Recovery Plan for Vultures in Tamil Nadu

February 2015

ARULAGAM

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Foreword

Until some years back vulture population was widely spread all over in Tamil Nadu, but now it is confined to Moyar valley in Nilgiri Biosphere.
Arulagam understood the reality and initiated vulture conservation mission in three years back with the support of Critical Ecosystem Partnership Fund (CEPF) through the guidance of BNHS and in association with Care Earth Trust and Malabar Natural History Society.

Past three years, we sensitized variety of stake holders from veterinary doctors to cattle herders including student community to address this issue. After some good activities and vigorous campaigns, even in the short span of less than three years we observe some encouraging results and this will continue at the same pace to reap more success.

At this juncture, we thank the Tamil Nadu Forest Department officials & staff for extending their excellent support for our efforts. We thanks especially Mr. Lakshmi Narayanan (IFS) Retd and Mr. V.K. Melkani (IFS), Principal Chief Conservator of Forests and Chief Wildlife Warden, Tamil Nadu Forest Department, Chennai, Dr. P. Raghu Ram Singh (IFS), Project Director, Mudumalai Tiger Reserve, I. Anwardeen (IFS), Conservator of Forest, Erode, Mr. V.T. Kandasamy, Conservator of forest, Coimbatore, Mr. K. Ashish Srivastava (IFS), Mr. Sugirtharaj B Koil Pillai (IFS), Rtd, Mr. K. Soundrapandian, Nilgiri North Forest Division, The Nilgiris and Mr. R. Raj Kumar (IFS), Divisional Forest Officer and Assistant Director of Sathyamangalam Tiger Reserve.

We also extend our sincere thanks to Thirumathi. Archana Patnaik, Collector of Coimbatore District, Thiru. P.Shankar, Collector of Nilgris District, Thiru. V.K. Shanmugam, then Collector of Erode District, for their significant, constructive contributions for including vulture conservation in Gramasaba agenda. We thank Panchayat development officials, presidents and their members for understanding the seriousness of the prevailing problem and supporting us, co operating with us in all our Arulagam initiatives & activities in the conservation of vultures. I appreciate and thank all our Arulagam members, supporters, volunteers for their involvement in this venture. We need this amazing support continuously and consistently for achieving our goal. I congratulate Mr. Bharathidasan, Secretary, Arulagam for giving effort to draw this recovery plan for vulture species. We hope that implementation of this plan meticulously will yield expected results surely in the coming years.

Karthika Rajkumar,
President'
Arulagam

Recovery Plan for Critically Endangered Vulture Species in Tamil Nadu

Introduction

Vultures are generally social birds, feeding and roosting in groups. These vultures are split in to two groups, namely Old World vultures which belong to the family Accipitridae comprising of 16 species and seven species of New World vultures belonging to the family Cathartidae (Feduccia, 1996). They are long-lived birds with a life span of up to 30 years recorded in captivity. They mature slowly too and start to breed only at the age of six or seven years. Genus *Gyps*, species breeds in loose colonies on trees or cliffs where twig nests are made. *Gyps* vultures lay only one egg in a clutch; two eggs in a clutch occasionally recorded in *OWBV* species; the incubation period is 45 to 55 days and the young birds fledge when they are about three to four months old (Ali & Ripley, 1983).

Importance of Vultures

Vultures are an important component of the ecosystem performing the role as scavengers by consuming dead and decaying animal carcasses, thereby keeping the environment clean and healthy. Vultures are known to feed on rotting carcasses of ungulates, which may have died due to deadly diseases like Anthrax, Foot-and-mouth disease etc. A flock of vultures can consume a huge carcass within a half an hour and left over will be the bones, hooves and horns.

Ecosystem service by the Vulture:

- Provides a valuable ecosystem service by scavenging on animal carcasses, thus destroying pathogens, which grow rapidly on rotting meat.
- Plays a crucial role in nutrient recycling
- Prevents contamination of water bodies
- Controlled zoonotic diseases which includes parvo, foot and mouth disease, rabies, anthrax and etc..

Empty sky and its Consequences:

Twenty years ago there were tens of millions of vultures in the Indian subcontinent. Now they and their services are nearly all gone.

- Increasing in populations of feral dogs

- Increasing the risk of dog bites, rabies and other unknown diseases and public nuisance
- Increasing the chance of pollution in water bodies
- Dealing with these problems imposes substantial extra costs on government agencies and charities.

