

# VANA PREMI



*Nav Say Navay Sall Tak Ke Bachon Ka Sathi*

Life Time Subscription - Rs. 5000/-

Yearly Subscription - Rs. 400/-

Single Copy Rs. 40/-

Vol. 21

**JULY - 2020**

No. 5



Cheetah  
(*Acinonyx jubatus*)

Leopard or Panther,  
Tendwa in  
Hindi and Urdu  
(*Panthera pardus*)

JOURNAL OF THE ASSOCIATION OF RETIRED FOREST OFFICERS, TELANGANA & ANDHRA PRADESH

Website : [www.vanapremi.com](http://www.vanapremi.com)



## TELANGANA STATE FOREST DEVELOPMENT CORPORATION LTD.

- A fully owned, financially well managed State Government Company. Raising massive plantations to cater to the needs of the wood based industries.
- Watershed approach adopted for raising plantations, to make them ecologically sustainable, socially acceptable and commercially viable, with the long term goal to improve the site quality of plantation areas.



- Large grower of about 26,809.00 Ha. of Eucalyptus clonal / seed origin plantations. Bamboo also grown as an important crop over 6,405.00 Ha.
- The TSFDC has also taken up the challenging task of Eco-Tourism development in the State. Already made open to public – Hyderabad Botanical Garden, Pala Pitta Cycling Park near Hi-Tech City, Madhapur, which has received the ISO 9001:2015 certification on 16-10-2019. Effective SMC measures for recharging pond water and improving surface water taken up in association with Smaran NGO. Mahavir Nischal Van Eco-Tourism Centre, Vanasthalipuram, and Mrugavani National Park at Chilkur are attracting increasing number of visitors.
- TSFDC is also developing Urban Parks in Lalgadi Malakpet RF Cluster, Thumukunta RF & Gowdelli PC Kalan & PC Khurd Cluster. Sankalp Taru NGO is collaborating with TSFDC in improving greenery at Gowdelli Park.
- TSFDC has also taken up consultancy work for NTPC and RFCL and successfully raised multiple Row avenue plantation along Rajiv Rahadari highway in peddapally Dist.
- Dhanvanthari herbal garden is revived with support from Deloitte and Technical support of environment forest solutions.

---

### Vice Chairman & Managing Director

T.S. Forest Development Corporation Ltd.,  
3rd Floor, UNI Building, A.C. Guards, Hyderabad - 500004.  
Telephone Nos. 040-23395750/23392652  
Email: [vcmd.tsfdcl@gmail.com](mailto:vcmd.tsfdcl@gmail.com), [www.tsfdc.telangana.gov.in](http://www.tsfdc.telangana.gov.in)

Editor : Qamar Mohd. Khan

Associate Editor: D. Nagabhushanam, I.F.S. (Retd.)

The Association of Retired Forest  
Officers, Telangana & Andhra Pradesh

(Regd. No. 557/1990)

President : Sri. S.K. Das, I.F.S.  
Cell : 9550681964, 23115085  
Vice President : Sri. T. Narayan Swamy, I.F.S.  
Cell : 9701336446  
Secretary : Sri. A.V. Govindarajulu,  
Cell : 9440764611  
Jt. Secretary : Sri. A. Shankaran, 9494019595  
Treasurer : Sri. Sardar Iqbal Singh,  
Cell: 9502163411

Executive Committee Members

- 1) Sri. Muralidhar Rao, I.F.S, 848390004
- 2) Sri. N. Syam Prasad, I.F.S, 9100633141
- 3) Sri.K. Santokh Singh, I.F.S, 848808101
- 4) Sri. P. Upender Reddy, 9848754778
- 5) Sri. V.V. Rajam, 9348322236
- 6) Sri. G. Raman Goud, 9391499119
- 7) Sri. A. Kishan, 9963321321
- 8) Sri. B.M. Swamy Das, 9000817781

Permanent Invitees

1. Sri. T. Narayan Swamy, I.F.S, 9701336446
2. Sri. K. Buchi Ram Reddy, I.F.S, 9666097788
3. Sri. J.V. Sharma, I.F.S, 9441319151

Editorial Board

1. President : Ex- Officio President of Assn.
2. Editor : Qamar Mohd. Khan  
Tel: 040-40205831, 9849233624  
e-mail:qamar\_asima@yahoo.com

Members

4. Sri. V.V. Hari Prasad, 7893673767
  5. Sri. K. Pradeep, 9848178693
  6. Sri. L.Ch. Thirupelu Reddy, 959100965
- Convenor : Ex-officio Secy.of Assn  
Auditor : Sri. Sardar Iqbal Singh, 9502163411

**TARIFF RATES FOR ADVERTISEMENTS**

1. Back side of front and last cover page	
2. (Colour) for one year.....	Rs. 30,000/-
3. Outer Coverhalf (Colour) for one year.....	Rs. 20,000/-
4. Inner Center Spread (Colour) for one year....	Rs. 30,000/-
5. Inner Full Page (B&W) for one year.....	Rs. 20,000/-
6. Inner Half Page (B&W) for one year.....	Rs. 15,000/-
7. Inner full page One Time (B&W).....	Rs. 5000/-
8. Inner half page One Time (B&W).....	Rs. 3000/-

Contents

1. Editorial..... 4
2. World Is Working On Other Options to Prevent Climate Change  
-Dr. Uma Shanker Singh..... 8
3. Let The Mother Earth Not Be Revengeful  
-Mohan Chandra Pargaien ..... 11
4. Green Quiz Championship- July 2020  
-Dr. K. Tirupataiah ..... 13
5. All About Andamans, The Cellular Jail & Sazaa-E-Kaalapaani  
-Dr. Raghotham Rao Desai ..... 14
6. World War Again?  
-V.V. Hariprasad ..... 16
7. My Tenure In Kaghaznagar Division  
-M. Raja Ramana Reddy..... 17
8. Break The Chain  
-Konda Mohan ..... 21
9. Grey Hornbills, Indira Park and Me!  
-Sadhana Ramchander ..... 22
10. The Importance of Seed Balls In Improvement of Vegetation In Forests  
-Dr P. Shivakumar Singh..... 29
11. World Environment Day on Biodiversity  
-E. Manikanta Reddy ..... 32
12. Project Nawah - An Unrelenting Drive Towards A Plastic-Free World  
-Paras Khurana..... 35
13. News And Notes ..... 37
14. Loten's Sunbird (*Cinnyris Lotenius*) ..... 43
15. Legal Notes ..... 45

Date of Publication: 26-05-2020

/ Total Pages 52

## Editorial

**Corona Virus:** - Infectious diseases are caused in the living organisms by pathogens, which include bacteria, fungi, protozoa, worms, and viruses. Pathogens of all classes must have mechanisms for entering in to the body of their host and for evading immediate destruction by the host immune system. Then only they cause diseases in host. All bacteria are not pathogenic and some are beneficial to living organisms. Human and animal gut is home to millions of species of bacteria. In fact, scientists estimate that there are 100 trillion bacterial cells in our body. Those bacteria help our body to break down big food molecules into useable fuel. The bacteria also produce vitamins and help protect the body from diseases.

