai - May 23, 2009
<http://www.sankei-kansai.com/2009/05/24/20090524-010213.php>
- Cleaning the Musashi River - removing abnormal proliferation of waterweed / Oita Godo Shimbun - May 22, 2009
http://www.oita-press.co.jp/localNews/2009_124304050366.html
- Starting an experiment to fill a depression on the lake bed, which is one of the factors in the contamination of Lake Nakaumi / Nihonkai Shimbun - May 22, 2009
<http://www.nnn.co.jp/news/090523/20090523068.html>
- Improving the water quality of the Yamato River - cleaning activities and the release of shellfish fries / Osaka Nichinichi Shimbun - May 25, 2009
<http://www.nnn.co.jp/dainichi/news/090525/20090525027.html>

<2>Information from JRRN Secretariat

- Report on the acceptance of JICA Training Program (Pakistan) (May 20, 2009)

JRRN Secretariat was responsible for lectures (e.g. the improvement of river environments in Japan, case studies of restored river environments, etc.) and guiding site investigation for people from the Pakistani government and local municipalities, who visited Japan for the JICA Training Program.

>> <http://www.a-r-r.net/jp/info/letter/activity/>

- Report on the Third JRRN Mini-seminar on River Environments (May 13, 2009)

JRRN hosted the Third JRRN Mini-seminar on River Environments - the endemism of Asia revealed by environmental flows.

JRRN Seminar

JRRN promotes seminar as “JRRN Mini-Seminar on River Environment” to provide opportunities for JRRN members and non members to share and exchange their knowledge and experiences on river restoration.

2nd JRRN Mini-Seminar on River Environment: The Restoration of Urban Rivers including the Anyang River, KOREA (Dec. 10, 2008: Tokyo)



On December 10, 2008, JRRN hosted the Second JRRN Mini-seminar on River Environments, “The Restoration of Urban Rivers Including the Anyang River in Korea” (with lecturer Dr. Lee Samhee, KICT researcher). The lecture, which was about the current situation of river restoration in Korea as well as technical methods and issues, focused on a case study of the Anyang River. In addition, there was an active exchange of opinions with participants.

3rd JRRN Mini-Seminar on River Environment: Endemism of Asia Revealed by Environmental Flows (May 13, 2009: Tokyo)



On May 13, 2009, JRRN hosted the Third JRRN Mini-Seminar, the “Endemism of Asia Revealed by Environmental Flows.” JRRN Technical Committee Member Dr. Naoki Shirakawa gave a lecture, and the JRRN Secretary explained the “Reference Guideline for Restoration by Eco-Compatible Approach in River Basin ver.1”.

Technical Assistance / Public Relations / International Exchange by JRRN

JRRN promotes technical corporations, international exchange and PR activities to create rich river environment in Japan and other countries.

Assisting Taiwanese public sector with inspection tours (November 25-26, 2008, Tokyo, JAPAN)



JRRN Secretariat supported preparatory coordination with inspection sites and two-day site visits to the Metropolitan Area Outer Underground Discharge Channel, Kogasaki Purification Facilities, and Tokyo Metropolitan Ochiai Water Reclamation Center.

Assistance to Hong Kong government engineers with an inspection tour of the Sumida River, Tokyo (February 20, 2009, Tokyo, JAPAN)



On February 20, 2009, an inspection team of the Civil Engineering and Development Department, Hong Kong Special Administrative Region, visited Japan to inspect the Sumida River and the Old-Nakagawa River as successful case examples of urban waterfront restoration in Japan. In addition, they paid a courtesy visit to the River Division, Bureau of Construction, Tokyo Metropolitan Government which manages the Sumida River, and exchanged opinions actively with the Japanese side.

Accepting JICA Training Program (Pakistan) (May 20, 2009, Tokyo, JAPAN)



On May 20, 2009, the JRRN Secretariat was responsible for lectures (e.g. the improvement of river environments in Japan, case examples of restored river environments, etc.) and guiding an site visit (the Sumida River) for people from the Pakistan government and local municipalities, who visited Japan for the JICA (Japan International Cooperation Agency) Training Program.

Assisting Taiwanese technical training program (July 8, 2009, Tokyo, JAPAN)



On July 8, 2009, a group of practical engineers from the Water Resources Agency, Ministry of Economic Affairs, Taiwan, came to Japan to participate in a training program which gives information on efforts for river environment improvement in Japan, which was conducted by the JRRN Secretariat and the Foundation for Riverfront Improvement and Restoration.

Attending the 17th RFC research symposium (Sep. 11, 2009, Tokyo, JAPAN)



On September 11, 2009, there was a debriefing session of the research institute of the Foundation for Riverfront Improvement and Restoration, which manages JRRN. With the theme of "Accumulation of technical knowledge and development of international network on river restoration" Ms. Numata from the JRRN Secretariat made a presentation about ARRn, and JRRN's activities and future prospects.

Assisting delegates from Hubei Provincial Water Resources Bureau in China (Nov. 13, 2009, Tokyo, JAPAN)



On November 13, 2009, a river inspection delegation (7 members), including the deputy director-general of the Hubei Provincial Water Resource Bureau in China as a delegation leader, visited Japan. The delegation and JRRN Secretariat exchanged opinions, mainly about the improvement of river environments. We took them to observe the Ayase River, which runs through Adachi Ward, Tokyo, as an example of an improved water environment.

Assisting visiting researchers from Chinese Government (Nov. 30, 2009, Tokyo, JAPAN)



On November 30, 2009, two researchers dispatched from the Chinese government visited the JRRN Secretariat. We exchanged opinions about water environmental issues in Northeastern China, and other issues needing to be solved.

