Wildlife Protection

Tuesday, November 1 2011, 1:52 AM

Various Programmes

Man and Biosphere Programme

- 1. Launched by UNESCO in 1977, it aims to create a World Network of Biosphere Reserves to enable them to exchange knowledge and experiences.
- 2. Indian's Nilgiri Biosphere Reserve will compete for the MAB Award.

Project Tiger

<u>Organophosphorus</u>

1. It is a toxic chemical used by the poachers to kill the tigers. It is laced with meat. This year 3 such deaths have been reported.

Strategy

- 1. The aim is to preserve tigers in natural habitats. Tiger reserves are managed as breeding nuclei, from which surplus animals migrate to adjacent forests. As a part of the programme, a Tiger Protection Force was created to combat poachers and villagers were relocated from the core areas.
- 2. A core buffer strategy was followed with following 3 pillars (a) Elimination of all human interference in core areas and regulation in buffer areas. (b) Restricting habitat management activities in core areas to repairing of damages already done. (c) Encouraging research.

Organizational Setup

1. At the top is National Tiger Conservation Authority. A *Field Director* is appointed for each reserve. Wireless communication system and outstation patrol camps have been developed within the tiger reserves, due to which poaching has declined considerably.

Issues

1. The Forest Rights Act passed by the Indian government in 2006 recognizes the rights of some forest dwelling communities in forest areas. Some have argued that this is problematic as it will increase conflict and opportunities for poaching; some also assert that "tigers and humans cannot exist". Others argue that this is a limited perspective that overlooks the reality of human-tiger coexistence and the role of abuse of power by authorities, rather than local people, in the tiger crisis.

Performance

1. Tiger population in the country has gone up from 1200 in 1970s to 1700 now. Area under the protected zone has gone up from 13,000 sq. km in 1970s to 36,000 sq. km now.

Government Initiatives for tiger protection

- Legal steps: Amendment of the Wild Life (Protection) Act, 1972 to kick start Project Tiger and establish national tiger authority. In 2006 Project Tiger was converted into a statutory authority - National Tiger Conservation Authority.
- 2. <u>Administrative steps:</u> Kudermukh, Karnataka is the latest tiger reserve. Project Tiger guidelines have been revised which include funding the states for rehabilitation.
- 3. <u>International Cooperation:</u> MoU with Nepal, China for cross border trade. Cross border trade opposed at multilateral level also. India signed a joint resolution with Russia to conserve tigers and leopards in the Global Tiger Meeting.

Global Tiger Meeting

 It takes stock of the progress of Global Tiger Recovery Program in tiger range countries like Bangladesh, Nepal, Russia, Vietnam, Myanmar and China as well as to evaluate funding needs from World Bank. But apart from Nepal no other country has done a Tiger census.

Loss of Genetic Variations in Tigers Despite Rising Population

- 1. India's tigers have lost 93% of genetic variation from that of their ancestors, despite their numbers having risen the recent years. This has happened due to the loss of habitat across the country, hampering connectivity among tigers. The existing tiger population in the country, which has mostly multiplied from a small number.
- 2. The lack of genetic diversity is a matter of grave concern. For, it can affect their evolution, especially their ability to respond to new diseases, climate change and other challenges.

Project Cheetah (CE)

- Cheetahs are extinct from India but are found in Iran. So India requested Iran to export one cheetah couple or let it have some stem cells to clone. But Iran asked for Asiatic lion couple in exchange which India refused. World population of Asiatic Cheetah is estimated to be < 100.
- 2. India is therefore exploring an alternate plan of importing the African Cheetah from Namibia where they are in greater abundance, with a view to breeding them in captivity and then setting them free in protected, semi-arid habitats in India. The government has shortlisted Kuno-Palpur (surplus Gir lions will also be located here) and Nauradehi wildlife sanctuaries in MP and Shahgarh in Jaisalmer as potential sites.
- 3. But SC stayed it on grounds that it didn't have clearance from national board for wildlife (NBWL hasn't taken any decision on it and only feasibility studies have been conducted) and violated the wild species relocation guidelines of IUCN (the guidelines prohibit introduction of alien species and obviously Namibian cheetah never existed in India).

Asiatic Lion

SC Decision on Cheetah and Lion Transfer

- 1. The fact that these lions exist only in the Gir makes them especially vulnerable as a natural calamity or an outbreak of an epidemic. Recognising this danger, plans were put in place to relocate some lions to Kuno-Palpur. The Gujarat government objected to it.
- 2. The Court allowed translocation of Asiatic lions from Gujarat to Madhya Pradesh, saying the species is under threat of extinction and needs a second home. Currently, there are around 400 Asiatic lions in Gujarat's Gir sanctuary.
- 3. The bench, however, said the introduction of African cheetahs in India from Namibia

cannot be allowed. The proposed project had also faced opposition on the ground that it was against the IUCN guidelines on trans-location of wildlife species. It was contended that IUCN guidelines categorically warn against the introduction of alien or exotic species, and that the African cheetah was genetically different from its Asiatic counterpart.

