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# ILEC

#### International Lake Environment Committee Foundation This newsletter is also available in Japanese.

**NEWSLETTER** 

- Save Water, Save Lakes -



The 16th World Lake Conference (WLC16) kicked off in Kuta, a west-coast beach resort in Bali, on November 7, 2016 when the island just entered rainy season. What caught the audience's attention in the beginning of Opening Ceremony was 32 children on stage calling for actions to taken to ensure the next generation sustainable environment of world's lakes. They had got together in Bali from various parts of Indonesia (22 junior high school students screened nationwide) and also from Japan (10 primary school students from Shiga and Kyoto Prefectures) to participate in the international environmental education program co-organized by ILEC and Ministry of Environment and Forestry, Indonesia on the occasion of WLC16 (a related article is on Pg. 4). The Ceremony proceeded with fabulous performances of traditional Balinese dance and music, and the participants were welcomed by opening addresses from Organizing Committee representatives such as Minister Siti Nurbaya of Environment and Forestry, Indonesia, and Director General Hironori Hamanaka of ILEC. In their remarks, it was highlighted that they were delighted to have the WLC finally taken place in Indonesia, which is rich in lakes and that they look forward to productive discussions bringing fruitful outcome.

The Lake People around the World All Got Together and Discussed

in Bali



As featured in the previous issues of this newsletter, there are over 1,500 lakes scattered around the Indonesian territory which is stretched from side to side. The lakes are essential to industry and livelihood of this country diverse in ethnic, religious and cultural values. Regardless of their characteristics, such as the tectonic Lake Toba in Sumatra situated in the middle of rich nature, or urban lakes in the vicinity of slums in Jakarta, the Indonesian lakes and their basins' environment are seriously threatened in general, due to the economic growth and other artificial influences. To address this, the Indonesian Government had been developing national policy on lake basin conservation since 2009. The WLC in Bali was held partly to trigger national and regional momentum to share their current knowledge and to further promote their national strategy. Their devoted work in collaboration with ILEC and other international and national partners over the four-year-long preparatory process finally brought about a successful organization of WLC16.

During the four-day thematic sessions, fora, and side events, various theme concerning lakes were discussed, with more than 200 abstract contributions. Some of them were heated with active exchanges of views and experiences of multi-stakeholders of lakes; not only researchers or government officials, but also private sectors including citizen-working groups, as it has been emphasized in the past WLCs. Discover more about highlights of WLC16 in the next pages!

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# Indonesian and Japanese Lake People Get Together at National Policy Dialogue

Policy dialogue is one of the main features of every WLC. During WLC16, National Policy Dialogue between the host country Indonesia and Japan was organized on November 8 (Session I: Policy Improvement) and 9 (Session II: Community Engagement), prior to the conventional International Policy Forum (see the next page). The two-day dialogue was a much-needed opportunity for directly exchanging views among the representatives from various government agencies, citizen organizations, research institutions and private-sector operations from Indonesia. It was also participated by some Japanese invited speakers, mainly from national and local governments



and citizen working groups, who were requested to provide information on their many years of experience to overcome difficult challenges facing lake basin management in Japan.

The Dialogue served a very useful purpose for Indonesian Governments facing the urgent need to accelerate the implementation of the national program launched in 2013, mainly aimed at 15 priority lake basins, and also for the local government and community representatives to learn firsthand on the implementation strategies being evolved at the national level. Sharing of the Japanese national government, local government and local community experience directly by the Indonesian counterparts was also very useful, particularly with regard to evolving the lake basin management policies and programs at the governmental level as well as to develop new approaches in bringing about broader societal mobilization in attending to this very complex and challenging lake basin management issues in Indonesia. The catalytic outputs of this Dialogue is hoped to bring about encouraging results to be shared in the next WLC in Ibaraki, Japan, in two years time.

