

# Goa Forest News

Quarterly News Bulletin of the Goa Forest Department

Vol. XIV No. 2

October 2015



## VANMAHOTSAVA 2015

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## Editor's Note

*Dear Readers,*

As you all know that first week of July is celebrated as Vanmahotsava across the Country. During this week, plantation work is undertaken not only by the Forest Department alone, but by various stakeholders of the society. The 65<sup>th</sup> State Level Vanmahotsava was celebrated at Harmal Panchakroshi High School, Pernem, North Goa on 25/07/2015. A brief report of 65<sup>th</sup> Vanmahotsava makes the Cover Story of our Newsletter.

Learning is a continuous process. A two day Workshop on Detection of Wildlife Crime, was organised by Wildlife Crime Control Bureau, Western Zone in collaboration with Goa Forest Department at Forest Training School, Valpoi for the officers and executive staff. Also to refresh the professional knowledge of ministerial and executive staff of the department, Refresher Courses were organised at Forest Training School, Valpoi. A total of 44 LDC/UDC level ministerial staff and 68 Forest Guard and Round Forester level Executive staff were benefitted with these One Day Refresher Courses. A glimpse of the aforesaid courses is shared herewith.

It's often seen that after joining service, we all find it difficult to pursue with our interests, hobbies and sports. Although sportsman spirit is the key to success in professional life as well. To infuse this sportsman spirit and develop camaraderie among the staff and officers at various levels, All India Forest Sports Meet is organised annually. The 22<sup>nd</sup> AIFSM is being organised at Bengaluru, Karnataka from 19<sup>th</sup>-23<sup>rd</sup> December, 2015. A 48 member contingent from Goa Forest Department is also participating in the same. A brief report of the preparations being carried out is included in this newsletter.

So Dear Readers, Enjoy reading Forest News and do keep continuing the greening and cleaning efforts in all our surroundings.

*With best wishes*

*Kuldeep Sharma*

(Kuldeep Sharma, IFS)

Editor

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## 65<sup>th</sup> STATE LEVEL VANMAHOTSAVA CELEBRATED

'Vanmahotsava', the festival of tree planting commenced six decades ago at the national level. The idea of Vanmahotsava was initiated by Dr. K.M. Munshi, the then union Minister for Agriculture and Labour, Government of India. Like elsewhere in the country, the Goa Forest Department also celebrates the occasion annually to commence the tree planting activities. In Goa the monsoon reaches in second week of June and normally, forestry plantations commence immediately once the monsoon sets in.

This year the Goa Forest Department organized the 65<sup>th</sup> Vanmahotsava Function at Harmal Panchakroshi High School, in Pernem

taluka on 25/07/2015. The function was organized by Social Forestry Parks & Gardens division on behalf of the State Government in association with Harmal Panchakroshi High School, Pernem. The VANMAHOTSAVA was launched by Honourable Chief Minister of Goa Shri Laxmikant Parsekar.

Speaking on the occasion, the Chief Minister of Goa, Shri Laxmikant Parsekar stressed on the importance of planting and nurturing of trees which sustain life and water on the planet.

Various stakeholders such as Village Panchayat, School Students, School Teachers & Media participated in the formal function at Harmal Panchakroshi High School, in Pernem.



Smt. Smita L. Parsekar, Head Mistress Harmal Panchakroshi High School, while planting sapling during Vanmahotsasava 2015.

## 2-DAY WORKSHOP ON WILDLIFE CRIME CONTROL CONDUCTED AT FTS, VALPOI.

The Goa Forest Department in association with the Wildlife Crime Control Bureau, Western Region, Mumbai organised a two-day workshop on Wildlife Crime Control for Assistant Conservator of Forests, Range Forest Officers of Goa Forest Department and Police Inspectors of the Goa Police Department on 25<sup>th</sup> & 26<sup>th</sup> August, 2015.

The workshop was inaugurated by the Principal Chief Conservator of Forests Sh. Ajai Saxena, IFS in presence of Sh. Maranko, Regional Director, Wildlife Crime Control Bureau, Western Region, Mumbai.

Wildlife as well as legal experts were the resource persons for this workshop. One Supreme Court Advocate conducted a session on handling of wildlife crime cases in various Courts in the country including Supreme Court.

