UP State Biodiversity Board

# BIODIV News

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United Nations Decade on Biodiversity
Living in harmony with nature


## Contents



## Editorial

*Esteemed Readers,*

This quarter witnessed the CoP-11 of the Convention on Biological Diversity at Hyderabad in which about 170 countries participated. India will be the President of CoP for the next two years. The Hyderabad pledge was adopted in which all countries are requested to pledge money for the cause of biodiversity. India and the CBD Executive Secretary, made strong call to parties, partners and other stakeholders to take urgent action towards achieving the Aichi Biodiversity Targets.

The Science Express Biodiversity Special was also, a resounding success with Lucknow rewarding 46, 425 visitors in November 2012.

Currently only 15 countries (South Africa, Seychelles, Rwanda, Panama, Micronesia, Mexico, Mauritius, Lao people's DR, Jordan, Gabon, Fiji, Ethiopia, Botswana, Albania and India) have ratified the Nagoya Protocol.

India during its Presidency of COP will work tirelessly for the ratification of the Protocol by 50 countries, so that it comes into force during the Presidency of India.

Let's all the inspired by what Mahatma Gandhi had said; "The difference between what we do and what we are capable of doing would suffice to solve most of the world's problems. So let us comment ourselves to what we are capable of doing".

– Editor

# 1. Conference of the Parties (COP-11)

01st -19th Oct., 2012

The XIth Conference of the Parties (COP 11) - Convention on Biological Diversity was organised by the Ministry of Environment & Forests, Government of India from 8 October to 19 October 2012. It was held at Hyderabad International Convention Centre, and the conference included a high-level ministerial segment meet that was organized by India in consultation with the Bureau and Secretariat and it took place from 17 October to 19 October 2012.

Mobilization of financial resources was the theme for the COP 11 summit. The next round of the conference is scheduled to take place in Korea after 2 years. Finding out the commendable solution by discussions over the issues of the Earth's bio-diversity is the main agenda of the conference. The conference was attended by more than 5000 delegates from 180 countries. Enrollment of about 14,400 participants in the convention made it the largest biodiversity gathering of its time.

## Demands of Developing and Developed Countries:

- African countries like Namibia demanded developed nations to stand by their promise fund allocation for saving the bio-diversity, made in the 2010 protocol.
- The developed nations stood by their demand of creating a baseline of the investments made by now and how much more was needed.

## Discussions on Identified Targets of Nagoya Protocol:

- Discussion over the 20 identified targets at 2010 Nagoya Protocol was also done to find out the problems that it faced for implementation.

## India's Stand:

India also demanded steps to be taken for ecosystem restoration and establishment of a relationship between biodiversity and climate change, identification of ecologically and biologically significant areas in marine ecosystems.

## India to Chair the Conference for Next Two Years as its President:

India will be Chairing the Conference as its President for next two years.

- The Union Environment and Forests Minister Jayanthi Natarajan, who took over the charge of COP-11 as its President for next two years emphasized on the issue of resource mobilization that remained an unfinished agenda of COP-10 at Nagoya in Japan
- Manmohan Singh the Prime Minister of India announced a grant of $50 million for strengthening the institutional mechanism of biodiversity conservation in India and other developing countries by the name of Hyderabad Pledge
- The Prime Minister also launched the high level segment of the 11th conference of parties during the UN Convention on Biodiversity meeting at Hyderabad. This conference was the first conference after the launch of Decade of Biodiversity by United Nations in 2011.

The high level meet took place during the United Nations Decade on Biodiversity (UNBD) that was declared by the United Nations General Assembly following its resolution 65/161. This plan was designed to find out the solutions for the objectives like Strategic Plan for Biodiversity and the Aichi Biodiversity Targets. Across the UNBD, a trial to encourage government and representatives of

different countries to develop, implement and communicate the results established by their national strategies designed for fine implementation of the strategic plan over biodiversity.

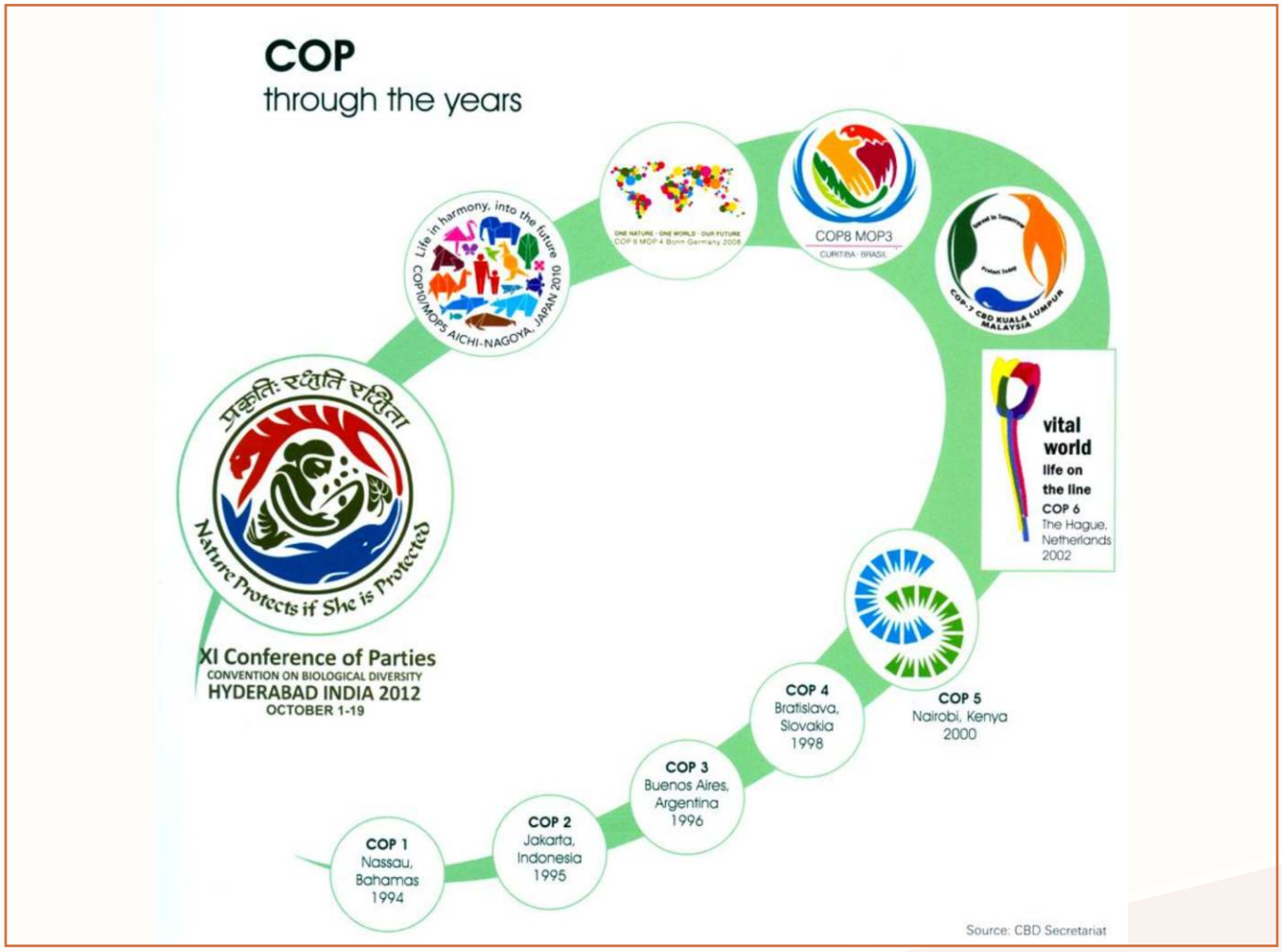
## Plan and Programmes Launched during COP11 Conference:

Plan and Programmes Launched during COP11 Conference:

- Bird Life International on 16 October 2012 launched an e-Atlas of Marine-Important Bird Areas during COP11. The e-Atlas would act as an inventory and carry data of around 3000 important bird areas from across the world and can play a major role in conserving the Convention on Biological Diversity (CBD) target for protection of 10 percent coastal and marine Areas by 2020
- The NTCA (National Tiger Conservation Authority) also declared its plan to create a national database for tigers, the flagship species of India proving a unique identification code and number to each one of these big cats in India. This was declared by the member secretary of NTCA, Rajesh Gopal during an event organized with a theme "Have We Turned the Corner in Tiger Conservation?"

## Conclusion:

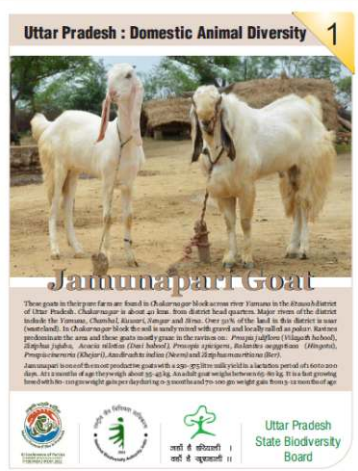
Amid the discussions and concerns, the COP 11 conference failed to reach to a concrete decision of making resource mobilization and fund arrangements done. Indian Prime Minister allocated a fund of $50 million for strengthening the mechanism for preserving the biodiversity in India and other Developing nations. Although several steps and things were critically discussed and concerns were raised to achieve better results and face the upcoming challenges.

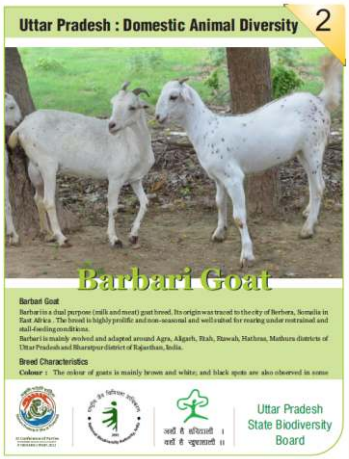


# 2. Participation of UPSBB at COP-11

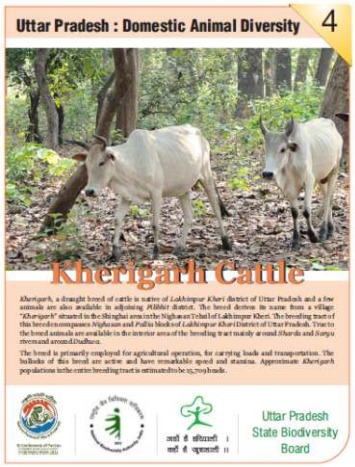
The U.P. State Biodiversity Board, Lucknow published the following flyers and a booklet, which were distributed to the participants during the event free of cost.

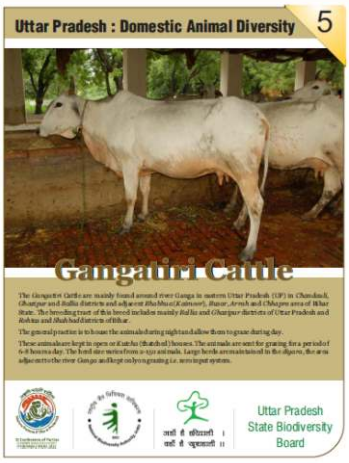
## a) Flyers:

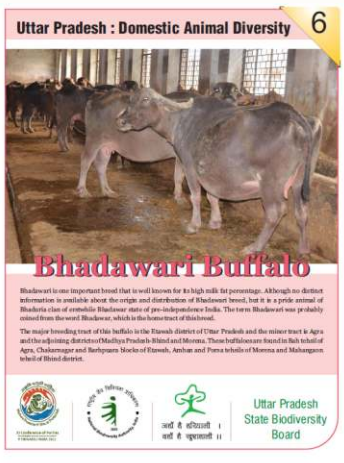




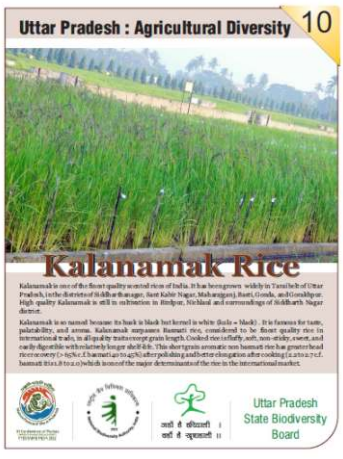


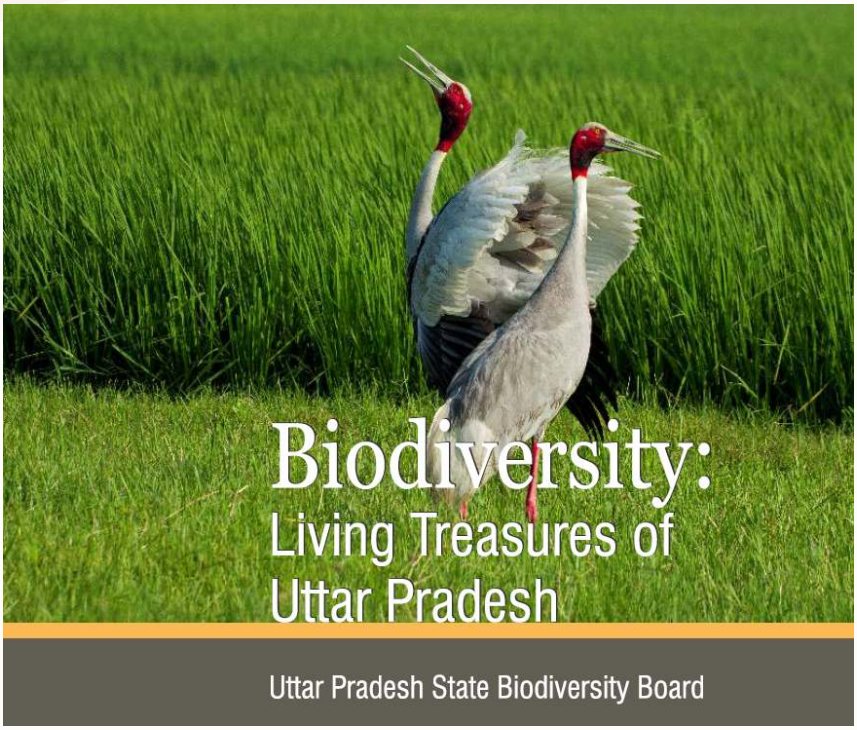










b) Booklet





Glimpses of the Exhibition during COP-11


# 3. The Aichi Biodiversity Targets

## A

### Strategic Goal A

*Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society*

Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.