Corona virus is one of such pathogens. The dictionary meaning of Corona is a white or colored circle or set of concentric circles of light seen around a luminous body, especially around the sun or moon. As the shape of these viruses roughly resemble sun or moon this virus is named as Corona. Coronaviruses are large, roughly spherical, particles with bulbous surface projections. Corona viruses are a group of related RNA viruses that cause diseases in mammals and birds. In humans, these viruses cause respiratory tract infections that can range from mild to lethal. As for the new disease caused by the coronavirus, it was originally called novel coronavirus. In February, the World Health Organization gave the name COVID-19. The CO stands for Corona, VI is for Virus, and D stands for Disease. The 19 is for 2019, the year the disease first appeared in China. Coronaviruses were first discovered in the 1930s when an acute respiratory infection of domesticated chickens was shown to be caused by infectious bronchitis virus. Human Corona viruses, first characterized in the year 1960, are responsible for a substantial proportion of upper respiratory tract infections in children. SARS (Severe Acute Respiratory Syndrome) caused by SARS-CoV was first detected in November 2002.

SARS bears many similarities to the current pandemic of COVID-19. The scientific name for Coronavirus is *Orthocorona virinae* and belong to the family of *Coronaviridae*. Name is currently accepted by the International Committee on Taxonomy of Viruses. A decade later, in 2012, there was another outbreak involving a newly identified coronavirus: MERS-CoV (Middle East Respiratory Syndrome). The first case of Middle East Respiratory Syndrome (MERS) occurred in Saudi Arabia. There were two further MERS outbreaks: South Korea in 2015 and Saudi Arabia in 2018. There are a handful of MERS cases every year, but the outbreaks are usually well contained. The virus that causes COVID-19 and the one that caused the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 are related to each other genetically, but the diseases they cause are quite different.

Since 2003 at least five new human corona viruses have been identified including the severe acute respiratory syndrome corona virus, which caused significant morbidity and mortality. The first human cases of COVID-19, the disease caused by the novel coronavirus was first reported by officials in Wuhan City, China, in December 2019 believed to be from a "wet market" in Wuhan which sold both dead and live animals including fish and birds. And slowly spread throughout the globe causing death, difficulties and havoc throughout the world. Such markets pose a heightened risk of viruses jumping from animals to humans because hygiene standards are difficult to maintain if live animals are being kept and butchered on-site.

The animal source of Covid-19 has not yet been identified, but the original host is thought to be bats, which is not yet established. Bats were not sold at the Wuhan market but may have infected live chickens or other animals sold there. Most people infected

with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment provided their immune system is very strong. Older people, those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, & cancer and people with low immunity are more likely to develop serious illness and may lead to death also. The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes, and how it spreads. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments including plasma treatment which is taken from a person who was infected with COVID-19 and is completely cured due to development of anti-bodies in his blood to, fight against the viruses. The COVID-19 virus affects different people in different ways. Common symptoms include: Fever, Tiredness, dry cough. Other symptoms include: shortness of breath, aches and pains, sore throat, and very few people will report diarrhoea, nausea or a runny nose. People with mild symptoms who are otherwise healthy should self-isolate and contact their doctor or a COVID-19 information line for advice on testing and referral. People with fever, cough or difficulty in breathing should call their doctor and seek medical attention. When any person is infected with COVID-19 virus, immediately he will not show any symptoms of disease till the virus incubates in that person's body. The "incubation period" means the time between catching the virus and beginning to have symptoms of the disease. Most estimates of the incubation period for COVID-19 range from 1-14 days, most commonly around five days. Studies to date suggest that the virus that causes COVID-19 is mainly transmitted through contact with respiratory droplets and not through the air.

World Health Organization declared this COVID-19 disease as Pandemic. A disease can be declared an epidemic when it spreads over a wide area and many individuals are taken ill at the same time. If the spread escalates further, an epidemic can become a pandemic, which affects an even wider geographical area and a significant portion of the population becomes affected.

We can reduce chances of being infected or spreading of COVID-19 by taking some simple precautions.

1. Regularly and thoroughly clean hands with an alcohol-based hand rub or wash them with soap and water. Washing hands with soap and water or using alcohol-based hand rub kills viruses that may be on our hands.
2. Maintain at least 1-meter distance between ourselves and anyone who is coughing or sneezing. When someone coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain virus. If we are too close, we may breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.
3. Avoid touching eyes, nose and mouth. Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to our eyes, nose or mouth. From there, the virus can enter our body and can make us sick.
4. Make sure we, and the people around us, follow good respiratory hygiene. This means covering our mouth and nose with our bent elbow or tissue or use mask. Then dispose of the used tissue or mask immediately. Droplets spread virus. By following good respiratory hygiene, we protect the people around us from viruses such as cold, flu and COVID-19.