The Regional Director of Wildlife Crime Control Bureau Sh. Maranko delivered a lecture on collection of evidence in wildlife crimes and handling of cases by Inquiry Officers.

Sh. Dubey (Retired Forest Officer from Madhya Pradesh) narrated several case studies. On the second day, a case was discussed and mock court proceedings were conducted and discussed.

In total 48 participants attended the workshop which included 2 Deputy Conservators of Forests, 4 Assistant Conservator of Forests, 24 Range Forest Officers, 4 Police Inspectors, 6 Police Sub-Inspectors, 4 Foresters and 4 Forest Guards.



**Glimpse of 2 day workshop  
on Wildlife Crime Control held  
at FTS Valpoi**





## REFRESHER COURSES CONDUCTED AT FOREST TRAINING SCHOOL, VALPOI

Forest Training School, Valpoi conducted five Refresher Courses for the frontline staff and ministerial staff in July and August 2015. The refresher courses are conducted every year for the executive field staff to update with the latest developments in the field of forest and wildlife conservation.

The participants were updated on topics like climate change, court cases handling and legal matters. They were also addressed by Prof. Madhav Gadgil who briefed them about his work done for the conservation and protection of the Western Ghats. The course matter for Forest Guards and Foresters included procedure of investigation and inquiry into forest and wildlife offences and handling of court cases including briefing of Government Counsel. A total of 68 Executive Staff including 50 Forest Guard, 18 Round Forester were benefitted by the refresher course.



For the first time, two special courses for Lower Division Clerks of the Forest Department on office procedure, maintenance of records, accounts and conduct rules were also organised at FTS. A total of 44 Lower Division Clerk /Upper Division Clerk were benefitted by the refresher course.

The feedback of the participants was also obtained. Participants recommended for more such courses in future.



Refresher Course at FTS in progress

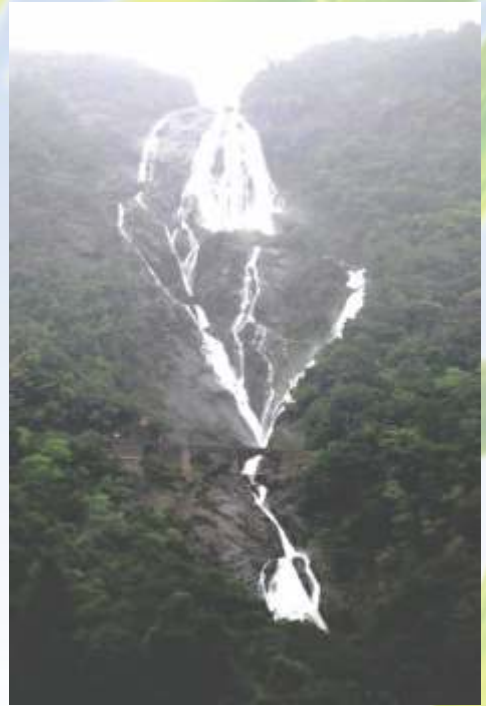
# DUDHSAGAR WATERFALLS - ECOTOURISM HOTSPOT OF GOA

by Dr. A. Anil Kumar, IFS

The state of Goa nestled in lap of Western Ghats in the east with Arabian Sea to its west is synonymous the world over as a tourist destination drawing people in droves from far and near to explore its serenity, the wide expanse of pristine beaches and resorts stretching from north to south over a coastline that is 105 km long.

Eco-tourism activities in the Protected Areas of the state are managed by the Forest department. 755sq km of Forest area equivalent to 20% of geographical area has been notified as Wildlife Protected Areas (WLPAs) that we know as Sanctuaries and National Park. While the stroll or drive through the WLPAs provides chance encounters with wildlife, it is time well spent even amidst the peace and quiet of dense forests. Goa has 6 sanctuaries and 1 national park. The names of sanctuaries goes like Bhagwan Mahaveer, Madei, Netravali, Cotigao, Bondla and Dr. Salim Ali while the name listed first also denotes a national park in the state.