Target 4

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

## B

### Strategic Goal B

*Reduce the direct pressures on biodiversity and promote sustainable use*

Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

C

## Strategic Goal C

***Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity***

Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

## D

## Strategic Goal D

***Enhance the benefits to all from biodiversity and ecosystem services***

Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Target 16

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

## E

## Strategic Goal E

***Enhance implementation through participatory planning, knowledge management and capacity building***

Target 17

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.


Target 18

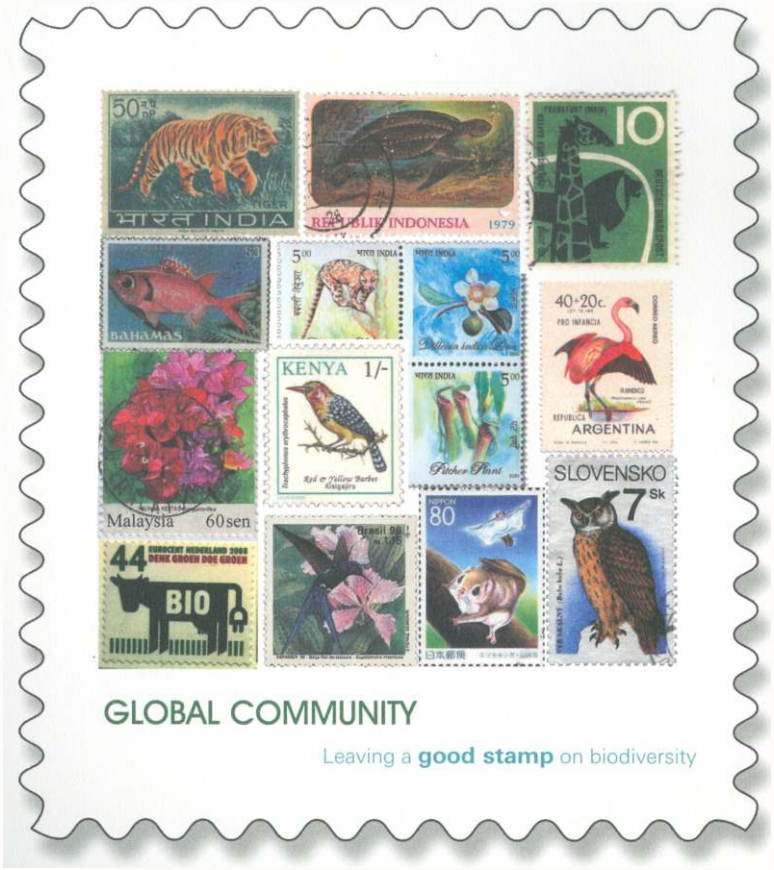
By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.


Target 19

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.


Target 20

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.



# 4. 7th Board meeting

## 11th Oct., 2012

The 7th Board meeting was held on 11th Oct. 2012. In this meeting, confirmation of the minutes of the previous meeting was done first, followed by the discussion on the progress and follow up actions on the directions given in the previous meeting. In addition, a review on the progress of various activities of the Board was presented by Pratibha Singh, DCF. It was brought to the notice of the board that India is host to the 11th Conference of Parties (COP) of the convention of Biological Diversity (CBD) that is currently at Hyderabad. Brochures/Flyers/Booklets/ Standees for the information of international guests have been developed and will be displayed/distributed at a stall in COP-11. These materials are being distributed free of cost at Hyderabad during the COP-11 meeting.

The following decisions were taken at the 7th Board meeting:

1. Approval of audited financial report of 2011-12
2. Approval of expenditure of the Board upto August 2012
3. Approval of proposed budget for 2012-13
4. Approval of Guidelines for preparation of PBR with the cooperation of educational institutions.
5. Approval was given for making 1000 copies (each) of books on Birds of Raj Bhawan, Lucknow and "Trees of Lohia Park", Lucknow by the board.
6. The draft of Annual Report 2011-12 was approved by the Board for publication in Hindi and English.
7. 07 new projects were approved for funding from the Board.
8. Extension was given to BSIP currently doing the project, "Documentation of Plant Diversity through Literature Survey for Development of Uttar Pradesh Biodiversity Database Information System (UPBDIS)" for a period of 09 months (01-04-12 to 31-12-12).

9. Extension was given to Zoology Deptt., Lucknow University for the project, "Annotated and Colored Checklist of the Reptiles and Amphibians of Uttar Pradesh" for a period of six months (May to October 2012).

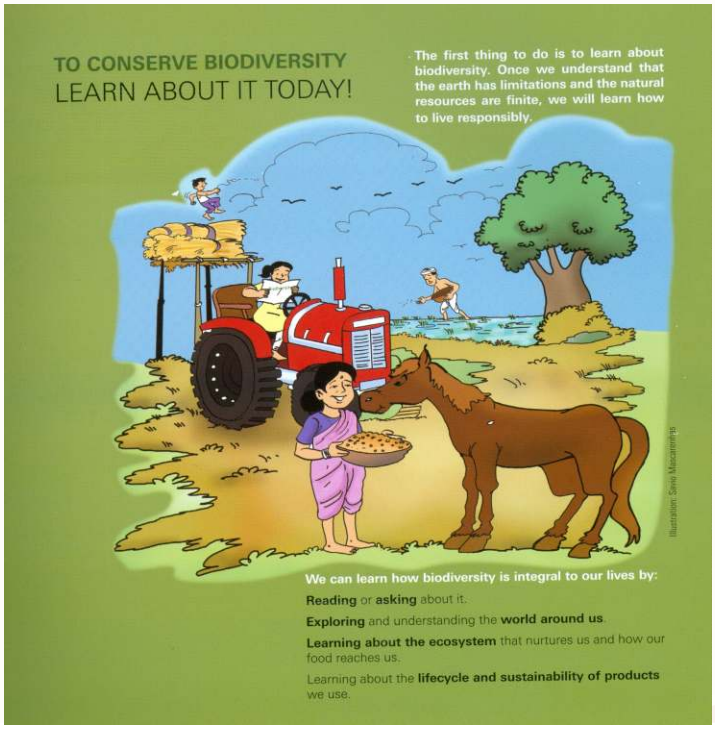
10. Permissions sought/Approvals given:

    i. Under Section 6 of Biological Diversity Act and Rule 18 of Biodiversity Rules, 2004, permission was sought from NBA for the use biological resources e.g. *Cymbopogon* spp., *Chrysanthemum cineraraiaefolium, Eucalyptus citriodora, Foeniculum vulgare, Lavandula* spp., *Lippia* spp., *Mentha arvensis, Mentha piperita, Ocimum basilicum, Perlargonium gravelens, Zingiber officinale* from Central Institute of Medicinal and Aromatic Plant, Lucknow. NBA had sought consent of UPSBB for this, the same was gratned conditionaly.

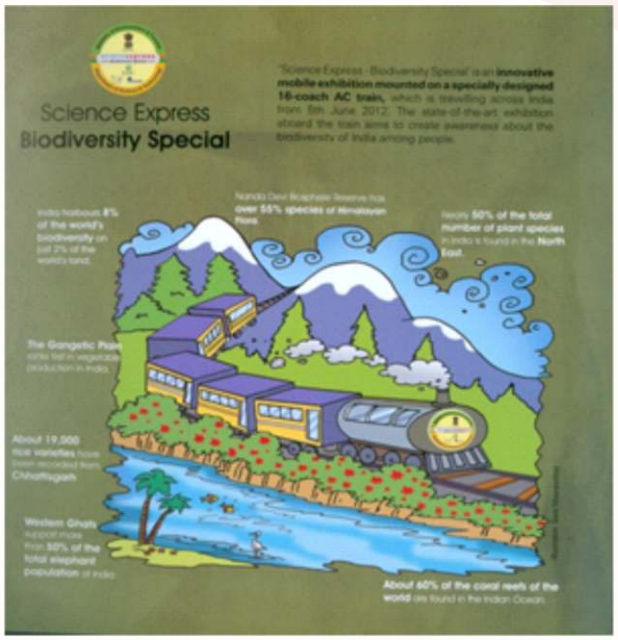
    ii. Under Section 6 of Biological Diversity Act and Rule 18 of Biodiversity Rules, 2004, NIS, CSIR Building, New Delhi had sought permission from NBA for the use of biological resources like *Juglans regia, Indigofera tinctoria, Terminilia chebula, Acacia simuata, Lawsonia inermis, Trigonella fornum-graecum, Sapindus mukorossi, Elipta alba, Embelica officinalis, Acacia catechú, Piper betle* for research purpose through the purchase from Nakkhas Bazar, Lucknow. NBA had sought consent of UPSBB for this, the same was given.

    iii. Under Section 20 of Biological Diversity Act and Rule 19 of the Biodiversity Rules, Prof. K.P. Joy, Centre of Advance Studies, Deptt. of Zoology, Banaras Hindu University had sought permission for use of biological resource Hetero pneustes fossilis (Edible catfish) for research through purchase from Chauka Ghat Bazar of Banaras. NBA had sought consent of UPSBB for this, the same was given.

    iv. Under Section 7 of Biological Diversity Act and U.P. State Biodiversity Rules 2010, M/s Sungro Seeds Ltd. had sought permission from NBA for the use of biological resources like 50 seeds of *Gossypium hirsutum/barbedense* (Cotton) and *Cry1EC-cockerline*, NBRI event 24 and Cry 1EC-gene-sourced from a soil microorganism, *Bacillus thuringiensis* from NBRI campus. It was decided by the Board to refer the matter to U.P. Deptt. of Science & Technology for seeking their advice in this regard. Besides, the suggestions from two or three specialists in this field should also be sought.



# 5. Science Express - Biodiversity Special (SEBS)




'Science Express - Biodiversity Special' (SEBS) is an innovative mobile exhibition mounted on a specially designed 16 coach AC train, traveling across India from 5 June to 22 December 2012. SEBS is the fifth phase of the iconic and path-breaking Science Express. The SEBS is a unique collaborative initiative of Department of Science & Technology (DST) and Ministry of Environment & Forests (MoEF), Government of India.

U.P. State Biodiversity Board, Lucknow welcomed SEBS in Gorakhpur and Lucknow. Some highlights of the programme are mentioned below:

1- Gorakhpur Cantt. Railway Station (03rd November 2012)

The 'Science Express - Biodiversity Special' (SEBS) was welcomed at Gorakhpur Cantt. Railway Station by Shri. Ravi Ranjan Jamuar, CCF, Gorakhpur , Smt Pratibha Singh, Deputy Conservator of Forests, U. P. State Biodiversity Board and was attended by 14199 students and 754 teachers.

Shri. Ravi Ranjan Jamuar, CCF, Gorakhpur and Smt Pratibha Singh, DCF, UPSBB welcomes SEBS at Gorakhpur

Shri. Ravi Ranjan Jamuar, CCF, Gorakhpur , Smt Pratibha Singh, DCF, UPSBB viewing SEBS exhibition

2-Northern Railway Station, Lucknow (07th November 2012)

The Science Express-Biodiversity Special arrived on 07th Nov., 2012 at Charbagh Junction, Northern Railway, Lucknow. The exhibition was formerly inaugurated by Shri V.N. Garg, Principal Secretary, Forests and Environment, UP and Chairman UP State Biodiversity Board, Lucknow,. Shri Pawan Kumar, Secretary, Forest and U.P. State Biodiversity Board, Shri J.S. Asthana, Principal Chief Conservator of Forests, U.P., Shri Rupak De, Principal Chief Conservator of Forests ( Wildlife ), Dr. Ashwani Kumar, Principal Chief Conservator of Forests, Research and Training Shri Umendra Sharma, MD U.P. Forest Corporation and graced the occasion. Besides, Shri O.P. Verma, Director, Environment, U.P. and Member Secretary, U.P. Pollution Control Board was also present. The children

of schools from C.M.S., Riverside Academy and T.D. Girls Intermediate College also participated actively on this occasion. Science Express-Biodiversity Special train was visited by 46425 visitors at Lucknow.