Vulture species in India:

There are 23 species of vulture in worldwide. Out of these, nine species of vultures have been reported in the Indian sub-continent (Ali and Ripley, 1983). They are

S.No	Common Name	Scientific Name	R/M	Status
1	Oriental White-backed Vulture (OWBV)	*Gyps bengalensis*	R	CR
2	Slender-billed Vulture(SBV)	*Gyps tenuirostris*	*R*	CR
3	Indian Long- billed Vulture(LBV)	*Gyps indicus*	*R*	CR
4	Egyptian Vulture (EV)	*Neophron percnopterus*	*R*	E
5	Red-headed Vulture (RHV)	*Sarcogyps calvus*	*R*	CR
6	Indian Griffon Vulture	*Gyps fulvus*	*M*	*LC*
7	Himalayan Griffon	*Gyps himalayensis*	M	NT
8	Cinereous Vulture	*Aegypius monachus*	M	NT
9	Bearded Vulture/ Lammergeier	*Gypaetus barbatus*	M	NT

* **Resident (R) Migratory (M), Critically endangered (CR)**

Endangered (E), Near Threatened (NT), LC- Least Concern (LC)

Slender-billed Vulture, which was not distinguished as a separate species from Long-billed Vulture until recently (Rasmussen and Parry 2001), is locally common in the north and north- eastern parts of the Indian sub-continent (Ali and Ripley, 1983).

Flight, foraging and feeding behaviour

Vultures scavenge for food and are extremely efficient in finding carcasses. Generally they do not fly early in the morning and wait till the day warms up, sunning themselves on treetops or on the open ground. Once the day becomes hot and thermals (columns of hot air) rise, they start soaring, gaining height assisted by the thermals. Soaring vultures can stay airborne foraging for hours together. Foraging vultures have been known to range very far and wide, even more than **100 km in a day**. With their extremely powerful eyesight, the foraging vultures will either find the carcass themselves or by observing the activity of other individuals or other scavengers. Once the carcass is located, a number of vultures (kettle) will congregate in a short time and start feeding on it, with much posturing and squabbling. Normally, vultures can take sufficient food into the crop at one meal which will last for several days. The vultures generally feed in groups of the same or mixed species (Ali & Ripley, 1983).

Vultures in Tamil Nadu

Four species of vultures were recorded Tamil Nadu. They are

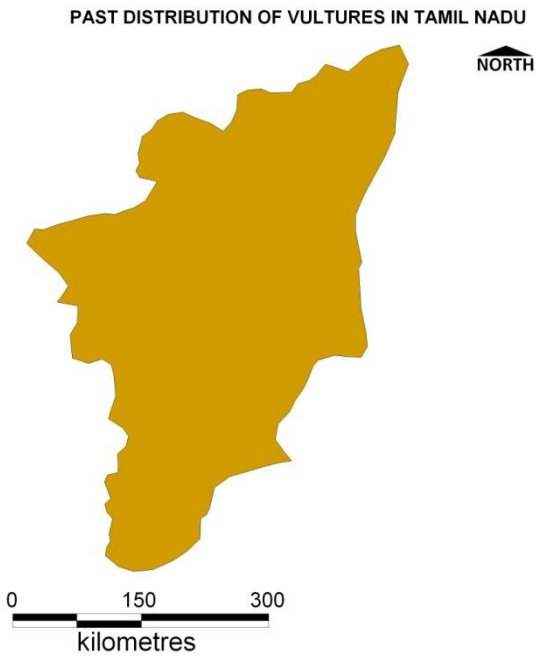
1. Oriental White-backed Vulture (OWBV)
2. Indian Long-billed Vulture (LBV)
3. Red-headed Vulture (RHV) and
4. Egyptian Vulture.

All these vultures were present in all over Tamil Nadu. Sight records gathered from birdwatchers show that vultures were present in Chennai, Chenglepet, Tanjore, Coimbatore, Tirunelveli, Madurai, Sivagangai, Ramnad and etc. White-rumped vulture and Long-billed vulture are resident in the Mudumalai Wildlife Sanctuary (Gokula *et al.*, 1996). The Indian vultures were breeding in some of cliffs in Nilgiri and Palani hills of TamilNadu (Sathyamurthi, 1970).Vultures were often sighted at leather tanneries in Chrompet (Chennai), Vaniyambadi and Dindigul. Vulture had been recorded in Dindigul and it was perching in the pillar of leather tanneries (Bharathidasan.S, Personnel

observation, 1992). In Chrompet, numbers of vultures was as high as crows (Neelakantan, 1958).

In the Vallam Village on the outskirts of Tanjore, a flock of White-backed Vultures had assembled regularly to feed on the left over of cattle killed for meat (Dr.K. Ratnam).Vulture nest had also been recorded in coconut tree in Tirunelveli. Farmers had driven the bird away due to loss of yield from the trees and inconvenience caused during plugging (Raja, Nanguneri, personnel interview).
Vultures were seen in Chinnar, Palakkad and Thirukalugu Kundram (C.Sasikumar and Sivaprasath personnel observation).