The Bhagwan Mahaveer Wildlife Sanctuary & National Park, Mollem is located at a distance of around 65 km from Panaji on the National Highway 4A in Dharbandora and Sanguem talukas (revenue subdivisions) of North and South Goa districts respectively. The sanctuary is oldest in the state which was notified way back in 1968 and the national park came into being in 2007. The two constitute the largest wildlife reserve covering an area of 240 sq km [133 sq km being the sanctuary area and 107 sq km being the national park]. The area is dotted with evergreen, semi evergreen & moist deciduous forests and support varied fauna in its undulating terrain like Gaur, Leopard,



Mouse deer, Barking deer, Malabar giant squirrel, king cobras and avi-fauna. The WLPA has several features that depict nature's play at its best. The most prominent being Dudhsagar falls, a gigantic water cascade that descends from a height of over 300 metres into a deep gorge to take the shape of a river bearing the same name. It is believed to be the 5<sup>th</sup> tallest waterfall in the country. The river enters the state from Kueshi village in Joida taluka of Karnataka after two rivers namely Garudaval Ghatkunga and Bhagvatal Ghansuri meet. The river is rechristened as Dudhsagar in Goa. The site is accessible through a fair weather road that traverses the deep forests over a distance of 12 kms in designated four wheelers that ply in the circuit. The round trip starts from Collem and takes about 2~3 hours. This is essentially open during the dry weather season from October to May and



remains closed in the monsoon. The waterfall is perennial even though the quantum of water carried varies with season. Dudhsagar falls represents the manifestation of nature at its best as it owes its origin to the densely forested catchment and in turn nurtures the lush green vegetation downstream. Even though conducted tours to the falls had commenced around 25 years back with 97 vehicles taking the tourists, the release of hindi movie 'Chennai Express' which had shots of the area saw the popularity of the falls rising manifold and bringing along large number of domestic and international tourists. In accordance with the decision of State government, the number of vehicles saw a four fold increase to 431 from 2013-14 tourist season. The site accounts for over 2/3<sup>rd</sup> footfalls and revenue earnings as far as eco-tourism in the state PAs is concerned. A railway causeway built by the erstwhile Portuguese and now a part of South western railways runs across the falls almost at its middle and adds to the visual appeal of the place. The visitors basically enjoy the sight of the giant water body and capture the visuals of passing trains on the causeway trudging out through one of the 13 tunnels on their cameras. Several tourists take a swim in the water pool at the foot of the falls even though it is quite risky at times due to strong underwater current.

The Wildlife range, Mollem under the Wildlife & Ecotourism (North) division is responsible for the management of the site that include regulation of visitors and vehicles. Bio toilets and temporary change rooms have been set up besides a shack that sells water and soft drinks. Life guards are also deployed to ensure tourist safety.

Significant decisions related to management of the eco tourist site are arrived at on the basis of recommendations

of State board for wildlife. The department as part of visitor management allows a maximum of 50 vehicles to enter the National park at Collem at every 90 minute interval beginning 0830 hrs daily till 1530 hrs. Each vehicle is permitted to carry up to 7 adults. All the tourists are compulsorily required to carry life vests in the circuit. The particulars of adults and child in each vehicle is recorded at the point of entry where a note on the plastic water bottles being carried in is kept and checked while the vehicle is on its way out after the visit is over. Keeping the area clean of its grbage is also a task that is performed by deployment of dedicated workforce. One unique feature of the circuit is that no private vehicles are permitted in the route and only the designated vehicles can ply on the route. According to the data available, the circuit saw around 2.25 lakh tourists visiting Dudhsagar in the year 2013-14 while there was a slight drop in the following year to around 2.00 lakh. The average number of trips on any given day during the season is 150 while it goes up in the peak periods. The Dudhsagar circuit has been providing livelihood options to several hundred people residing in the villages of Collem, Mollem, Shigao, Matoje falling under Collem & Mollem Village Panchayat.

The need of the hour is to strike a balance between tourism and conserving the sanctity of the site that gets into threat on account of unregulated tourist arrivals and resultant pressure on the PA. This is expected to be achieved by taking all the stakeholders and policy makers into confidence so that the conditions do not deteriorate to a level where restoration becomes impossible.

