

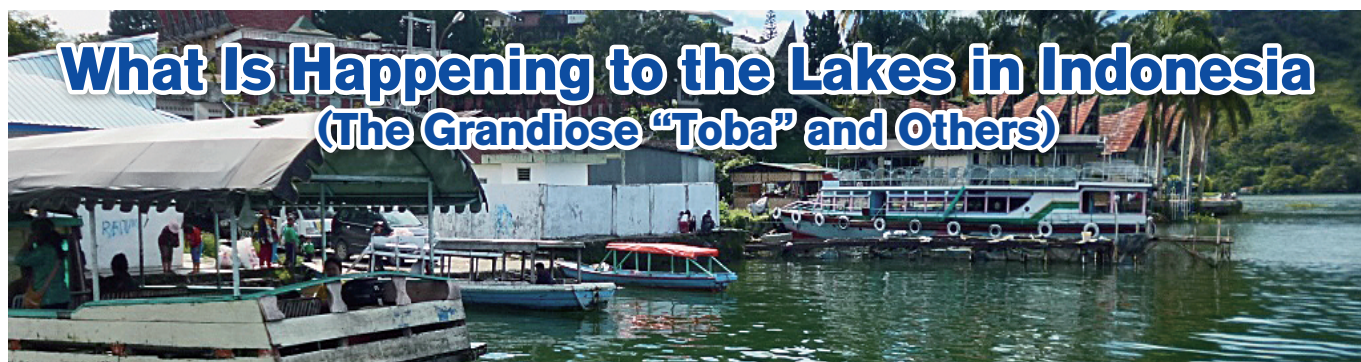


NEWSLETTER

– Save Water, Save Lakes –

International Lake Environment Committee Foundation

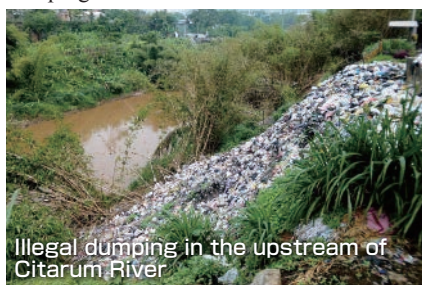
This newsletter is also available in Japanese.



What Is Happening to the Lakes in Indonesia (The Grandiose “Toba” and Others)

The 16th World Lake Conference (WLC16: BALI, Nov. 7-11, 2016) is on the horizon. As we mentioned in the previous issue of this newsletter, the host country Indonesia has over 1,500 lakes in total (covering both small and large ones). They support local livelihood and socio-economic development, e.g., by providing hydropower and irrigation/industrial water, mitigating flood damage, and promoting tourism, etc. Despite that lakes are giving such benefits to us, our activities are damaging them and their ecosystems in various ways. To name a few, eutrophication, sediment run-off, and water contamination which is especially prominent in congested urban areas (mostly caused by industrial/domestic discharge), or degradation of ecosystems in rural areas where irrigation and fishing are overly exceeding, are ubiquitously seen problems around the world. However, how much awareness there are and how much actions are taken among stakeholders for sound and sustainable environment of their lakes can vary from nations to nations, often depending on their social situations. Unfortunately, from what ILEC has witnessed through the consultative visits to Indonesian lakes and their basins in the last few years, it can be said that more attentions and actions are needed for their degraded environment. For example, the Citarum,

which flows into Jakarta, is ranked as one of the world’s dirtiest rivers. It is largely polluted by industrial discharge from its upstream, Bandung, and also by illegal dumping on the banks.

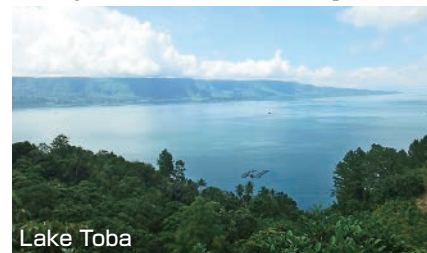


Illegal dumping in the upstream of Citarum River

In such an alarming condition, the Indonesian Government has launched a national conservation policy for the designated 15 priority lakes. To better understand current status of Indonesian lakes which are well reflected in these priority lakes, WLC16 prospective participants are recommended to visit at least one of them before or after the Conference in Bali, if possible. Just to give suggestions, here are the top three priority lakes ILEC would recommend for your extended trips:

■ **Lake Toba:** Situated in North Sumatra, which is just across from the Malay Peninsula over the Strait of Malacca, this largest lake in Indonesia is massive in its volume (approx. 130km² in surface area

and 530m deep at maximum). It is also an internationally important large lake, as being the second largest in South East Asia (the first is Cambodia’s Tonle Sap in the rainy season) and also known as the world’s largest volcanic lake. The lake is surrounded by mountains, and also is home to Samosir, an inhabited island located at its center. Its depth drastically drops from the shore to the bottom. Due to such unique topography, the lake water may seemingly look transparent, however, by taking a close look at densely populated areas of the basin, water hyacinths are covering the eutrophic lake surface, or household waste is littered along the shoreline, eventually contaminating the water. The whole basin creates tranquil atmosphere of the fishing and farming villagers’ lives; aside from holiday seasons when a large number of national/international tourists visit this area, the lake is usually crowded with local people going across on the boat transporting their agricultural and commercial products.



Lake Toba

IN THIS ISSUE

- What Is Happening to the Lakes in Indonesia
- Lake Biwa & Lago Trasimeno Exchange Meeting
- ILEC Facilitates Nation-Wide “Basin Discussion” in Japan
- ILBM-ESSVA Workshop in Kisumu
- The 12th Term Scientific Committee Comes on Board
- “Lakes & Reservoirs” Latest Issues
- Letter from Scientific Committee (Special Edition)
- Report from a Former JICA Training Participant (Morocco)
- Overview of ILEC Activities (Oct. 2015 - Mar. 2016)
- Sakura Exchange Program in Science
- Biwa-Kids Ambassadors Go to Thailand Vol.2
- Thank You for Your Support!

To reach Lake Toba from other parts of the world, or from Bali, the best way is to arrive in Medan first by air, and then change to ground transportation. While driving through the suburbs of Medan toward Lake Toba, you will see vast plantations of palm oil and natural rubber. While the industry is largely supporting the economics of Indonesia, which is Asia's one of the biggest suppliers of these two resources, drainage from the plantations is causing serious water pollution. In addition, both of palm and rubber trees' exploitation efficiency drops after 10 or 12 years, and they have to be reforested within 25 years. Therefore, waste water treatment and effective utilization of used trees (e.g., as biomass) are urgent tasks in this country. The plantations are gradually being expanded to the vicinity of Lake Toba, but the surroundings of the lake are still blessed with untouched nature and traditional vistas created by remains and houses of the indigenous Batak folk. For the above reasons, Toba is a worth-visiting priority lake of Indonesia, although it is located in a remote area. Because of the limited availability of the travel information, and also for the security reason, hiring a tour-guide is highly recommended upon traveling to the lake.

■ **Lake Batur:** This caldera lake, approx. 16km² in surface area and 88m deep at maximum, is located in the northwestern Bali and can be visited on a day trip from

the WLC16 venue. It is situated deep in the mountains where the local livelihood is hardly well off. Apart from few tourism, the main income sources in this region are irrigated agriculture and fishery. Actually, agricultural drainage and increasing fish-farming nets are degrading the lake environment. Although Lake Batur is not as large as Toba, the panoramic view stretched from the Mt. Batur to the lake is a must-see. For more information of Lake Batur, please also refer to the featured article in the previous issue.

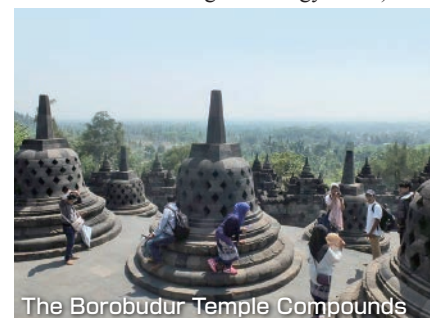
■ **Lake Rawa Pening:** This shallow volcanic lake, approx. 25km² in surface area and 4m deep on average (14m at deepest), is located in Central Java. Unlike the other two lakes introduced above, Rawa Pening is not a touristic destination but an important lake for local residents as it provides them with recreational space, fishing resources, and other income sources. As an example of resource utilization, some residents excavate mud from the lake bottom and process it to

Lake Rawa Pening covered with water hyacinths, and bunches of mowed water hyacinths



sell as fertilizer for mushrooms. Or, others mow and dry water hyacinths thrived along lake shore to make souvenir crafts out of them; however, the size of this business remains small and not effective enough as measures for exterminating this invasive plant.