Dr. Amita Kanaujia and students of Zoology Department of Lucknow University were also present. The students of CMS had come with neatly painted placards. Dr. Preeti Kanaujia of C.E.E. (North Zone) encouraged the students to take the "biodiversity pledge". They also explained the concept of "Footprint" and "Handprint".

Shri. V. N. Garg, Principal Secretary, Forests and Shri. J. S. Asthana, PCCF U.P. welcome SEBS at Lucknow

Shri. V. N. Garg, Principal Secretary, Forests interacting with the SEBS team

Principal Secretary, Forests viewing different exhibits

Students participating in Platform Activity conducted by SEBS team

# 6. 8th Board meeting

## 07th Dec., 2012

8th Board meeting was held on 07th December, 2012. In this meeting, confirmation of the minutes was done first, followed by the discussion on the progress and follow up actions on the directions given in the previous. Besides, a review on the progress of ongoing activities of the Board was presented by Pratibha Singh, Dy.C.F. It was informed that the COP-11 event was held at Hyderabad during 01- 19 October 2012 and a stall of U.P. State Biodiversity was also exhibited, where a total of 22000 flyers and 2000 booklets were distributed free of cost to the visitors taking interest in the exhibition.

The following decisions were taken at the 8th Board meeting:

1. Presentation of work of the Board during the year 2012-13.
2. Approval of expenditure of the Board upto September, 2012.
3. Approval for the extension of ongoing project "*Documentation of Plant Diversity through Literature Survey for Development of Uttar Pradesh Biodiversity Database Information System (UPBDIS)"* for a period upto 31st March 2013 with the condition that no extra grant will be given for this purpose.
4. Permission sought/Approval given:

   Under Section 7 of Biological Diversity Act and U.P. State Biodiversity Rules 2010, M/s Sungro Seeds Ltd. had sought permission from NBA for the use of biological resources like 50 seeds of *Gossypium hirsutum/barbedense* (Cotton) and Cry1EC-cockerline, NBRI event 24 and Cry 1EC-gene-sourced from a soil microorganism, *Bacillus thuringiensis* from NBRI campus.

   It was decided by the Board to refer the matter to U.P. Deptt. of Science & Technology for seeking their advice in this regard. Besides, the suggestions from two or three specialists in this field should also be sought.

*"If all the insects on Earth disappeared, within 50 years all life on Earth would end. If all human beings disappeared from the Earth, within 50 years all forms of life would flourish."*

*– Biologist Jonas Salk*

# 7. Visits/Trainings/Conferences etc.

1. Sri Pawan Kumar, Secretary, U. P. State Biodiversity Board, attended Convention on Biodiversity (CBD) CoP 11 from 14th to 18th October 2012 at Hyderabad organized by Ministry of Environment & Forests, Government of India, at HICC-HITEX Complex in Hyderabad, India.

2. Smt Pratibha Singh, Deputy Conservator of Forests, U. P. State Biodiversity Board attended Convention on Biodiversity (CBD) CoP 11 from 15th to 19th October 2012 at Hyderabad organized by Ministry of Environment & Forests, Government of India, at HICC-HITEX Complex in Hyderabad, India.

3. Dr Ram Jee Srivastava, Senior Scientist attended the Diamond Jubilee Celebrations of CSIR - National Botanical Research Institute, Lucknow on 25th Oct. 2012. Bharatratna Dr. APJ Abdul Kalam, Hon'ble Former President of India was the Chief Guest and his Excellency Shri B.L. Joshi, Hon'ble Governor of U.P. was the Guest of Honour on the occasion.

4. Dr Somesh Gupta, GIS/Technical Associate attended the 82nd Annual Session of NASI & National Symposium on "Nanoscience & Technology for Mankind" jointly organized by National Academy of Sciences, Allahabad and Banaras Hindu University, Varanasi during November 29- December 01, 2012. He also presented a research paper on "Ramifications of Climate Change on Biodiversity" in the biological session.

5. Sri R K Dubey, Assistant Conservator of Forests, U. P. State Biodiversity Board attended the Annual meeting of all State Biodiversity Boards and First National Biodiversity Congress-2012 on the theme "Biodiversity for Food Security" during 27-30 December 2012 organized by Kerala State Biodiversity Board, at Kanakakkunnu Palace, Thiruvananthapuram.

6. The Institute of Engineers (India) U.P. State Centre in association with The Professional Engineers (Civil) Association - PECA celebrated World Habitat Day on Oct- 1, 2012. On this occasion Smt Pratibha Singh, Deputy Conservator of Forests, U. P. State Biodiversity Board delivered a keynote address focusing on habitat and feelings and affection for our habitat, the mother earth. She briefed about limitations of resources on biosphere with reference to our developments and growth including population. She also briefed about top ten green cities.

# 8. Newspaper Clippings

## (i) International News

HINDUSTAN TIMES, LUCKNOW
WEDNESDAY, OCTOBER 31, 2012

# New species of lizard found in Oz

## RARE REPTILE Scientists fear that it is only a matter of time before the skink will be extinct

Agence France-Presse
letters@hindustantimes.com

**SYDNEY:** Scientists announced the discovery of a new species of lizard fighting to survive among the sand dunes outside Perth in Western Australia on Monday.

They fear it is only a matter of time before the six-centimetre (two-inch) long Ctenotus ora, or the coastal plains skink, will be extinct with urban sprawl rapidly closing in.

The discovery, detailed in the journal Zootaxa, took place during research south of the city to determine the levels of biological diversity in southwestern Australia. "The discovery of a new species is a momentous occasion in science," said Geoffrey Kay, an ecologist from the Australian National University who found the lizard with colleague Scott Keogh.

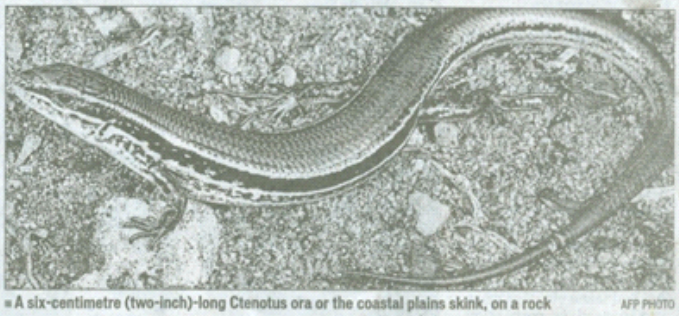
"To find something as yet undetected, so close to one of the country's largest cities, demonstrates how much we've still got to discover." But he warned of the real threat to the reptile.

"Although it's a fantastic discovery, it's poor cause for celebration. Our new lizard is under serious risk of being erased just as suddenly as it appeared to us," he said. "Only a few of these lizards have ever been found in the wild, so while we know numbers are low, we are not sure of the exact size of the remaining population." The small stretch of sand the brown and white skink calls home is steadily being concreted.

"Developments along the coastline near Perth need to consider this new lizard and potentially a large number of other species yet to be discovered in this diverse part of the world," added Kay.

Southwestern Australia is recognised as one of the top 25 biodiversity hotspots in the world, alongside places such as Madagascar, the tropical jungles of West Africa, and Brazil's Cerrado. "We've known for a long time that the southwest has an outstanding diversity of plants, as exhibited by its stunning wildflowers," said Kay.

"But only now with this research are we seeing that the level of diversity in animals, in particular reptiles, is far deeper and more extreme than we previously imagined."



A six-centimetre (two-inch)-long Ctenotus ora or the coastal plains skink, on a rock AFP PHOTO

31 Oct. 2012: A new species of lizard, *ctenotus* has been discovered in the sand dunes outside Perth, Western Australia. It is about 6 cm. in length.

## (ii) National News

THE HINDU • THURSDAY, OCTOBER 11, 2012

FARMER'S NOTEBOOK

# Chawki rearing ensures a smooth transition from hatchlings to silk

M.J. PRABU

Sericulture is part of the cultural heritage of Mysore district.

This is because the region's climatic factors aid abundant growth of mulberry trees that are the prime source of food for silkworms. Today the trees are being cultivated on more than 2,000 hectares in Mysore alone.

Several farmers in the region who rear silkworms generally purchase 10 day old worms (technically referred to as 2nd moult) from chawki rearing centres (CRCs) and rear them for the next 30 days in their homes.

"Usually farmers rearing silkworms construct a shed either behind their homes or in some adjacent open place near their dwelling. Maintaining good hygiene, temperature, humidity, and constant supply of tender and healthy mulberry leaves are some essential inputs for good growth of the worms," says Dr Arun Balamatti, Programme Coordinator, Krishi Vigyan Kendra (KVK), Sattur, Mysore.

But avoiding pests and diseases infesting the young worms being reared in the farmers home itself becomes difficult and that is where chawki rearing houses step in.

The word 'chawki' refers to young silk worms reared from hatching to second moult stage. The quality of these worms forms the crux of successful silkworm rearing. It can be compared to growing crops in the nursery first before planting in the main field.

In the nursery, the young crops are taken care of by maintaining a low temperature, giving right nutrients etc so they grow well without getting infested with pests or diseases.

Similarly, the aim of chawki rearing is to produce good quality healthy worms for the farmers.

If the chawki worms are not reared properly, the later stages will result in crop losses. Hence, it is the most crucial period of silkworm rearing. "Despite this fact, there were hardly any CRCs operating in Mysore district till 2006. KVK Mysore introduced three chawki rearing centres in two districts, Mysore and Chamarajanagar, in 2006.

All the three CRCs have completed one year successful operation chawki rearing and supplying the worms to farmers. Two of the three CRS are being run by farmers' SHGs, whereas the KVK is directly managing one CRC.

The three CRCs put together generated 2,320 man days of employment. With this kind of engagement in CRCs, each SHG member is able to earn between Rs. 1,000 to Rs.1,500 per month, which works out to a total of Rs. 1,26,000 a year," explains Dr. Arun.

It may be noted here that this is an additional income for those involved in chawki rearing since it is only a part-time work for the members, involving about three hours of work a day. Further, it provides an incremental contribution to the silk industry through increased cocoon yield which is worth Rs.78,00,000.

This apart, the CRC as a seri-enterprise has witnessed innovations like uniform hatching, institutional innovations like participatory chawki management by farmers' SHGs (self help groups) and use of indigenous techniques in temperature and humidity management.

Inspired by the success of these three CRCs, an additional three CRCs have already started working in the same areas.

What is heartening is that in the traditional dry land sericulture areas like Kudera in Chamarajanagar, where sericulture had almost disappeared due to poor monsoons and irrigation facilities, the enterprise is re-emerging.

"The success of CRCs is due to the firm conviction of the host institution, JSS Mahavidyapeetha, which believed that this was possible, and hence supported the initiative taken up by both the JSS and KVK as an additional effort under a special project," says Dr Arun.

He explains: "For those who want some quick reference as what benefits a chawki can offer: It provides healthy worms, ensures better cocoon yield. Disease is significantly reduced, through black-boxing technique, and the CRCs ensure uniform hatching of eggs and saving rearing time for farmers thus reducing their overall production cost."

For more detailed information interested readers can contact Dr. Arun Balamatti, Programme Coordinator, Krishi Vigyan Kendra, Sattur, Nanjangud taluk, Mysore-571129, email: jsskvk_1994@rediffmail.com, Phone: 08221-232272, mobile: 09448832186.

SOME ALTERNATIVE: *Farmers need to spend three hours of work a day.* – PHOTO: SPECIAL ARRANGEMENT

Oct 11, 2012: Three CRC's (Chawki Rearing Centres) have been started in Mysore. These supply 10 day old silk worms to farmers who rear silk worms. The farmers then real them for the next 30 days in their homes. The CRC as a seri-enterprise has witnessed innovations like uniform hatching, institutional innovations and use of indigenous techniques in temperature and humidity management. A supply of healthy worms ensures better cocoon yield.

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, OCTOBER 14, 2012

## Desert's culinary repository

**Braving the junk food conquest, Rajasthan villagers keep alive traditional methods of preparing roasted barley grains with all its nutrients intact**

**BARLEY:** *Popular food grain.*
PHOTOS: ROHIT JAIN PARAS

Mohammed Iqbal

In a unique method preserving the healthy elements of food grains intact, villagers in Rajasthan have followed a traditional system for preparation of food and drinks from barley to keep them cool, especially during the scorching heat of summer months.

