



WWF® for a living planet

Mruthika

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FROM THE STATE DIRECTOR'S DESK

Almost two months of the New Year has passed. As we are approaching the end of the current financial year, it is a time of conferences, seminars and workshops mainly for clearing off unspent budget amounts. A critical review of the situation in the State or the country very much clearly shows that, it is not that we are not aware about issues, but the sad fact is that we never want to adopt a precautionary approach. In some extreme cases, it also gives the feelings that, we really don't want to solve the issue, because solutions are very clearly visible in front of us, but then also we just sit over discussing and lamenting upon it. And the recent trend is of politicizing each and every issue. Simple issues are made complex and left unsolved. For how long can we go ahead like this? This is not just the case with nature conservation and environment protection but it is a general trend that we are seeing in the society nowadays. Materialism is creeping in and affecting almost every section of our population. We are bothered about only things which directly benefit us or our family and that too in the immediate future. Long term planning and management is a concept which is very much adopted in other

developed and developing countries, but in India it is a concept which is fast being forgotten since it is losing its relevance in the hearts and minds of the people. For eg. China has understood the greater need for energy conservation and is very much concentrating its efforts to renewable energy sources and efficiency improvement. In India also, we are very much aware about the same, but how much are we actually doing for it? The Central and State Governments has initiated some activities in this regard and also allocated funds, but the question is, to what extent it is being implemented and is it in its right sense? The change has to happen in all sectors of the society – be it in the government, non-government, R&D or lower, middle or upper sections of the population. Only with some long term perspective and planning can we solve many of our problems. What we need to think is that even if we do not reap the benefits of our efforts, our children will. As the famous saying goes and holds true 'we have not inherited this Earth from our forefathers, we have borrowed it from our children - so let us make sure that we leave them a living planet'.

Renjan Mathew Varghese, State Director

IMPORTANT NEWS ON ENVIRONMENT AND NATURE

GLOBAL

Huge coral reefs could disappear by 2100

Recent study finds that coral reefs give birth to rich sea life. Coral reefs give birth to a dazzling number of new species of sea creatures, according to a study that highlights their critical role in marine ecosystems. Scientists have found that the reefs not only harbour amazing biodiversity, but are actively involved in the generation of new life forms. The study overturns conventional thinking that much of the sea life in coral reefs originated elsewhere. Wolfgang Kiessling of the Humboldt University of Berlin, who led the study, said: "We found that coral reefs are very active at generating biodiversity in the oceans, and that they export biodiversity to other ecosystems. This was a surprise because many people had assumed that reefs were ecological attractors; that species go there from other

places." He and his colleagues in Germany and the US studied a database of fossil organisms that lived on the sea floor from the Cambrian period, about 500m years ago. They compared the number of new genera that first appeared in coral reefs with those in other shallow-water environments and found the reefs were responsible for about 50% more. The results are published in the journal Science. Mr. Kiessling said the study offered extra incentive to protect coral reefs. "If we lose the coral reefs we lose the ability for marine ecosystems to generate new species in the future. Increasing carbon dioxide in the atmosphere damages corals as seas become warmer," he said. (*The Hindu*, 08.01.'10)

NATIONAL

Swaminathan hails decision on Bt Brinjal

Agriculture scientist and Rajya Sabha Member M.S. Swaminathan on Tuesday described the Government's moratorium on commercialisation of Mahyco's Bt brinjal until independent studies established its safety,

as “a wise and appropriate decision.” He said it was appropriate not to hurry and to look at the problems taking into consideration the satisfaction of all sections of the society. The Government should utilise the time to put in place a credible, effective and transparent system for the benefit of the country and conduct tests in a manner that has public trust. Asked about transparency in the system, Dr. Swaminathan said the Government should completely share the data. “After all, it is the public who has to consume it, not the government. The risks and benefits should be carefully evaluated.” Dr. Swaminathan, also known as the ‘Father of the Green Revolution,’ said biotechnology was a powerful tool but it should be utilised for “public good.” Clearances should be on case-by-case basis. “Technology is a powerful tool and always evolving. How we utilise it, is important” (*The Hindu*, 10.02.’10).