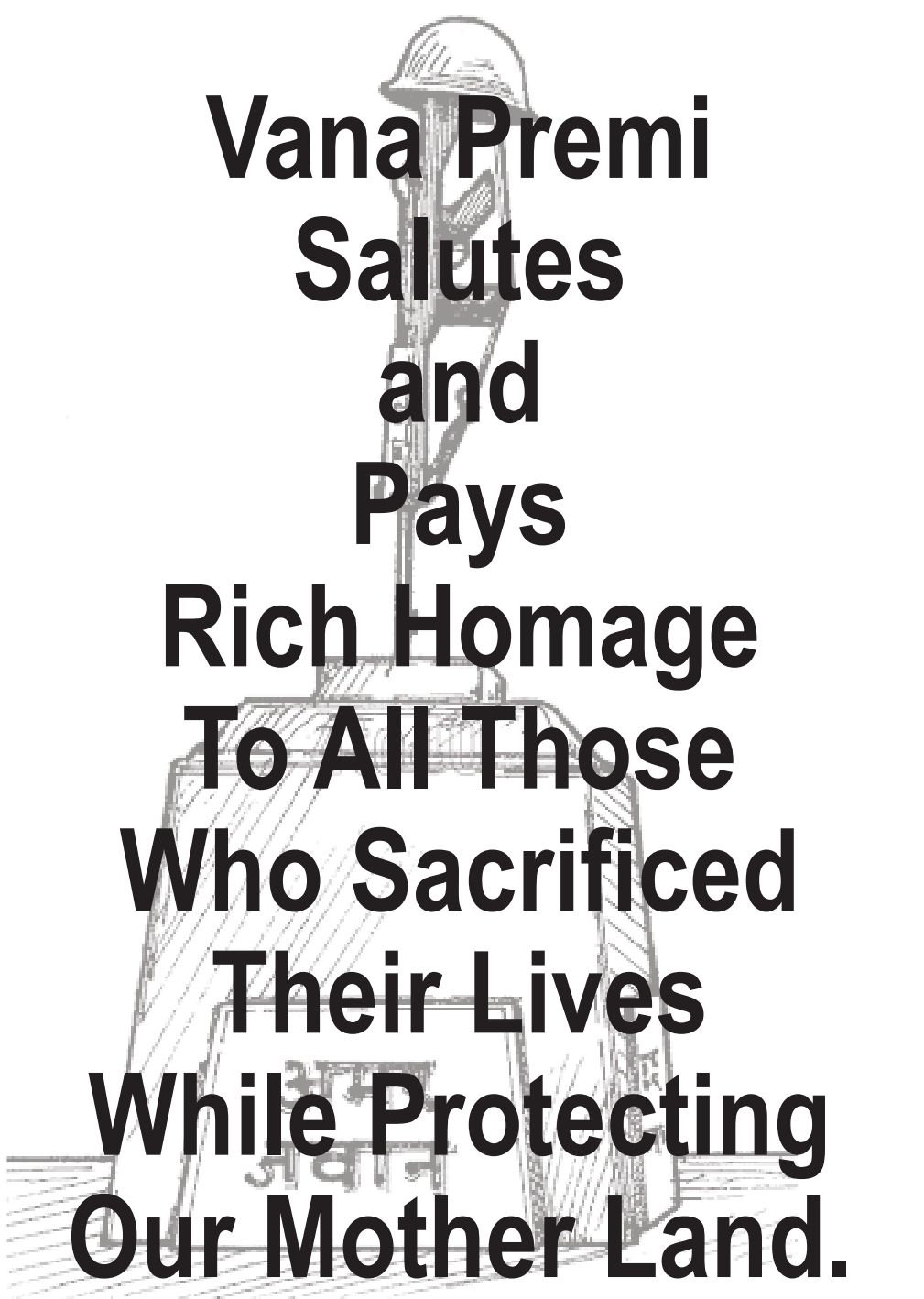
5. Stay home if having fever, cough and difficulty in breathing, seek medical attention. Follow the directions of local health authority.
6. Keep up to date on the latest COVID-19 hotspots (cities or local areas where COVID-19 is spreading widely). Avoid traveling to such places. Prevention is better than cure. It is always better to improve our immune system which prevents COVID-19

Corona virus has spread its tentacles throughout the world causing massive and untold havoc and miseries in which more than ninety lakhs people are infected and more than five lakhs people died. Due to the spread of COVID-19 virus millions of people have been displaced, lakhs of businesses are shuttered, and millions are without jobs or any means of sustenance. The poor have been hit like never before and the middle class too will soon begin to crumble. This COVID-19 is responsible for forcing every person to stay in the house due to lockdown on different dates, throughout the globe for quite a long period, which caused untold miseries to the citizens throughout the world. All the transport system was closed, offices, industries, factories, shops, malls, cinema halls, gyms, public parks, amusement parks, Zoo parks, markets, hotels, restaurants, Schools and colleges were closed. Even private clinics were closed. Educational institutions have not opened till today. Economy of all the countries is very badly affected. Construction activities were brought to standstill. Labor and employees were returning to their native places from their work spots in lakhs and lakhs, as there was no work and these laborers were short of money and food. Most of them returned by walk in the hot summer with their family members and children. These laborers walked few hundreds of kilometers as there was no transport available and labor were not having even money to pay for their travel. People in large number lost their jobs and became unemployed. According to a rough estimation three lakhs people lost their livelihood from marriage halls

of Hyderabad city alone. Wine shops were closed due to which Governments revenue was drastically dropped down and the Government was not in a position to pay part of, the regular salaries and pension of their employees since last three months. Part payment of salaries and pension was deferred. ***“Awam Jab Sharaab Peeti Hai To Awam ke Paair Ladkhatay Hain - Awam Jab Sharaab Nahee Peeti hai To Hukumat Kay Paair Ladkhatate Hain”*** (When the public consumes alcohol they stagger-but when the public does not drink alcohol the Government staggers or falters.)

Readers know very well that Vana Premi was also not published during the lockdown period as all printing presses were closed. This is the first time I have seen in my life time, that along with Doctors, Police personnel also treated the public for COVID-19 during the lockdown period. Up to 16<sup>th</sup> of June 2020 in Telangana 5193 persons were found positive, and 187 persons died. In Andhra Pradesh 5087 persons were found positive and 86 persons died. In our country 342841 persons were found positive, and 9914 persons died. 8059420 persons were found positive throughout the globe and 437012 persons died. Still the number of COVID-19 positive cases are steadily increasing and we have to wait and see for the final tally.

