



# NEWSLETTER

*International Lake Environment Committee*

**=Promoting Sustainable Lake Management=**

This Newsletter is also available in Japanese.

## Toward Fiscal 2006 ... Hironori Hamanaka, Director General of ILEC

Lakes have truly diverse values.

Some lakes are used for fishing and leisure while others are used for water and flood control. Lakes also have cultural value, offering scenic beauty to visitors and providing gorgeous backgrounds for characters in novels

Among these diverse values, however, you may say that the most important value of lakes lies in the function as water resources. Ninety percent (90%) of the liquid freshwater on the surface of the earth is thought to exist in lakes. Since freshwater is easily available, it sustains the life of living creatures and is used for agriculture and industries. Thus, freshwater is indispensable for our life.

Today, over 6.5 billion people live on earth. Issues and problems about water resources and lakes are becoming increasingly important because the survival of human beings and the future of civilizations hinge on solutions to such problems.

Thus, lakes are vital for people. However, lakes are facing mounting issues and problems in many parts of the world.

For example, an increasing number of lakes have been polluted due to the expanding activities of people. Some lakes have shrunk or disappeared due to droughts and excessive use of water. Hazardous materials have also flowed into many lakes. Many invasive species have been uncontrolled and changing the ecology of lakes. Notwithstanding that these problems have emerged in different environments and from different social conditions surrounding the use of lakes, all of these problems are of vital concern to those who live by lakes and depend on the water from these lakes and their basins.

Ever since the International Lake Environment Committee Foundation (ILEC) was formed in 1986, ILEC has continued over the last two decades to appeal to the international community for the importance and means of

sound environmental management and sustainable use of lakes.

Administrative officials in charge of water supply around the world have gradually begun to understand the role and significance of lakes. ILEC's efforts bore fruit in the declaration adopted at the 11th World Lake Conference, held for the first time on the African continent in 2005 in Nairobi, Kenya. The declaration even pointed out that the preservation of lake environments is a central theme in issues and problems of water in the international community.

Based on ILEC's achievements over the last twenty years, ILEC firmly believes that it is entrusted with the mission of defining and propagating principles and methods for appropriate management of lakes and their basins for sustainable use.

More specifically, ILEC is determined to take the initiative in solving problems concerning lakes around the world based on two concepts, the World Lake Vision and Integrated Lake Basin Management. With these two driving principles in mind, ILEC will continue to seek cooperation with individuals and NGOs.

ILEC's support of activities is still in a difficult financial position. As we will continue to make every effort in securing revenue via fund management and other means, ILEC would like to ask for your continuing financial support and contributions.



Tsudaie, an attached lake of Lake Biwa near ILEC

*IN  
THIS  
ISSUE*

- Toward Fiscal 2006 ...
- Outline of ILEC's Projects for Fiscal 2006
- GEF-Lake Basin Management Initiative Project Report and CD-ROM Completed
- The latest move in ILEC Scientific Committee
- The Survey on Promoting Partnership between Citizens and Local Governments in Lake Management commissioned from the Ministry of the Environment
- Sessions held by ILEC on the 11th World Lake Conference
- JICA - Integrated Lake Basin Management Course
- One World Festival
- Lakes of the World: Chilika Lagoon, India
- "World Lake Vision Action Report" Kicked-off
- ILEC deeply appreciates your continued contributions.

# Outline of ILEC's Projects for Fiscal 2006

The ILEC Board of Directors' meeting and the council, both held on March 14, 2006, examined and approved projects and budgets for fiscal 2006, which are outlined as follows:

## 1 Promoting activities based on the World Lake Vision

To promote activities based on the principles of the World Lake Vision, announced jointly by ILEC, Shiga Prefectural Government, and UNEP International Environmental Technology Centre (IETC) and other supporting organizations at the 3rd World Water Forum held in March 2003, ILEC has prepared Actions for the World Lake Vision to provide guidelines for preserving lakes and reservoirs. ILEC also plans to hold a workshop in September 2006 at Lake Chapalla in Mexico, to promote the World Lake Vision in the Central and South American regions.

## 2 Propagating and promoting Integrated Lake Basin Management (ILBM)

ILEC will translate reports on the Global Environmental Facility (GEF) projects into different languages in order to promote ILBM, a type of management attained through projects financed by GEF. ILEC will also hold subcommittee sessions at Stockholm during World Water Week in August 2006.

## 3 Planning and Cooperating for the 12th World Lake Conference

In cooperation with the Ministry of Environment and Forests of the Government of India, a cosponsor of the 12th World Lake Conference, ILEC is preparing for the conference to be held in 2007 in Jaipur, India.