Now vultures are wiped out almost from the entire landscape in Tamil Nadu and only a small population of vultures is left in Moyar Valley, Nilgiri biosphere of Western Ghats, Tamil Nadu. It indicates that the Tamil Nadu region also witnessed the population crash of vultures that was experienced elsewhere in India.



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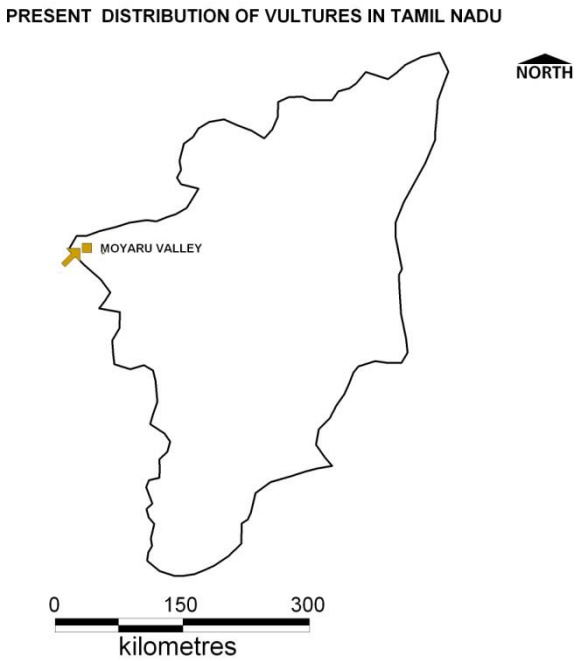
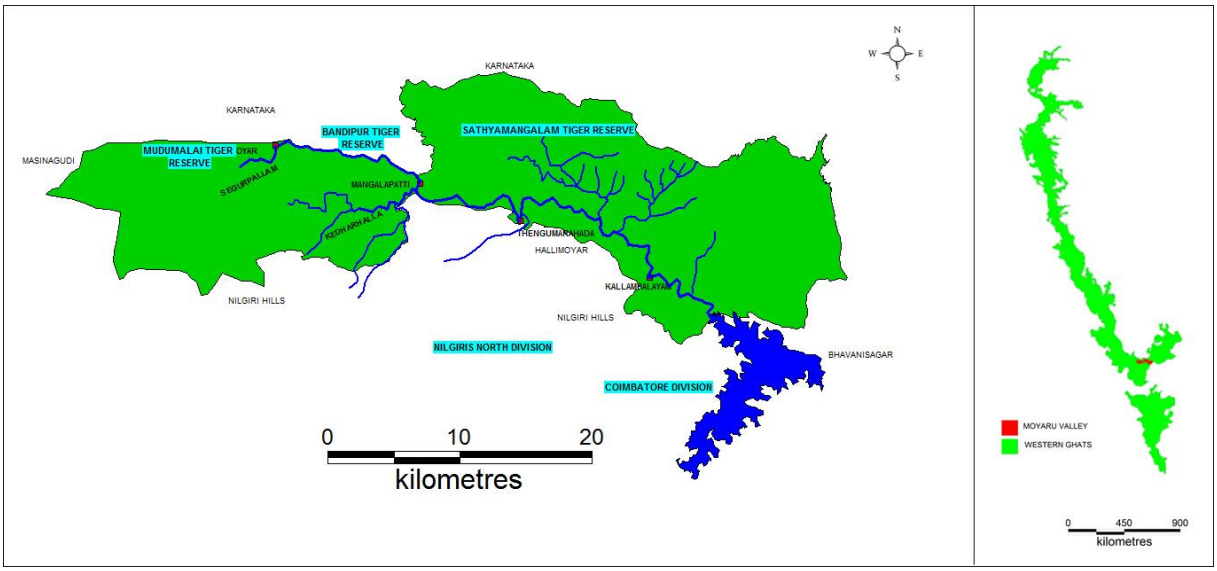


At Present

Salient features of Moyar valley:

The Moyar Valley is located between the latitude and longitude of 11.701289°, E 76.587062° to 11.472443°, E 77.147608°