Mounting threat from e-waste

India, one of the two largest markets for mobile phones in the world along with China, faces a mounting problem — how to get rid of the discarded mobiles? For, by the year 2020, the size of the discarded mobile mound will grow by 18 times from the 2007 level, says a United Nations Environment Programme study. If no proper e-waste recycling mechanism is put in place, these abandoned phones are going to create environmental damage and health problems, the study warns. The study titled, ‘Recycling from e-waste to resources,’ was released at a combined meeting of the bodies of UN Conventions on hazardous chemical wastes, organized by the UNEP at Bali on February 22. It warns developing countries, especially fast growing economies like India, China, Brazil and South Africa, that if efforts are not made to recycle the abandoned electronic equipment, they will be in for big environmental trouble. Apart from mobile phones, old computers, TVs and refrigerators added to the e-waste mountain in these countries. For instance, computer e-waste in India will have risen by five times by 2020 from the 2007 level. Discarded refrigerators will double or even triple. The report estimates that India’s current e-waste generation is 2.75 lakh tonnes from TVs, over one lakh tonnes from refrigerators, 56,300 tonnes from personal computers, 1,700 tonnes from mobiles and 4,700 from printers. However, China’s problem from e-waste is much more than that of India. It now generates five lakh tonnes of refrigerator waste and three lakh tonnes of PC waste. Apart from the e-waste generated by domestic consumption, India, China and other developing countries also have to confront the legal and illegal dumping of e-waste by western countries, mainly the United States which is, as of now, not bound by

international agreements on hazardous wastes as it has refused to sign such treaties. The UNEP report also notes that global e-waste generation is growing by 40 million tonnes a year. In 2007, more than one billion mobiles were sold in the world and the sales are set to jump in the coming years, particularly in developing countries which are home to large populations (*The Hindu*, 25.02.’10).

STATE

‘Miss Kerala’ gets a protective shield



Hope is finally burning bright for ‘Miss Kerala’ (*Puntius denisonii*), an ornamental fish facing the danger of extinction from commercial exports. A freshwater fish endemic and once largely exclusive to the Achencoil and Chaliyar rivers, Miss Kerala, also known as Red line torpedo barb, was a major export revenue earner for the State in the ornamental fish export sector, with each pair of these beauties raking in at least Rs.1,500. However, with no steps to curb the exports, the species was slowly swimming to extinction. Now, giving a shot in the arm for those fighting to save Miss Kerala, the World Conservation Union (IUCN) has put her on its Red List, regarded the most comprehensive inventory of the global conservation status of plant and animal species since 1963. The IUCN Red List says Miss Kerala is vulnerable because it has a restricted extent of occurrence (less than 20,000 sq km) and is suffering from a decline in habitat quality and number of mature individuals. Miss Kerala, according to the list, is found in only four locations: the Cheenkannipuzha (tributary of the Valapattanam river), the Achencoil, the Chaliyar and also in waterbodies near Mundakayam. The Red List says the fish is likely to be threatened by habitat degradation. (*The Hindu*, 01.02.’10).

Call to keep nation free of GM crops

A two-day high-level national meeting on ‘Genetically Modified Crops - Merits and Demerits’, held in Thiruvananthapuram, in its declaration, concluded that India should not allow commercial cultivation of Bt brinjal and other genetically modified

(GM) crops and that the country should be kept free of GM crops and food. The declaration of the meeting, organised by the State Agriculture Department and the Biodiversity Board, was adopted after discussions at which ministers, senior officials, scientists and representatives of the civil societies from various parts of the country participated. Besides ministers including the Chief Minister from Kerala, ministers from Punjab and Madhya Pradesh also attended the meeting, as also top ranking officials from 11 states and scientists from several agricultural universities in the country. The meeting resolved that, as the custodian of the third mega-biodiversity centre of the world, the people of India had the moral responsibility to protect the country's rich biodiversity from any action that could destroy it. The declaration said "We recognise that there is more than enough evidence to show that GM crops such as Bt brinjal will have serious impact on biodiversity, agro-biodiversity, farmer control of seeds, traditional knowledge systems of farming, safety of food, people's health and the traditional healing systems (that draw its strength from the rich biodiversity of the country). The growing understanding of genetic engineering as a technology applied in food and agriculture is highly reductionist and evidences show that there is no long-term sustainability" (*The Hindu*, 04.02.'10).