The conventional method is now on its way out with the arrival of junk food and soft drinks, but its glimpses can still be seen in some rural settings. A small 'unit' for converting *jau* (barley) into *dhani* (roasted barley), situated adjacent to an agricultural field at Jamuwa Ramgarh village, 32 km from Jaipur, is one of the few such entities still surviving in the desert State. Barley is one of the most popular food grains gown here.

The 'unit' dedicated to roasting of barley comprises a *bhatti* (oven) and a small cabin of grass, where the fire is lit with barley crop waste and the barley grains are put for roasting. Women sit near the cabin's entrance hole and collect the barley grains for beginning the process of roasting that preserves the grains' nutrients and cooling properties. A man goes inside through the small opening for roasting the grains.

Fifty-year-old Ramkaran, who is one of the members of the small team managing the unit, gets inside the grass cabin and receives the utensil of grains after the fire is lit in the oven. He has all the conventional equipment scattered around him. Interestingly, the opening of the small cabin of grass and bushes is barely large enough to allow the entry of a single person, who can push his way inside and come back only by crawling.

Demonstrating the procedure for preparation of the healthy food, Ramkaran puts the barley grains inside the oven in a utensil with twig attached to it. In the oven's high temperature, the roasting process is completed within a few minutes. The grains are then taken out to be cleaned, processed, sifted and transferred to another utensil.

The women check the grains and test the quality of roasting. The entire process takes 10 to 15 minutes. Other villagers can also bring their barley grains for roasting on the payment of a price. The roasted grains are spread under the shadow of a tree for cooling and arriving at the normal temperature. Once fully cooled, they are ready for consumption. The grains can be eaten in the raw form, known as *dhani*, or mixed in water to make a drink, locally known as *sattu*.

As a repository of the traditional Rajasthani cuisine, the 'unit' effectively provides healthy food to the desert dwellers.

**THE OVEN:** *(Above and right) Barley being roasted in a traditional 'bhatti'.*

Oct 14, 2012: Villagers in Ramgarh village of Jaipur district, Rajasthan follow a traditional system to covert *'jau'* (barley) into *'dhani'* (roasted barley).

## SIX BIODIVERSITY-RELATED CONVENTIONS

* Convention on Biological Diversity (CBD)
* Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
* Convention on the Conservation of Migratory Species of Wild Animals
* The International Treaty of Plant Genetic Resources for Food and Agriculture
* Convention on Wetlands (Ramsar Convention)
* World Heritage Convention (WHC)

ALLAHABAD
THE HINDU • SUNDAY, OCTOBER 14, 2012

# Countries chase elusive targets

K. Venkateshwarlu
& Y. Mallikarjun

The ongoing Eleventh Conference of the Parties to the Convention on Biological Diversity (CBD) in Hyderabad is looking at the world's progress on saving diverse species in different ecosystems. It is hearing the depressing message that the targets are slipping away.

Although Braulio Ferreira de Souza Dias, the executive secretary of the CBD is optimistic and positive, many of the Aichi biodiversity targets such as halving — and further reduction to near zero — of the rate of loss of natural habitats including forests remain elusive. Fulfilling the goals of the Strategic Plan for Biodiversity 2011-2020 and its Aichi targets would be "central to our actions in this decade," he says.

The progress on various components of biodiversity conservation is not encouraging, going by CBD reports. Take the case of oceans. They have absorbed up to a third of the total carbon dioxide emissions. Although oceans comprise a diversity of habitats and some of the spectacular seascapes sheltering 32 out of 34 phyla (higher taxonomic ranks of species) of the planet, and deep seabed habitats hosting between 500,000 and 10 million species, they present a gloomy picture when it comes to conservation. Eighty per cent of the world's fish stocks are fully exploited or over-exploited, the report notes.

It is no different when it comes to mountain ecosystems. Encompassing some of the most amazing landscapes, a great diversity of species and habitat and human cultures, these ecosystems are important for biodiversity as they host some of the world's complex agro-cultural gene pools and traditional management practices. It was at CoP 7 that a programme of work on mountain biodiversity was adopted, but the progress appears sluggish.

**EAGER TO LEARN:** *Students view an exhibit in the Science Express-Biodiversity Special train in Secunderabad earlier this week. The travelling expo aims to nurture curiosity among children about the environment.* – PHOTO: NAGARA GOPAL

The Global Biodiversity Outlook 3 brought out by CBD on some of the goals set for 2010 uniformly says several aspects are still "not achieved globally." These include conservation of biological diversity of ecosystems, habitats and biomes, protection of species and genetic diversity, promotion of sustainable use and consumption and tackling habitat loss, land use changes and threats from invasive alien species.

The CBD is unhappy at the "slow progress." During a recent interview and in his opening remarks at the inaugural of the COP 11 Dr. Braulio said mainstreaming of biodiversity continues to be a challenge for most countries (Parties). "Adopting new approaches and mechanisms" and moving towards a "more pragmatic approach with less emphasis on negotiations and more on experience sharing in our pursuit of the Aichi biodiversity targets" needs emphasis.

**OCEANS PRESENT A GLOOMY PICTURE WHEN IT COMES TO CONSERVATION. EIGHTY PER CENT OF THE WORLD'S FISH STOCKS ARE FULLY EXPLOITED OR OVER-EXPLOITED**

CBD reports on other areas such as forests show a mixed outcome. Indicators published in 'Aichi Targets Passport' brought out by BIP (a global initiative on indicator development) shows that the loss of forest through conversion to other uses or natural causes declined from 16 million hectares per year in the 1990s to 13 million hectares per year in 2010.

The Aichi Passport says the rate of deforestation — mainly the conversion of tropical forest to agricultural land — shows signs of decrease in several countries but continues at a high rate in others. Creation and natural expansion of forests in some countries and regions have reduced the net loss of forest area significantly at the global level.

Simone Lovera, executive director, Global Forest Coalition, expressed concern at COP 11 over the expansion of monoculture plantations like eucalyptus in large areas in India and other countries.

As for indigenous people, as per Aichi target 18, traditional knowledge, innovations and practices of these communities relevant to the conservation and sustainable use of biodiversity and their customary use of biological resources should be respected by the year 2020 within national legislation and relevant international obligations.

However the reality seems quite different at least in some parts of India, if one goes by what indigenous communities have said at COP 11.

## Disruptive projects

A farmer from Madhya Pradesh and another from Orissa, both belonging to indigenous communities, complained that they lost their traditional farming and livelihoods due to mining and other disruptive projects. Activists from other organisations highlighted power, mining and other projects as threats to indigenous people, who are losing their cultural identity, freedom and livelihood.

Oct 14, 2012 : The 11th Conference of Parties of the Convention on Biological Diversity (CBD) in at Hyderabad. The Executive Director of CBD Braulio Ferreira de Souza Dias says that fulfilling the goals of the Strategic Plan for Biodiversity 2011-2020 and its Aichi targets will be a priority.

SUNDAY, OCTOBER 14, 2012

# Why has the countryside fallen silent?

Sukumaran C. V.

*Over increasingly large areas of the United States, spring now comes unheralded by the return of the birds, and the early mornings are strangely silent where once they were filled with the beauty of bird song. ...In the economy of nature, the natural vegetation has its essential place. Hedgerows along country roads and bordering fields provide food, cover, and nesting areas for birds and homes for many small animals. — Rachel Carson.*

**AN EXCEPTION, NOT A RULE:** *Nowadays in Kerala, no owl is heard, no water hen or lapwing or spotted dove is seen or heard. Everything is gone, the quails, the snakes, the foxes, the bulbuls, the trees, the thickets, the black palm trees, paddy and paddy fields.* – PHOTO: K.K. MUSTAFAH

Professor P. J. Sanjeeva Raj's reference to 'the Age of Loneliness' in his article "Beware the loss of biodiversity" (*The Hindu*, Open Page, September 23) reminded me of Rachel Carson's *Silent Spring*, especially the 8th chapter — 'And No Birds Sing.' The U.S., the most 'advanced' nation, felt this loneliness even before 1962 by annihilating biodiversity. *Silent Spring* was first published in 1962 and it tells what an eerie loneliness the 'developed' man has brought on himself with his anthropocentric pruning of the Environment.

Carson quotes from the letter an Alabama woman sent to an ornithologist: "Our place has been a veritable bird sanctuary for over half a century. Last July we all remarked, 'There are more birds than ever.' Then suddenly, in the second week of August, they all disappeared. I was accustomed to rising early to care for my favourite mare that had a young filly. There was not a sound of the song of a bird. It was eerie, terrifying. What was man doing to our perfect and beautiful world?"

In my village in Kerala, where there were acres of paddy fields and dry lands filled with indigenous trees and thickets, there were plenty of water hens (*kulakkozhi*), lapwings (*thithirippakshi*), spotted doves (*pullipravu* or *aripravu*) quails (*kada*) and different kinds of bulbuls. The water hens and lapwings are wetland birds and paddy fields are essential for their survival. As paddy cultivation is gone forever, the sounds of water hens and lapwings are heard no more.

The habitat of quails, spotted doves and bulbuls was the spacious dry land filled with trees and thickets. The sound of the spotted dove has been ubiquitous in the village. Bulbuls were seen picking the little fruits from among the creepers and shrubs in the thickets underneath the trees and quails were seen crossing the village roads from one bushy compound to the other. I used to wonder how the water hens, lapwings and quails, which nest on the ground, protect their eggs and chicks from predators like the snake, mongoose and fox. The howling of foxes and hooting of owls were always heard at night. The eggs and chicks survived in spite of the predators, but neither the birds nor the predators could survive man's unnatural tampering with their habitat.

Today, no howling of the fox is heard. No owl is heard, no water hen or lapwing or spotted dove is seen or heard. Everything is gone, the quails, the snakes, the foxes, the bulbuls, the trees, the thickets, the black palm trees, paddy and paddy fields.

*Kanjiram, Podikanni, Mundipparukku, Plachi, Maruthu, Njaval, Manjappavutta, Kasumavu* — these are the names of indigenous trees which were in abundance in our surroundings till some years ago, but none is seen now because we found that there was no 'utility' in these trees.

The jungle babblers nested on these trees and even if their habitat is lost, fortunately they are still seen. Of the many birds I used to watch and hear everyday in my childhood, the babblers are the only ones (of course, the crows are there) which I regularly see now. And there are sunbirds, some bulbuls, magpie-robin, myna, kingfishers and coucals (*Chemboth*). It means that the birds which feed on paddy or corns and the birds which depend on big trees for nesting are hard hit by our development.

As Carson says in the concluding paragraph of *Silent Spring*, "the 'control of nature' is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man."

If we fail to understand at least at this belated stage what Carson said in 1962, and protect our biodiversity, what will await us the Homo sapiens is the fate of the dinosaurs — a complete wipeout. I have read somewhere that the dinosaurs were wiped out only when their existence undermined the equilibrium of the environment. I am not sure whether the surmise is correct or not, but man has undermined the equilibrium of Mother Earth is a doubtless fact.

*(lscvsuku@gmail.com)*

Oct 14, 2012 : C.V. Sukumaran says that in Kerala today no owl is heard no water hen or lapwing or spotted dove is easily seen or heard. He goes on to say that birds that depend on big trees for nesting are hard hit by development. It reminds one of Rachel Carsons "Silent Spring" especially the 8th Chapter-'And No birds sing.'

# Newspaper Clippings

HINDUSTAN TIMES, LUCKNOW
WEDNESDAY, OCTOBER 17, 2012

## Biodiversity gets PM push with ₹250cr pledge

**HYDERABAD MEET** Manmohan urges global powers to join hands for preventing ecological crisis, securing happy future

Chetan Chauhan
chetan@hindustantimes.com

**HYDERABAD:** To push the developed world into putting more funds for biodiversity conservation, Prime Minister Manmohan Singh on Tuesday committed $50 million (₹250 crore) to strengthen institutional mechanism for biodiversity in India and other developing nations.

"I am pleased to launch the Hyderabad Pledge and announce that our government has decided to earmark a sum of $50 million during India's presidency of the Conference of Parties to the Convention on Biological Diversity...," he said, while inaugurating the high-level segment at a United Nations conference on Biodiversity.

Asking the global community to work together to prevent ecological " catastrophe", he said, India was willing to join hands with all countries to reach a "happy compromise" that will secure a future which provides ecological and economic space for sustainable growth.

On the domestic front, the PM promised more inclusive conservation and protection of livelihoods of fisherfolk on the lines of Forest Rights Act, which aims to protect the rights of tribal communities and other forest dwellers. He also pointed out how having a digital database of the traditional knowledge has helped in checking bio-piracy and how India was sharing the benefits with locals under the National Biodiversity Act.

