Every living creature needs clean and safe drinking water. One of the major challenges of humanity today is to balance increasing demands for fresh water and integrity of fresh-water biodiversity and aquatic environment. More than 1/3rd of the humanity today is living without adequate fresh water and forecasts state that two thirds of the World population will be without safe drinking water by the year 2025.

The wetlands and rivers, store more than 90% of the liquid fresh water on earth surface, are important for human development due to the important ecosystem and livelihood supports they provide. The environmental conditions of most lakes are in a steady decline due to severe anthropogenic pressures and deserve immediate conservation attention to overcome the imminent water crisis.

Coastal backwaters and inland water bodies are economically efficient systems, now fast declining due to lack of care, improper management, over exploitation and lack of awareness. One of the hopes of wetland conservation lies in the ‘active involvement of the dependent communities’ in the management of natural resources. This can be strengthened by institutionalizing community rights over protection and harvest of the natural resources.

Vembanad Lake (Kerala) - the largest tropical wetland ecosystem on the southwest coast of India is only next to the Arabian Sea in terms of supporting maximum livelihood activities. Apart from this, Vembanad Lake has immense conservation importance as a designated Ramsar site. Since livelihood activities of a large number of people are directly dependent on the Lake, the deterioration of extent and quality of the lake leads to increased conflicts. ATREE is trying to address some of the conservation issues faced by Vembanad Lake by bringing together local communities and institutions to strengthen wetland management. Through its Community Environmental Resource Centre (CERC), established at Alappuzha, ATREE aims to build multi-sectoral and multi-stakeholder partnerships at the local level to influence decision making, increase coordination between stakeholders and strengthen their capacity to address the various issues related to the sustainable management of Vembanad Wetlands.

If Kerala is ‘God’s own country’ as it is popularly known, Vembanad Lake is the ‘signature of Almighty’ leasing out his land to humanity. ATREE’s Vemabanad Team is happy to present this News Letter ‘Vembanad’, reflecting the charm (and agonies) of this magnificent lake with a special focus on its conservation issues.

- Priyadarsanan

“Oh! Water stream, come near to me. You are the elixir of immortality”

Atharva Veda, 3:13:6

Wetland Festival

ATREE, along with Kerala State Land Use Board and WWF—India has organized ‘Wetland Festival—2008’ at Alappuzha to celebrate the ‘World Wetlands Day’ observed on February 2nd. The program was attended by students and stakeholders of the wetlands of Kerala. The day was marked by several events to spread the message of wetland conservation. Read more about the celebrations in the Wetland Festival Supplement on page 4 and 5.
What is at Stake?

The functions performed by the wetlands in biodiversity conservation, flood control, livelihood assistance to the people living around, water shed services and services to the industries around are incredible. Stakeholder awareness and capacity building initiatives for managing Vembanad Socio-ecological system, is an important program of CERC. Interactions with various communities including leaders of community organizations, Government officials at local level, local self governments, self-help groups, political unions and other groups revealed that respective stakes are unique and require an understanding of local conditions and realities.

There is conflict of interest among the primary stakeholders in Vembanad. Such interests emerge to the forefront by various groups while stakes are discussed. Incorporation of such stakes and interests into the planning and implementation of activities of the program is important for achieving the goals of wetland conservation and management.

Way Forward

Departmental support systems and the roles of Panchayath Raj institutions in resolving pertinent issues under local planning process are being assessed. The functions of the existing co-operative societies to safeguard the interest of each sector will also be analyzed. Approach papers and action plans will be prepared and shared in various forums to draw attention of all concerned policy makers, local leaders, stakeholders, to the critical situation. Citizens’ reports will be developed on the basis of surveys and policy analysis.

Panchayath Raj Institutions (PRI) have to play a significant role in implementing any environment management plan. Appropriate capacity building of PRI leaders in association with various training institutes of the Government such as Kerala Institute for Local Administration (KILA) is also on our agenda.

ATREE feels duty bound to assist the PRIs in Vembanad wetland region to develop environmental management plans as part of their annual development plans during the 11th plan period. We are exploring the possibility of combined workshops with KILA to organize vision sharing workshops in this context.

The role of media in highlighting the major issues will be channeled suitably. Various Government policies in the pipeline need a closer look for facilitating remedial intervention to the sector. Such Policy bridging initiatives at the State and National level will be another target to fulfill.

- Latha Bhaskar
Jalapaadom Becomes Popular in Vembanad Schools

Jalapaadom (Lessons on water) is a unique environmental education program designed for the students in the Vembanad region. The program aims to create awareness among the students about the ecological functions of the lake ecosystem and about the socio-cultural and economic significance of wetlands. Ultimately this is expected to motivate the young generation to appreciate the values of wetlands, so that they become advocates for wetland conservation. Jalapaadom is implemented in 40 village schools and a few colleges and Teacher Training Institutes adjoining Vembanad Lake. The project activities are carried out through Wetland Study Centres (WSCs) established in each participating institution.