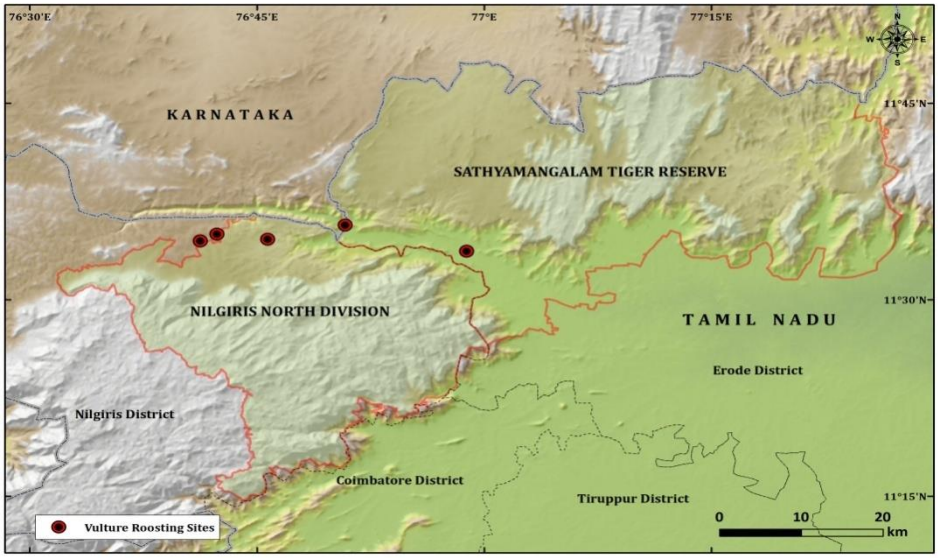
- Perennial and semi perennial rivers drains in Moyar
- Supports high density of terrestrial wild fauna
- High tiger and elephant density
- Surrounded by villages and settlements
- High density of domestic cattle – bovids
- Veterinarians absence and diclofenac usage is less because of remote areas
- Part of Western Ghats – biodiversity hotspot
- Part of Nilgiri Biosphere Reserve
- Largely forested: dry thorn and dry deciduous forests
- 135 Oriental White-backed Vultures, 17 Indian Vultures and 5 Red-headed Vultures were recorded near an animal carcass in the Sathyamangalam Tiger Reserve of Moyar Valley during 2013-14. In addition, 2 Egyptian Vultures were occasionally recorded in the Bhavanisagar dam site in Sathyamangalam Tiger Reserve.
- During the synchronized survey, 2014 results showed that presence of OWBV (N=102), LBV (N=3) and a RHV in Nilgiri North Forest Division and Sathyamangalam Tiger Reserve of Moyar Valley.



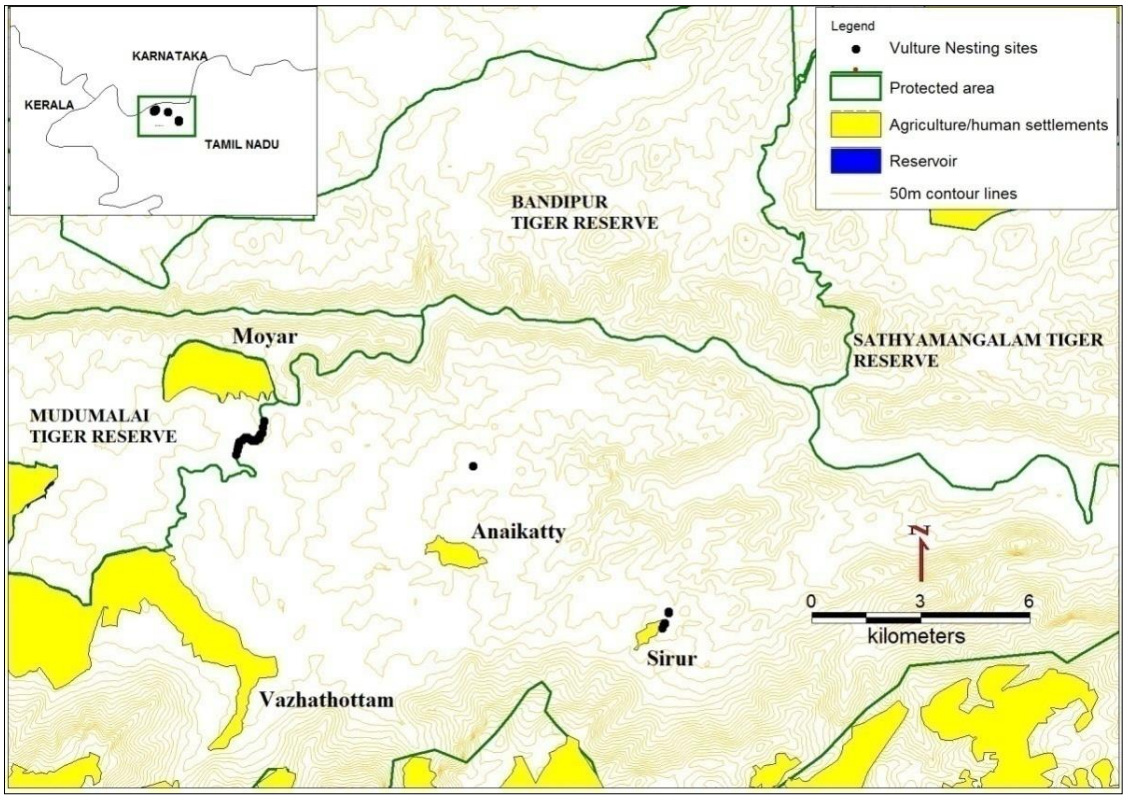
Breeding colonies of vultures in Moyar Valley:

- The Critically Endangered OWBV breeds in Mudumalai and Nilgiri North forest division of Moyar Valley as an ideal breeding ground. There are 24 active nests of OWBV in *Jagalikadavu*, 12 active nests in Arekadavu 3 nest in Kumparakadavu, 3 active nests in *Kathalai padugai* in Akkaraipatti were recorded. There are 3 nests located in *Nilakottai* range of *Pennai* beat.
- There were 31 pairs of White-rumped vulture nesting population observed on the trees along the riparian habitat (Map 4.1) in NNFD in the Moyar Valley. Five pairs of Indian vulture were breeding on the rocky cliffs in both NNFD and STR (Map 4.2) of Moyar Valley. Only one clutch was recorded throughout the study period (Venkitachalam, 2014).
- Twigs, dry leaves, grass, thermocol, sometimes even polythene covers were recorded as nesting materials used by OWBV in Jagulikadavu and Siriyur areas (Ramakrishnan,et al, 2014)
- The historical records of the nest locations also were collected and it reveals that the RHV also used to nest over Anakkalmariammankoil and there are six old nesting sites of OWBV were recorded such as Arakadavupallam, Masikoil, Marvakandi Dam, Doddanare, Gulithurai patti, and Thotikadau.
- Recorded of abandoned nest in Thoppala and Sikalla of Nilgiri north division.

Vultures roosting sites in Moyar Valley

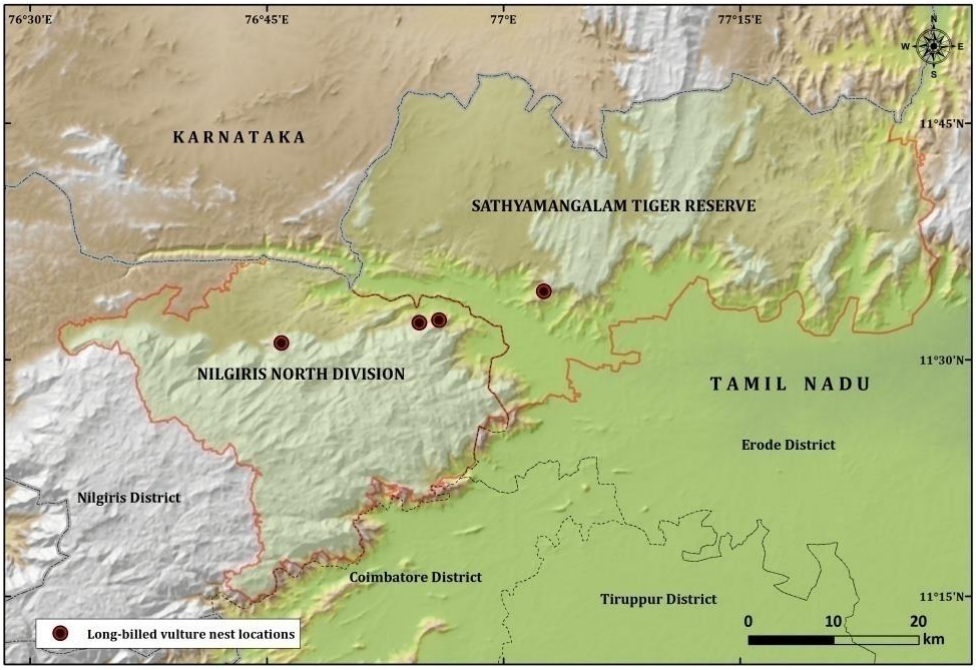


White-backed vultures nest distribution in Moyar Valley

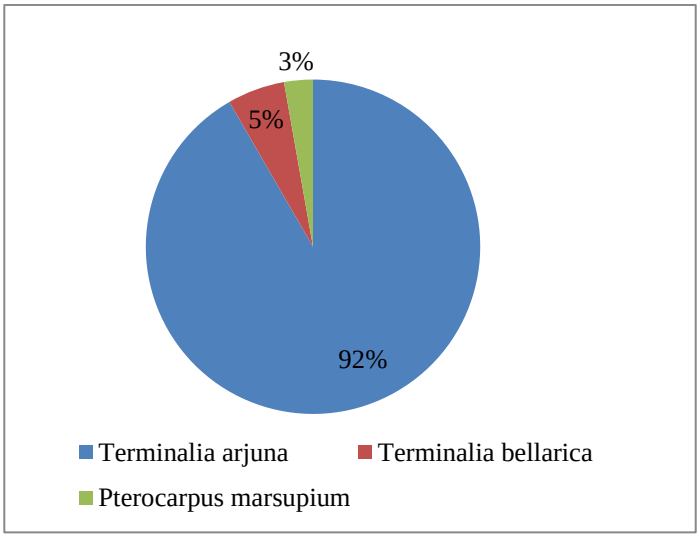


Highlights:-

The first breeding record in five pairs of Indian long-billed vultures was noticed in NNFD and STR of Moyar valley. This is a breakthrough in Tamil Nad