The reason why we recommend a trip to this lake is in its location. To visit Lake Rawa Pening, it can be most convenient to lodge in the ancient capital, Yogyakarta, where you can enjoy touring around the World Heritage sites, such as the Prambanan Temple Compounds (located near the Yogyakarta Airport) and Borobudur Temple Compounds (which would be on the way up to Lake Rawa Pening from Yogyakarta).



All these three lakes are scattered around different parts of Indonesia. Therefore, if you attend the Conference in exotic Bali, the island of Hinduism, and then travel to Lake Toba for instance, you will experience cultural and religious diversity of Indonesia: Once you enter the North Sumatra Region, where Christianity is the majority, bicultural landscapes mixed with churches and Batak houses will welcome you.

The WLC16 Organizer is calling for your participation (free of charge, but online registration is required in advance) and also abstract submissions until June 7th, 2016 at www.wlc16bali.org. Please also stay tuned at the website for coming updates. We look forward to meeting our readers in Bali this coming fall!



Mt. Batur, with Lake Batur at its foot

Lake Biwa & Lago Trasimeno Exchange Meeting

On November 19, 2015, ILEC organized a tele-conference with Perugia, Italy, the Lake Biwa & Lago Trasimeno Exchange Meeting, at its office. The meeting was held to follow and share the interchanging born on the occasion of the 15th World Lake Conference (WLC15: Perugia, Italy - 2014 September), during which event the Local Policy Forum was held to have experience sharing among the citizen-working groups from these two lakes. The tele-conference was attended by the WLC15 citizen working group participants, international students from the University of Shiga Prefecture and University for Foreigners of Perugia (after the WLC15, the Universities had concluded the agreement on exchange program), and local high school students from Shiga, and others. Throughout the meeting, active opinion exchanges and presentations were made to deepen understandings for both lakes. One of the Italian students, who participated, commented that the meeting was a fruitful opportunity to discover and learn even more about lakes issues.



ILEC Facilitates Nation-Wide “Basin Discussion” in Japan

During January 26-27, 2016, ILEC hosted a domestic forum in Otsu, Japan, targeting government officials and researchers engaged in lake basin management. Although ILEC had organized a series of domestic fora of this kind before, this time the discussion was rather centered at verifying the current situation of basin management in Japan after the 2014's enactment of Water Cycle Policy, with the case studies from participating lakes. The concept of the Integrated Lake Basin Management (ILBM) was also introduced to the participants by Prof. Masahisa Nakamura (Shiga University) who gave keynote lectures. The two-day forum was presided by Prof. Naoko Hirayama (the University of Shiga Prefecture)

and attended by nearly thirty experts and officials nation-wide, from the Ministry of Environment, local government authorities and academic institutions.

On the first day, a variety of presentations, regardless of the size and legal status of lakes, were made by representatives from Lakes Biwa (Shiga), Kasumigaura (Ibaraki), Mikata-goko (Fukui) Kahoku-gata (Ishikawa), Inawashiro (Fukushima), and Sanaru (Shizuoka). They were followed by discussions among participants which continued to the following day. The forum was concluded with a field trip around the southern part of Lake Biwa, and positive comments were made from participants, suggesting



continued organization of this event. Indeed, this year's edition of the forum triggered a good momentum for enhanced network among the Japanese lake-people, which is likely to be growing toward the 17th World Lake Conference already scheduled to be hosted by Ibaraki Prefecture, Japan in 2018.

ILBM-ESSVA Workshop in Kisumu

The Integrated Lake Basin Management (ILBM) – Ecosystem Services Shared Value Assessment (ESSVA) Workshop was held in Kisumu, Kenya during November 24-25, 2015. ESSVA is a new participatory approach proposed by ILEC to activate ILBM platform process by assessing the status of ecosystem services and management challenges in the lake basin through people's perception (self-evaluation) called ESPP (Ecosystem Services Perceptual Profile) and facts/figures about the basin conditions called ESFP (Ecosystem Services Fact Profile). The workshop was attended by 25 experts representing a wide range of interests including county and national Governments, national research institutions, academic organizations, NGOs, and international organizations (Lake Victoria Basin Commission, UNEP and WWF).