Vana Premi thanks all the Doctors, para medical staff including lab technicians, Police staff, Municipal staff, sanitation workers, Health and Family Welfare, Home, Revenue, Rural Development and Panchayat Raj, Urban Development, Food, Civil Supplies and Consumer Affairs, Water works, Information and Public Relations, Transport, Energy, Personnel and Administrative Reforms, Finance (including treasuries), Animal Husbandry, Fisheries, Forest, Ecology and Environment, departments and any other department personnel, the public and many NGOs, who worked during the lockdown period to save the lives of public risking their own life. - **QMK.**



**Vana Premi  
Salutes  
and  
Pays  
Rich Homage  
To All Those  
Who Sacrificed  
Their Lives  
While Protecting  
Our Mother Land.**

## WORLD IS WORKING ON OTHER OPTIONS TO PREVENT CLIMATE CHANGE

by

Dr. UMA SHANKER SINGH

**WHY IT IS DIFFICULT TO REDUCE CARBON DIOXIDE FROM ATMOSPHERE:** There are a number of factors that make it systematically difficult to reduce CO<sub>2</sub> emissions as I can see a number of reasons why it's turning out so difficult to reduce worldwide CO<sub>2</sub> emissions.

Firstly, lower than expected demand for a commodity results in lower prices making a further reduction in demand more difficult. Coal is a clear example. Coal producers have for a long-time overestimated demand resulting in a decade of investment. Resulting low coal prices led to increasing demand (be it not as high as initially expected) and an increase in the market share of coal in the primary energy sector. This is a global phenomenon except for the U.S. where abundant low cost shale gas has taken away market share from coal.

Secondly, the benefits of CO<sub>2</sub> emission reductions are global and long term; the associated costs are local and are incurred now. This implies that there is always a strong incentive to cheat.

Thirdly, oil and gas producing countries have a strong interest in the continued use of fossil fuels and they will continue promoting and subsidising them. Energy-intensive industries are migrating to low-cost energy countries. A significant and growing part of Saudi Arabia's oil production is used for local industries (petrochemicals, metal processing), generating a second income stream in addition to oil production. To some extent this also applies to the U.S. where a rapid increase in low-cost shale gas production has resulted in a long-term reduction of

electricity prices; a significant competitive advantage for any U.S. energy-intensive industry.

Fourthly, the benefits of economic progress (with an associated energy consumption increase) for undeveloped countries are real. Global warming concerns people in undeveloped countries as well but when asked to rank issues it comes out last (way below security, food, education, health and energy and transport related issues). In fact it comes out near the bottom of the list in most countries except for the most highly developed ones. Therefore, this is imperative to find out some other options to decrease carbon dioxide level at the global level

**CARBON MINERALISATION:** This strategy exploits a natural process wherein reactive materials like peridotite or basaltic lava chemically bond with CO<sub>2</sub>, forming solid carbonate minerals such as limestone that can store CO<sub>2</sub> for millions of years. The reactive materials can be combined with CO<sub>2</sub>-bearing fluid at carbon capture stations, or the fluid can be pumped into reactive rock formations where they naturally occur. Scientists across the world are working on the feasibility of storing 50 million tons or more of CO<sub>2</sub> in basalt reservoirs in the Pacific Northwest. Over 20 years, the project has been envisaged to inject CO<sub>2</sub> from industrial sources, such as manufacturing and fossil fuel power plants, into basalt 200 miles offshore, on the eastern flank of the Juan de Fuca Ridge. There, beneath 2600 meters of water and another 200 meters of sediment, the basalt reservoir contains pore spaces that would fill up as the CO<sub>2</sub> mineralizes into carbonate limestone. In this area, the basalt reacts quickly and mineralization could

potentially take only two years or less. Goldberg's team has analyzed factors including how to transport the CO<sub>2</sub>, how it would react chemically, and how the site could be monitored over time. It would enable the researchers to experiment with different kinds of injections, for example, whether they should be continuous or intermittent and answer questions such as 'how fast does the pore space fill up?' which can only be tested in the field. Since 2012, Carb Fix, an Icelandic project that Goldberg also worked on, has been capturing carbon and mineralizing it at the country's largest geothermal power plant run by Reykjavik Energy. While the plant runs on geothermal renewable energy, it still emits a small amount of CO<sub>2</sub>; Carb Fix injects 12,000 tons of CO<sub>2</sub> yearly into the ground for \$30 per ton. Because carbon mineralization takes advantage of natural chemical processes, it has the potential to provide an economical, non-toxic and permanent way to store huge amounts of carbon. However, there are still technical and environmental questions that need to be answered and many scientists are questioning whether carbon mineralization could possibly contaminate water resources or trigger earthquakes.

**DIRECT AIR CAPTURE:** Direct air capture sucks carbon dioxide out of the air by using fans to move air over substances that bind specifically to carbon dioxide. The technology employs compounds in a liquid solution or in a coating on a solid that capture CO<sub>2</sub> as they come into contact with it; when later exposed to heat and chemical reactions, they release the CO<sub>2</sub>, which can then be compressed and stored underground. The benefits of direct air capture are that it is actually a negative emissions technology, it can remove carbon that's already in the atmosphere, as opposed to capturing new emissions being generated and the systems could be located almost anywhere. At a coal plant, about one in ten molecules in exhaust gas is CO<sub>2</sub>, but CO<sub>2</sub> in the atmosphere is less concentrated. Only one in 2,500 molecules

are CO<sub>2</sub>, so the process for removing CO<sub>2</sub> is more expensive compared to capturing carbon from fossil fuel plants. Direct air capture started out at \$600 per ton of carbon; currently it costs \$100-\$200 a ton still expensive, in part because there are no economic incentives (such as a carbon tax) or secondary environmental benefits (such as enhanced soil quality) to removing CO<sub>2</sub> from the air. Improving the technology so that CO<sub>2</sub> can be captured more efficiently, and/or selling the captured CO<sub>2</sub> can bring the price down. Three companies namely, Swiss Clime works, Canadian Carbon Engineering, and American Global Thermostat are working on this. While direct air capture has great potential for carbon dioxide removal, it is still at an early stage of development. Fortunately, it is getting some Congressional support in the form of the Future Act (the Furthering carbon capture, Utilization, Technology, Underground storage, and Reduced Emissions Act). The act doubles the tax credits for capturing and permanently storing carbon dioxide in geological formations and using it for enhanced oil recovery; for companies that convert carbon to other products such as cement, chemicals, plastics and fuels; and provides a \$35 tax credit per ton of CO<sub>2</sub> via direct air capture.