SPECIES OF THIS ISSUE

Polar Bear (*Ursus maritimus*)

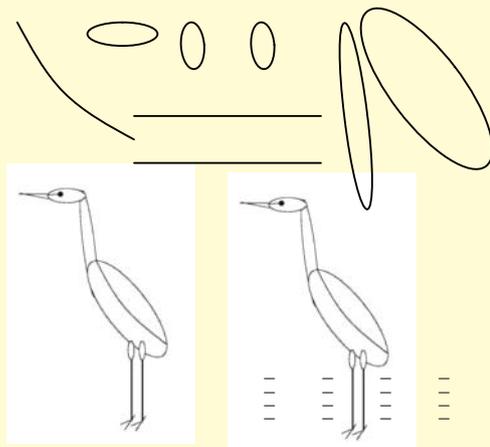
The polar bear is native largely within the Arctic circle encompassing the Arctic Ocean, its surrounding seas and surrounding land masses. Its Latin name, *Ursus maritimus*, means 'sea bear', an apt name for this amazing species which spends much of its life in and around, or on the water - predominantly on the sea ice. It is the world's largest land carnivore and also the largest bear, together with the omnivorous Kodiak bear, which is approximately the same size. An adult male weighs around 352–680kg (770–1,500lb), while an adult female is about half that size. A layer of fat up to 11 cm (4.3 in) thick keeps the bears warm, especially while swimming. The other adaptations are paws that function like snowshoes (distributing their weight to keep them from breaking through ice and snow), shorter and solid claws (better suited for walking on ice or climbing steep banks), thick coat (made up of a double layer of water repellent hairs that conserve heat), black skin which is good for absorbing the rays of the arctic sun etc. The world wide population is about 20,000 to 25,000. In 2005, the IUCN included the polar bear in the vulnerable group based on the decline

in the total global polar bear population. Habitat destruction due to global warming and climate change, hunting, toxic pollution, oil exploration etc are the main threats to the polar bears.



CHILDREN'S CORNER

Can you draw a bird using this ovals and lines?



EXPERT TALK

Reclamation of vast extent of wetlands for golf course and other luxury amenities in and around Vembanad lake – the prestigious Ramsar Site of Kerala

The most recent and bizarre of development proposal being pushed forward by the Industries Department is by an international development firm proposing to reclaim 450 acres of wetlands named 'Methran Kayal' in Kuttanad area, and that too, to put up a 18 hole golf course, multi star hotel, condominium, luxury resorts etc. One has to realize that this proposed wetland site is part of the internationally acclaimed Ramsar Site Vembanad. Vembanad is one of the largest wetland of Kerala extending across 4 or 5 districts. It gains much significance with regard to its values and functions, high biodiversity and immense livelihoods provided



to a wide range of stakeholders across the State. If this is the form of development that our government and associated development agencies foresee and wants to push forward, then we have to beware about our future as Keralites in Kerala, because it seems that the Government is interested in catering luxuries to the minor rich, whereas the major poor loose their livelihoods and other conveniences and finds themselves in trouble. Earlier there was agriculture in all these lands. But about two years back, the land has been purchased from small land holding farmers



giving about 13-14 lakhs per acre (normal rate being 1lakh per acre) and since then it is lying as fallow land. The farmers cannot be blamed. In a State where agriculture till date has not been given the due priority (many promises and schemes remains on paper whereas farmers and farmer families are pushed to suicides), it is high time that the Government adopts a proactive approach to ensure the long term food security issue. The site has very good number of avian visitors also.

Renjan Mathew Varghese, State Director

ACTIVITIES OF WWF-INDIA KERALA STATE OFFICE

JANUARY 2010

Workshops on Environment Education for Teachers and Teacher Trainees

Thrissur

The eighth workshop on Environment Education for Teacher Trainees was held at St.Joseph's B.Ed



College, Pavaratty, Thrissur on 13th January 2010 with the support of CPREEC, Chennai. The workshop was attended by 130 Teacher Trainees from three institutions and was inaugurated by Fr. Sebi Palamattathu, Manager of St.Joseph's Educational Institutions in a function that was presided over by Smt.K.Santhakumari, Principal of the college. Technical sessions on 'Environment Education' and 'Environmental issues of Kerala' were led by Sri.Jain J. Therattil and A.K.Sivakumar. Activity sessions included games and mini dramas and skits based on the presentation done on environmental issues of Kerala. Both the activities lifted the energy level of the workshop and made it highly interactive. During the concluding session, participants expressed their thanks to the organizers for providing them such a chance to conceive more clearly the concepts and ideas on environment education.