Prior to the workshop, a pilot ESPP survey was conducted in three lakes, Baringo, Nakuru and Victoria (Nyanza Gulf), and their results were presented at the workshop. The ESPP findings indicated a reasonable understanding among the local people regarding the magnitude of resource developing activities characteristic in their basins. However, the impact of those activities on the sustainability of the lake basins' ecosystem services seemed

poorly appreciated by the local people. These findings were then compared with the ESFP findings that were prepared by some of the workshop participants. This was to verify the perceptual profile and highlight discrepancies and thus guide the planning of future activities. Through the discussion, participants recognized the usefulness of ILBM-ESSVA as a promising approach to improve lake basin governance in Kenya. Participants mapped out and proposed a national program for managing lake basins in the country for sustainable use. The workshop provided a forum for discussing ILBM Platform Process progress since its first introduction in the country and how ILBM concept can be interfused with the ongoing IWRM-based management process to ensure Kenyan lakes are managed for sustainable use through ILBM-ESSVA.



The 12th Term Scientific Committee Comes on Board

The Scientific Committee, comprising a small number of internationally renowned scientists and government officials specialized in the field of lake and reservoir management and conservation, is responsible for advancing and implementing scientific matters supporting the aims of ILEC.

As of April 1, 2016, the Committee, newly chaired by Prof. Walter Rast (USA), commenced into its 12th Term. The former

Chair Prof. Masahisa Nakamura (Japan) has resigned from the Committee at the end of 11th Term, leaving significant contributions to ILEC over the last 21 years. He was succeeded by the New Member, Prof. Yoshihisa Shimizu (Japan). Together with Prof. Nakamura, Dr. Richard Robarts (Canada) and Prof. Nikolai Aladin (Russia) who have supported ILEC's activities in the last 15 years while actively conducting their

researches in the lakes of the world and their regions stepped down, respectively. Finally, Prof. Luigi Naselli-Flores, who made extraordinary contributions to ILEC, especially in the organization of 15th World Lake Conference (2014), has also left after his 9 years of service. We would like to express our sincere gratitude to these four distinguished Members for their service and support.

The ILEC Scientific Committee 12th Term Members (April 2016 - March 2019)

Name	Nationality	Affiliation
Walter RAST (Chair)	USA	Professor Emeritus and Director, International Watershed Studies, The meadows Center for Water and the Environment, Texas State University
Tsugihiko WATANABE	Japan	Professor, Laboratory of Regional Planning, Graduate School of Global Environmental Studies, Kyoto University
Adelina SANTOS-BORJA	Philippines	Department Manager III, Resource Management and Development Department, Laguna Lake Development Authority
Sandra AZEVEDO	Brazil	Professor, Carlos Chagas Filho Biophysics Institute, Brazil Federal University of Rio de Janeiro
Daniel OLAGO	Kenya	Professor, Institute for Climate Change and Adaptation & Department of Geology, University of Nairobi
Juan SKINNER	Guatemala	Vice-president, the Lake Atitlán Environmental Protection Society
Salif DIOP	Senegal	Member, Agricultural Sciences Section, Academy of Sciences and Techniques of Senegal
Ajit PATTHAIK	India	Chief Executive, Chilika Development Authority
Zhengyu HU	China	Deputy Director, the Institute of Hydrobiology, Chinese Academy of Sciences
Yoshihisa SHIMIZU	Japan	Professor, Research Center for Environmental Quality Management, Graduate School of Engineering, Kyoto University



Scientific Journal of ILEC Lakes & Reservoirs: Research and Management Latest Issues

Volume 20, Issue 3 (September 2015)

Pages	Article Title	1st Author
139-154	The challenges of management: Recent experiences in implementing fisheries co-management in Lake Victoria, Kenya	Kevin O. Obiero
155-165	Development issues regarding Bunot Lake: the Lesser Lake among the seven lakes of San Pablo City, Philippines	Bing Baltazar C. Brillo
166-181	Determination of the status of stakeholder participation in the management of the Lake Malawi basin through application of Integrated Lake Basin Management	C. L. Chidamodzi
182-186	Norden multimesh gill net for fish sampling in lotic environments	Arne Fjälling
187-205	Tonle Sap Lake, Cambodia: A perspective on its transborder hydrological and resources governance	Mak Sithirith
206-215	Environmental control of the dominant phytoplankton in Aras Reservoir (Iran): A multivariate approach	Fereidun Mohebbi
216-228	Development and application of a simulation model for reservoir management	A. Bhadra

Volume 20, Issue 4 (December 2015)