Project Hangul



a male Hangul Deer

Performance

1. Their habitat is Kashmir and they were threatened by habitat destruction, over-grazing and poaching. Their numbers dwindled to as low as 150 animals by 1970 from over 5000 in 1900. However Project Hangul increased their numbers to over 340 by 1980 but after that it fell again to 160 in 2008.

Activities

1. Project Hangul plans to breed them in captivity to increase their chances of survival.

Project Elephant

Activities

- 1. Restoration of natural habitats and corridors of elephants and their protection from poachers.
- 2. Minimizing human-elephant conflict and ensure welfare of domesticated elephants.

Performance

25 Elephant Reserves extending over about 58,000 sq km have been formally notified.

Project Crocodile

Performance

1. It has been highly successful and has pulled back crocodiles from endangered species tag.

Activities

- 1. Restoration of natural habitats and protection from poachers with the involvement of local communities.
- Captive breeding, grow and release strategy followed.

Project Snow Leopard (2009)

- 1. Snow leopard is found in Kashmir, HP, Uttarakhand, Sikkhim and Arunachal. The project is under wildlife habitats development scheme.
- 2. The aim of the project is to preserve the animal as well as their habitats. Participatory policies are a part of the project. Local as well as modern scientific knowledge will be fully

integrated. Pressure on the habitat will be reduced.



<u>Project Olive Sea Turtle</u> Activities

- 1. Olive ridley sea turtles migrate to India's east coast specially Odisha. So the plan targets such areas. They are specially targeted for their eggs (considered a delicacy) and skins. Nesting females are an easy targets. They also get caught up in fishing activities as well as boat movement. Additionally, coastal development also threatens newly hatched turtles through the effects of light pollution. Hatchlings which use light cues to orient themselves to the sea are now misled into moving towards land, and die from dehydration, exhaustion or are killed on roads.
- 2. It involves identification and inventorization of breeding sites & migration routes, development of guidelines including on tourism and fishing activities and sensitizing local population.

Threatened Species



 They are a top level endangered species and their natural habitat is Western Ghats and Andamans. However, construction of a hydel project in W Ghats is threatening their existence. The Kerela Government has launched a niche initiative of involving community to identify the nesting sites of the bird.

Pearl Fish or Karimeen (CE)

1. The fish is facing extinction due to demand from growing tourism. The Kerala Agriculture University has developed the cage technology to conserve the fish. It can be done both in fresh and brackish waters.

Electrocution of Elephants in Odisha

- 1. Over past 10 years, 110 elephants have been electrocuted. The power distribution in the state is carried on by 4 private companies who claim they don't have enough money to upgrade and repair their lines running through the forest.
- 2. So the state government tried to get the repairing funds from Compensatory Afforestation Management and Planning Authority (CAMPA).
- 3. CAMPA funds are collected from the companies who use forest areas for non forest purposes.
- 4. So it is argued that CAMPA funds should not be given back to the power companies and their license should be canceled if they don't have enough money.





1. They are found in W Ghats and are poached for uses in traditional medicines.

Great Indian Bustard (CE)



- 1. Their natural habitat is arid and semi-arid grasslands. It avoids irrigated areas. The major areas where they are known to breed are in central and western India and eastern Pakistan.
- 2. The main threats are hunting and habitat loss. In the past they were heavily hunted for their meat and for sport. In some places such as Rajasthan, increased irrigation by the Indira Gandhi canal have led to disappearance of the species from these regions. At Ranibennur Blackbuck Sanctuary (Karnataka), habitat changes have affected the populations of blackbuck and bustards. In the 1950s the scrub forest was replaced with *Eucalyptus* plantations. These helped wildlife when the trees were short but after their extensive growth they made the adjoining grassland less favorable for bustards.
- 3. The major issue is that grasslands, unlike forests, are not protected areas in India.
- 4. Less than 200 are left today. Rajasthan launched a campaign to save the bird recently. It will include (a) research and monitoring, (b) protection, management and restricted human use of core breeding areas, (c) linking local livelihood with bustard conservation by consolidating government and community institutions, (d) conservation education and awareness of local communities, (e) training of managers, and (f) a conservation breeding programme.

Gyps Vulture (CE)



- It has suffered a 99%–97% population decline. The cause is poisoning caused by the veterinary drug diclofenac. This is a non-steroidal anti-inflammatory drug when given to working animals reduces joint pain and so keeps them working for longer. But it causes kidney failure in several species of vultures.
- 2. The government has banned the veterinary use of diclofenac. Another NSAID, meloxicam, has been found to be harmless to vultures and should prove to be an acceptable substitute for diclofenac. Apart from meloxicam, captive-breeding programmes for several species of Indian vulture have been started. The vultures are long lived and slow in breeding, so the programmes are expected to take decades.
- 3. <u>Neck drooping:</u> It is a phenomenon where birds would exhibit this behavior for protracted periods over several weeks before collapsing and falling out of trees.