Each Wetland Study Centre has 60 to 80 active members. Convener and Joint conveners were selected from among the students and two teachers were selected to coordinate the activities of WSC in each school. Formal inaugurations of the study centers were organized in all these schools thereby initiating the functioning. Weekly meetings, invited lectures, documentary screening, notice boards displays, competitions, field trips, etc. are among the activities of WSCs.

- T. D. Jojo

Rays of Hope ....

To be in the land of the famed and endemic Vechoor cow was good enough. But little did I expect the response from the children who assembled for the first interaction about Wetland Study Centre at the Vechoor Devi Vilasom School, in the tiring pre-lunch hours!! But the bubbling group that assembled surprised me. The teacher in charge, Mr. Sivankutty’s introductory speech reflected the depth of awareness and knowledge about the complex issues ranging from tourism to land based toxins that are impacting the integrity of the Lake. The student group numbering 80 listened with a lot of attention while Jojo and me explained the uniqueness of Vembanad lake, its impact on the “ecology and environment” especially since it is part of their everyday life. Gokul, the President and Sreelakshmi the Secretary of the Student Wetland Study Centre were confident about their roles and responsibilities, though shy in addressing the gathering.

The experience in the Kudavechoor St. Michael’s Higher Secondary School was different as the students were mostly from higher classes. Students are enthusiastic about the purpose and aim of WSCs and are committed to conserve this lake for future generations. The sprawling campus of the school touches the banks of the lake and many of the participants come to school by boat. The teacher in charge Mr. Sibi Joseph quickly arranged the students in the big hall – a mixed group of very obedient girls and boys who were tensed about the upcoming School Youth Festival. The response to the class on ‘ecology and environment and the need to have a research mentality in life’ was exciting. Data collection through close observation of the surroundings as a research methodology was appealing to many of them.

The ABVHS School at Muhamma stands in the midst of a huge sandy campus with trees and an old building. Mr. Ajjithal extended all help to assemble a group of 40 students. His introductory speech linked the need for commitment to nature and society. The children displayed very strong interest and were able to list the unique features about Vembanad Lake. The project that was done last year on migratory birds by an outgoing student also proved the awareness of the teachers have about local ecology and nature.

These are few interactions and responses from the schools we visited. The silent, yet strong commitment of the young minds provides rays of hope.

- Anitha Sharma
Jaladarpanam — A Participatory Program for Water Quality Monitoring

Water bodies reflect the hygiene habits of the community living around it. The growing population pressure, migration, emergence of new stakeholders, private dominance of resource allocation and use and the granting of rights by the Government to use the water body without evaluating its cumulative impact on the wetland and its biota, have all led to uncontrolled lake contamination. This deteriorated water quality of the lakes causes water borne diseases, thus affecting the well being of the people and habitat needs of other life forms. Constant monitoring of the water quality operative societies, youth clubs, clam collectors, women self help groups, as well as some educational institutions. Initial training was provided by the CERC team. A series of technical training sessions to screen the water samples using field test kits is scheduled. The results will be carefully documented. Further water quality testing will be done in certified laboratories identified for the purpose and with whom partnerships have been installed.

A query to the UNDP Solution Exchange website for Water community on lake water monitoring received several expert opinions. The PDF version of this consolidated Reply can be found at http://www.solutionexchange-un.net/environment/cr/cr-se-wes-15110701.pdf. Collective action, ranging from grass root level to policy level is hoped to be achieved through the combined efforts of ATREE—CERC and the enthusiastic partner teams around the Lake along with the respective Panchayaths.

- Latha Bhaskar

College students hunt for the pathogens

Absence of proper sewerage systems on the banks as well as houseboat tourism cause direct faecal contamination of Vembanad Lake. As a result the Lake is becoming a cesspool of diversity of pathogens. Alappuzha district is known for seasonal outbreaks of diseases like Cholera and other Gastrointestinal diseases. Sandeep and Sophia, MSc. students of M. A. College for Advanced Studies, Tiruvalla are all set to hunt for the microbial pathogens of Vembanad lake under the guidance of Dr. Jaya-chandran. This ATREE supported student project will help in mapping the magnitude and diversity of pathogens present in the water of Vembanad lake as well as the hotspots of bacterial contamination in the lake.

Upcoming Activities

- Inauguration of Jaladarpanam
- Inauguration of Basin Stations for water quality monitoring
- Survey among primary stakeholders
- Workshops for PRI Leaders on preparation of Environmental Management Plans
- Summer camps for students
- Field trips for students of Wetland Study Centres

Fourteen Caretaker Teams of stakeholders join the mission to monitor and protect the water quality.