Indian Long-billed vulture nesting locations in Moyar Valley



Percentage of tree species prefernce for nesting by White-rumped Vulture in Moyar Valley

Cause of population declines

1. **Diclofenac**

Veterinary use of the Non-steroidal anti-inflammatory drug (NSAID) diclofenac is the major cause of these declines. Diclofenac has been used to treat symptoms of disease (mastitis) and injury in domesticated ungulates in many parts of the Indian subcontinent since the 1990s.

The effects of diclofenac have been studied experimentally on captive individuals of three of the global total of eight *Gyps* vulture species. In all of the species tested, death occurred within a few days of treatment with a single dose of diclofenac and severe kidney damage and extensive visceral gout (accumulation of the excretory product uric acid) were observed in post mortem.

Other possible threats

2. **Persecution by cattle herders through poisoning:**

Carnivores living in the edge of core protected areas, particularly vulnerable to human kleptoparasitism, snaring (non-selective) and direct persecution. Cattle herders and farmers target carnivores such as tiger and leopard that have killed their cattle by poisoning the carcass. Common methods used by local farmers for

retaliatory killing is by poisoning left over carcass by carnivores and baiting by poisoned meat. Malicious poisoning does not end with the target animal, but it also affects other wildlife such as vultures, Striped Hyaena, jungle crows and wild boars. In poisoning cases, the willingness to investigate and prosecute the offenders by the forest department is prone to more conflicts with local people. They hide the incidents citing them as natural deaths (Davidar and Davidar, 2002).

3. **Carcass unavailability:**

   Methods for the disposal of cattle carcasses are changing nowadays. Carcasses of domesticated ungulates are scarce due to selling of age old cattle and hygienic disposal methods which limit the vulture population**.**

   In Protected Areas also sometimes elephant and guar carcasses are also buried or burnt rather than disposing off in open area to avoid the spread of foul smell/ diseases and this turn causes shortage of food availability.

4. **Habitat degradation:**

   Tree felling, cliff mining, forest fire, road formation, tourism and festivals which affects vulture to some extent.

Current status

As per International Union of Conservation of Nature's (IUCN-2014) red list for birds, OWBV, LBV and RHV are listed as critically endangered. Egyptian vulture is in endangered category. Vultures are categorised as Schedule 1 species as per wildlife protection act.

Conservation Responses

By Government:

Soon after research had indicated the severity of the effects of diclofenac on vulture populations, the government of India, Pakistan, Nepal and Bangladesh has taken actions to prevent the contamination of vulture food supplies with this drug. India's National Board for Wildlife recommended a ban on veterinary use of diclofenac on 17 March 2005. In May 2006, a directive from the Drug Controller General of India was circulated to relevant officials, requiring the withdrawal of manufacturing licences for veterinary formulations of diclofenac. This directive was further strengthened in 2008, when it was made an imprisonable offence to manufacture retail or use diclofenac for veterinary purposes.

By organizations:

Conservation actions undertaken so far, in addition to the restrictions on diclofenac use, include surveys to measure the effectiveness of the ban on veterinary diclofenac, regular surveys of vultures to measure their population trends, awareness raising to make the ban more effective, advocacy for enforcement of the ban, contact with the pharmaceutical industry, testing to establish which veterinary drugs are safe and which are harmful to vultures, the creation of Vulture Safe Zones in which intensive campaigns are undertaken to remove toxic NSAIDs from the food supply of the remaining small populations of wild vultures, and conservation breeding to provide a secure captive population and a surplus of captive-bred birds for reintroductions.

Prevalence of NSAIDs:

Contamination of cattle carcasses with diclofenac has declined, but it has not been eliminated yet. Diclofenac intended for human use is easy to obtain, and easy to mis-use for the treatment of livestock because pharmaceutical companies market the drug in larger vials than are required for human medicine. Consequently, carcasses of wild vultures continue to be found with traces of diclofenac in their tissues and post-mortem findings

continue to indicate that diclofenac poisoning was the cause of death. Recent death of vulture also shows the presence of diclofenac in Mudumalai.

The veterinary use of another NSAID (ketoprofen) known to be toxic to *Gyps* vultures is legal and has increased. Other NSAIDs are also in legal use which may be harmful to vultures, but have not yet been tested. Aceclofenac, an NSAID that is likely to be metabolized into diclofenac after being administered to cattle, is beginning to be used. It is likely to kill vultures that feed on contaminated carcasses.