Though they welcomed the Hyderabad pledge, activists termed Singh's speech as being far from the truth. "Listening to his assertions regarding India's commitment to conservation and livelihoods, one would think the country is in the right hands. Nothing can be farther from the truth," said Ashish Kothari, founder of NGO Kalpvariksh, accusing the government of displacing people for economic development and failing to implement the Forest Rights Act.

He urged countries to make concerted effort to save biodiversity as India had done by ratifying the Nagoya Protocol on Access and Benefit Sharing and pointed out that the 2010 Aichi biodiversity targets under the convention were not fully met.

"This situation needs to change," he said, adding that the critical issue really was to mobilise the resources.

But, the talks on resource mobilisation are stuck because countries such as Canada and Mexico refuse to budge from their positions. Canada does not want to commit any money till a "realistic" assessment of biodiversity loss is done, while Mexico wants some commitment before any assessment study is done.

Prime Minister Manmohan Singh addressing the COP 11 delegates in Hyderabad on Tuesday. PTI PHOTO

**OTHER HIGHLIGHTS**

- A UN report on Tuesday said half of the world's wetlands - mostly in Asia- have vanished in the last 100 years because of increased human pressure
- World Agroforestry Centre report said there was risk to global food security because of unsustainable use of natural resources
- Reduced flow of freshwater into seas in India will enhance coastal erosion, which is affecting 25 % of India's coast, said a statement by Indian Civil Society

**PM SPEAK**

- Urged global community to work together to prevent ecological catastrophe
- Said global talks to resolve environmental issues had not moved forward because the rich nations were not providing funds due to the slowdown, termed it "unfortunate"
- Promised inclusive protection of livelihoods of fisherfolk on the lines of Forest Rights Act, which protects the rights of forest dwellers.

Oct 17, 2012 : The PM Manmohan Singh announced a sum of $50 million (Rs. 250cr.) during India's presidency at COP. He said that the real critical issue was to mobilize resources to save biodiversity. He promised inclusive protection of livelihoods of fisher folk on the lines of FRA for forest dwellers.

ALLAHABAD
THE HINDU • WEDNESDAY, OCTOBER 17, 2012

## e-Atlas of marine bird areas launched

K. Venkateshwarlu

**HYDERABAD:** An *e-Atlas of Marine-Important Bird Areas,* was launched by the BirdLife International at the ongoing 11th Conference of the Parties (COP11) to the Convention on Biological Diversity (CBD) here on Tuesday.

The inventory, covering 3000 Important Bird Areas (IBAs) worldwide, was described as a major contribution to marine conservation and a vital resource for meeting the CBD target of protecting 10% of marine and coastal areas by 2020.

It will also be crucial to the process of describing Ecologically or Biologically Significant marine Areas (EBSAs) and will have significant input into the siting of offshore energy infrastructure, according to a note circulated at the COP11.

The e-Atlas will be available exclusively online. Like Google Map, it will be dynamically updated as new sites are identified and new data about them become available. It will be linked to other BirdLife data resources.

Seabirds are now the most threatened group of birds. They present unique conservation problems, since many species travel thousands of kilometres across international waters and multiple exclusive economic zones, and only returning to land to breed.

"Given the vast distances they cover, the long periods they spend at sea and the multiple threats they face there, identifying a network of priority sites for their conservation is vital to ensure their future survival," said Ben Lascelles, BirdLife's Global Marine IBA Coordinator.

Oct 17, 2012 : CBD has a target of protecting 10% of marine and coastal areas by 2020. "An e-Atlas of marine-Important Bird Areas" has been launched at COP-11. This e-Atlas will be available exclusively online. The current inventory has 3000 Important Bird Areas (IBA's) worldwide.

# Newspaper Clippings

ALLAHABAD
THE HINDU • WEDNESDAY, OCTOBER 17, 2012

## 'Drain it, lose it,' says new wetlands economics report

G. Ananthakrishnan

**HYDERABAD:** A major report that will help countries understand the economic value of inland wetlands, which cover a vast area of the earth's land surface and provide key ecosystem services, was released at the conference of the Convention on Biological Diversity here on Tuesday. The message ofthe report is simply, 'drain it, lose it.'

Inland wetlands cover at least 9.5 million sq km of the earth's surface, and together with coastal wetlands, 12.8 million sq km. Restoration of this particular type of ecosystem is the most expensive. These water bodies provide clean water for drinking and agriculture, cooling water for the energy sector; they also regulate floods. Agriculture, fisheries and tourism sectors depend heavily on the health of wetlands.

"In 100 years, we have managed to destroy about 50 per cent of the world's wetlands, which is a stunning figure," said Achim Steiner, Executive Director of the United Nations Environment Programme, at the release of the final consultation draft of the report titled "The Economics of Ecosystems and Biodiversity for Water and Wetlands" (TEEB for wetlands). The perception that wetlands are not essential to the functioning of societies and economies, contributes to their destruction. The TEEB report has been commissioned by the Ramsar Convention. India, a signatory to the Convention, has 25 wetlands listed under the covenant (such as Chilika) and about 150 identified wetlands of national importance. The country is being persuaded by international monitors to put in place management plans for the protected sites. Progress in this regard is "partial," according to Ritesh Kumar, conservation programme manager of international NGO Wetlands International - South Asia.

According to him, the conservation approach in India has to move from a 'puritanical' one, to one that emphasises economic value and its vital link to human survival.

Professor Nick Davidson, Deputy Secretary General of the Ramsar Convention, said the final TEEB report was scheduled to be released on February 2, 2013, coinciding with Wetlands Day. Flood plains are being built over in many places, resulting in losses to people when there is natural movement of rainwater across these sites.

India's challenge is to define wetlands on sound lines, and apply the rules it issued in 2010 for conservation and management of these water bodies. Building activity in fast-expanding cities is draining wetlands, and many are also being filled with garbage. There is almost no conservation response from local and State governments, an activist said at the release of the report.

Oct 17, 2012 : At the CBD, COP-11 the draft report titled, "The Economics of Ecosystems and Biodiversity for Water and Wetlands" (TEEB for Wetlands) was released. India a signatory to the Ramsar Convention has 25 wetlands listed and another 150 identified wetlands of National importance. India's challenge is to apply the rules signed in 2010 for conservation and management of these water bodies.

HINDUSTAN TIMES, LUCKNOW
WEDNESDAY, OCTOBER 31, 2012

## Get communities involved

### Money from bio-trade and rich nations cannot save India's rich biodiversity

Kanchi Kohli and Shalini Bhutani

The 11th Conference of Parties (CoP) of the Convention on Biological Diversity (CBD) recently concluded in Hyderabad. But what does this mega-event and decisions taken there mean for the conservation of biological diversity in a country like ours? When the CBD first came into force 20 years ago, it was to address two critical issues that arose out of the human-biodiversity interaction. First, to check large-scale degradation of ecological habitats with positive steps for conservation. Second, to arrest 'biopiracy' by the pharmaceutical and seed industry.

We are now two decades down with the CBD and India also has the Biological Diversity Act, 2002, in force for the last 10 years. So far, neither has managed to address the two core problems that the convention set out to address. If it had, the first three goals of the Aichi targets that the CBD set for member countries in 2010 would not be directed towards addressing root causes of biodiversity loss, reducing direct pressures on biodiversity and improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity. Even as some

There is no clarity in terms of how money will resolve the conflicts around resources

celebrate the financial impetus that the current CoP has given to these targets, it stands in complete contradiction, as land is being diverted for industrial and infrastructure purposes. There does not seem to be any clarity in terms of how money will resolve the conflicts around land and resource use in the country today. Will we have biodiversity conservation schemes implemented in the same areas which continue to be demarcated for mining, power generation or infrastructure expansion?

The CBD's answer to biopiracy is laying down a robust system for Access and Benefit Sharing (ABS), which is what the Nagoya Protocol is about. It's believed that if accessors of genetic material and knowledge follow due procedure of law, they would be able to get into suitable contractual agreements with those who own the material and/or knowledge. This strong conviction continues to be perpetrated when there is no model of ABS in sight that affects fair and equitable sharing.

Benefit-sharing largely depends on whether or not the accessor discloses that the material will be used beyond research. In most cases of the 108 ABS agreements that the National Biodiversity Authority (NBA) has signed to date with various institutions and individuals, a defined payment was made to the authority with a contractual assurance that in case the genetic material is sought to be commercialised, benefits will be 'shared' back as mutually agreed. Therefore, what might have been termed biopiracy in the past now gets legalised by a regulatory system that relies on systems of trust and self-disclosure to track genetic material and its use.

The issue of designating who are the owners of biodiversity has remained unresolved for more than the last two decades. To whom will the ABS regime attribute ownership for the brinjal germplasm, which was used as part of the Bt Brinjal experiment? This is a crucial case of biopiracy where the NBA is contemplating action against the seed company.

The CBD, its decisions and protocols are clearly headed in a direction which believes that money from bio-trade and developed country grants can bring in resources for conservation of ecosystems, and contracts with industry will make the process of access more ethical. It surely can't buy any guarantees for the local custodians of biodiversity and conservation futures.

*Kanchi Kohli and Shalini Bhutani are part of the Campaign for Conservation and Community Control over Biodiversity*

The views expressed by the authors are personal

Oct 31, 2012 : CBD first came into for 20 years ago. The very first two critical issues to be addressed were: *(1) To check large scale degradation of ecological habitats; (2) To arrest "bio-piracy."* It was felt that by laying down a robust system for Access and Benefit Sharing (ABS) (Nagoya Protocol) the assessors of genetic material and knowledge would get into suitable agreements with those who own the material or knowledge.

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, NOVEMBER 4, 2012

# Hunters make migration deadly for freshwater fishes in Kerala

T. Nandakumar

**THIRUVANANTHAPURAM:** Uncontrolled fishing for food and sport has been identified as a major threat for the majority of freshwater fish species in Kerala, along their migratory route from rivers to inland canals and wetlands for spawning.

A variety of snakes, amphibians and birds are also slaughtered by hunters who go on a killing spree during the monsoon migratory season for fishes known as *ootha* in local parlance. The mass mortality adds to the threat posed to biodiversity by reclamation of paddy fields, river sand mining and pesticide contamination, according to a study conducted by the Kerala State Biodiversity Board (KSBB).

The study warns that intensive fishing during migration would lead to depletion of fish stocks and threaten the survival of species. Fishing during the spawn disrupts the breeding cycle, resulting in a dramatic decline in stocks. The report says that spawning fish was regarded as easy target, attracting more people to the hunt. Non-resident Malayalis often timed their vacation with the *ootha* season to indulge in fishing for sport.

Very few fish could overcome the array of traditional and modern fishing equipment deployed on the migratory route from rivers through streams and canals to the breeding and spawning grounds in upland paddy fields. In some areas, fishermen used knives and choppers to kill the fish in large numbers.

A sizeable number of snakes, frogs, turtles and storks were also killed during the *ootha* season. Paddy fields were littered with mutilated bodies of snakes and eels after a fishing session.

KSBB chairman Oommen V. Oommen said the board would submit the report to the government with recommendations to impose a ban on fishing during the spawning season and take steps to protect the migratory routes and habitat of freshwater fishes.

The study which covered inland migration of freshwater fishes in Kottayam, Pathanamthitta, Thrissur, Wayanad and Kannur districts found that fishermen used electrocution, baskets, nets, rod and line and barriers to trap or kill fish. In the shallow paddy fields, the fishes were especially vulnerable and easy prey at night for the fishermen hunting by torchlight.

The survey listed 20 fish species that are commonly hunted in Thrissur district, 30 in Wayanad, 16 in Kannur, nine in Pathanamthitta and 15 in Kottayam during the *ootha* season. The inedible species were killed and thrown away. A few fish markets in Thrissur had stalls selling fish eggs.

The report said spawning fish commanded a higher price because the enhanced fat content was believed to make them tastier. Species like Wallago attu (*vala*), Channa marulius (*cheran*), Channa striata (*varaal*) and Harobagrus brachysoma (*manhakoori*) command the highest price, selling at Rs. 250 to 300 per kg.

*Freshwater fish caught from spawning grounds in Kerala*

KSBB member secretary K.P. Laladhas said the situation warranted an extensive awareness campaign to sensitize people to the biodiversity loss caused by unsustainable fishing during the spawning season. He also highlighted the need for more detailed studies on the issue.

Most fishermen interviewed during the survey reported declining catch. They attributed it to wetland reclamation and pesticide residue in paddy fields.

The report warned that destructive fishing practices like electrocution had made *ootha* fishing unsustainable, resulting in a stark decline in the population of several species.

Nov 4, 2012 : A study by the Kerala State Biodiversity Board has found that a variety of snakes, amphibians and birds are being slaughtered by hunters who go on a killing spree during the monsoon migratory season for fisher ("OOtha"). The survey listed 20 fish species that are commonly hunted in Thrissur district, 30 in Wayanad, 16 in Kannur, 9 in Pathanamthitta and 15 in Kottayam. The situation warrants an sensitize people to biodiversity loss caused by unsustainable fishing in the spawning season.