Palakkad

The ninth workshop in the series was held at Indu Memorial B Ed College, Kuzhalmannom, Palakkad on 14th January 2010. The workshop was attended by 110 Teacher Trainees from three institutions and was inaugurated by Sri.K.V.Vijayan, President of Kuzhalmannom Panchayat in a function that was presided over by Sri.Mohandas, Standing Committee Chairman of Health and Environment of the Panchayat. Sri.P.Sankaranarayanan, Principal of the college welcomed the guests and participants. Sri.Udayakumar V.K., Panchayat Member felicitated the meeting. Technical sessions on 'Biodiversity and Humans' and 'Eenvironmental issues of Kerala' were led by Sri. S.Guruvayoorappan, Programme Co-



ordinator of Wildlife Protection Society of India (WPSI), Southern Region and A.K.Sivakumar. The presentations were done with the help of beautiful and catching visuals taken from the Western Ghats side of Kerala. During the activity session, entire participants were divided into groups of 10 and were asked to prepare mini dramas and skits based on the presentation done on environmental issues of Kerala. Followed by this a game to find out the spots and stripes on living things within their campus was exercised.

Kozhikode

The 10th workshop was held on 20th January 2010 at Prestige Public School, Kozhikode. The workshop was attended by 37 Teachers from different schools of the district. The workshop was inaugurated by Smt.Sahirabanu, Principal of the school in a function that was presided over by Sri. A.K.Sivakumar.



Following the inaugural session, a multimedia presentation on the topic "*Environmental issues at global and local scenario*" was led by Dr.Muhammad Rafeeqe of Dept. of Botany, Malabar Christian College, an active member of Malabar Natural History Society (MNHS), Kozhikode. Second session was led by Sri. A.K.Sivakumar on the topic "*Biodiversity Conservation and Environment Education*". In the post lunch session, the participants were divided into six groups and asked to design and demonstrate a skit based on the previous



technical sessions. They had group discussions in teams and presented the same with adequate creativity and conceptualization. Solid waste management, tree felling, irresponsibility of public in environmental management, wetland reclamation, student

involvement in conservation, real estate mafia etc were the topics they portrayed through their skits of five minute duration allotted for each team.

Wayanad

The 11th workshop was held on 21st January 2010 at Govt. Vocational Higher Secondary School, Kalpetta, Wayanad. The workshop was attended by 61 Teachers from different schools. The workshop was inaugurated by Sri.K.Muhammad, Principal of the school in a function that was presided over by Sri. A.K.Sivakumar. Sri.C.Jayarajan, District Convener of NGC programme welcomed the participants and guests to the workshop and Sri. Thomas Stephan, State Vanamitra Award Winner delivered the vote of thanks. Sri. A.K.Sivakumar, led a session on '*Climate Change and Environment Education*' with the help of a multimedia presentation followed by an open discussion on '*Eco-friendly lifestyle*' that can be adopted by each individual without any compulsion or any extra pain. The participants involved very actively in this session and collectively viewed this as the best part of the workshop. The post lunch session was led by Sri.P.A.Ajayan, an environmentalist and member of Ferns, a nature conservation organization of the district. The session was on the potential of environment education in the district with reference to the biodiversity richness.

Awareness sessions in Colleges of Teacher Education

Education Officer delivered a multimedia presentation on 'Environmental issues of Kerala' at Swami Vivekananda College of Teacher Education, Mayilumpuram, Palakkad which was attended by 120 Teacher Trainees. Possible intervention by teacher community and potential of environment education in these issues were discussed in this session. The session was well appreciated by the participants as it was quiet a new experience in their career.

In a similar programme, Education Officer presented a multimedia presentation on 'Environment Education' at Govt. College of Teacher Education, Thalassery as part of inaugurating their Nature Club on 22nd January 2010. Basic principles of environment education and conservation were detailed during the session.