What remains to be done?

These are all hopeful signs, but the following serious concerns remain. The Vulture population that exists at present is precariously small and will remain vulnerable to adverse events until numbers have increased substantially. This vulnerable period will be long because the low natural reproductive capacity and long duration of immaturity of vultures means that, even under the most favourable conditions, the shortest period in which a wild vulture population can double in size is about ten years. The rate of the recent population decline was much more rapid than the most rapid possible rate of increase, with the population of the species most strongly affected by diclofenac halving every year in India.

Currently, vultures are scarce or absent which demonstrates that protection of natural ecosystems alone is insufficient for the effective conservation of vulture populations. Parks are too small to achieve this on their own. Satellite tagging has shown that vultures range over huge areas in search of carrion and so the presence of diclofenac-contaminated cattle carcasses around the margins of even the largest of the National Parks has been sufficient to eliminate or greatly reduce their vultures.

Hence, it is time to establish a more robust long-term vision for the recovery and future safeguarding of South Asia's vulture populations, which links together all the necessary strands of regulatory and conservation action with scientific research and monitoring. This programme is outlined in the following tables

Commandments

1. **Removal of the Main Causative Agent**:-

Above 3 ml vials of diclofenac, Aceclofenac, flunixin, and ketoprofen are largely misused and necessary immediate action to be taken to arrest it.

Aims	Activities	Action owner	Influence **H**igh / **M**ed/ **L**ow
Curb leakage of human formulations of diclofenac, Aceclofenac, flunixin, and ketoprofen drugs into the veterinary sector.	1) Enhanced vigilance and periodic raid to be conducted especially in pharmacies situated in Nilgiri , Erode, Tirupur and Coimbatore districts. 2) Monthly Sales record of NSAIDs with copy of prescriptions, doctor's name and license number to be produced by pharmacy shops. 3) Strict enforcement and legal action under drugs and cosmetics act, 1940, Section 28 B, against the offenders to be initiated. And adequate publicity can be given in the media.	Health Department (District Drug Controller (Additional Director, Drug Inspectors)	H
Ensure the supply of Meloxicam in adequate quantity to the dispensaries.	Adequate stock of Meloxicam to be maintained.	Animal Husbandry Department	H

Test traces of NSAIDs especially diclofenac in cattle and vulture carcass.	1) State Government to issue Government Order (G.O.) for testing the trace of diclofenac and other NSAIDs in cattle and vulture carcass. 2) Lab to be established 3) Special team to be formed for sample collection 4) Surveys and analyses of cattle carcasses with results from safety testing to draw attention of governments to potentially hazardous drug.	Veterinary University/ Animal Husbandry Department/ SACON with the guidance of MoEF	H

2. Monitoring and Protection

Monitoring, recovering and conserving vulture habitats.

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Ensure continuous Monitoring, recovering and conserving vulture species and habitats	1) Capacity building training to be conducted for forest watchers/ APW/ Guards for identifying vulture species and monitoring the known vulture breeding and roosting colonies. 2) Data collection on vulture: All vulture sightings to be recorded at each Anti-poaching Camp, with details such as species, age class, activity, numbers,	TNFD	H

	sightings of carcasses and presence of vultures with details. The data for the Division should be collated every months		
	3) Population Survey:- Conduct nest counts or road transect surveys, as appropriate. 4) Conduct synchronized vulture survey annually- by using same methods as in previous surveys and publish results of the survey	TNFD	H
	5) Enhanced vigilance to be done for safe guarding the nesting trees against forest fire during the breeding season. 6) Devotees are to be restricted to g o near the vulture nesting habitat especially in Siriur hamlet		

3. **Ensuring carcass availability:**

Ensuring improved availability of carcasses to vulture

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow

Make wildlife post mortem rules for the beneficial of vulture species by Government of Tamil Nadu by exercising the powers conferred by clause (c) of sub-section (2) of section 64 of the wild life (protection) Act, 1972 (Central Act 53 of 1972).	Rules to be drafted under the rule the following to be included. In forest and adjoining areas, carcasses of wild animals such as Elephant, Gaur, and feral buffalo should be left alone to be fed by vultures and other scavengers, instead of burying or burning them. Arrangements to move such carcasses to interior areas if they are found near human settlements	Secretary, PCCF in Forest Department and Animal Husbandry	H
Recording unusual death	Timely reporting of death of Vultures and other wildlife in unusual and abnormal situations. Post mortem exercise to be conducted.	TNFD & Forest veterinarians	

4. **Carcass poisoning:**

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow

Prevent Carcass poisoning	Impose legal implications Enhance vigilance to be exercised by 1) Effective foot patrolling and timely detection of carcasses 2) Placing camera trap near the carcasses 3) Proper compensation package to be provided. 4) Cattle insurance schemes may be introduced. 5) Single window scrutiny can be established for speedy processing so as to reduce animosity of affected cattle owners towards wildlife and forest department 6)Arrangements to be made with cattle owners for leaving the carcass for vulture by introducing testing procedures	TNFD	H
Control the cattle populations	1) Owners of the cattle in the settlements and villages should be identified and cattle which belong to the outsiders should be completely banned from grazing in the forest. 2) Conducting Animal health	TNFD	H
		Animal Husbandry and TNFD	M

	camp and periodic visiting by veterinarian for ensuring immunization and diclofenac free.		