The author is presently working as Deputy Conservator of Forests, Wildlife and Eco Tourism (North)

## MY LEOPARD

by Prakash Salelkar

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The leopard is a graceful, powerful big cat closely related to Lions, Tigers, Snow leopard and jaguars. This cat has smooth haired, bulky, elegant muscular body as to that of a gymnast, having rosette spots like shining diamonds on a dual coloured yellowish black shawl, hence honored with the name “Queen of the Forests”. Their hidden movement, vigilant attitude and muscular built is meant for hunting. It is a strongest climber of all the cats and capable of killing the larger prey than itself.

The leopard is most elusive of the large carnivore, live solitary and a cunning hunter. Its prey ranges from strong scented carrion, fishes, reptiles, birds and mammals to rodents, hares, deers, pigs and monkeys. It always prefers to live near habitations for easy prey of domestic pets like dogs and cattle. It hides in the minimal space like small bushes or above the trees and ambushes the prey as and when found.

Many of the big cats have been focus of the conservation efforts; the leopard has not received similar attention. The leopard was once widely distributed in Indian subcontinent but now is classified as near threatened by IUCN since 2008. The leopards have vanished 50% from historical ranges of Asia. In India the depletion and fragmentation of forest cover is also forcing this highly adaptable cat for new places to survive. And fortunately the versatile animal that can climb trees, swim and hide in minimal cover has learned to thrive



close to human habitation. Thus escalates to incidences to human leopard conflicts.

The man has land water and air reserved exclusively for his use and for posterity. This can only be described as misguided sense of proprietorship. Man's grid has mindlessly exploited the nature, striped the planet of its vital forest cover, polluted the air, water and pushed the countless species to extinction. Great cities, unending stretches of roads, mineral mines, factories and farm lands have left no room for the lesser species who too have right to live and share wealth of this planet. The stretches of forest cover in protected areas in which man have confined the animals, saved them as it is were, largely for his future generations is being encroached upon. The world is not our alone to exploit even if we are its dominant species. We must learn to share equitably with its other rightful inhabitants.

Leopard is a cat effective in controlling population of herbivores which are increasing greatly. It would result in overgrazing and destruction of green



cover of the earth. The leopards are invaluable in keeping the population controlled of the herbivores like deers, hares, bisons, and monkeys that destroy the crop. It also keeps the check on wild boar population too which is presently considered as menace. The leopard that shelters in the field serves to keep these foraging animals off and stands as a guard for precious crop. The leopard's favorite food is stray dogs, thus they help in controlling dog population and there by the rabies, eradication of which is a mission of the time.

As far as our state is concerned there are no casualties on record for last 80 years by the leopard. There may be some accidents or near miss incidents where the human is injured in the self defence. It is very much important to note that, a scooter which kills at least 5 riders or pillions every week is advertised and purchased at every home. The poor leopard that has not caused any causality is a subject of haterate and fear figure of every individual. There are numerous mis-concepts floated by way of myths which in turn continued adding unwarranted logics and realities suppressed under this lethal spear targeting the leopard, a worrier dedicated to guard the human race.

It is very essential that, when a leopard is cited please do not disturb it. Leave it alone and it will go by itself because it is a shy animal, do not show any unwanted heroism as we should be aware that we are confronting a versatile predator and an animal with very sharp teeth and claws and will not hesitate to attack when threatened. The leopard will

attack when provoked and dangerous when frightened by the crowd. However, if we leave it alone, will escape quietly without making any harm hence it is advisable to be away from the site and allow rescue team to perform to save us

In the states like Maharashtra and Gujrat there are many villages where 9/10 leopards exist in 100 sq.kms. having no Human Leopard conflicts. In the Gir region leopard and Lion leave peacefully around human habitation. The Maldharis when interviewed in respect of these big cats, their opinion is unbelievable, they prefer to stay with 'Hawaj' (means carnivores) they opine that it is very important for them as they protect our crops from Nilgai and other herbivores without cost. Even stray cattle lives away from the crop due to smell of the carnivores. There are mere incidents where our cattle fall prey. However, the cattle in Gujrat are well protected with high walls and caged shades. According to the traditional belief, the Lion owns the jungles of which they are but inhabitants and when a lion kills a livestock they consider it as sort of rent paid towards occupation of jungle space. They are proud to share the space with these big cats and we are suppose to take our cue from them. **“ Let us share some space to our LEOPARD around us which is merely snatched from it and let it live peacefully with us as a co-occupants of this planet.**

The author is presently working as  
Range Forest Officer,  
Netravali Wildlife Sanctuary.