## **Citizen Working Groups Take Part in the Conference**

The WLC16 was participated by a number of citizen working groups. From Shiga Prefecture, home to Lake Biwa and also to the ILEC office, four citizen working / student groups, as listed in the table below including those two attended the WLC for the first time, presented on their lake-activity challenges at oral and poster sessions. In October 2016, prior to the Conference, the presenters from each group gathered and rehearsed their presentations in front of the JICA training participants came from several countries at ILEC. The presenters had modified their presentations based on the feedback from the rehearsals. After their presentations in Bali, they received

questions and remarks from the audience at the oral sessions: To the presenter from Harie district of Takashima City who talked about "Kabata", usage of the circulated groundwater of the district, there were questions from those who have trouble with water quality aggravation. To the Akanoi-Biwako Environmental Citizen's Initiative who made presentation on their extermination of Creeping Water-Primrose under the multicollaboration of stakeholders, similar struggles on the alien waterweed spices were shared. To the presentation from Seseragino-Sato about their "Fish Cradle Paddy Field Project" in their region of Suhara, some attendants engaged in



similar activity of making eel going up to upstream of the dams in Indonesia raised questions. The Seseragino-Sato presenter gave them a gift of rice harvested in his "Fish Cradle Paddy" for their friendship. IVUSA participated in the poster session as well where they received earnest questions and opinions. We hope that their exchanges in Bali lead to something for their mutual future collaboration activities.

#### List of Participants

Group Name	Oral Presentation Title
Harie-Shozunosato Committie	Kabata
Akanoi-Biwako Environmental Citizen's Initiative	Creeping Water-Primrose Threats Akanoi Bay Which inside of the Lake Biwa, the Reservoir of Kansai Region
Seseragino-Sato <newcomer to="" wlc=""></newcomer>	Fish Cradle Paddy Field Project
International Volunteer University Student Association (IVUSA) <newcomer to="" wlc=""></newcomer>	Nationwide Cooperation of University Students in Removal of Invasive Aquatic Weed in Lake Biwa, Japan

## International Policy Forum: Toward Greater Collaboration in Asian Lakes

The main objective of International Policy Forum was to accelerate the development of common platform for greater collaboration on policy, science and technology research and broad stakeholder engagement in managing Asian lake basins, particularly of those in Southeast Asian region. During the preparatory stage, members of the ILEC Scientific Committee and of the Indonesian Government conducted a



number of consultative meetings, and, in the end, succeeded in having many national governments and international organizations from the region to participate in and contribute to the prospective forum deliberations. Each keynote presenter from the national governments of Indonesia, India, and Malaysia, and from Asian Development Bank (ADB) and United Nations Environment Programme (UNEP) provided their currently undertaken specific activities and the ongoing efforts for regional collaboration, setting the stage for round-table discussion among the forum participants divided into five groups. The themes assigned to the five groups were; A) Development and Implementation of National Programs, B) Capacity Development Challenges, C) Stakeholder Participation,

D) Scientific Collaboration on Tropical Limnology, and E) Regional, International and Global Lake Basin Management Challenges.

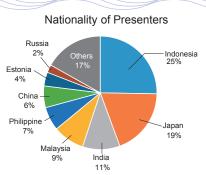
The variety of viewpoints and elaborations were subsequently integrated into the Bali Declaration, specifically reflected in such phrases as, development of databases, particularly for tropical inland water systems; development of regional networks for collaborative research for increasing knowledge and promoting sharing of experiences in managing lake basins; and joint actions toward achieving the Sustainable Development Goals (SDGs) related to lentic-lotic water systems. These agreed recommendations will have to be rigorously pursued toward the WLC17.

## The ILEC Delegates from Various Countries Present at Thematic Sessions

The three-day thematic sessions held under 11 themes at WLC16 got more than 170 contributions from 31 countries. Although its three quarter came from Indonesia and other Asian countries, some came all the way from Africa or Latin America. Ideas and solutions for various environmental problems of the world's lakes and their basins were activety exchanged.

The ILEC delegates, mainly composed of its Scientific Committee Members, also presented their concrete actions in line with the ILBM concept to address issues of the project lakes in Americas, Africa and Asia, respectively, or in global viewpoints. At the end of each session, a number of questions were received from young generation such as "What conditions should be set for the boundary setting?", or "What kind of indicators should be focused on to close up the impact of climate change?", and our delegates responded in detail.

The thematic sessions for sure made many contributions to the Conference, crossing national borders and generations. Those three days made us believe that sharing the challenges and efforts of lakes and their basins



around the world can trigger developing more efficient and effective efforts.