During World Water Week, ILEC will hold a kick-off meeting that calls for participation.

## 4 Building World Lake Database and Knowledge Base

ILEC will work for the formation of a uniquely interconnected World Lake Database and Knowledge Base system to solve problems of the present World Lake Database of ILEC.

## 5 Lake Research Awarding Project

At the request of Shiga Prefectural Government, ILEC is going to administrate the steering committee for the 14th Ecological Lake Biwa Prize, promote PR activities, and steer the screening committee.

## 6 Implementing JICA Training Programs

ILEC will implement Integrated Lake Basin Management Course and Environment Education Course Focused on Fresh Water Environment II at the request of the Japan International Cooperation Agency (JICA), an independent administrative institution in Japan. These training programs target administrative officials, researchers, teachers, and other engineers from governments and high-level educational institutions in developing countries.

To implement these projects, ILEC has appropriated ¥57,842,000 of general accounting budget and ¥71,410,000 of special accounting budget for fiscal 2006.

## GEF-Lake Basin Management Initiative Project Report and CD-ROM Completed !!

The GEF-Lake Basin Management Initiative Project Report and CD-ROM have been completed. Please contact ILEC secretariat for more information. You can also download the full-text of the report (English and Japanese [tentative translation]) from ILEC website [www.ilec.or.jp](http://www.ilec.or.jp) as well.



# The latest move in ILEC Scientific Committee

The ILEC Scientific Committee General Meetings were held on 31 October and 5 November 2005 on the occasion of the 11th World Lake Conference in Nairobi, Kenya. There were 14 participants, and the following items were discussed: Restructuring and reorganization of the ILEC Scientific Committee; the 12th World Lake

Conference to be held in India in 2007; Workshop in World Water Week in Stockholm in August 2006; Distribution of the Journal "Lakes & Reservoirs" and so on. Also, delegates for the 11th World Lake Conference from the government of India joined the second meeting on 5 November and provided the SciCom members with information and on the

status of preparation in India for the 12th World Lake Conference to be held in Jaipur, India.

In particular, the issue of restructuring and reorganization of the ILEC Scientific Committee was also discussed in the SciCom Bureau Meetings which were held through 17 to 19 March 2006 on the occasion of the 4th World Water Forum in Mexico. The discussion took the balance among the field of study, region, and gender into account based on the information regarding current members' intention to continue or resign as a member and the recommended candidates for new members, which were collected from all the current members in advance. There was also an idea proposed for the new vision for the restructured SciCom as well.

The SciCom General Meeting will tentatively be held in Stockholm on the occasion of Stockholm World Water Week in August 2006. All the current members and the new members will be meeting and further discussing the future goals and plans.



Scientific Committee General Meeting (in Nairobi)

---

## The Survey on Promoting Partnership between Citizens and Local Governments in Lake Management commissioned from the Ministry of the Environment

The objective of this survey is to find out the applicability of the experience, lessons, and the efforts made for building and maintaining partnerships between local people and local governments in lake basin management by comparing and contrasting them as reported from several lake basins in the Asia and Pacific region.

This survey focuses on five lakes in the Asia region: Lake Biwa (Japan); Lake Poyang (China); Lake Daecheong (Korea);

Lake Laguna (the Philippines); and Lake Toba (Indonesia). Firstly, a fact sheet was distributed to each case reporter in order to collect general information on the lake basin and the activities of the lake basin environment conservation by stakeholders in the area. Following the fact sheet, a case report with detail information of their activities was submitted. The background and detail activities for the partnership between local people and local government, the similarity and differences,

the outcomes and lessons were selected from each report and compiled as recommendation.

The report of this survey tries to capture the issues relating to lake basin management in diverse viewpoints by including chapters on the challenges for local people in utilizing Geographical Information System (GIS) for the lake basin management and on the lessons from the GEF-LBMI project.

# Sessions held by ILEC on the 11th World Lake Conference

## World Lake Vision Special Session

The World Lake Vision Special Session was held in the Amphitheatre of Kenyatta International Conference Centre on the evening of October 30th 2005. It was co-organized by ILEC and Shiga Prefectural Government. Its objective was to bring together on-going activities based on the World Lake Vision (WLV) around the world and to further the implementation of the WLV. The session had one keynote speech and five case presentations.

Prof. Rast (USA), drafting chair for the development of the WLV, reiterated in his keynote speech that the WLV is a call to action and a continuing effort is

necessary to achieve its goal. He concluded by saying speech that the WLV and the Integrated Lake Basin Management should go together as the two wheels of the vehicle to facilitate the management of lakes and resources for sustainable use.