**ENHANCED WEATHERING:** Rocks and soil become weathered by reacting with CO<sub>2</sub> in the air or in acid rain, which naturally occurs when CO<sub>2</sub> in air dissolves in rainwater. The rocks break down, creating bicarbonate, a carbon sink, which is eventually carried into the ocean where it is stored. Enhanced weathering speeds up this process by spreading pulverized rock, such as basalt or olivine, on agricultural land or on the ocean. It could be crushed and spread on fields and beaches, and even used for paths and playgrounds. Enhanced weathering could improve soil quality, and as the alkaline bicarbonate washes into the ocean, it could help neutralize ocean acidification. But it could also potentially alter soil pH

and chemical properties, and affect ecosystems and groundwater. Mining, grinding and transporting the rock would be costly, require a lot of energy and produce additional carbon emissions as well as air pollution. Due to the many variables and the fact that most assessments of enhanced weathering have not been tested in the field, cost estimates vary widely. Ocean alkalization, considered a type of enhanced weathering, involves adding alkaline minerals, such as olivine, to the ocean surface to increase CO<sub>2</sub> uptake and counteract ocean acidification. One study estimated that this strategy could sequester between 100 metric tons to 10 gigatons of CO<sub>2</sub> a year, for costs ranging from \$14 to over \$500 a ton. Its ecological impacts, however, are unknown.

**OCEAN FERTILIZATION:** Ocean fertilization would add nutrients, often iron, to the ocean to prompt algal blooms, which would absorb more CO<sub>2</sub> through photosynthesis. However, by stimulating the growth of phytoplankton the basis of the food chain ocean fertilization could affect local and regional food productivity. Vast algal blooms could also cause eutrophication and result in dead zones depleted of oxygen. In addition to its possible ecosystem impacts, it also has less potential to sequester carbon over the long term.

**COASTAL BLUE CARBON:** Salt marshes, mangroves, sea grasses and other plants in tidal wetlands are responsible for more than half of the carbon sequestered in the ocean and coastal ecosystems. This blue carbon can be stored for millennia in the plants and sediments. However, wetlands are being destroyed by runoff and pollution,

drought and coastal development—a soccer field-sized area of sea grass is lost every half hour. Restoring and creating wetlands and managing them better could potentially double their carbon storage. Healthy wetlands also provide storm protection, improve water quality and support marine life. There are few estimates of the carbon removal potential of blue carbon, but the costs would be low to zero.

**AND SOME IDEAS FOR THE FUTURE:** There are possibilities in enhancing carbon sequestration if the following measures are taken in especially in four areas:

1. Modifying the genes of phytoplankton would enable them to sequester carbon in areas of the global ocean that lack the nutrients needed for photosynthesis.
2. Electro-geo-chemistry uses electricity from renewable sources to break saline water down to produce hydrogen (which can be used for fuel) and oxygen, which, in the presence of minerals, produces a highly reactive solution. This solution absorbs carbon dioxide from the atmosphere and turns it into bicarbonate.
3. Enzyme systems speed up chemical reactions that could change carbon dioxide into other useful organic compounds.
4. The last idea involves creating 4.5 million little oases in deserts to host phytoplankton that would absorb CO<sub>2</sub>. They would also provide fresh water and support vegetation that could also suck up carbon.

*“Most diseases show no symptoms from the start. Hate the disease, but not any patients”*

– Srinivas Mishra

## LET THE MOTHER EARTH NOT BE REVENGEFUL

by

**Mohan Chandra Pargaian**

यस्यामदिं जन्वितिप्राणदेजत्सा नो भूमिः पूवपेये दधातु.

Yasyaam-Idam Jinvati Praannad-Ejat-Saa No Bhuumih Puurva-eye Dadhaatu.

*In Her (Mother Earth) indeed is alive all Lives, May She bestow us with that Life. (Athervaveda)*

Today when the dreaded virus of minuscule size has engulfed the whole world causing massive and unprecedented havoc and miseries of umpteen proportions killing more than four and half lakh people and infecting nearly eighty seven lakh people, bringing the world economy to a standstill besides leaving millions of people inside their homes with no works and with no sign of early recovery, the people have also started to accept this unexpected upheaval and fury as retaliation of the Mother Earth in response to misdeeds of man and unabated onslaught on the earth.

Long back in 1970 under the guidance of Gaylord Nelson, the people of US celebrated first earth day on 22nd April in response to their protest against the industrial revolution which was later renamed by the United Nations in 2009 as International Mother Earth Day to celebrate to recognize and remind that the Earth and its various ecosystems are the base of the existence of human race hence require to maintain perfect harmony with mother Earth. Despite having known all negative consequences of continued exploitation of mother earth and its varied resources to meet both the need and greed in the guise of development, globalization and consumerism, we have continued to plunder and exploit the earth beyond its carrying capacity and without giving a little time to it to rejuvenate. Gary Gardner Director of research for World watch rightly states that "Most of the environmental issues we see today can be linked to consumption,". Anthropogenic induced global

greenhouse emission has resulted into various catastrophes like climate change repercussions causing challenges of biodiversity extinction, reduced food security, melting glaciers, heat waves, droughts, degradation of different ecosystems and biodiversity's etc. with painful boomerang effects thereby putting enormous pressure on the mother earth. The theme of this year Earth day 2020 while celebrating its 50<sup>th</sup> anniversary is also focusing on action on climate change which is identified as the biggest challenge for the survival of human being.

Nature and its preservation in various forms has always been considered important in Indian culture. According to the mantra of Atharvaveda (12.12.) "भूमिः पुत्रोऽहं पृथिव्याः परजन्यः पति स उ नः पपित्तु" which means "As I am, you are my mother and the clouds should remain like a father to us". Being the life line of human being and various other life forms and their interdependence on mother earth for innumerable she has been described in the Puranas by the names of *Bhumi*, *Vasundhara*, *Vishwambhara*, *Sarvasha*, *Mrunmayi*, *Ratnagrabha*, etc.,

In the recent past the unabated exploitation of varied resources of nature by human without keeping the rejuvenating capacity of mother earth has infuriated her and showing her *RAUDRA ROOPA* she is responding with anger through signals of varied nature in the past at regular intervals be it earthquake or floods, or Tsunamis or raising of water

levels and last but not the least epidemics/ pandemic of various kinds including the last one of SARS but we the human have never bothered to introspect a little to look back and to listen to those signals and warnings with far-reaching implications. In one of the studies, it is established that nearly two-third of infectious diseases including SARS, MERS, EBOLA, AIDS etc. originate from wildlife and possibility of the link between consumption of wildlife and present COVID-19 can also be not ruled out which reflects direct impact of the destruction of biodiversity and habitats by human beings. The people across the globe have even now started realizing the delicacy of balance between the earth and human mistreatment of the environment with unforgettable shock in the form of this pandemic.