Nature awareness programme at Peet Memorial Training College, Mavelikara

WWF-India, Kerala State Office organized a one day Nature Awareness Programme at Peet Memorial Training College on 25th January. Students from three schools participated in the programme which comprised of two technical sessions and a quiz programme on wetlands. The active involvement of about 80 students from Bishop Hodges HSS,



Mavelikara, Govt. Girls HSS, Mavelikara and Mahatma High School for Girls, Chennithala was very evident from their questions and clarification regarding the technical sessions. Mr. Abraham Thomas, Lecturer in Natural Science, Peet Memorial Training College and Mrs. Salini G., Research Officer, WWF-India, Kerala State Office led the technical sessions on 'Importance of nature conservation' & 'Environmental Issues of Wetlands'. The quiz programme on wetlands was mastered by Sri.C.Harikumar, resource person of WWF-India. This activity raised the energy level of the students. Bishop Hodges HSS won the first place. Awards to the winners participation certificates were distributed.

FEBRUARY 2010

World Wetlands Day 2010

World Wetlands Day 2010 was observed by WWF-India, Kerala State Office at NSS Training College, Changanassery, lying in close proximity to wetlands, canals, paddy fields and marshes around Vembanad Lake, the largest Ramsar Site of India. The programme was attended by 155 Teacher Trainees and their faculty. The workshop was inaugurated by Sri.K.Gopalakrishnan Nair, Vice-Chairman, Municipal Council, Changanassery in a function presided over by Smt.Christal Gladis, Principal of the institution. Participants were provided with a set of 3 posters on wetlands. Mr. A.K.Sivakumar and Sri.Renjan Mathew Varghese from WWF-India led the technical session on 'Wetlands in general, national and state scenario' and 'Threats and Conservation Issues of Wetlands'. A quiz programme exclusively on Wetlands was led by Mr.Sivakumar. The poster competition conducted in connection with the event was thought provoking and informative. The poster set prepared by teams of Physical Science and Mathematics were selected as first and second respectively



In a similar programme organised at NSS College, Cherthala, Ms. G. Salini, Research Officer of WWF-India, Kerala State Office presented a multimedia presentation on Wetlands as part of a half day seminar. Sixty students from the various disciplines of environmental science, zoology and botany participated in the programme.

National Environment Awareness Campaign 2009-10

The awareness programme conducted as part of the National Environment Awareness Campaign 2009-10 organized jointly by WWF-India, Kerala State Office and Centre for Environment and Development with the support of Ministry of Environment and Forests, Govt. of India on the theme 'Climate Change — combating a global phenomenon through local initiative' was held on Monday, 8th February, 2010 at the Museum Auditorium, Thiruvananthapuram with the active participation of 165 students from 9 educational institutions of the district. The campaign was inaugurated by Prof.D.Thankamony, Member Secretary of Kerala State Pollution Control Board in a function that was presided over by Sri. Renjan Mathew Varghese, State Director, WWF-India. Smt.Shilo K. Dev, Programme Coordinator (Outreach) of Centre for Environment and Development and Sri.Gangadharan, Education Officer of Museum and Zoo Directorate felicitated the campaign. A set of resource materials including six colorful posters, a set of four stickers and a CD ROM on the theme of energy conservation and climate change was released in the inaugural session for awareness creation among the students and public. The materials were released by the Chief Guest and were received by the teachers and students from the various schools. A multimedia presentation on 'Climate Change and Low Carbon Future' was presented by



Sri. Renjan Mathew Varghese in which facts and figures of climate change and its impacts at global, national and local level were explained.