Ms. Santos (Philippines) presented the effort to practice and disseminate the WLV's guiding principles in the Philippines, including the creation of a Philippine Lakes Vision. Mr. Anshari (Indonesia) reported the initiative to form a lake forum at national level, Yayasan Danau Indonesia

(YDI) for the development of Indonesian Lake Vision. Ms. Michael (Mexico) called for the application of the WLV principles to sustainably manage Lake Chapala. Mr. Lwanga (Uganda) discussed how the WLV principles are being applied in their lake management mechanism (LAGBIMO) of Lake George. Mr. Kuria (Kenya) reported the development of "Nakuru Vision" and action plans based on it.

After case presentations, ILEC announced to prepare the WLV Action Report to encourage the implementation of the WLV principles. The report will be presented at the next World Lake Conference in India in 2007. Finally Prof. Magadza's wrapped up the presentations to close the session.

Along with the session, the translation versions of the World Lake Vision were displayed in front of the session venue. By now it has been translated into 10 different languages, which indicates that WLV is one of the most multi-language translated set of documents of this kind. At the end of the Conference, the WLV was appreciated in the "Nairobi Resolution" as one of important contributions in promoting the sustainable lake management.



World Lake Vision Session

## Public Participation in Lake Management (Session 5-A)

The session was co-organized by ILEC and Shiga Prefectural Government on 31 November 2005. It was chaired by Dr. Shinji Ide (Japan) and Dr. Ong'ang'a (Kenya) with eight oral presentations which covered wide range of topics in relation to public participation in lake management. The session room was full of participants, indicating that public participation is one of the hottest topics in lake management.

Mr. Romulus (Kenya) presented an all stakeholders driven management plan for Lake Kanyaboli and the surrounding Yala swamp wetland in

Kenya. Mr. Calcagno (UNEP) clarified the concept of "public acceptance" through experiences in the UNEP-Dams and Development Project. Mr. Naruse (Japan) introduced firefly related activities conducted by Akanoi-Biwako Environmental Citizens' Initiative in Japan. Dr. Ide (Japan) analyzed the features of "Basin Consociations" around Lake Biwa, Japan, in the context of traditional and modern community-based organizations (CBOs). Mr. Ono (Japan) brought forth the results of questionnaire survey for consensus building between local citizens and government on sewage works for Lake

Biwa. Mr. Troell (USA) gave an introduction to the establishment of community-based fisheries management institutions in the three East African Community States surrounding Lake Victoria. Mr. Fujiyama (Japan) showed effectiveness of Web-GIS systems for information sharing in participatory lake management. Mr. Tola (Kenya) compared the roles of local communities in lake basin management between Kenya and Japan.

In the discussion that followed presentations, it was pointed out that 1) capacity building of traditional CBOs is



essential for watershed management, 2) however, traditional CBOs by themselves cannot achieve the goals due to their limitations, there is a need to organize new CBOs, 3) the terms “participation” and “involvement” should be used carefully as they are top-down approach terms used by governments but not by people, 4) involvement of multiple CBOs is crucial for basin-wide activities, however, then some political issues come in. Nevertheless, all the participants in the session agreed that local communities play the key role in lake basin management and organization of local population should be made based on traditional CBOs in the area.



Public Participation in Lake Management Session

## Citizen/NGOs meeting

The meeting was co-organized by ILEC and ITDG-Practical Action (Kenya) with the support of Living Lakes (International network on lakes) on November 1, 2005. The objective was to share information and experiences among citizens and NGOs in Lake Management. The meeting had two sessions, 1) Application of GIS (Geographic Information System) in lake management, and 2) NGO's Lake Management Activities in East-African countries.

The 1st session had three case presentations. Mr. Kuria (Kenya) presented their activities in Nakuru using GIS for monitoring urban environment

performance. Mr. Naruse (Japan) talked about GIS application to improve water quality and protect fireflies in their community near Lake Biwa. Mr. Fujiyama (Japan) introduced how Web-GIS is effective in promoting participatory lake management. The session confirmed the usefulness of GIS in sharing information among citizens, but also they noted that information stored in good structure of data bases is not useful unless some actions are taken guided by the information.

The 2nd session focused on NGO-led initiatives and activities for sustainable lake management being undertaken in East Africa. Mr. Benedict

(Lake Turkana, Kenya) presented “Turkana Community Conservation Project” for the sustainable fishing involving communities. Dr. Ong’ang’a (OSIENALA, Kenya) introduced capacity building efforts within communities in West Kenya. Mr. Kamuren (Lake Bogoria, Kenya) emphasized the importance of culture to empower the locals in managing the natural resources. Mr. Kisebo (Lake George, Uganda) addressed the need for empowerment of the local community to implement the sustainable programmes in water and sanitation. Mr. Troke (Lake Magadi, Kenya) discussed the problems of Lake Magadi caused by mining of soda factory. Mr. Gawayya (Uganda) focused on trans-border issues in environment conservation. Mr. Orwa (Tanzania) reported about an initiative to strengthen capacity of the riparian communities. Mr. Kags (Ministry of Water and Livestock Development, Tanzania) introduced conservation measures taken by his Ministry for Lake Natron.