5. **Extension activities**

Vulture/ Raptor interpretation center and Raptor Rescue center

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
To highlight the importance of vulture in the ecosystem and the need to conserve them	Establishing of Raptor Interpretation Center at Ooty/Mudumalai/ STR	TNFD	L
Establish of Vulture Rescue Center	Recovering of injured vulture/ abandoned chicks and kept it for temporary aviary until it is ready to fly.	TNFD	L
Estimate the former and potential future value of the ecosystem services provided by wild vultures.	Conduct a survey of costs of cattle carcass disposal, feral dog control and other ecosystem service measurements	Arulagam in association with SACON and TNFD	L

Involve general public and Media in conservation	1)Sensitization program for various stakeholders 2)Repeated advertisement in veterinary journals and other medias about banned drug 3)Community-led vulture-based ecotourism in Tamil Nadu 4)Exhibition in flower show, village festivals and cattle sandy 5)Celebrating International Vulture Awareness Day	TNFD/ News Public Relation Officer/ Finance dept / Conservation organization	L

6. Research activities

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Monitor wild vultures with GPS PTTs	1) Develop method for GPS Platform Transmitter Terminal (PTT) vulture tracking. 2) Capturing and tagging of wild vulture 3) Monitoring	TNFD/ BNHS/ SACON/ Arulagam	M

7. Habitat protection for long term conservation

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Protect habitat	1) Notify Moyar Wildlife sanctuary under section 26 A (1) (b) of Wildlife (Protection) Act 1972 Central Act 53 of 1972 by including the forests of Nilgiri North Forest Division.	TNFD	M

8. Need for collective actions:-

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Treat catastrophic decline of vulture as a biological disaster	Central government to issue directions under section 62 of National Disaster Management Act, 2005 to prevent vulture decline. National Plan, State Plans and District Plans to be amended suitably to include reducing threats to vulture.	Ministry of Home Affairs State Disaster Management Authority and District Disaster Management Authority	H

9. Vulture Safe Zone

Vulture foraging range is more than 100 km/ **day. The Objective** of a **Vulture Conservation Area** is to establish through targeted awareness activities and sampling for at least a 100km[1] radius (30,000km^2) so that no diclofenac or other veterinary drugs toxic to vultures are present in cattle carcasses (the main vulture food supply), such that it can be declared as a **Vulture Safe Zone**. Arulagam

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Establish Moyar valley as a full vulture safe zone	Maintenance and review of VSZs in Tamil Nadu	Forest Department	H
Identification and selection of new provisional Vulture Safe Zones (pVSZs) in Tamil nadu, in particular for LBV.	Capacity building and advocacy for pVSZs	Forest Department	M

10. Captive Breeding Programme

Aims	Activities	Action owner	Influence **H**igh/ **M**ed/ **L**ow
Initiate Captive breeding Center for LBV, OWBV, RHV and Egyptian Vulture in Arignar Anna Zoo/ NBR	1) Training of Staff and preparation in facilities 2) Maintain the population in good health. 3) Release the vulture in full vulture safe zone	TNFD	L

There is Hope for Vultures

Vulture Safe Zones, which were pioneered in Nepal, are being introduced in Tamil Nadu, by Arulagam (Nature Conservation Organization) with the guidance and support of Tamil Nadu Forest Department, Critical Ecosystem Partnership Fund (CEPF) and Saving Asia's Vulture from Extinctions and in association with Care Earth Trust and Malabar Natural History Society. But it is hoped that it will be added to and implemented jointly as a partnership between conservation organizations such as Salim Ali Center for Ornithology and Natural History Society, Bharath Natural History Society, Zoo Outreach Organization and government agencies such as Animal Husbandry Department, Drug Controllers, District Administrations, Milk Cooperative societies, Pharmacy associations and the pharmaceutical industry.

Clean India Campaign and Vultures

Vulture helps us by consuming the dead and decaying organisms and control spreading of water borne disease, foot and mouth disease, anthrax, rabies, and etc. Thus indirectly supports Clean India Campaign initiated by Honorable Prime Minister of India.

Why not we treat vulture decline issue like ebola outbreak and take the appropriate steps immediately.

Let the Vulture soar high again in the sky.