Training Workshop on Environment Education for Teachers and Teacher Trainees

Ottappalam

NSS Training College, Ottaplam hosted the 13th workshop in the series being organized by WWF-India, Kerala State Office and supported by CPREEC,

Chennai. The programme was attended by 172 Teacher Trainees from 6 Teacher Training Institutions. The workshop was inaugurated by Dr.Gopalakrishna Kurup, Head of the Department of Botany, NSS College, Palappuram in the function that was presided over by Dr.S.Premkumar, Principal of the Training College. Sri.Abdul Gafoor E.K. of Salafia Training College, Karinganad felicitated the workshop. Technical sessions were led by Sri.K.J.Suresh, Lecturer in Education of NSS Training College, Changanassery, Dr.C.V.Sreerenjitkumar, Dept. of Zoology, Govt. Victoria College, Palakkad, Mr.Jain J. Therattil of St.Alosyious College, Thrissur and Nature Club Co-ordinator of the district for WWF-India and Mr. A.K. Sivakumar, Education Officer. In the activity session, the participants were divided into groups and asked to design dramas or skits that project local level environmental issues and concerns and to present the same in the venue. Uncontrolled exploitation and



pollution of Bharathapuzha, popularly known as Nila, changing land use pattern, unscientific developmental process, less commitment of social leaders on environmental matters, changing lifestyles and attitudes were the topics they selected. The dramas and skits were good and touching upon most of the environmental problems of Kerala.

Mavelikara

The 14th training workshop was held at Peet Memorial Training College, Mavelikara on 19th and 20th February 2010. It was attended by 84 Teacher Trainees from 4 Teacher Training Institutions. The workshop was inaugurated by Prof.Anne Paul, who has years of experience in the capacity of Principal for different Teacher Training Institutes, and a Lecturer in Natural Science, in the function that was presided over by Dr. Ashok Alex Philip, Principal of the Training College. Sri.E.K.Jijan, Lecturer in English of Mount Tabor Training College felicitated the workshop. Technical sessions were led by Sri.K.J.Suresh, Sri. Abraham Thomas of Peet Memorial Training College, Mavelikara and Ms.Salini G., Research Officer from WWF-India, Kerala State Office. In the activity session, all the participants were divided into five groups and asked to visit different areas of Mavelikara, to find out the local environmental problems and they had to prepare



an environment education project to address the same. They visited Kottathode, Thazhakarapuncha, Vallikkavu, Kottarkavu and Prayikkara.

Kasaragod

The 15th and last workshop in the series for this academic year was held on 24th February 2010 at Apsara Public School, Kasaragod. The workshop was attended by 42 Teachers from 28 schools of the district. The workshop was inaugurated by Dr.Madhava Panikkar, (Retd) Deputy Director of Collegiate Education and known environmentalist of the district. Sri.Anil, Vice-Principal of the school welcomed the participants and guests to the workshop. Sri.Kunjambu Nair, District Convener of the NGC programme felicitated the function and offered all possible help for the follow-up of the programme. Following the inaugural session, Dr.Panikkar led the session on the 'Importance of Environment Education and Conservation' in the background of water resource conservation and management. A movie named '*Jalam Jeevamrutham*' on water resources and conservation of Kerala was screened after the talk to give the participants a more clear idea on the topic and it very much achieved its objective. The session on 'Basic principles and action of Environment Education' and was led by Sri. A.K.Sivakumar. After the lunch break, Mr.Sivakumar led another short session on 'Ecosystem Interpretation' that helped the participants in capacity building to be good interpreters and they proved the same in the next activity session in which participants were divided into five groups and assigned various topics like pond, river, forests, banyan tree and paddy fields. They were provided with chart sheets and sketch pens to prepare a pictorial interpretation on the same topics. The last session was a game asking the participants in teams to sing the maximum possible number of songs starting with the names of flowers. Each team put forward two names and other groups sang the songs. This session helped them to realize the cultural value of flowers and very much helped in raising the energy level of the programme.

EDITORIAL BOARD

Mr. A.V. George
Mr. Renjan Mathew Varghese
Mr. A.K. Sivakumar
Ms. G. Salini

Kerala is blessed with enchanting natural beauty.
It is nourished by 44 rivers and a chain of backwaters.

It is confronted with environmental problems due to pollution
on account of urbanization and industrialization.

The health consequences of exposure to dirty
environment are considerable.

The people of Kerala are highly conscious of
the need to protect the environment.

Kerala State Pollution Control Board is committed
to control environmental pollution.

It administers various environmental statutes for the
prevention and control of pollution.

**Join us in maintaining and restoring the
wholesomeness of the environment.**



KERALA STATE POLLUTION CONTROL BOARD

(under the Department of Environment of the Government of Kerala) PATTOM P.O.,
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