References

Recommendation made by the Nature Restoration Session of the 4th World Water Forum (March 2006, Mexico)

The "River Restoration in Asian Monsoon Region" session on 4th World Water Forum was cosponsored by three countries of China, Japan and Korea. In the session, panel discussion was held between the representatives of Malaysia and UNESCO-IHE additionally to that of three countries. At the end of the discussion, following terms were proposed as the conclusion. In response to this recommendation, Asian River Restoration Network (ARRN) was established in November 2006.

- It has been realized that river restoration is of vital importance to socio-economic sustainable development in parallel with flood management and water use management.
- It is necessary to recognize that the basin as a basic unit for management, that the river environment is dynamic, and that the environment of the various rivers is maintained by dynamic disturbance.
- It is necessary for the countries in Asian monsoon region to establish the suitable methodology and technology for river restoration, considering dense population, frequent and severe flooding, and abundant rice paddy.
- In Asian monsoon region human-influence to a cultural landscape is harmonized with the ecosystem traditionally. Those landscapes that have been modified by humans over long periods are often also important for nature as well as culture.
- It is important to develop a database and Asian network of projects and knowledge of international experts in river restoration. River restoration is a multi-disciplinary and multi-organizational task that should be supported by river engineers, environmental scientists, ecologists, water managers and the public.
- 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.

(Quote from "Session output" on 4th World Water Forum's "River Restoration in Asian Monsoon Region")

ARRN Charter (Revision)

Asian River Restoration Network Charter

Name

This international information exchange network shall be called "Asian River Restoration Network" (hereinafter referred to as ARRN).

Organization

ARRN is operated by the Governing Council. Under this council, Information Committee, Technical Committee and Secretariat are established to perform routine duties.

Objectives

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.

Categories of Activities

In order to attain the objectives stated above, activities in the following categories shall be carried out in relation to the restoration of rivers and watersheds:

- Activities for technical support
- Activities for research and development
- Activities for publication
- Activities for public relations

Particulars of Activities

ARRN shall carry out the following activities in relation to the restoration of rivers and watersheds to attain the objectives defined in the 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.

ARRN will expand the scope of activities as required.

Eligibility for Participation and Registration Procedure

1. ARRN shall accept applicant from administrative institution, private organization, researcher and individual to be a member of this network as long as they will follow the objectives of this network.
2. All participants shall register themselves with the Secretariat following the approach below.
3. In a country/region where "River Restoration Network" (hereinafter referred to as RRN) secretariat has already been established, applicants to ARRN should be registered through

the national RRN secretariat. In any country/region where there is no RRN, applicants to ARR should be registered through the ARR secretariat directly.

Governing Council

1. The Governing Council make decisions on the management of ARR such as the organizational framework and action plans.
2. The Governing Council is composed of the representative of each national RRN.
3. A Chairperson shall be appointed for the Governing Council, who is a qualified expert in the field of river restoration and his/her term of office is 2 years.
4. The chairperson will be nominated by each national RRN and be elected at the Governing Council meeting.
5. In the Governing Council, the following items can be proposed by any ARR participant and the Secretariat shall be deliberated:
 - Decisions on the structure of the Governing Council and the Secretariat.
 - Decisions on the execution, revision and cancellation of this Charter
 - Decisions of the annual action plan and its implementation.
 - Other matters put on the agenda by participants

Information Committee

1. The ARR Information Committee aims at preparing future vision and activities of ARR and sharing knowledge by establishing a toolbox.
2. Information Committee member shall be appointed by the representative of national RRN and his/her term of office is 2 years.

Technical Committee

1. The ARR Technical Committee aims at providing the technical methods for river restoration including the guideline for Asian countries.
2. Technical Committee member shall be appointed by the representative of national RRN and his/her term of office is 2 years.

Secretariat

1. The secretariat shall be appointed for the Governing Council by a rotation of national RRN. Consecutive re-nomination is possible and shall be agreed by the Governing Council Meeting. The term of office of the Secretariat is 2 years.
2. A Secretary General shall be appointed for the Secretariat by the chairperson.
3. The Secretariat shall hold the Governing Council meeting.
4. The Secretariat shall submit an action plan and other matters for decision to the Governing Council.

Funding for Activities

Funding for the activities of the Secretariat shall, in principle, be provided by the participants themselves who take charge of the Secretariat. However, cooperation may be solicited from other participants when necessary.

Execution, Cancellation and Revision

This Charter shall come into force after it is signed by the representative of each national RRN and may be revised or canceled as required through deliberations in the Governing Council.

Memorandum:

The Charter was primarily proposed in accordance with the discussions between three organizations, China Institute of Water Resources and Hydropower Research (IWH), Korean Institute of Construction Technology (KICT) and Foundation for Riverfront Improvement and Restoration of Japan (RFC) in November 2006.

The Charter was amended by the Governing Council on September 30, 2009.

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@arrn.net by email.

Membership Benefits

- (1) 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.arrn.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 ARR

- (1) An organization which wants to join ARR 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 ARR.
- (3) After the Chairperson of ARR approves the membership application form, the organization becomes the ARR member as a Non-RRN organization.
- (4) ARR 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 ARR secretariat supports the establishment of each RRN. The establishment of new RRN will be judged by ARR governing council meeting.

Note)

In a country/region which RRN secretariat has already established, applicants to ARR 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 (MS-WORD:601kB) is available here. <http://www.a-rr.net/jp/en/arn/docs/appform.doc>



Asian River Restoration Network secretariat

Planning Division

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Secretariat member: Junzo SAGO (Secretary-General), Katsuhiro GOTO,
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Japan River Restoration Network (JRRN) has a role of ARRN secretariat from Nov. 2006 to Oct. 2010. 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 international information network of river environment.

<http://www.a-rr.net/jp/en/>