The continued supremacy of development over the environment and lack of priority and concern for various environmental challenges among policymakers has also aggravated this onslaught of varied proportions on the mother earth. This supremacy of development coupled with audacity had even made him declare himself as Supreme as evident from one of the narrations of René Descartes (1596–1650) where he said that “we might also apply them (fire, water, air, the stars, the heavens) in the same way....and thus render ourselves the lords and possessors of nature”.

Though it is too early to comment as when we will be fully free from this pandemic, however this has forced us to think and look back for the introspection with re-evaluation as to how we should respond to this crisis mainly the one related to climate change and biodiversity loss.

It is sheer human tendency to forget once we overcome any critical phases like this but we should be again cautious and alert that if the actions and corrective measures this time are not supported with serious commitment without camouflaging and greenwashing, the next strike of furious and wounded earth will be difficult to understand to encounter and will not give another opportunity to the human race to respond and act to survive the wrath and assault of mother earth.

Let's celebrate this Mother Earth day with renewed commitment and concern that besides putting our wholehearted personal and community efforts, there shall be genuine and visible actions at various levels including policy interventions and commitments post-COVID-19 and the delicate balance between development/consumerism one side and fragile environment on the other side is maintained for long-cherished goals of sustainable development. The genuine concerns in this direction with committed efforts duly promoting a holistic approach to harmony with mother earth only can act as a silver lining at the end of the existing dark and gloomy tunnel. We the human need to evolve mechanisms using our technologies and brains in all those areas where we have plundered the resources and come out with rejuvenating and pro-environmental interventions aiming at our peaceful coexistence with mother earth. This soul-searching act alone will be a befitting response at this juncture.

(The author is a Senior IFS officer of Telangana State India. His e-mail I.D is mcpargaien@gmail.com Twitter @pargaien)

*“With Covid-19, I believe it’s God’s way of telling us:  
“Only Humans can Save Humans with Humanity.”*

– Somya Kedia

**GREEN QUIZ CHAMPIONSHIP- JULY 2020**

**Quiz Master:  
Dr. K. Tirupataiah**

This month's quiz is on **"Chimpanzees, Snakes and Tiger"**

1. When is World Chimpanzee Day celebrated? a) 12 <sup>th</sup> July, b) 13 <sup>th</sup> July, c) 14 <sup>th</sup> July, d) 15 <sup>th</sup> July	2. Who devoted most of her life for studying and conserving Chimpanzees? a) Jane Austin, b) Jane Goodall, c) Jane Fonda, d) Jane Mary
3. In which National Park did the "Chimpanzee Woman" work most of her time? a) Kruger, b) Karoo, c) Gombe, d) Mole	4. Chimpanzees are put in Genus-----
5. Study of Chimpanzees is important to human beings because they are our -----living relatives	6. How many confirmed sub-species of Chimpanzees are there? a) two, b) three, c) four, d) five
7. World Snakes Day is celebrated on a) 13 <sup>th</sup> July b) 14 <sup>th</sup> July, c) 15 <sup>th</sup> July, d) 16 <sup>th</sup> July	8) Snakes are important from crop and other material protection because they are effective -----
9. Snakes are living and breathing cousins of -----	10. World Tiger Day is celebrated on a) 28 <sup>th</sup> July, b) 29 <sup>th</sup> July, c) 30 <sup>th</sup> July, d) 31 <sup>st</sup> July
11. What is WWF trying to promote related to Tiger? a) Save Tiger, b) Double Tiger, c) Triple Tiger, d) Quadruple Tiger	12. In Which year was the World Tiger Day started? a) 2010, b) 2011, c) 2012, d) 2013
13. Liger is a hybrid whose father is ----- and Mother -----	14. Kamlang Wildlife Sanctuary in -----State is the 50 <sup>th</sup> Tiger Reserve in India
15. The recessive allele (Chinchilla albinistic) gene occurs in Tigers once in ----- number of Births	16. Where in India is Wildlife Crime Control Bureau located? a) Chennai, b) Kolkata, c) Mysore, d) New Delhi

**For answers please see page No.21**

## **ALL ABOUT ANDAMANS, THE CELLULAR JAIL & SAZAA-E-KAALAPAANI**

by

**Dr. Raghatham Rao Desai**

**First, Andamans:** The Andamans consists of nearly 184 islands and 65 islets in the Bay of Bengal, the original aboriginal tribes inhabiting them belonging to the Negrito race---- possibly migrated from coastal Burma, given their proximity----some of them also having been cannibals!

The length of the islands between the extremities is about 355 kms, there being five groups from North to South ---- North Andamans (81km long), Middle Andamans (71kms), South Andamans (84 kms), Baratang (28 kms, running parallel to the East of S. Andamans) and finally Rutland (19 kms, a portion of which is full of dense & dark forests).

Given its marshy vegetations and swamps, the Andamans are hotbeds of malaria, flies humming and spreading over in thick swarms ----- also having abundance of leaches (being fatal and even causing paralysis in humans who get suckered on) and serpents.

From 1789, the Andamans have served as the settlements for convicts (for the British East India Company) after Archibald Blair surveyed the islands & recommend establishment of the penal settlement. Several of the 'mutineers of 1857 war' were transported, most of them died in confinement. The first jail and gallows were constructed during 1865, more than 80 freedom-fighters having then been hanged on a single day. In popular parlance, the settlement became known as '*kaalapaani*' or Black Waters----- alluding not only to its seclusion (from the mainland) but also the loss of cast (due to overseas journey, leading to social exclusion). In

1874, a remission system was put in place in the penal administration, whereby if a convict (transported for life) was good, he would be released in 20-25 years.

**Now, the cellular Jail :** The radial, seven-winged monstrous jail with a high watchtower ( at the intersection), with three story's each, and having a series of cells (totaling up to 698) radiated outwards (like the spokes of a bicycle wheel), might certainly have sent shivers down the spines of many brave hearts. A large bell hangs on the tower (to raise alarm). Each cell measures 13 1/2' x 7 1/2', having a small ventilator (at a height of 9 3/4' from the ground) ----- the solitary cells having been arranged so as to prevent any communication among prisoners.