#### The Bali Declaration Passed to WLC17

The heating discussion during WLC16, which was attended by nearly 1,070 people from 35 countries, came to its end on November 10, 2016. In the afternoon of this day, Closing Ceremony was held where Deputy Director



General Masahisa Nakamura of ILEC proposed the Draft Bali Declaration to the participants. The Declaration was adopted by the Government of Indonesia on November 15, reflecting inputs raised from the floor at the Ceremony. Then, Governor Masaru Hashimoto of Ibaraki Prefecture, Japan announced that the next Conference, WLC17, would be held in Ibaraki during October 15-19, 2018. On behalf of ILEC, Director General Hironori Hamanaka thanked the participants and all the people got involved in the preparatory process for the Conference in his closing remarks. The Ceremony was closed by Deputy Chairman for Earth Sciences Zainal Arifin of Indonesian Institute of Sciences (LIPI). LIPI initially proposed ILEC to host the WLC in Indonesia back in 2012. It took us more than four years to make it happen, but thanks to all our colleagues from LIPI, Indonesian Ministries, and our international partners, the WLC16 was successfully organized. On the following November 11, some participants enjoyed beautiful natural and cultural sites in Bali on the Open Tour before they all flew back home. We thank all who took part in WLC16 and already look forward to meeting more lake-friends in two years time.

#### **"Biwa Kids Ambassador Project"** to Nurture Younger Generation

Shiga Prefecture, Japan has hosted "Biwa Kids Ambassador Project" since 2008 to support sustainable environmental conservation effort and to nurture younger generation for the future of the lake district. ILEC has been entrusted with this project since 2015. In 2015, the kids were dispatched to several places around the Lake Biwa to study indigenous cuisine and to Chiang Mai, Thailand for the international exchange. In 2016, the study theme was "to learn about rice farming, irrigation and creatures around rice pads." The kids went to local rice fields to find various creatures in the channels, and were dispatched to Bali, Indonesia, where WLC16 was held.

# **Pre-Workshop #1 (Jun. 18):** The Biwa Kids attended the creature observation



event held at Suhara Fish Spawning Rice Pads, where indigenous crucian carp run-up from the lake.

**Pre-Workshop #2 (Jul. 27):** The Biwa Kids visited the fisheries experimental station located in Hikone City to study the fishery in the Lake Biwa. They also learned that the most of the crucian carp released near Lake Nishinoko (a small lake in Shiga) came back to the site where they were released as fry. Then the kids went to the Kohoku Wild Bird Observatory to see various creatures living in wetlands surrounding Lake Biwa.

Lastly, they gathered at the local community center to prepare Funa-Zushi, fermented crucial carp with rice which is Shiga Prefecture's specialty. It takes six months to mature. They are looking forward to tasting it in March 2017.





**Pre-Workshop #3 (Oct. 2):** The Biwa Kids got on a boat operated by Azuchi Chamber of Commerce and Industry to explore Lake Nishinoko and its reed field. It was a great opportunity for them to learn directly from Mr. Shuzo Okuda, "the Mr. Nishinoko", about the lake history. After the cruise, they huddled together at the ILEC office to prepare presentation material for the international exchange program in Bali. They also rehearsed presentation before the JICA training participants who gave them positive advice.



**The WLC16 Kids International Exchange Program:** Four kids fom Kyoto Prefecture joined the six Biwa Kids Ambassadors and, in all, ten kids traveled to Bali from Japan to participate in the three-day program:

Day 1 (Nov. 6): As a preparatory work for the whole program, The kids attended the lectures on Balinese culture and Subak at the Udayana University. After visiting the Pasar Ikan (fish market) at Kedonganan, they headed north to the Subak Sembung, one of the Subak sites, where they explored various aquatic creatures.





**Day 2 (Nov. 7):** One of the highlights of the program came when the kids presented what they had studied in Japan in the face of about 50 Indonesian children of the Scholar Dasar Negeri 1 Peguyangan (public elementary school) located in the north of Denpasar. They also learned that the Indonesian children were working on segregated disposal of trash.

Let's Find Many Treasures of Lakes and Rivers, and Let People Know How Important They Are!



**Day 3 (Nov. 8):** In the morning, they attended the Opening Ceremony of WLC16 to launch the Kids Declaration. They were welcomed by attendee's applauds. In the afternoon, Kids Lake Forum was co-organized with the Indonesian Government in which they enjoyed edutainment game with 22 Indonesian kids. Throughout the activity in Bali, the kids had many valuable learning opportunities. We are hopeful that they will play an important role in environmental conservation in the future.