Pages	Article Title	1st Author
231-232	Editorial: The 16th World Lake Conference is on the horizon and a New Journal Emphasis	Walter Rast
233-242	Spatial and temporal sedimentation changes in the Three Gorges Reservoir of China	Peng Gao
243-255	Degradation of Lake Ziway, Ethiopia: A study of the environmental perceptions of school students	Hayal Desta
256-263	Effects of habitat and fishing on fish assemblages in a tropical reservoir: Lake Kariba, Zimbabwe	Tsungai A. Zengeya
264-274	Catch per unit effort estimation and factors influencing it from recreational angling of sockeye salmon (<i>Oncorhynchus nerka</i>) and management implications for Lake Toya, Japan	Emmanuel A. Sweke,
275-284	Water Quality Prediction of Gangapur Reservoir (India) Using LS-SVM and Genetic Programming	Mrunalini Shivaji Jadhav
285-299	Water quality prediction capabilities of WASP model for a tropical lake system	Sheela A. Moses

Letter from Scientific Committee (Special Edition)

Inaugural Address by New Chair



It is with both pleasure and anticipation that I assume the Chairmanship of the ILEC Scientific Committee. My predecessor has completed an amazing tenure in furthering the mandate and goals of ILEC, which remains the premier organization focusing on lakes and other lentic water systems around the world. The Integrated Lentic-Lotic Basin Management (IL²BM) Platform developed over the last decade, combined with the Ecosystem Service Shared Value Assessment / Ecosystem Service Shared Risk Assessment (ESSVA/ESSRA) concept, has emerged as a valuable approach for identifying and addressing the scientific and governance issues challenging the sustainability of the ecosystem services these important waterbodies provide to

Walter Rast (USA)

humanity. Accordingly, one of my major tasks will be to continue refinement and application of the IL²BM-ESSVA/ESSRA approach to additional lentic water systems around the world. This includes specific consideration of their upstream and downstream hydrologic and jurisdictional linkages, and the governance challenges they represent. Assessment and improvement of lake governance will remain a core effort within this goal. This will not be an easy task, but one that is critical for increasing the visibility and importance of lakes and other lentic water systems in global water arena discussions and international water fora. I look forward to this challenge, with the hope that all the friends and partners of ILEC will join me in helping to make it happen.

Retirement Address by Former Chair

ILEC was established in February 1986 as an international NGO with a special focus on promoting and contributing to sound management of lakes and other lentic water systems globally for sustainable use of their resources, an area of environmental management that Japan has been placing particularly importance in international cooperation. The ILEC Scientific Committee was established in the same year, thus making its 30th anniversary this year. I joined the Committee in lieu of the Inaugural Chair, the late Prof. Tatuo Kira who stepped down in 1997, and was given the honor of being associated with other fifteen or so members representing various parts of the world. When Prof. Sven Jorgensen, the 2nd generation Chair, resigned in 2005, I was requested to assume the post of Acting Chair. Then in 2007, I was selected to assume the 3rd generation Chairmanship. Thus, my association with the Committee has become 20 years as Member and a little more than 10 years as Chair this year.

During my service as Member, the activities I was involved in ranged from participation in the project to develop ILEC's World Lake Databook (subsequently transformed into the World Lake Database), development and implementation of a training course in lake water quality management

supported by JICA, inauguration of the ILEC Journal, Lakes and Reservoirs: Research and Management, as well as planning and facilitation of the World Lake Conferences held in Lacar, Argentina (1993), Ibaraki, Japan (1995), Copenhagen, Denmark (1997) and Shiga, Japan (2001). From 2003 to 2005, I was fortunate to have a chance to head an international project to study the status of management of 28 selected major lakes in the world. The project was financially supported by the Global Environment Facility (GEF) and executed by the World Bank, and involved experts from some 40 countries. While being Chair, the major challenge for me was to develop and promote a global program on managing lakes and their basins for sustainable use, the basic conceptual framework, termed the Integrated Lake Basin Management (ILBM), having transpired out of the above GEF project. Over the past ten years or so, the ILBM related activities have been collaborated by UNEP, and research and promotion activities have been supported by various Japanese Government agencies in charge of environment, foreign affairs and education, as well as by universities and research institutions in Shiga-Kyoto region, in particular Shiga University. In the course of implementing ILBM activities, the JICA supported training program on lake water

Masahisa Nakamura (Japan)



many new ILBM related concepts including the currently pursued concepts such as ILBM-Heartware and ILBM-ESSVA, have also evolved through activities held at the national, regional and global levels, apart from ILBM application in the Transboundary Water Assessment Program (TWAP) and in national program development in Kenya, India and Malaysia. In the meantime, the World Lake Conference continued to have served as invaluable means to promote local, national, regional and international lake basin management agenda in India (Jaipur, 2007), China (Wuhan, 2009), USA (Austin, 2011), and Italy (Perugia, 2014).