# Newspaper Clippings

THE HINDU • FRIDAY, NOVEMBER 9, 2012

## Wild bear 'couple' frequent Odisha temple

Santosh Patnaik

**MALKANGIRI (ODISHA):** A wild bear 'couple' have taken to frequenting a Bhairav temple on the outskirts of this town attracting visitors from neighbouring Chhattisgarh and Andhra Pradesh.

Named Ramu and Jambu by the locals, the wild bears visit the temple compound after sunset and wait for passersby to feed them bananas, biscuits and coconuts. The pujaris of the temple, located about 5 km from here, keep the grill gates closed for safety.

"I am here for the past five years. Ramu started visiting our temple three years ago. Since he was quite friendly, passersby considered him an envoy sent by God and worshipped him and fed him. A year later, he found his mate, Jambu. For the past few days, either of the two or both make an appearance at the temple regularly," said Lakshman Pradhan, the head priest, told *The Hindu*.

Sloth bears are spotted in large numbers in the Malkangiri forest division, known for its rich flora and fauna.

Spread over 3,364 hectares, the dense forest area is also home to leopards, spotted and barking deer, wolves and wild pigs.

"We have thousands of wild bears in the district, which very often attack people and damage crops. I recently wrote to the State Wildlife Warden to send a team from Nandankanan zoo near Bhubaneswar and tranquillise Ramu and Jambu and release them into the interior reserve forest," said Divisional Forest Officer T. Ashok Kumar.

### Attracted by food

The Forest Department believes that the two wild bears have become lazy and frequent the temple area from the nearby hillock only to get food.

They fear that speeding vehicles may hit them. Under the Wildlife Act, feeding and teasing wild bears are prohibited.

"While going to Jeypore I noticed a bear near the temple immediately after my posting here. Anticipating a risk to the life of the endangered species, I immediately erected a board in front of the temple cautioning the public," Mr. Ashok Kumar said.

This year alone, 11 attacks by wild boars have been reported in various parts of the district.

A tribal named Arjun Kemurudu, 29, an agriculture worker from Old Chitapalle near Balimela, was killed. The Forest Department has got the sanction to pay Kemurudu's dependents — wife and three children — a compensation of Rs. 2 lakh under the Wildlife Protection Amended Rule, 2002.

*One of the wild bears at the Bhairav temple on the outskirts of Malkangiri town.*

Nov 9, 2012 : A wild sloth bear, couple, Ramu and Jambu have taken to frequenting a Bhairav temple on the outskirts of Malkangiri district in Odisha. Malkangiri forest division is known for its rich flora and fauna. In the year 2012, about 11 attacks by wild boars have been reported from various parts of the district.

# Newspaper Clippings

ALLAHABAD
THE HINDU • THURSDAY, NOVEMBER 22, 2012

FARMER'S NOTEBOOK

## A former white collar employee harvests success from turmeric

### About 17 tonnes of fresh turmeric was harvested from an acre

M.J. PRABU

Mr. Muhammed Busthani, from Koduvally in Kozhikode district of Kerala, does not claim to be an experienced farmer, but a casual chat with him can make one realise that the man's knowledge in the subject is quite deep rooted.

His interest, particularly in turmeric, is surprising when he asserts: "Among all crops turmeric is the least affected by pests and infestations."

**TURNING POINT:** *Busthani in his turmeric field in Kozhikode.* – PHOTO: SPECIAL ARRANGEMENT

#### No clue

On return to his home town after leaving a private sector job in New Delhi, Mr. Busthani was planning to venture into business.

But he was totally clueless on where to start. His friends floated many ideas, but he was all the more confused.

It was a meeting with an expert at the Indian Institute of Spices Research, Kozhikode, and an old acquaintance, which helped him to realize that agriculture was his next calling.

In February 2011, he, along with his five friends, attended a three-day seminar and technology showcasing conducted at the Institute under the aegis of National Agricultural Innovation Project (NAIP) of ICAR.

That was a turning point in the life of Mr. Busthani and his friends.

"After attending various sessions in the seminar and hearing the success stories of farmer participants, we decided to grow turmeric," he recalls.

Initially, they booked one tonne of seeds of Prathibha turmeric variety from a farmer delegate in the seminar. The friends formed a trust and took one acre land on lease at Sultan Bathery, Wayanad, and thus Bucca Farms was born.

From that one acre plot the team harvested around 17 tonnes of fresh turmeric in January 2012.

"We dried about 100 kg of Prathibha turmeric and powdered it for domestic use. After that, the home made dishes were all in a different taste. When my wife pointed out the superiority of turmeric powder, I thought of cultivating it on commercial scale," he recalls.

#### Exploring options

He took the appreciation seriously and explored the opinions of the neighbouring housewives – a sort of survey study.

All the neighbours who used Prathibha turmeric for cooking endorsed the 'magic' of Prathibha turmeric powder.

This year, the friends leased out around 18 acres of land at Pazhayangadi near Vellamunda in Wayanad district of Kerala and the entire area was planted with the remaining Parthiba seeds.

Today, Bucca Farms may be the largest farm growing a single variety of turmeric in Kerala. The farmers adopt the production packages recommended by IISR.

The operations including the fertilizer applications are targeted to get a yield of 320 tonnes. IISR scientists' team has developed specific fertilizer recommendations to obtain a fixed yield from a unit area of land, known as 'targeted yield'.

As the crop is showing good health and uniform growth, the farmers are expecting a yield somewhere near the targeted levels.

#### Tonnes per hectare

"Maturing in 225 days under rainfed conditions, Prathibha gives an average yield of 39.12 tonnes per hectare. Relatively higher levels of curcumin (6.25per cent), oleoresin (16.2per cent) and essential oil (6.2 per cent) make this variety a hot choice for industrial, medicinal, and culinary purposes.

"The variety is proven to give 6 to 7 per cent of curcumin under Kerala conditions," says Dr. B Sasikumar, Principal Scientist of the institute who developed it more than 10 years back.

"The Prathibha variety, which was released in the year 1996, has proved to be more adaptable to different states of India like Kerala, Karnataka, Andhra Pradesh, Maharashtra, Punjab etc, owing to its better phenotypic plasticity and other favourable conditions," says Dr. M Anandaraj, Director, Indian Institute of Spices Research.

With his two years of experience of turmeric cultivation, Mr. Busthani is now aware of the problems of farming in the state – labour shortage and high labour costs.

#### Remedy

And he has a remedy too for this malady – farm mechanization. In fact, one of the major labour requirements for turmeric in the state is for bed-making for planting. With the help of local skilled workers, he converted a tractor mounted disc plough into a bed maker.

"Though the topography of the area was undulating, we could make uniform beds for planting turmeric in the entire 18 acres land using the bed-maker. It helped us to save about 300 labourers' work," he adds.

The farmer is also contemplating going in for available modern techniques in other farm operations so as to bring down the cost of production.

"We are working on a tractor mountable device to harvest the crop in the coming season," he adds.

He was also one of the farmers identified for scientific cultivation of ginger (varada) under the institutes' NAIP project on multi-enterprise farming models to address the agrarian crisis of Wayanad, Kerala in 2011.

For more details contact Mr. Muhamed Busthani, Thotathil House, Elettil PO, Koduvally, Kozhikode, Mob: 09946041946.

Nov 22, 2012 : Mr. Mohammad Busthani from Kozikode district of Kerala formed Bucca farms in Wayanad with four of his friends. In the first year they grew turmeric on one acre and harvested 17 tonnes. In the second year they leased out 18 acre of land and got 39.12 tonnes per hectare. They grow the Prathibha variety released in 1996 and are happy with their success.

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, NOVEMBER 25, 2012

## Ecotourism, last nail in the coffin of biodiversity

Dr. S. Sandilyan

In recent years several State governments have raised the curtains for ecotourism in natural reserves. Obviously, ecotourism gives a chance to people to see plants and animals in their natural habitats and is a source of income to the locals. On top of that, it improves the State's economy. But it also has its deleterious impact.

No State government has any strict rule adopted inside the declared ecotourism centres. There is no ban on use of plastic articles such as carry-bags, water bottles and disposable cups in several ecologically and biologically sensitive zones of India. It is easy to find the baneful plastic inside mangroves, tiger reserves and zoos. Also, the attitude of visitors inside recreational areas is not encouraging. Visit any of the Indian zoos and, invariably, you will find that people of all ages and both sexes tease the animals by shouting loudly and throwing stones, twigs and papers at them. These hostile and awful attitudes annoy the animals and cause them mental trauma. Especially, primates and crocodiles suffer a lot and sometimes they lose their life. It is a common scene in the Chennai Crocodile Park that during basking the reptiles open their mouths wide, into which our so-called tourists simply throw stones and pebbles. If swallowed, this would cause loss of life. Though these parks and zoos are continuously monitored by employees, damage is caused. Imagine the fate of the wild animals in the natural reserves when they are opened to ecotourism.

The use of plastic cups, bags and bottles causes havoc in the natural system. Paper cups abandoned in and around biosphere reserves might cause large-scale mortality of worker bees. A recent study by Mr. Chandrasekaran of Madurai Kamaraj University has shown that the sugary residue in the discarded cups attracts honeybees on a large scale. Workerbees swarm them and these cups act as 'death traps'. The residue of beverages (coffee/tea/milk/juice) wets their wings and they are unable to fly. This results in large-scale mortality and the population of honeybees declines drastically.

Dammar bees or stingless bees, Melipona irridipennis (Meliporidae), one of the important pollinators, also get attracted to the disposable cups. Within 10 minutes of my observation, I found nearly 48 dead bees in a single cup and more than 800 bees in a single dustbin placed before a teashop in our area. If the trend continues for a few more days or weeks, all worker bees in a colony will die.

*The residue in discarded paper cups dampens worker bees' wings, thus crippling them.*

A special mention has to be made that these kinds of tiny insects play a key role in all forest and agro ecosystems, and they are the major group which is interlaced with several ecological functions.

It is reported that globally 70 per cent of crop plants and 98 per cent of trees in tropical rain forests are pollinated by tiny insects like bees. In the Western Ghats, the aphid bees alone contribute to the pollination of 18 per cent of 86 species of trees, and 22 per cent of shrubs. So the decline in the population of bees will cause a vicious circle at the tropic level of an ecosystem. And, finally, the entire system will crumble like a house of cards.

Carry bags and plastic water bottles discarded in wetlands cause considerable damage to the system, to the unique mangrove ecosystem and its fragile diversity. Carry-bags clog the aerial roots, resulting in poor air circulation and sometimes leading to the death of young mangrove plants. Likewise, some of the sedentary molluscan species will lose their life if they are covered by carry bags. Carry-bags which settle on mudflats affect the benthic community. Finally, the mudflats, which serve as a food basket for fish, prawn and the globally declining waterbirds, will be demolished.

Also, these bags, perched on the mangrove tree branches, produce a peculiar sound during wind flow, annoying and driving away the foraging waterbirds.

Motorboats used by tourists produce a high decibel sound, which echoes throughout the mangroves. This noise disturbs all foraging, roosting, nesting and resting waterbirds. This kind of continuous disturbance may even force the birds to leave the habitat permanently and, sometimes, abandon their clutch and brood too.

It is reported that tourist activity such as sunbathing and collection of plants and animals for studies also cause damage to the system. Even leisure walks on shores and other wetlands cause stress to the tiny benthic animals. The walking events trample the benthic animals and modify the bio-geo nature of the soil too.

So, a careful assessment has to be made before an area is declared an ecotourism spot; even after the declaration, continuous monitoring is needed to assess the impact of tourism on the ecosystem and its diversity. Biodiversity is the untapped capital of a country. So it is better to shun the idea of opening hot diversity spots for public access in the name of ecotourism.

*(The writer is Assistant Professor, PG and Research Department of Wildlife Biology, A.V.C. College, Mannampandal, Mayiladuthurai, Tamil Nadu. Email: ssandilyan@gmail.com)*

Nov 25, 2012 : Use of plastic clips, bags bottles, paper cups abandoned in an around protected areas damage the ecosystem. A large number of worker bees swarm on the sugary residue in discarded cups-that cause large scale mortality. So do other tiny insects like stingless bees? These small insects are important pollinators. So effective monitoring of an ecosystem is needed to assess the impact of tourism.

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, DECEMBER 2, 2012

# The green man of Gaya

Sarita Brara

**Sikander cycles to Brahmyoni hill every morning to tend to the thousands of trees he has grown single handedly**

Sikander lives in a small, one-room house in Gaya, does odd jobs as a part time electrician or an extra hand at a shop to earn a living. But his heart, soul and mind lie in the lofty mission to spread greenery in this town, near Bodh Gaya, where Buddha attained enlightenment. He had single handedly planted countless saplings and today more than ten thousand trees stand tall in Brahmyoni hill and other places.