## **Report from a Former JICA Training Participant**

#### Yue Xuan Feng (China)

Mr. Yue Xuan Feng participated in a JICA-commissioned training program, "Environmental Education Focused on Fresh Water Environment" in FY 2012. He has been working as Associate Professor at School of Chemistry & Chemical Engineering, Shaanxi Normal University since his participation in the training up to the present. At the time of training, he had been engaged in environmental analysis

and participated in the training in order to response to the national call to develop a low-carbon society in China. The two-months training lodged his mind two issues: One was that Japanese enjoy perfect public hygiene, which can partly be because of their strong awareness of environment protection. The other was the scientific, detailed, immediate and instant separation of all kinds of waste. These trigged him to build up the counterpart in China spreading propaganda on water protection for sustainable development of human. Upon his return home, his research has shifted to the analytical detection techniques of various samples. Currently, he is in charge of "new strategy and practice in the field of drug development."



Mr. Yue and his research group working on the drinking water quality

In the last decade, human health issue attributed to environmental ecosystem, chemical administration and other related fields has gained more attention not only among scientists but also in general. Part of my interests focuses on the new techniques and their application in drug development. I would like to briefly introduce the readers to the strategy and practice in drug development in my lab. It is a common practice to separate and purify compounds from the traditional Chinese medicine



Exploring the floating plants in Yijun River, China with his son

(TCM) before their chemical characteristics, biological activity and toxicity are studied. Only those available will be given further consideration for animal test and enduringness evaluation. It is beyond argument that this kind of screening for natural compounds from medicinal plants is important, yet it does not often comply with the philosophy for the administration and study on TCMs. The therapeutic performance of TCM and its compound formulas are supposed to be the result of multiple compounds upon multiple targets under synergistic action, so we tend to consider the compounds in TCM and its compound formulas as a whole rather than individuals. At the advantage of GCMS, LCMS techniques and special affinity for active receptors on HUVECM, we establish several screening models for active compounds in TCM, with an aim to screen potential Tumor angiogenesis inhibitor (TAI). The applications of the established screening models, as part of the contribution to the screening methods for TCM, are carried out in the essential oil and alcohol extract of Chinese herbs Ligusticum chuanxiong Hort, Aconitum taipeicum Hand.-Mazz, and Tie Bang Chui, respectively.

## Sakura Exchange Program in Science of FY 2016

During December 5-14, 2016, ILEC carried out the 2nd "Japan-Asia Youth Exchange Program in Science" or, "Sakura Exchange Program in Science," granted by the Japan Science and Technology Agency (JST). ILEC welcomed eight delegates composed of teachers and students from Hunan Normal University, and a junior high school and primary school attached to it from Hunan Province, China and introduced them to technology in Japan and environmental education in Shiga. They visited one of the primary schools in Shiga and observed the environmental education class, where they presented traditional food from each country; Funa Zushi, or sushi made with crucian carp, among others from Shiga and black soybean curd from Hunan. In the discussion, they found out that both were fermented, tasty and had unique smells.

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



# Letter from Scientific Committee (Japan)

## ASIAN CORE Program among Universities in Japan and Malaysia



Professor Department of Environmental Engineering Research Center for Environmental Quality Management Kyoto University

Yoshihisa Shimizu

The long-standing collaboration between Japanese and Malaysian universities through the Japan Society of Promotion of Science and Vice Chancellor Council in Malaysia Program (JSPS-VCC) since the early nineties has resulted in life-long academic camaraderie and successful exchange of knowledge in multi-disciplinary areas by researchers in the two countries. The achievements of this program had resulted in capacity building of many academic staffs through the cooperative research and scientist exchange programs. During this program in 2011, Kyoto University established and opened its first overseas office in Malaysia in University of Malaya. Recognizing the many tangible and intangible benefits accrued from this prominent networking among the Japanese and Malaysian universities, it was unanimously agreed in 2008, that the academic rapport and knowledge exchange be sustained through other platforms. The proposal to start the ASIAN CORE Program coordinated by Kyoto University has come to fruition early in 2010 with the theme, "Research and Education Center for the Risk Based Asian Oriented Integrated Watershed Management." This ASIAN CORE Program is carried out by so called matching fund system supported by Ministry of Higher Education, Malaysia as well as JSPS.

We have decided to cluster 4 areas/groups of research focus under different main theme. "Hydrology Group" aims at disaster prediction and hydrologic analysis for watershed management, with consideration of climate change. It also investigates current water usage and creates governance strategy to prevent from flood/drought due to climate change. "Water Quality Group" conducts quantitative evaluation and prediction for improvement of watershed environment by applying the governance strategy scenario. This group also stimulates and predicts the effects of the scenario for watershed environment using water quality analysis models. "Environmental Risk Group" performs assessment of environmental risk of hazardous chemicals and establishes appropriate screening methodologies through creating a risk analysis model in watershed management with consideration of climate and regional specification (e.g., typhoon and flushing). "Governance Group" collects knowledge data for integrated watershed management and analyzes governance structure. This group will collect and sort diverse knowledge data and suggest proper governance towards sustainable development and conservation for watershed environment.