Upon stepping down as the 3rd generation Chair of ILEC Scientific Committee, I am very grateful for having been able to serve over the past decades as stated above, for which I thank you all very much.

Report from a Former JICA Training Participant

Berrad Farida (Morocco)

Dr. Berrad Farida participated in a training program, “Integrated Basins Management for Lake Environment” in FY 2013. Hereunder the report from her, as to her experience through the training program and current activities.

When I was considering writing this article, I hesitated between giving a sort of ‘testimony’ on the experience of my training about ILBM, the lessons learned and how useful all this was to me, or writing about what I actually achieved upon returning to Morocco. Reading previous reports from other trainees, I felt that in my case I do not, in truth, have any tangible or solid achievements to share. But then I remembered that Nakamura sensei insisted that no one can make a miraculous change introducing ILBM concept and framework in a quick way.

My action plan, as I perceived it, could only be a kind of plea for an integrated watershed management of the dams under construction in the Tangier-Tetouan Region (northern Morocco). Indeed, to propose an action plan would be ostentatious as watershed management is a responsibility of many stakeholders and my department is only supposed to coordinate the preparation and implementation of management plans. I thought, and still believe that this is a unique opportunity to prepare, beforehand, the best possible environment for the sustainable and integrated management of all resources around future lakes. This should not only ensure good water quality and prevent loss of capacity by



River polluted by olive mills

siltation but also promote the development of the populations (upstream and downstream). It goes without saying that water is a resource that is rare and highly prized for a country like Morocco. ILBM seems like a very good approach to take on and the implementation of the six pillars of ILBM may be used in an iterative way as connections always exist between one pillar and another (at least to my understanding). A report of the present situation, dysfunctions, and challenges - to persuade the different involved stakeholders in order to work together - is under way but needs some more time, and efforts. Its goal, when completed, is to mount a project in one of these basins as a demonstration or pilot site. This report may benefit from the new European Union Support Program for the Forest Policy in Morocco (Watersheds Component).

Meanwhile, I try to advocate for this approach in all the workshops or meetings I attended in my region especially about the risks of pollution and by giving a presentation on ILBM at a university. The feedback I got is that students and teachers are more interested in modeling and in other technical topics related with water and hydrology. My plan is to discuss the possibility of organizing trainings about ILBM for our staff and for researchers in order to emphasize that governance is primordial when it comes to natural resources management. Two final ideas I would like to mention: One is inspired by the concept of Jichikai or the spirit of community in managing a small urban basin in my town. The second concerns an oasis in which traditional laws and knowhow about irrigation systems and the distribution of water shares have been eroded and are causing serious problems of pollution affecting people and the environment and where the solutions can be very simple if all the stake holders can only find a way to work together.



Dr. Farida in front of reservoir in Tangier Province

Overview of ILEC Activities (Oct. 2015 - Mar. 2016)