Participants learned that a wide range of activities are taking place in East Africa. They also recognized a need for networking NGOs and enhancing information exchange so that NGOs can benefit each other and provide complimentary activities to the government more effectively.



Citizens / NGOs meeting

# JICA - Integrated Lake Basin Management Course

ILEC has held the Lake Water Quality Management Course commissioned by the Japan International Cooperation Agency (JICA) from 1991 to 2005. The number of participants who have completed this course is 155 from 40

countries.

In 2005, ILEC reviewed the contents of the course. It was decided to continue under the title of JICA - Integrated Lake Basin Management Course, mainly focused on "sustainable use of lakes".

The period of this fiscal year's course was from January 16 to March 17. Eight trainees from 7 countries participated, one each from Brazil, Colombia, Guatemala, Kenya, Syria, Macedonia, and two from Ghana.

On the course, the participants obtained various knowledge and skills through the curriculum, for example, interacting with local NGOs, visiting to water supply plants and sewage-treatment plants, studying in Tokyo and Hiroshima, in addition to the studying at ILEC. At the end of the course, each trainee made an action plan to implement in his or her own country as a outcome of the study. It was wonderful experience for the participants to learn the lifestyle and culture of Japan through such activities as the homestay program organized by the Kusatsu Interpeople Friendship Association (KIFA), the New Year's party of KIFA, and Japanese language class organized by organized by JICA at ILEC in the night.



with Course Leaders (Prof. Matsui and Prof. Nakamura)

## One World Festival

The international community is facing many issues, such as environmental destruction, human rights suppression, ethnic battles, an increase in refugees and widespread poverty. To solve these growing global problems, it is very important for all us to think of tasks for ourselves and to act.

One World Festival has been held since 1993 for the purpose of informing many people about the importance of international cooperation and providing opportunities to take part in the international activities. This festival assisted by NGOs, International Organizations, Municipal Governments and Companies in the Kinki region has many programs, for example, symposiums, exhibitions of various organizations, ethnic foods corners, shows of ethnic music and dancing.



ILEC exhibition

This year's festival was held in the International House Osaka on 4-5 February. ILEC took part in the Festival and displayed of photographs of activities of ILEC such as the 11th World

Lake Conference in Kenya, the Environment Education Class for Children, and JICA Training Courses. It was a good opportunity to show activities of ILEC to many participants.

# Lakes of the World:

## Chilika Lagoon, India

Ajit K. Pattnaik, Chilika Development Authority, Bhubaneswar, India,

The Chilika Lagoon is the biggest lagoon on India's eastern coast. Its size fluctuates substantially within the course of a year, with a maximum area of 1,165 km<sup>2</sup> during the monsoon season and a minimum of 906 km<sup>2</sup> during the dry season. It is of relatively recent origin, being formed several thousand years ago. Freshwater runoff from the drainage basin, combined with saline water inflows from the ocean, result in a wide range of fresh, brackish and saline water environments within the lagoon, with this spatially and temporally diverse water environment supporting an exceptionally productive ecosystem.

The lagoon is a well-known wintering site for migrating birds; approximately half of the over 211 species recorded at Chilika are intercontinental migrants from far parts of Asia, including the Caspian Sea, Lake Baikal and Siberia. The lagoon is also only one of two lagoons in the world that is home to the Irrawaddy dolphin (the other being the Songkhla Lagoon in Thailand). Its rich biodiversity, along with the beautiful scenery of the area, attracts many bird watchers and ecotourists. The lagoon is also extremely important for the local population, not only as a source of livelihoods (mainly through its fisheries) but also as a focus for cultural, religious and spiritual activities.

Unfortunately, Chilika was facing a series of problems by the 1990s that impaired many of its uses. Major problems were related to a decreased salinity in the lagoon, caused by a narrowing of the lagoon mouth. The gradual choking of this outlet to (and inlet from) the sea was a result of the accumulation of sediment entering the lagoon from the drainage basin. Because

the tidal flux was disturbed, the lagoon's salinity decreased, thereby altering the natural ecosystem. The area and depth of the lagoon decreased; the area covered by freshwater macrophytes increased; biodiversity decreased; and fish catches declined. Some lands near the lakeshore also were waterlogged at certain times because the natural release of floodwaters through the lagoon mouth was constrained. In addition to the clogging of the lagoon mouth and the salinity-related problems, there also have been changes in the quantities and timing of freshwater flows because of upstream riverine impoundments for irrigation and flood control. There also has been a general increase in pollution from agricultural, aquacultural and domestic sources in the drainage basin.