Gangetic River Dolphins (EN)

- 1. Their population is down from 10,000 to 2,000 as they are killed for their flesh and oil. This species is one of the 4 fresh water dolphin species in the world. The other 3 are : Indus in Pakistan, Yangtze in China and Amazon in Latam.
- 2. Vikramshila sanctuary is the only dolphin sanctuary in India and a research center will be opened up in Bihar. International trade is prohibited.
- 3. The immediate danger is the decrease in river depth and appearance of sand bars dividing the river course into smaller segments. UP is bringing up ancient Hindu texts in hopes of raising the community support to save the dolphins from disappearing.

<u>Himalayan Musk Deer (EN)</u>



- 1. It is threatened because the musk it produces is a priority in making perfumes and medicines and sells for \$45,000 per kilogram. Only males produce the musk but killing is indiscriminate as poachers set traps.
- 2. Captive-deer farming for musk has been developed and it is possible to extract musk from a deer without having to kill it. However, the captive deer succumb to disease, fighting and producing poorer quality musk. So killing wild deer is thought to be the most cost effective method for extracting musk. Now open farming has emerged as a viable alternative, whereby free ranging or wild musk deer are caught and the musk then extracted, allowing the species to be conserved and survive.

Fringed Lipped Carp (EN)

- 1. Its natural habitat is in Krishna and Godavari and over harvesting has led to its threatened status. It is a herbivores mainly a bottom feeder feeding on diatoms, blue green and green algae, insects, higher aquatic plants and detritus.
- 2. AP Biodiversity Board has planned to introduce fingerlings in the monsoon season in the upper reaches of Godavari and to train the fishermen for scientific harvesting.

Red Wattled Lapwing (EN)

- It is threatened by habitat destruction (stays close to urban areas) and air and water pollution (pesticides and herbicides). They generally nest on ground and thus are more vulnerable.
- 2. They feed on insects and thus their disappearance will lead to increased insects. They can camouflage their eggs well.

Jerdon's Courser (CE)





- 1. This courser is a restricted-range endemic found locally in the Eastern Ghats of Andhra Pradesh in the Sri Lankamalleshwara Sanctuary. It was first recorded in the mid 19th century; it was then considered to be extinct for more than 80 years, until it was rediscovered in 1986 at Cuddapah District, Andhra Pradesh.
- 2. Their preferred habitat has tall bushes at a density of 300 to 700 per hectare. Prior to its rediscovery it was thought to be a diurnal bird. It is nocturnal in habit and presumed to be insectivorous.
- 3. The construction of the Somasilla Dam led to relocation of villagers into the region where the Courser was rediscovered. Thus there was increased livestock pressures and firewood extraction, extensive quarrying, increased agricultural activity and a resulting loss of habitat.
- 4. In December 2005, the only known location for the species was threatened by the Telugu Ganga project, a scheme to supply water to the city of Chennai.

Forest Owlet (CE)





1. The Forest Owlet is an owl that is endemic to the forests of central India.

White Bellied Heron (CE)





1. The White-bellied Heron is found in the wetlands of tropical and subtropical forests in the foothills of the eastern Himalayas of India, Nepal (now extinct), Bhutan and Myanmar. The major threats the heron faces are poaching (both the bird itself and its eggs) and habitat destruction (the cutting of nesting trees and the disappearance of wetlands). It is under grave threat of extinction in Bhutan due to accelerated development of large-scale hydro-power projects in the basin. Rising water levels force the nesting birds to search extensively for fish, leaving the eggs or chicks exposed to predators such as the Crested Serpent Eagle.

Bengal Florican (CE)



- 1. Bengal Floricans live in open tall grassland habitats with scattered bushes and occur from UP to Assam via Bangladesh. It is the world's rarest bustard. It is known to have become increasingly threatened by land conversion for intensive agriculture, particularly for dry season rice production.
- 2. It may be that in India the decline is coming to a halt and that stocks in Kaziranga and Dudhwa are safe at very low levels. Sustainable management of grasslands (scientific collection of firewood) is needed to maintain it.

Himalayan Quail
Pink Headed Duck
Sociable Lapwing
Spoon Billed Sandpiper
Siberian Crane
Christmas Island Frigate Bird
Dugong
Malabar Civet

Masheer and Angling

- It is very tough to catch and hence catching it is a recreational activity from British times.
 But now the species is being decimated due to indiscriminate fishing by netting, poaching, poisoning and diverting water flows for irrigation.
- 2. Angling as a sport to protect the fish as enthusiasts release the fish after it's caught. It protects large stretches of the mahseer habitat from poaching and other illegal activities. The areas that are rich in fish are divided into "beats" among the local community that protect each stretch, thus allowing them to earn money from the sport.
- 3. The species is found in clear streams where the temperature remains between 5 degrees Celsius and 25 degrees Celsius. The mahseer inhabits the Indus, Ganga and Brahmaputra as well as the Cauvery.