Fourteen Caretaker Teams of stakeholders join the mission to monitor and protect the water quality.

Water is stagnant and of poor quality in many canals

Plunder the future

Water bodies mirrors the hygiene habits of community living around.
Bridging Knowledge Gaps

Environmental and socio-economical data about Vembanad Lake are collected by several organizations and individuals for various purposes. Much of this data is collected as part of scientific research, donor-funded projects, monitoring activities and environmental impact assessments. However, many potential users within and outside the stakeholder domain either do not know that this data exists or do not know how to use it. Currently, integrated data and information systems in the region are so underdeveloped, that the available information cannot be effectively applied to address environmental questions. Those seeking data on Vembanad are often faced with a confusing array of bureaucratic procedures and proprietorships, which often prevents civil society institutions and others from designing appropriate interventions, taking informed decisions or adopting the best practices. ATREE is developing an integrated environmental information system for Vembanad lake which will address the requirements of conservation planning, education and activism of the region. The initial phase of this system will contain a reference library, a web site and a geographical information system accessible to the public.

As part of the system, a reference library is already been established at the ATREE – CERC. The library have a good collection of research papers, study reports, and other reference material about the Vembanad Socio-ecological system. The work on the web based and geographical information systems are in progress.

- Kiran M.C.

Opposite Directions ?

Recent boom of wetland tourism bring profits to those associated with it, but the resultant ecological degradation affects several traditional stakeholders.

Vembanad

Draft of Kerala State Land Policy is released by Government of Kerala to strengthen the land reforms, protect Government and farm land and prevent land misuse and ‘theft’. Releasing the draft, Revenue Minister K P Rajendran said the Government plans to bring in stringent laws to prevent illegal purchase and possession of land in the state. A wetland information system and a wetland management system are planned as part of the policy to ensure the judicious use of water resources, rivers, backwaters and other wetlands. These wetlands will be declared as protected zones through necessary laws. Land-filling and conversion of these areas for other uses will be restricted.

People Friendly Tourism Policy: The benefits of the tourism industry should be evenly distributed among all sections of the society rather than just a handful of capitalists, opined the Tourism Minister of Kerala, Shri. Kodiyeri Balakrishnan. A new people friendly tourism policy is on the anvil aimed at removing the monopoly of big players in the field. The functioning of the Tourism Department will be optimized to bring betterment in the lives of traditional workers. More emphasis would be laid on the conservation of nature.

Kerala State Water Policy-2007 draft published for comments by Government of Kerala. The document is available at the website http://www.kerala.gov.in/waterpolicy/index.php and the public can express their opinions through the site.

Lantana: a menace to sobriety?

The negative effects of invasive species on biodiversity and well being of human societies are well known. Of all the invasive plants, Lantana camara may be the most pervasive. In an innovative approach to manage this menace, ATREE encourages local communities for effectively using Lantanta for making furniture and other assorted articles. In Periyar Tiger Reserve (PTR), Kerala, ATREE joins hands with Kerala Forest Department and Periyar Foundation to provide training for marginalized communities in the peripheries of the Reserve in making furniture and other assorted articles out of Lantanta. This supplements their livelihoods and help PTR in controlling this growing menace. ATREE is one of the pioneers in this field and helping local people in Natham (Tamil Nadu) and MM hills (Karnataka). These eco-friendly products could capture the markets and also help to reduce the pressure on existing bamboo and rattan stocks. The activity at PTR was initiated with a small grant received by Mr. Bipin Charles, a former employee of ATREE, from Earth Watch Institute as part of HSBC’s Corporate Social Responsibility programme which was matched by ATREE.
World Wetlands Day is observed on February 2nd every year to commemorate the signing of the U.N. Convention on Wetlands, known as Ramsar Convention. This is an occasion to join together to acknowledge the benefits that we receive from wetlands, and to help raise the awareness about the importance of wetland ecosystems in sustaining the life on the earth. The theme suggested for this year's wetland day was "Healthy Wetlands, Healthy People" that will also be the theme for Ramsar’s 10th meeting of the Conference of the Parties.

ATREE has celebrated this year’s wetlands day as ‘Wetland Festival-2008’ in Alappuzha, Kerala in collaboration with Kerala State Landuse Board and World Wide Fund for Nature-India (Kerala State Office). The program was targeted for students and other stakeholders of the wetlands of Kerala. It provided an opportunity for the students of Wetland Study Centers (WSC), partners of Jaladarpanam (Participatory water quality monitoring program) and other stakeholders to express their views, thoughts and creativity and highlight their concerns in wetland conservation. This occasion provided a platform for Government agencies, NGO’s and other interested groups to come closer and work together for wetland conservation.