It is an inclusive and exclusive topic of current research interest spanning both science and non-science elements, and thus it involves many areas of discipline. It is also a topic of great interest in the face of challenges attributing to climate change and water security locally and globally. The Program is designed to create world-class research hub in selected fields in Malaysia, while fostering the next generation of leading researchers. It does this by establishing sustainable collaborative relations among research/education institutions in Japan and Malaysia. Under the Program, both countries will collaborate in cutting-edge fields of research and on research topics deemed to be of high international importance.



Symposium in Malaysia (2012)

## Sci Com General Meeting in Bali Appoints New Bureau Members

The ILEC Scientific Committee (Sci Com) Members from all parts of the world got together at the General Meeting in Bali, on the day before the opening of WLC16, November 7, 2016. The Committee, currently composed of ten internationally renowned scientists and experts in the field of lake and reservoir management and conservation, is responsible for advancing and implementing scientific matters supporting the aims of ILEC. It is reorganized every three years. The Bali Meeting was the first gathering for the current 12th term of the Committee, which started in April 2016 under the Chairmanship of Walter Rast (photo: center left). During the one-day long meeting, various agenda items related to its policies and strategies for future activities of ILEC were discussed. The Meeting also appointed Ms. Adelina Santos-Borja (center right) and Prof. Salif Diop (third from the right) as Vice-Chairs, and Prof. Sandra Azevedo (second from the right) as Bureau Member, respectively. With the support by this newly structured Sci Com, ILEC aims to further promote its international activities, especially focusing on Latin America, in addition to Africa and Asia where a number of projects have actively been pursued.



Group photo taken after the Bali Meeting (Third from the left is former Chair/currently Deputy-Director General Masahisa Nakamura of ILEC)

The list of Scientific Committee Members of 12th term is available at: www.ilec.or.jp/en/about\_ilec/scicom

# **Our Activities Overview (FY2016)**

April 11-22 ILEC takes part in the Ha Long Bay Project for Green Growth (Quang Ninh Province)

20 The WLC16 1st Japanese Committee Meeting (Otsu)

- **21-22** Delegates from the Ministry of Environment and Forestry, Indonesia visit Japan for WLC16 preparatory discussions with the Japanese Governmental agencies, JICA and ILEC (Tokyo, Otsu & Kusatsu)
- **22-28** Study tour from Vietnam to Japan under the JICA commissioned Project for Green Growth Promotion in Halong Bay Area
- May 9-11 ILEC announces the assessment results of the TWAP Lake Component at IWC8 (Colombo) [PIC1]
- 10 ILEC receives donation of 1.39 million Japanese Yen from Kansai Urban Banking Co. (Otsu) [PIC2]
- 15- ILEC takes part in the Ha Long Bay Project for Green Growth (Quang Ninh Province, through June 1)
- June 1-5 WLC16 Preparatory Meeting with the Indonesian Government (Bogor & Jakarta)
- 7-10 ILEC attends the 1st Philippine Symposium on Freshwater Biodiversity and Ecosystems (Manila)
- 17 11 delegates of students and lectures from Illinois College, USA visit ILEC (Kusatsu) [PIC3]
- 18 The Ramsar Biwa-Kids 1st Pre-Workshop (Yasu)
- 22 The WLC17 2nd Preparatory Committee Meeting (Tsukuba)
- July 15 29 delegates of students and professors from Tongji University, Shanghai visit ILEC (Kusatsu)
- 27 The Ramsar Biwa-Kids 2nd Pre-Workshop (Hikone & Nagahama)
- August 1-5 Kenya-Nakuru government officials visit solid waste management and environmental business sites in the Lake Biwa basin (Otsu, Kusatsu, Koka & Takashima) [PIC4]
- 3 The Ramsar Biwa-Kids Exchange Program at a local biodiversity forum (Kusatsu)
- **8** ILEC renews the Memorandum of Understanding (MoU) on the five-year long joint project implementation with UNEP
- 8 The WLC17 3rd Preparatory Committee Meeting (Tsukuba)
- 17-18 Training course on lake environmental management for the Lake Tonle Sap project (Kusatsu)
- 19 A JICA commissioned training program, "Integrated Basin Management for Sustainable Use and Preservation of Water Resources" kicks off (through Oct. 14) [PIC5]
- 27-28 ILBM International Symposium as the TICAD6 official side event (Nairobi)
- September 12-16 WLC16 Preparatory Meeting with the Indonesian Government (Jakarta)
- 26 9 local high school students and teachers visit the JICA training participants at ILEC (Kusatsu)
- October 2 The Ramsar Biwa-Kids 3rd Pre-Workshop (Ohmi-Hachiman & Kusatsu)
- 8 Lake Biwa citizen working groups rehearse their WLC16 presentations at ILEC (Kusatsu)
- 18 The WLC16 2nd Japanese Committee Meeting (Otsu)
- November 5-9 The WLC16 Kids International Exchange Program (Bali)
- 6 LAKESIII Workshop, in collaboration with Shiga University (Bali)
- 7 ILEC Scientific Committee General Meeting (Bali)
- 7-11 The 16th World Lake Conference (Bali)
- 28 ILEC takes part in the Ha Long Bay Project for Green Growth (Quang Ninh Province) [PIC6]
- December 5-14 ILEC hosts the Japan-Asia Youth Exchange Program in Science (Otsu & Kusatsu)
- 26 The WLC17 4th Preparatory Committee Meeting (Tsukuba)