Traditional fisherfolk were particularly hard hit by these problems. The decline in fish catches led many to use a smaller mesh size, thereby putting even greater pressure on the fisheries and further complicating the problems. Pressure to maintain livelihoods seems to have contributed to poaching of migratory birds and logging activities in the watershed. Compounding the difficult situation was a change in government policy regarding the lease of fishing grounds (that affected fishing rights), resulting in the loss of access by traditional fisherfolk to many fishing grounds and a rise of commercial prawn culturing. Conflicts over this issue resulted in violent clashes and several deaths.

The Chilika Development Authority (CDA) was created in 1992 as a coordinating body between the wide range of institutions and people with a stake in the lagoon and its basin. The

CDA has worked closely with departments of the State Government of Orissa to improve conditions in the lagoon. The most noticeable decision to date under the guidance of the CDA was cutting of a new opening in 2000 to the Bay of Bengal, and dredging the channel between the outer channel and the rest of the lagoon. The result was a restoration of the flow regime, leading to a dramatic improvement in the lagoon's salinity conditions and amelioration of many problems caused by the declining salinity. As examples, fish and crab catches (and income for fisherfolk) have markedly increased; macrophyte coverage has declined; and some rare and endangered fish species have returned. A monitoring program was instituted, a management plan was drawn up and environmental flow releases are being negotiated from the upstream irrigation impoundments. It is notable that the decision to open the new mouth and dredge the channel was based on both scientific studies and extensive stakeholder consultations.

Challenges undoubtedly remain. Addressing upstream problems (e.g., siltation, untreated sewage, changes in the hydrological regime) will require much effort. However, conflicts over fishing have abated mainly due to enhancement of the fishery resource. Furthermore, it is encouraging to note that the Chilika Lagoon, after being placed on the Montreux Record (Ramsar's list of sites undergoing ecological degradation) in 1993, was awarded the prestigious Ramsar Wetland Award in 2002 in recognition of the improvements and was removed from the Montreux Record due to the successful restoration of the lagoon ecosystem by the CDA.

## *“World Lake Vision Action Report” Kicked-off*

The World Lake Vision Action Report will be prepared to promote the implementation of the World Lake Vision (WLV).

This project was proposed by ILEC in October 2005 at the WLC11 held in Nairobi, Kenya. In response to ILEC's invitation, 14 experts and practitioners for lake management around the world gathered in Mexico City on March 19, 2006 at the occasion of the 4th World Water Forum to kick-off the project and set up “WLV Action Report Committee”, which will be a key mechanism to prepare the Report. Participants chose Walter Rast, Professor of Texas State University (USA) as Chairman of the Committee, who acted as Drafting Chair to formulate the WLV. They also discussed how to make the report a practical one to support the implementation of the sustainable lake management based on the WLV Principles.



Action Report Committee (in Mexico City)

The report will be prepared by the following time table.

March - July 2006	Call for Papers
November 2006	Working Group Meeting to draft a report
December 2006 - February 2007	Peer review
March 2007	Printing

The final report will be presented at the WLC12 to be held in India in October-November 2007. We are looking forward to your case study report. For details, see ILEC Website at [www.ilec.or.jp](http://www.ilec.or.jp) or contact at [wlvacr@ilec.or.jp](mailto:wlvacr@ilec.or.jp).

## *ILEC deeply appreciates your continued contributions.*

ILEC would like to introduce the major contributors who have continued to support ILEC's activities over the past years.

ILEC hereby expresses its deep appreciation for them and promises to transfer your goodwill to the environmental preservation of lakes around the world.

Major contributors (in the order of the Japanese syllabary)

Ayaha Corporation  
Kinki Labor Bank  
Koto Shinkin Bank  
Shigagin JCB Inc.  
Shigachuo Shinkin Bank  
Shiga DC Card Co., Ltd.  
Central Finance Co., Ltd.  
Felissimo Secretariat



INTERNATIONAL LAKE ENVIRONMENT COMMITTEE

–Secretariat–

1091 Oroshimo-cho, Kusatsu-city, Shiga 520-0001, JAPAN  
TEL +81-77-568-4567, FAX +81-77-568-4568, E-mail: [info@ilec.or.jp](mailto:info@ilec.or.jp)