# The Risks of Assisting Evolution

By Elizabeth Alter

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There are four locked doors guarding a specialized lab at the Harvard School of Public Health. The doors are meant to prevent insects inside the lab from venturing out — which is essential, because researchers behind those doors are re-engineering mosquitoes by cutting and pasting bits of DNA with tools unimaginable a decade ago.

If researchers can figure out the right combination of genes, they'll manufacture a mosquito resistant to malaria, which could save hundreds of thousands of lives every year. But geneticists, bioethicists and others who understand the implications of this new technology are apprehensive. To an astonishing degree, these new tools, which include a technique called Crispr-Cas9, allow us to bend evolution to our will. But will we harness these new technologies to help our planet? Or spark an ecological catastrophe?

In university labs, corporate R&D centers and even inside amateur D.I.Y. laboratories, researchers are creating genetically modified organisms at an unprecedented pace. This biotechnological revolution is so fast-moving that it hasn't yet fully filtered into the public's awareness or policy makers' oversight. The implications of Crispr are now intensely debated by medical researchers, especially since Chinese scientists used the method earlier this year to modify human embryos. But there are few similar conversations about the implications of

these technologies for ecosystems, even though those impacts will most likely be more transformative for our planet's future.

These new tools are much more precise and easy to use than past versions. Researchers can cut and paste DNA into just about any animal, plant or fungus. Whereas modified genes were once likely to be stamped out if by chance they made it into the wild, today's technologies can supercharge a genetic chain reaction: A technique called “gene drive” ensures a modified gene will be inherited with nearly 100 percent success. This is valuable in making sure that a desirable new gene, like one resistant to the malaria parasite, spreads once introduced into a mosquito population. It also means a mistake can't easily be taken back.

As scientists, policy makers and citizens, we need to start debating how much genetic tinkering we should allow in the wild and what regulations need to be in place. On the one hand, these new tools could help us cope with many risks to humans and animals, including climate change. Coral could be buffered against warming ocean water through the introduction of heat-tolerant genes. Genes from successful species could be used to help rescue imperiled ones. The method could be used as a form of molecular CPR, helping species adjust to our changed planet more quickly than they could on their own.

But the ecological risks of these manipulations are real and poorly



understood. We can't fully predict the consequences of releasing self-propagating genes into the wild. Encoding a self-destruct gene, for example by altering sex-determining genes so the population eventually ends up entirely male, could be a way to battle invasive species like zebra mussels or coral-destroying sea stars. But such genes could potentially leak to places where these species actually play important ecological roles — and could even jump to other species through interbreeding. Re-engineered genes that escape from crop weeds and spread as a result of gene drive could devastate other ecosystems. Moreover, our understanding of how genomes function is still far from the point where we can change genes and be certain we aren't creating bigger unintended consequences.

Just about everyone agrees that regulation is urgently needed, but no one has much of an idea what it should look like. A National Academies of Sciences, Engineering and Medicine report on the nonhuman impact of gene drive is expected next spring. In the meantime, two actions could vastly improve prospects for successful and balanced regulation.

First, we need to clarify who has jurisdiction over gene-editing projects. Our current system is inadequate and confusing. A transgenic mosquito release in Florida by the company Oxitec is being evaluated by the Food and Drug Administration; a similar proposal for a moth release in New York is being overseen by the Department of Agriculture. Agencies vary widely in

their review processes, and the current uncertainty about who's in charge means that some ventures can fall through the cracks. The White House needs to issue clear guidelines.

Second, we need to pay for studies that explore the potential impacts of these technologies on the environment. Right now, there's little incentive to explore the risks. The National Academies of Sciences, Engineering and Medicine and other groups evaluating those risks have virtually no data to work with. A recent report by the Wilson Center notes that from 2008 to 14, less than 1 percent of synthetic biology funding went toward risk research in the United States, lower than in other emerging technologies. Foundations that are investing mightily in gene-editing technologies should commit to footing some of the bill for research on the environmental risks.