#### 2017

- February 4 The Ramsar Biwa-Kids Ambassador take part in the regional kids watershed exchange meeting (Kobe)
- 8 WLC16 Debriefing (Otsu, co-organized with Shiga Prefectural Government)
- 10 The WLC17 5th Preparatory Committee Meeting (Tsukuba)
- 15- ILEC takes part in the Ha Long Bay Project for Green Growth (Quang Ninh Province)

March 4 A special exhibition on the 30th anniversary of ILEC "Living with Lakes" opens at Lake Biwa Museum (Kusatsu, through April 9)

11 The Ramsar Biwa-Kids Project Debriefing (Kusatsu)

TICAD6: 6th Tokyo International Conference of Africa's Development TWAP: Transboundary Waters Assessment Programme UNEP: United Nations Environment Programme















# The ILBM International Symposium in Kenya: Toward the Next Step Activities in Africa

ILEC organized an international symposium and workshop in Nairobi, Kenya as the official side event of the 6th Tokyo International Conference on African Development (TICAD 6) during August 27-28, 2016. It was co-organized with the United Nations Environment Programme (UNEP) with the aim of promoting the ILBM in Africa. At the symposium, Ms. Jacqueline McGlade (Director, the Division of Early Warning and Assessment, UNEP) and Mr. Richard Kipsang (the Minister of Environment, Energy, Water and Natural Resources of Nakuru County) gave the opening remarks, which were followed by a few lectures themed on the topics below:

- 1. Overview of UN-Environment Freshwater Activities (Dr. Eric Hoa, UNEP-Freshwater Programme)
- 2. National Government Initiatives on the Management of Kenyan Lakes (Mr. Philip Muraguri, Ministry of Water and Irrigation)
- 3. ILBM and Ecosystem Service Shared Value Assessment (ESSVA) for ILBM Platform Process (Prof. Masahisa Nakamura, Deputy Director General, ILEC)

Participants discussed the needs of Lake Environment Database and also of the ILBM that should be infused in the Integrated Water Resources Management (IWRM). On the second day of the



workshop, several more presentations were given, which were followed by a panel discussion themed "How Should ILBM Be Integrated into the Kenyan National Strategy for Sustainable Lake Basin Management?" At the end of symposium, the participants agreed on the following items:

- 1. Develop National Lake Basin Management Strategy that echoes the achievements and challenges. The Strategy will provide a clear roadmap to implement ILBM-ESSVA to benefit all Kenyan lakes. It is required to have a clear communication strategy.
- 2. The adoption of the Green Economy Strategic Plan model by government was proposed as a good starting point.
- 3. The ILBM Lake Briefs should regularly be updated.
- 4. Each lake basin should develop an implementational/conceptual framework covering their unique attributes.
- 5. We should put emphasis on the "Participatory Pillar" to enhance education particularly for children.

It was a great achievement of this symposium that the personnel in charge of each lake in Kenya spontaneously decided to formulate a strategic plan as a team and to propose it to their national policy.





#### Thank You for Your Support!

• In 2016, ILEC received sponsorship from the following Supporting Member Organization (90,000 JPY or more)



INTERNATIONAL LAKE ENVIRONMENT COMMITTEE FOUNDATION (ILEC)



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