This celebration, which was first of its kind in India, was well accepted by the participants. Around 600 participants attended the festival held at St. Josephs GHS, Alappuzha on the 2nd of February 2008. The participants included students, teachers, media, general public, members of self help groups and local NGO’s.

The program started in the morning with an inaugural ceremony. Dr. Latha Bhaskar (ATREE-CERC) briefed about the aim of this Festival and welcomed the gathering. Mr. P.P. Chitharanjan, the Chairman of Alappuzha Municipality inaugurated the program. He appreciated ATREE for organizing such an event and assured the support of Alappuzha municipality in such efforts. Fr. Thomas Peelianickal, (Director of Kuttanad Vikasana Samithy) gave the wetlands day message. Mr. R. Sanal Kumar, (Deputy Director, Kerala State Land Use Board) delivered the keynote address. A wetland poster series was released during the function by noted fisheries scientist Dr. K. G. Padmakumar, (RARC, Kumarakom) handing over to Sr. Sophyamma Thomas, Head Mistress of St. Joseph’s school. Felicitations were given by Mr. Renjan Mathew Varghese, State Director, WWF – India, Kerala State Office and Sr. Sophyamma Thomas, Head Mistress, St. Joseph’s GHS. The inaugural ceremony came to a close at 11 a.m. with the vote of thanks by Mr. D. Deepak.

A puppet show with wetland conservation as the theme was an attraction of the Wetland Festival. Conceived, created and performed by members of Wetland study Center, Govt. TTI Alappuzha, the story centered on the environmental deterioration of the Vembanad socio-ecological system. The 15 minutes show was successful in highlighting the deterioration of the lake and affected livelihoods. Puppet show as a strong and interesting media inspire us to organize further workshops on puppet making/show for the students to propagate conservation message. The puppet show concluded stating that there are chances of hope as long as we have dedicated organizations like ATREE.
Tears were rolling down her cheeks, when Kandal Amma spoke about the once pristine Vembanad, to hundreds of children assembled during the Wetland Festival organized by ATREE.

Mrs. Mariamma Kurian, popularly known as ‘Kandal Amma’ (The Mangrove Mother) with due respect for her efforts to popularize kandal or mangroves, have been planting and nurturing mangroves in her land bordering Vembanad for the past 45 years. To those who had been to her house, gets a feeling that she had cared mangroves more than her 11 children. In the past, she used to collect seeds from the dense mangrove patches near Kumarakom. Now one has to visit her land to see the remaining patches of mangroves in this region. She was inspired by her poor father who had started planting mangroves, instead of putting stone walls like others do, to save their small piece of land and house from being eroded.

It is perhaps the Indian Ocean tsunami that implanted the importance of mangroves in the mind of people and policy makers. By her own words “there was a huge rush of researchers, Government officials, media, and school children to see and learn the importance of mangroves from her.”

Otherwise an ordinary house wife, she collects and distribute seeds during the fruit bearing periods. She has been recognized and awarded by various forums for her role in popularizing mangroves. The most memorable occasion was when Kallen Pokkudan, whose name synonymous with mangrove conservation in India called on her.

- Deepak
We also try to facilitate discussions on long-term, effective and inclusive institutional mechanisms involving Government agencies, academia, NGOs and local community groups.

Notes from the policy desk:

Policies Pertinent to the Vembanad Wetlands:

No legislation of land and forest in India legally defines wetlands and there are no special enactments for their conservation. Wetland protection depends upon the legal status of spaces or localities they are part of. In the 7th and 11th Schedules of the Constitution water is treated as a spatial or navigational 'matter' in Union, State and Concurrent lists. The policy team of Vembanad conservation program seeks to address the institutional, policy and information gaps which are adversely affecting the conservation and livelihood issues of the Indian wetlands in general with a special emphasis on Vembanad Lake. We also try to facilitate discussions on long-term, effective and inclusive institutional mechanisms for the sustainable management of the lake.

Some policies and policy recommendations with implications for Vembanad are currently in the anvil. These are the Coastal Zone Management Notification (CZM), 2007, The Draft Kerala State Land Policy, 2008, The ‘Measures to Mitigate Agrarian Distress in Alappuzha and Kuttanad Wetland Ecosystem’ report by the M.S. Swaminathan Commission, and Kerala State tourism policies. These are being analyzed in tandem with socio-ecological realities pertaining to Vembanad. Configuration of Panchayath space for conservation and monitoring will remain at the crux of policy engagements along with inter-sectoral linkages and coordination.

- Siddhartha Krishnan and Priyadarsanan