And finally, we need to encourage a public conversation about these technologies. At the end of the day, the escape of a few Harvard mosquitoes will not be the most pressing problem our ecosystems will face. But to confront the big challenges, we'll need an informed and educated public, sophisticated oversight and a broad conversation about what kinds of advances and risks we want to embrace. We need protections that are stronger than multiple doors.

The author [Elizabeth Alter](#) is an assistant professor of biology at City University of New York, York College.

Published on November 10, 2015, on page A27 of the New York edition

The All India Forest Sports Meet is conducted annually with an aim to promote sportsman spirit and camaraderie among the forestry personals working at various levels of hierarchy in the respective Forest Departments of the Country. The contingent of Goa Forest Department is taking part in the Annual AIFSM since inception of the games. Needless to assert that the Goa state has hosted the prestigious forest games twice including the last AIFSM. The ministerial as well as executive staff of the department are always very

enthusiastic about participating in these games. This year the 22<sup>nd</sup> AIFSM are being held in Bengaluru, Karnataka from 19<sup>th</sup> December to 23<sup>rd</sup> December, 2015. 48 members of the Department are participating in Football, Cricket & Kabaddi (Men) Team events as well as in various other individual Indoor & Outdoor events. In spite of their round the clock duty schedules, the personals of various ranks are doing extreme hard work in the practice sessions. Here are few glimpse of the ongoing practice session



## RETIREMENT

The following staff have retired on superannuation:

### FORESTER

- Sh. Shankar Y. Naik
- Sh. Laxman A. Gawas
- Sh. Vinayak H. Volvoikar
- Sh. Baban S. Naik
- Sh. Rama S. Gaonkar

### HEAD CLERK

- Sh. Prashant Shetkar

The Goa Forest Department wishes them happy and peaceful retired life.









## WILDLIFE RESCUE REPORT ( JUL 2015 to SEPT 2015)

The dedicated wildlife rescue squad of Goa Forest Department carries out regular successful wildlife rescue and rehabilitation operations. Continuing the efforts, following wildlife was rescued and rehabilitated by the Wildlife Squad:

MAMMALS	
Leopard	4 nos.
Common Langur	10 nos.
Civet Cat	10 nos.
Wild Boar	2 nos.
Mongoose	1 nos.
Squirrel	2 nos.
BIRDS	
Owl	5 nos.
Peacock	4 nos.
Sparrow	1 nos.
Eagle	2 nos.
Masked Booby	1 no.
Kite	2 nos.
Sooty Tern	1 no.
OTHER ANIMALS	
Olive Ridley Turtle	2 nos.
Monitor Lizard	1 nos.
Crocodile	5 nos.

SNAKES	
Common Cobra	299 Nos.
Python	245 Nos.
Rat Snake	223 Nos.
Russell's Viper	88 Nos.
Bamboo Pit Viper	3 Nos.
Saw Scaled Viper	2 Nos.
Hump Nosed Pit Viper	1Nos.
Common Bronzeback	60 Nos.
Striped Keelback	8 Nos.
Checkered Keelback	24 Nos.
Wolf Snake	39 Nos.
Sand Boa	43 Nos.
Banded Kukri	8 Nos.
Common Kukri	1 No.
Common Krait	25Nos.
King Cobra	1No.
Water Snake	1No.
Forsten's Cat Snake	6 Nos.
Bedom's Cat Snake	1 No.
Mountain Trinket Snake	4 Nos.
Ornate Flying Snake	2 Nos.
Green Whip Snake	1 No.
Green Vine Snake	1 No.
Trinket Snake	1 No.
Banded Racer	1 No.