This is the result of his tireless efforts since he began his mission in 1982, 30 years ago. He is so devoted to the cause that notwithstanding the heat, the cold or the rain, Sikander without fail cycles his way to the hills every morning and starts either planting new samplings or tending to the fresh ones and watering the old and new plants.

"I have three children at home," he says and "thousands on the Gaya hills to care for, nurture and protect"

He gets really hurt when some of samplings die or are uprooted by miscreants or encroachers, "and this happens constantly", he laments.

How did it all begin? Sikander recalls that as a child, whenever he came to this area for a picnic with his family or other boys, he found that the place was barren with no trees and he decided to turn the hillock green. What began as a pastime became an obsession and now his life-long mission. His family has suffered economically, because he refuses to be bogged down either by a full time job or accept employment outside Gaya that could take him away from his mission.

**THE MAN BEHIND THE FORESTS:** *Sikander.* PHOTO: RANJIT RANJAN.

Sikander has grown plants and trees of hundreds of varieties – medicinal, fruits trees and trees that provide shade. There are guava, mango, pomegranate, tamarind, cashew nut, lemon, amla, sheesham, ashoka, neem trees and many other varieties.

"I have planted trees to attract birds," he says, but regrets that children pluck them while they are still raw.

He also creates parks to beautify the city where he thinks there is a scope. People ask him whether it is for an institute, or an ashram or a spot. Sikander has done his bit to harvest rain water and dug several pits around Brahmayoni hills.

Sikander's latest fad is naming trees after freedom fighters and other famous personalities. There are trees named after Mahatma Gandhi, Pandit Nehru, Subhas Chandra Bose, Khudiram Bose, Bhagat Singh, Chander Shekhar Azad, Maharana Pratap, Lala Lajpat Rai, Shivaji and others. Sikander says that he is trying to find the names of other freedom fighters so that he can name more trees after them. He is making a special corner for plants named after Kargil martyrs.

Though Gaya's greenman has earned a lot of appreciation from many quarters and has many admirers, he has not received any help from the state government, irrespective of which party has been in power. His biggest concern today is to protect the green areas that he has created, away from encroachers and ensure that the saplings he plants with so much of hard work are not uprooted or die for want of care. He has applied for assistance many times to the local authorities and even petitioned the current chief minister, but so far has got nothing except assurances. He is keen on starting an organisation or a Trust so that he gets support for his rare mission, but says he does not have the means for it.

"My dream is to see Gaya as an international tourist city with greenery everywhere and also make people aware of the environment and the need to preserve it for coming generation," he says.

**SPREADING THE GREEN:** *Preserving trees and the environment for the coming generation.*

Dec 2, 2012 : Sikander, a man in Gaya district of Bihar has planted hundreds of trees single handedly from 1982, 30 years ago. He is fondly called "Gayas greenman".

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, DECEMBER 9, 2012

Hunting to save? The Hill Tiwas of Assam call it tradition; a sacred way to preserve what is theirs.

TEXT AND PHOTOS
RITU RAJ KONWAR

## THE HILLS ARE ALIVE

*The Tiwas of Assam who inhabit the hill areas or the foothills of Karbi Anglong and Nagaon districts love farming and agriculture. They rear pigs, chicks and ducks at home, and cultivate rice, ginger, chilly and cotton. But they are known for their unique hunting skills inherited over the generations.*

*The Hill Tiwas do not own guns. They hunt using spears and traps, though net hunting is the most popular method. Net hunting (Jal sikar) takes place as a community activity involving 15 to sometimes over 50 people. For a hunt, Tiwas generally use 10 to 15 nets up to 100 metres long, and form a semicircle of the same into which they drive animals from as far as half a km away. Two or three hunters would spot the animal first and inform the others in the team to set up the nets. The nets are hung on small trees or vines with wooden hooks at each end. The top of the net is then hooked on to other vegetation, and the bottom pegged to the ground.*

*Once the nets are set, hunters begin to drive animals from their hideouts right into the nets. This is an annual exercise to control animal population in the dense forest areas where the Hill Tiwas live. The tribe believes in protecting their cultural integrity and their right to wild resources upon which they depend.*

*However, net hunting is illegal in Reserve Forest areas.*

*Traditional hunting is practised not only by the Tiwa but many other tribal communities in northeast India, where hunting becomes essential to put a check on animals that destroy paddy fields. The entire cycle of setting up nets and catching the animals takes an hour. Different sites are chosen and in a day the hunters locate four to six places where they carry out the process.*

*Rice is the staple food of the Tiwas who consume meat, fish and eggs. Fowl and pork are considered delicacies.*

PhotoFile is a fortnightly photo feature that captures different aspects of Indian life and society.

Dec 09, 2012 : Tiwas of Assam inhabit the foothills of Karbi Anglong and Nagaon districts. The use spears and traps through net hunting is the most popular method.

# Newspaper Clippings

THE HINDU • SUNDAY, DECEMBER 23, 2012

## On the scent of malli

Enticing royals and common people alike with its sublime fragrance for centuries on end, Madurai's famous malli or jasmine is now celebrated as the subject of a new book

ROMA JOSE

"You want to hear it. It's a mesmerising story," she says. Those who have lived long enough in Madurai know how passionate Dr. Uma Kannan is about the malligai, ever since she came from London 35 years ago and settled in Madurai. "The city revelled in an abundance of jasmine then," she says. Apparently the only Indian Airlines flight to Chennai from Madurai was known as the "Malli Special".

"Baskets of Madurai Malli would be loaded for onward transportation and I would often wonder at the fact that there were more jasmine baskets than passengers on the flight!" says Uma.

As the years rolled on, the jasmine acquired a new meaning for Uma, correspondent, Thangavelu College of Arts. "It's engaging history, the social and literary perspective, its use in everyday life, everything appealed."

"The significance of jasmine in ceremonies and rituals," says Uma, "from puja rooms to wedding mandapams, as an offering to guests in the streets tucked neatly in our hair, as an adornment (decoration) in doors, doorways, statues and on photos, to their use in making of perfumes, incense sticks, candles, tea, sherbet and other recipes, I strongly felt it all had to be documented."

That malli is an synonymous with Madurai as the Meenakshi Temple, that malli is not just a flower but an intrinsic part of the city's ethos, prompted Uma to tell the flower's story.

Her book "Madurai Malligai — Madurai and Its Jasmine, A Celebration" is a treasure trove of flowery facts and the folklore, the religious and the commercial face of malli, the trade and logistics of a flower that has a unique link with Madurai dating back to 300 B.C. or even earlier.

Uma draws from the extensive references to the flower in Sangam literature. One of the Tamil poems of that period tells of King Pari, who could not bear to see a delicate jasmine creeper lying on the rough forest floor. He gifted his royal chariot to the plant so that the jasmine creeper could twine itself around it. Another mythological story says Parthan, the King of Ayodhya, became "Malliveeran" after he worshipped Lord Shiva in a forest filled with jasmine creepers. The flower also finds mention in the oldest Hindu scriptures, the Vedas, in ancient and medieval literature in various Indian languages, the epic Mahabharata and Vatsyayana's Kamasutra.

The jasmine is one of the oldest flowers cultivated by man for its fragrance and is also known as the plant of love as it is believed to have aphrodisiac qualities.

As a key member of INTACH, Madurai chapter, Uma was instrumental in organising several malli workshops over the last five years. "No other flower steals the wallpost in allure or popularity and Madurai wears nothing as well or with such pride as its Malligai."

When she started interacting with the flower weavers and observed them at work, she was struck, she says, by their humility and dedication, the magic in their fingers to transform the mounds of soft white fragrance into works of art, their joy and peace at stringing and selling flowers.

It was 18 months of research before Uma thought of a book — her first, and also the first full book ever written on jasmine by anybody and particularly the Madurai malli. "Malligai has got passing mention in some books here and there. My friends wondered how will I write an entire book on one small flower! From the very beginning, the book had a mind of its own...what started as a story of the flower couldn't be completed without talking about all those who grow and weave them and are a crucial link in the floral chain."



PATRON AND AUTHOR: *Dr. Uma Kannan.* PHOTO: S. JAMES

The book, Uma insists, is a "speciality" and not a "coffee table book". It contains stunning photographs — by her daughter Isha and Meenakshi Doctor. The text is concise and informative. She describes the varieties that are grown and the areas in which they are grown, with tips about cultivation and comprehensive notes about the major flower groups.

The book depicts how commission agents set the prices depending on the season and demand and how storage and transportation have changed with the times. Uma gives profiles of the flower sellers who string two buds and a knot to make a respectable living.

There are interesting chapters on ingenious uses of jasmine, weaving techniques and innovative designs in art and jewellery, and its versatility in recipes.

The book is aimed at florists and horticulturalists, historians, discerning tourists, and all those who call Madurai their home. "We give flowers at birthdays, wear them at weddings, send them to funerals. It

eyond the obvious aesthetics and fragrance, we don't think about it much."

This book, says Uma, will help readers understand that like the tulips of Amsterdam, the orchids of Thailand and the daffodils of England, the malligai has a unique place in the heart of Madurai.



TWO BUDS AND A KNOT: *Growers and weavers of jasmine are a crucial link in the floral chain.*

Dec 23, 2012 : We have heard of the tulips of Amsterdam, the orchids of Thailand and the Daffodils of England. Dr. Uma Kannan in her book "Madurai nalligai- Madurai and its jasmine celebration" gives an insight about flowery facts, folklore, religious and commercial face of malli, its trade and logistics.

*Fresh Jasmine Flowers*

# Newspaper Clippings

## (iii) State News

HINDUSTAN TIMES, LUCKNOW
MONDAY, OCTOBER 08, 2012

CM RELEASES CENSUS

# Dolphin count marginally up in state

**LUCKNOW:** The number of dolphins has gone up marginally in Uttar Pradesh, says the Dolphin census released by chief minister Akhilesh Yadav on Sunday.

"As per the census, there are 671 dolphins in UP and it is time we realise that poor dissolved oxygen levels and other factors responsible for killing aquatic animals are created by human beings. We need to save our rivers and environment," said the chief minister.

The chief minister also expressed concern over the poor state of river Yamuna, which goes up to Delhi. "Delhi is responsible for the poor state of Yamuna," he said while asking forest department officials to work sincerely towards improvement of the state's environment.

The three-day census, which began on October 5, involved 150 people specially trained for it. They worked in 18 teams covering roughly 2800-km stretch of the rivers Ganga, Yamuna, Son, Ken, Betwa, Ghagra, and Geruwa.

Dolphin is a blind mammal that swims on the basis of echo of its own sound and is capable of slowing down its heartbeat to save oxygen while swimming under water.

River dolphins have been awarded the status of national aquatic animal on par with the tiger, India's national animal.

According to a rough estimate in 1982, dolphins numbered roughly over 4,000 and the 2005 census said the number came down to 1,800, of which 600 were in Uttar Pradesh.

Dolphins live maximum up to 28 years and produce up to five off-springs in a lifetime, but due to pollution and killing their survival rate has dwindled.

"Never in history has such a comprehensive survey of a Gangetic River Dolphin been conducted. We hope the awareness campaign will generate interest amongst various stakeholders and they will come forward to conserve this endangered species," said Rupak De, PCCF (wildlife).

The campaign 'My Ganga, My Dolphin' aims also to make people aware about dolphins in and around the state.

Therefore, few villagers were also involved along with the census team.

### ZOO DIRECTOR FELICITATED

Lucknow zoo director Renu Singh receives a memento on the last day of dolphin census on Sunday.

- The dolphin is a blind mammal living in fresh water.
- It has to come out for breathing every few seconds.
- Dolphins have large brains in comparison to the size of their bodies and have exceptional intelligence.
- A new-born dolphin is 60 cm long in size.

### IN NUMBERS

**600**
was count in 2005

**671**
in 2012 census

### WHO'S KEJRIWAL, ASKS CM

- Chief Minister Akhilesh Yadav feigned ignorance about India Against Corruption member Arvind Kejriwal.
- When asked by mediamen to comment on Kejriwal's charges against Robert Vadra, he said, "Kaun hai Kejriwal?"
- Skipping any further query on the issue, the chief minister moved out of the function where he was announcing the dolphin count in UP.
- Kejriwal had alleged that Robert Vadra's wealth had increased from ₹50 lakh to ₹300 crore in three years' time. He also said that Vadra got unsecured interest-free loan from DLF, which was used to buy properties at cheap prices.

Oct 08, 2012 : A three day campaign called "My Ganga, my Dolphin" that began on Oct 5 involved 150 people (18 teams) roughly covered 2800 km stretch of Ganga, Yamuna, Son, Ken, Betwa, Ghagra and Geruwa, Counted 671 dolphins.