- Oct 18** ILEC organizes the Ramsar Biwa-Kids 3rd Pre-Workshop (Otsu & Kusatsu)
- 22** Nine Indian delegates visit ILEC through the HIDA project (Kusatsu)
- 22** Local high school students and teachers visit the JICA training participants at ILEC (Kusatsu)
- Nov. 8-19** ILEC takes part in the Ha Long Bay Project for Green Growth (Quảng Ninh Province)
- 19** ILEC organizes a tele-conference, Lake Biwa & Lago Trasimeno Exchange Meeting (Kusatsu & Perugia)
- 21-24** ILEC organizes the Ramsar Biwa-Kids International Exchange Program (Chiang Mai)
- 24-26** ILEC Organizes ILBM-ESSVA Workshop (Kisumu)
- 25** ILEC hosts the Japan-Asia Youth Exchange Program in Science (Otsu & Kusatsu, - Dec.2)
- 26** ILEC visits the UNEP-HQ and Japan Embassy in Kenya (Nairobi)
- 29** ILEC exhibits at a citizen & youth forum on the Water, Agriculture & Global Environment Issue (Kyoto)
- 29** ILEC visits the Malaysian Heartware project sites (Kuala Selangor) **[PIC①]**
- 30** ILEC organizes its Asian Scientific Committee Meeting (Putrajaya)
- Dec 1** ILEC attends the WLC16 Pre-Conference (Putrajaya)
- 2** ILEC organizes the WLC16 Preparatory Meeting (Bandung)
- 3-6** ILEC conducts WLC16 consultative visits to Citarum River Basin and Lake Toba (Bandung, Parapat & Samosir Island) **[PIC②]**
- 7-26** ILEC takes part in the Ha Long Bay Project for Green Growth (Quảng Ninh Province)
- Jan. 26-27** ILEC hosts the Domestic Lake Basin Policy & Research Forum (Otsu)
- Feb. 6** Consecutive lectures, Environment and Living Learning from Lake Biwa, Largest Lake in Japan, kicks off (Kusatsu, Otsu, Omihachiman & Takashima, - Mar 11) **[PIC③&④]**
- 13** ILEC organizes the Ramsar Biwa-Kids Project Debriefing Session (Kusatsu) **[PIC⑤]**
- 13-16** ILEC attends the ILBM-Heartware Expert Group Meeting (Siem Reap)
- 17** ILEC pays courtesy visits to Cambodian governmental agencies for promoting the WLC16
- 21** ILEC serves its home-made Funa Zushi at the Funa-Zushi Party (Kusatsu)
- Mar. 4-23** ILEC takes part in the Ha Long Bay Project for Green Growth (Quảng Ninh Province)
- 12-13** ILEC attends the World Agricultural Heritage Symposium and SATOYAMA Initiative Domestic Network Meeting (Noto)
- 24** Ten Chinese delegates visit ILEC (through the Hunan Dongting Hu Project)



Sakura Exchange Program in Science

From November 25 to December 3 2015, ILEC carried out “the Japan-Asia Youth Exchange Program in Science” (known as Sakura Exchange Program in Science), under the grant by the Japan Science and Technology Agency (JST). Hunan, a home to Lake Dongting and Xiang River, is a Province in China and has kept friendly relationship with Shiga Prefecture, where Lake Biwa is located, for more than 30 years. ILEC welcomed

eight delegates including Professors of Hunan Normal University and the teachers of primary and junior high schools from Hunan in collaboration with the Research Center for Sustainability and Environment, Shiga University, Shiga Prefectural Government and private companies which support environmental business in Shiga. The delegates were introduced to the Japanese technology, and environmental education in Shiga and Japan. We hope

that this interchange leads to the further development of technology and the environmental education in Hunan.



Biwa-Kids Ambassadors Go to Thailand:

Vol.2 The Chiang Mai Meeting

The Biwa-Kids Ambassadors from Shiga Prefecture, Japan made their visit to Chiang Mai, Thailand from November 22 to 24, 2015. During the visit, they attended the exchange program themed on “lakes and its food culture” jointly organized with the local elementary schools and universities. The six Ambassadors successfully made five presentations on what they have learned about their home-town lake, Biwa and its food culture in the last months (about which, please read the previous article, “Vol.1 Pre-Workshops,” featured in the last issue). Another mission they have proudly completed was to cook Japanese food using ingredients purchased from the local market. They enjoyed tasting what they prepared (such as *miso-soup*, *fish-flavored rice*, and *tempura*, etc.) and also discovering an exotic flavor of the Thai food prepared by the local children.



After their return to Japan, the Ambassadors reported their year-long activities to Vice-Governor of Shiga Prefecture, their families and others at the debriefing session held on February 13th. The traditional specialty of their hometown,

fermented Funa Zushi, preserved by them six months ago was also served to the participants at the session. Through the precious experiences, they have become more aware of the environmental issues. Congratulations Ambassadors, and we wish you success in the years to come!



Thank You for Your Support!

- In the Fiscal Year 2015, ILEC received sponsorship from the following Supporting Member Organization (60,000 JPY or more):



INTERNATIONAL LAKE ENVIRONMENT COMMITTEE FOUNDATION (ILEC)



—Secretariat—

1091 Oroshimo-cho, Kusatsu-city Shiga 520-001, JAPAN

Tel: +81-77-568-4567 / Fax: +81-77-568-4568 / E-mail: infoilec@ilec.or.jp

Website: www.ilec.or.jp / Facebook: www.facebook.com/ilec.english

*The latest issue and back issues of this newsletter are also available on our website above.