It is named 'Cellular Jail' because there are only cells and no barracks. In the seven-winged radial structure of the jail, the front of a cell (in each wing) opened to the back of a cell in another wing. Its construction began in 1896 and completed by 1906, at an estimated cost of just over Rs. 5 lakhs.

Many young men were unaccustomed to the levels of physical toil they were subjected to, fell ill & preferred death, but if they complained, they were often accused as feigning, locked up in their cells & never taken to the hospital, even when they burned with high fever. Ironical it may seem, but the fact was many prisoners went to the extent of infecting themselves (with other ailments & diseases) to avoid back-breaking work!

**And finally, Sazaa-e-Kaalapaani:** Convicts accused of murder, thuggee, frauds, forgeries and so on were

transported to these distant locations to 'reclaim them from their bad habits' ----- the real reason, though, possibly to procure settlement of free labor in large numbers.

*By the early twentieth century, there were close to 12000 Indian convicts from different regions, religions & castes housed in the Andaman penal settlement, which included 3000 freedom fighters of the <1857 War> rebels of the <Wahabi movement>, followers of <Wasudev Balwant Phadke> and members of Manipur Royal family (after the Anglo-Manipur war of 1891)----- each of these groups having been located in different settlements spread across the islands.*

*Women convicts too were shifted here since 1860.*

**Trivia:** It was into this mysterious and enigmatic world (of pain and torture) that Vinayak Damodar Savarkar had to stay (to remain incarcerated and locked in barrack number seven's top floor) from mid-1911 to mid-1921, till he was shifted to mainland prison!

Hundreds and thousands might similarly had gone to Andamans, and not even ten had returned alive to India. Young men as soon as they entered the jail became old & the shadow of death was visible on their faces.



**Ultra modern apartment, sir...  
each flat includes a hall, kitchen,  
3 isolation rooms and an ICU!**

## WORLD WAR AGAIN?

by  
V.V. HARIPRASAD

Has another world war begun?  
Pat came the reply from nook and corner of the world "YES".  
The question crops up "Who are the adversaries?",  
The whole world is on one side,  
And the fight is against the invisible and timid enemy "CORONA".

The enemy is doing a monster skeletal dance,  
Whereas the human race is diminishing as the time passes on.  
Even the animals have not been spared by the ruthless enemy,  
And its onslaught may end up with a colossal disaster.  
The bereaved world has gone the whole hog,  
And it is keeping its fingers crossed.

India the land of "Vedas" gave a clarion call,  
Emulating KRISHNA who was driving the chariot of ARJUNA,  
With an objective to annihilate the enemy.  
The strategy of "Isolation" has been evolved,  
To overpower the enemy,  
Which has been awestruck,  
As it knows that the move makes us win our hands down.

The "COVID WARRIORS" the doctors and the health fraternity,  
Have been waging the war on forefront,  
Shielding the rank and file of the society and the masses,  
Who are bound to support them with sheer "Isolation"  
By confining to their houses their forts of support.

May be the day is not far off,  
When the enemy gets defeated squarely being vanquished,  
And moves away lock stock and barrel,  
Having been diminished to a naught,  
And all those of the human race being victorious,  
March forward roaring with indomitable spirit,  
Bowing down their heads before the "COVID WARRIORS",  
With utmost humility, respect and gratitude  
Forever and ever and ever.

(The author is thankful to Sri K. Buchchiram Reddy. IFS (retd.) who extended his support in fine tuning this originally written in Telugu in the process of translation)

## MY TENURE IN KAGHAZNAGAR DIVISION

by

**M. RAJA RAMANA REDDY**

(Continued from last month)

### EVICTON NOTICE TO THE ENCROACHERS:

If the department wants to proceed against the encroachers, a strong base has to be prepared with scientific evidence. For this purpose, Google earth Maps (time line images) from the periods 2010 and onwards had been obtained. The FRO and staff under my guidance were determined to get the encroachers evicted from the area under encroachment. As the principle of natural justice would require, the affected persons have to be noticed on the proposed action and they need to be heard. With a view to meet with this legal requirement, an eviction notice in the local language dated 19.02.2019 was served on each of the three heads of families and the contents were read over and explained to the concerned in the presence of witnesses. Similarly, another notice dated 28.02.2019 was also served.

**WRIT PETITION NO. 6101 OF 2019:** As there was no response to the notice dated 19.02.2019, a second notice was issued on 28.02.2019 and served in the same manner as it was done before. The encroachers viz. Sri Sidam Pavu and 6 others filed W.P. No. 6101 of 2019 assailing the notices issued to them and requested the High Court to direct the authorities to grant forest rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act. 2006, even when they were not eligible as the cut-off date fixed in the act is 13.12.2005. The Government Pleader was requested by Letter dated 23.03.2019 to oppose the Writ Petition.

The Writ Petition was posted for hearing on 25.03.2019. I briefed the Government Pleader (G.P) on the merits of the case along with Google Maps. During hearing of the case, the counsel for

the petitioners was asked to produce any authentic document creating any right or title to the petitioners. The counsel could not produce any document. In the circumstances, the Hon'ble Court was pleased to pass the following order disposing the case at the admission stage itself:

***"In as much as Sub-Sections (3) and (4) of Section 20 of the Act provides that before taking any action, the officer concerned shall give an opportunity to the person affected to make any representation against the action proposed, I deem it appropriate to grant liberty to the petitioners to file their objections in response to the impugned notices, and on filing such objections, the respondents shall consider the same and pass appropriate orders in accordance with law, before taking any action against the petitioners. However, it is made clear that the respondents shall strictly adhere to the provisions prescribed under the Act."***

In compliance with the directions of the Hon'ble High Court in WP No. 6101 of 2019, the FRO has adopted the due process of law and issued 3<sup>rd</sup> eviction notice on dated 13-04-2019 and subsequently 4<sup>th</sup> eviction notice was also issued on 16-05-2019 and while issuing notices to all the encroachers the officers have taken all the dated acknowledgements of the notices along with photographs. The encroachers were required to file their objections to the notices as directed by the court. They have filed a response dated 22.04.2019 in reply to the notice dt.13.04.2019 issued by the FRO. Their plea was that they are cultivating the land since, 50 years and therefore they are eligible for the grant of forest right in the land under the Forest Rights Act. But the plea taken

by the encroachers is without substance and without any recorded proof. The representation was rejected by an order dated 16.05.2019

**WRIT PETITION NO.11310 OF 2019:** Sri Sidam Pavu, S/o Lingu, aged 80 Years, Occ. Agriculture R/o Gondi Village and (6) others of Ankusapur Gram Panchayat, Kaghaznagar Mandal in Kumram Bheem District have again approached the High Court of Telangana and filed W.P No. 11310 of 2019 on 10.06.2019. They questioned the validity of the eviction notices and prayed for orders not to evict them without following the due process of law and to suspend the impugned notices. When the matter was heard, the Court asked the counsel for petitioners to produce any record in proof of their right to occupy the forest land. The Government Pleader vehemently argued the case on behalf of the respondents and placed all the facts relating to the case while the counsel for petitioners could not produce any authentic document. The application was therefore dismissed.