*Gangetic Dolphin*

# Newspaper Clippings

ALLAHABAD
THE HINDU • SUNDAY, OCTOBER 14, 2012

# The docile dolphin in danger

**ENDANGERED:** *River dolphin is an indicator animal.* PHOTOS: WWF

## The 'My Ganga, My Dolphin' campaign in Uttar Pradesh picks up pace with WWF going into campaign mode in Narora

Rana Siddiqui Zaman

Once found in abundance in the Ganga river system, the number of dolphins has dwindled at an alarming rate in the past three decades owing to a host of reasons — shrinkage of habitat and industrial pollution being at the top of the table. According to a World Wide Fund for Nature (WWF) estimate, the population of these graceful creatures plummeted from 4,000-5,000 in 1982 to a less than 2,000 at present. Moreover, their annual mortality rate is as high as 130 to 160 animals.

Incidentally, dolphins were declared India's National Aquatic Animal in 2009.

In order to save the Gangetic dolphin from relegated to natural history book pages and find ways of increasing the existing population, WWF India, in partnership with the Uttar Pradesh Forest Department, has undertaken a survey of the number of dolphins in an approximate 3,000 km stretch of the Ganga and its tributaries Yamuna, Son, Ken, Betwa, Ghagra and Geruwa.

Speaking about the constant dip in dolphin numbers, Sandeep Behera, dolphin researcher and associate director of WWF India's River Basins and Bio-diversity, held unplanned developmental activities along the rivers, indiscriminate fishing and habitat destruction as some of the prime causes behind it.

"The decrease in the number of dolphins in the 165-km stretch, including Narora, was due to the use of pesticides in the crops in fields by river, industrial radiation and pollution," he added.

**NATIONAL AQUATIC ANIMAL:** *The dolphin comes out of water to breathe.*

The WWF has set up an office at Narora in Uttar Pradesh's Bulandshahr district to carry out an awareness campaign 'My Ganga, My Dolphin'. The campaigners are reaching out to school students in the area, apart from trying to convince the fishermen and farmers. Earlier, the fishermen used to extract oil from the blubber of dolphins for its perceived medicinal properties to cure skin diseases, as fish baits and for soap making and tanning. Dolphin teeth were superstitiously used to cure children from having nightmares.

The local WWF representative Viveksheel Sagar said: "In Narora, we involved *sadhus*, fishermen and farmers in the project. While *sadhus* can preach in *mandalis*, fishermen can avoid indiscriminate fishing and farmers can stop using pesticides."

To discourage the farmers from using spray pesticides and yet get good yield, they were taught wormiculture, which is preparing organic pesticide for free in 45 days using cow dung, food waste and earthworms. "We managed to pursue Jayshankar Singh Kushwaha, the only graduate in Narora's Naudei ki Madhaiyya village. He convinced his family and they started wormiculture in 2010," Mr. Sagar said.

When *The Hindu* visited this non-descript village of 1,100 people, we found two huge pits of wormi-compose/culture in the house of Chandarpal Kushwaha. They prepare the pesticide till June and use it throughout the year.

Excitedly showing a bunch of healthy brinjals, Chandarpal said that though hesitant initially, use of the pesticide has given good yield of crops. "Earlier we used to use 10 kg of urea in our 10 *beegha* fields, now we have to use only five kg of wormi-compose. We not only get better crop but also great prices in the market."

Pramod Kumar Sharma in nearby Karnawa village maintains 22 wormi-compose pits and sell the fertiliser to 250 farmers. Each 50kg-bag fetches him Rs. 200.

Happy with the results, the Kushwaha family is helping in spreading awareness in nearby villages about the use of wormi-compose and saving the dolphins by keeping the river clean. Jayshankar said: "I tell them not to throw polythene bags and other waste in the Ganga."

To check how clean the Ganga is on that stretch and watch dolphins, we head for a boat ride in the scorching but breezy afternoon. In the clear water with no trace of polythene or grime, we spot eight huge, grey dolphins — one even with four calves. They come out of water to breathe, creates a swirl in that area and a few seconds later, plunge back making a *soooooo* sound. Mr. Behera informed that 71 dolphins have increased since the survey in 2005 that recorded 600 animals.

The Gangetic dolphins, Plantaista Gangetica, are one of the four freshwater dolphins found and differ from the well known marine species. "They are 90 per cent blind as their eyes have no lens. So they use echo-location, creating sound to make out the topography. They have a long snout with which they grovel in mud for food. Because of less use of eyes, or environmental pollution, their eyes degenerate," said Hari Singh, a WWF researcher. Because of the sound they make, local people call them *susu* or *soooos*.

WWF CEO Ravi Singh said that the river dolphin is an indicator animal, which has the same position in a river ecosystem as a tiger in a forest. "Listed by IUCN as 'Endangered' and placed in Schedule - 1 of Indian Wildlife (Protection) Act, 1972, the dolphin enjoys high levels of legal protection nationally and internationally. Yet its numbers continue to decline, in absence of a coordinated conservation planning, lack of awareness, continuing developmental pressures and almost no protected areas for the species."

Oct 14, 2012 : WWF estimates that the population of the Gangetic dolphins India's National Aquatic Animal has plummeted from 4000-5000 in 1982 to less than 2000 at present. The decrease in numbers of dolphins in the 165 km stretch including Narora is due to use of pesticides in the crops in fields along the river side, industrial radiation and pollution.

The river dolphin, Platanista gangetica is also an indicator animal. It is listed as "Endangered" by IUCN and placed in Schedule1 of Indian Wildlife (Protection) Act, 1972. Its numbers continue to decline in absence of co-ordinated conservation planning. Lack of awareness, continuing developmental pressures and almost no protected areas for the species.

# Newspaper Clippings

THE TIMES OF INDIA, LUCKNOW
TUESDAY, DECEMBER 18, 2012

# Cameras at Katarniaghat capture seven big cats

## There's Hope To Discover Up To 8 More

Bipin Chand Agarwal | TNN

**Bahraich:** Almost a week into Phase-IV of monitoring big cats in the reserve, seven new tigers have been sighted in forest ranges in Katarniaghat Wildlife Sanctuary and Dudhwa Tiger Reserve.

As many as 168 pairs of camera traps have been put up and 42 additional pairs are expected to be purchased by the forest department soon. Each pair has been installed across an area of 4 sq km. This has made the monitoring process more intensive compared to the sample testing method in the preceding phase when 48 pairs of camera traps had been put to use.

Shailesh Prasad the field director was jubilant over the new sightings trapped on camera in Motipur and Kharkhara Ranges under Katarniaghat wildlife sanctuary which falls in the buffer zones of the reserve where tiger presence was expected least, he said, expressing hope that the area has potential to breed a tiger population.

The sighting was possible due to intensity of the monitoring process, he felt, adding that there might be six to eight more tigers within this 120 sq km stretch. Sharing his optimism, sources in National Tiger Conservation Authority pointed out that the results of Phase-IV monitoring across the country would certainly be encouraging.

In the third phase, limited camera traps were deployed and estimation done on the basis of results obtained from sample areas. Further, since the exercise is an annual feature, a regular tab can be maintained on status of the big cat population and there will certainly be no Sariska-like situation in future, where all tigers have been poached.

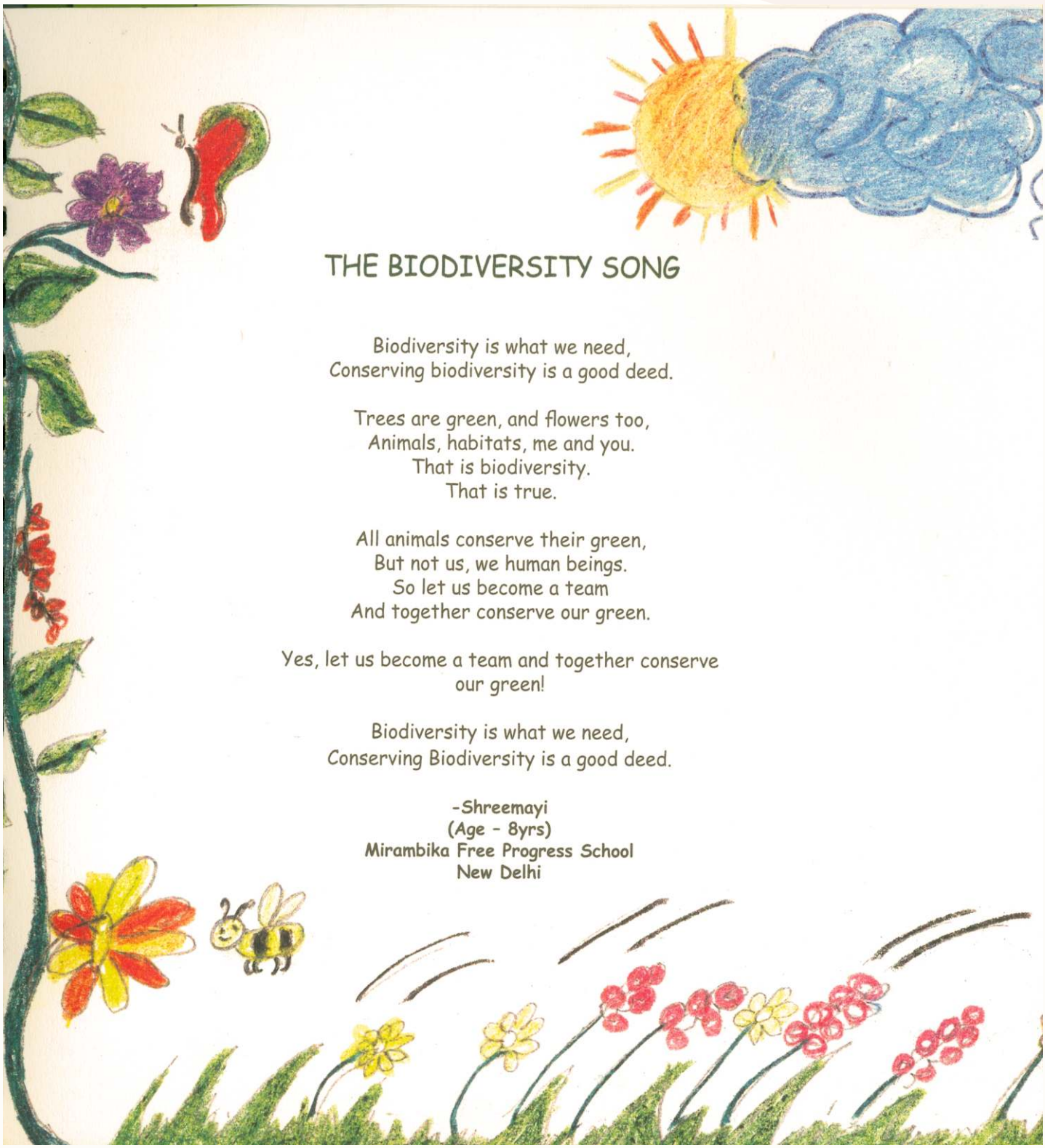
The State forest department is monitoring in association with WWF.

"The entire 2,108 sq km of buffer and core can be covered more intensively. It is believed that at least 70% to 80% of the big cats present would cross the camera traps in 45 days of the monitoring period," said Prasad. As per the earlier estimate, presence of about 109 tigers was projected in Dudhwa. But the latest figures could vary between 140-150 tigers, said Prasad.

Katarniaghat Wildlife Sanctuary is a part of the Dudhwa Tiger Reserve, and is located in Uttar Pradesh near the Indo-Nepal border, in the Terai area of Bahraich district. It covers an area of 400 km and was established in 1976.

The sanctuary is now being managed along with the Dudhwa National Park and Kishanpur Wildlife Sanctuary, as part of the Dudhwa Tiger Reserve under Project Tiger of the Government of India. The Katerniaghat Forests provide strategic connectivity between tiger habitats of Dudhwa and Kishanpur in India and the Bardia National Park in Nepal. Its fragile Terai ecosystem comprises a mesmerising mosaic of sal and teak forests, lush grasslands, steaming swamps and wetlands. It is unique for the number of endangered and critically endangered species, which occur here and include the gharial, tiger, rhinoceros, Gangetic dolphin, swamp deer, Hispid hare, Bengal florican, the white-backed and long-billed vultures.

Dec 18, 2012 : In the Phase IV of monitoring of big cats in Dudhwa National Park and Katerniaghat Wildlife Sanctuary, seven new tigers have been sighted. About 168 pairs of camera traps have been put up, each pair installed across an area of 4 sq. km. As per the earlier estimate 109 tigers were projected in Dudhwa.



# THE BIODIVERSITY SONG

Biodiversity is what we need,
Conserving biodiversity is a good deed.

Trees are green, and flowers too,
Animals, habitats, me and you.
That is biodiversity.
That is true.

All animals conserve their green,
But not us, we human beings.
So let us become a team
And together conserve our green.

Yes, let us become a team and together conserve
our green!

Biodiversity is what we need,
Conserving Biodiversity is a good deed.

-Shreemayi
(Age - 8yrs)
Mirambika Free Progress School
New Delhi

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