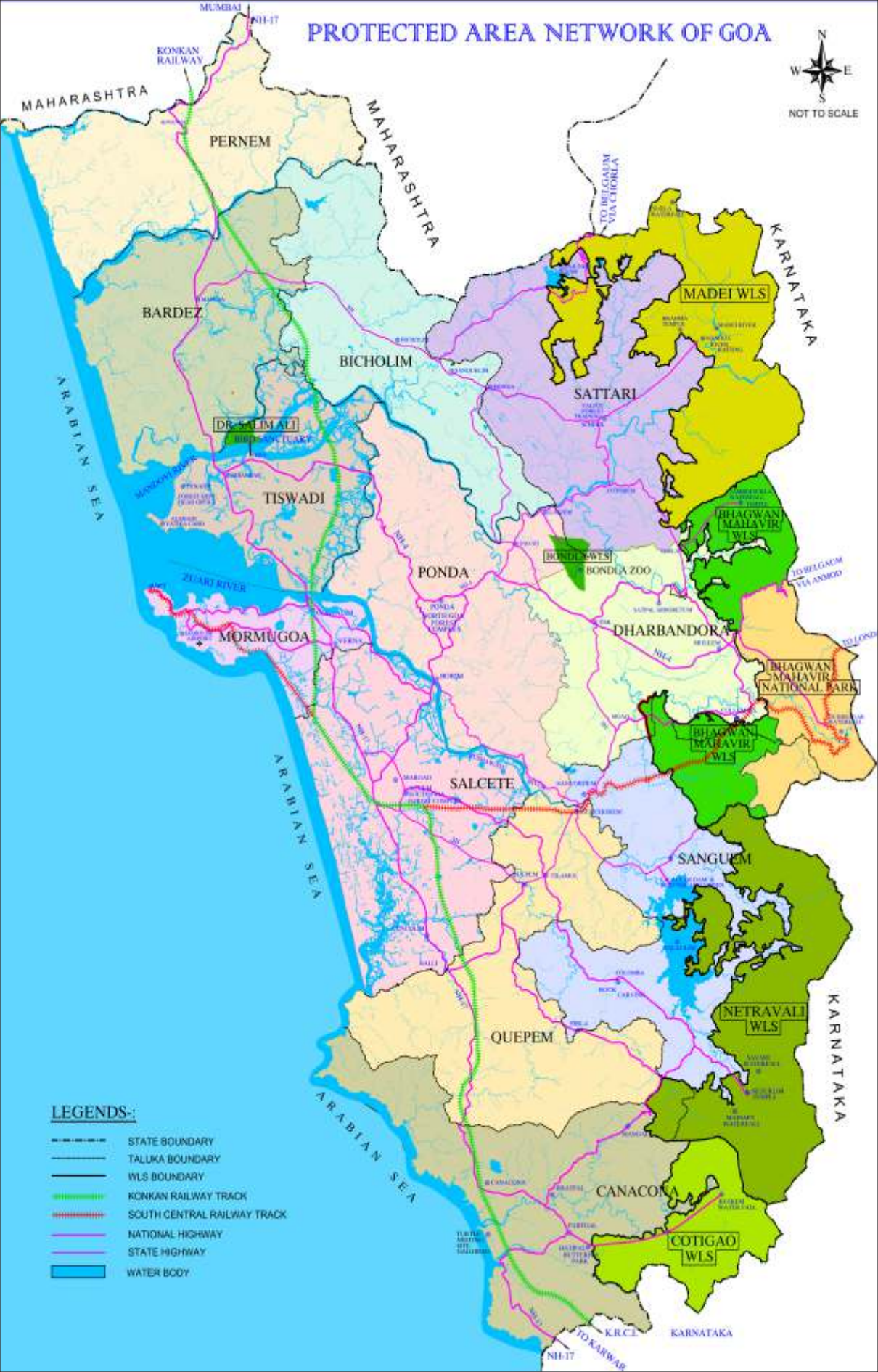
**IN CASE OF WILDLIFE EMERGENCIES, CONTACT**




**NORTH GOA - 2228772 SOUTH GOA - 2750246 / 2751462**



# PROTECTED AREA NETWORK OF GOA



## LEGENDS:-

-  STATE BOUNDARY
-  TALUKA BOUNDARY
-  WLS BOUNDARY
-  KONKAN RAILWAY TRACK
-  SOUTH CENTRAL RAILWAY TRACK
-  NATIONAL HIGHWAY
-  STATE HIGHWAY
-  WATER BODY