**STRATEGY OF EVICTION:** Since ample opportunity was given to the encroachers to put up their defence, it was decided to evict them from the forest. The decision was conveyed to the District Administration for necessary help. On the request of the District Forest Officer, the District Collector convened a coordination meeting with the Superintendent of Police and other officials on 10.06.2019 and decided on the action plan. The need for cooperation and coordination of the local police, Revenue officials in the 'operation retrieval of forest land' was emphasized. A letter was addressed by me to the Revenue Divisional Officer, Kaghaznagar seeking help and cooperation.

After completing all the formalities as required by law and in due compliance of the orders of the High Court dated 25.03.2019 in W.P. No. 6101 of 2019, **eviction process was started in a peaceful**

manner on **the morning of 12.06.2019** with men and women staff and with the help of Police Officials in Compt. No 66 of Gondi Beat of Kaghaznagar section of Kaghaznagar Range in the presence of Revenue Officials after drawing up a Pachamama. The fact was reported to the High Court through the Government Pleader on 12.06.2019.

The eviction was executed in a peaceful manner with utmost care and without use of any force. Having realized that the eviction is imminent, the encroachers themselves have packed up their belongings including their clothes, utensils Etc. With a view to provide shelter to the oustees, all of them were shifted safely to the Government Timber Depot, Common Facility Centre (CFC) Vempally and provided temporary rehabilitation with all the basic facilities including food, water, medical check-up etc. They were free to move about. It was like a 'refugees camp.' Some of their children were also admitted into the Government Tribal Welfare School in consultation with District Tribal Welfare Officer, Asifabad. One girl child, who was suffering with chronic disease was sent to Warangal and RIMS Adilabad for proper medical treatment.

I made a report to the Conservator of Forests, Adilabad Circle, Adilabad, District Forest Officer, KB-Asifabad, District Collector, Project Officer, Integrated Tribal Development Agency (PO ITDA) and Revenue Divisional Officer, Kaghaznagar and requested them for extending support in rehabilitating these families and providing necessary assistance under available Government schemes to the 16 families which includes (16) men and (15) women and (36) children, who were natives of Nagargutta, Kirdi, Dongergoan, Savathi, Chopanguda, Jaragudem, Boddipatar and Dorli of Wankidi mandal. On 13.06.2019, the PO ITDA deputed the District Tribal Welfare Officer to the Government Timber Depot. He interacted with the tribals lodged there and told them that, they will be provided with all facilities under the Government

schemes if they move to their native place Wankdi which is within the jurisdiction of ITDA. The plan was discussed with the elders and about (16) families have agreed to return to their native places at Wankidi.

**HABEAS CORPUS PETITION:** As the matter stood thus, one Prof. Gaddam Laxman, S/o Balaiah, posing himself as the President, Civil Liberties Committee of Telangana, residing in Uppal (Hyderabad) filed a Public Interest Litigation (PIL) in the High Court of Telangana on Saturday 15.06.2019. The petition was taken on file as Habeas Corpus Writ Petition No.11946 of 2019, alleging the action of forest officers as illegal detention. It is prayed for producing the detenues before the court; It is further prayed that criminal and departmental action should be initiated against the respondents. The following officers were impleaded as respondents:

1. The State of Telangana, Rep. by its Principal Secretary, Home Department, Hyderabad.
2. The State of Telangana, Rep. by its Principal Secretary, Forest Department, Hyderabad.
3. The State of Telangana, Rep. by its Principal Secretary, Tribal Department, Adilabad.
4. The Forest Range Officer, Kaghaznagar, Adilabad District.
5. The Forest Divisional Officer, Kaghaznagar, Adilabad District.
6. The Project Officer, ITDA Utnoor, Adilabad District.
7. The Station House Officer, Kaghaznagar, Adilabad District.
8. The Superintendent of Police, Kumurambheem (Adilabad) District.

The High Court Bench comprising the Hon'ble Ag. Chief Justice Sri Raghavendra Singh Chauhan (as

he then was) and The Hon'ble Justice Sri Shameem Akhtar heard the Counsel for the Petitioner on Saturday 15.06.2019 and having perused the records submitted on behalf of the Respondents, formed house Committee and directed all the respondents especially Respondent No. 4 and 5 to produce 16 family heads before the Bench at the bungalow of the Ag. Chief Justice on SUNDAY 16.06.2019 by 5:00 P.M at Hyderabad to show cause whether the Forest Range Officer, Kaghaznagar and Forest Divisional Officer, Kaghaznagar have illegally detained tribal families. The news was widely highlighted in all the newspapers of Sunday dated 16.06.2019. The court sought the assistance of two professors of Osmania University viz. Sri Jayadheer Tirumal Rao and Smt. Manoja. They were requested to interact with the tribals alleged to be under detention and ascertain from them if they had gone to the timber depot voluntarily or under force by the officials. If the professors feel any difficulty in communicating with the alleged detenues, they were given freedom to engage a person who could speak the tribal language and translate it into Telugu or English. The Bench prima facie felt that all the tribals were illegally detained at the timber depot.

The entire forest department was shocked and felt stressed of the situation as it is the first of its kind. The Forest Divisional Officer, Kaghaznagar assisted by his staff asked all the 16 tribal family heads to get into an A/C bus on 16.06.2019 to go to Hyderabad and they were told that they have to appear before the High Court.

**FINAL HEARING OF THE CASE:** The Bench met on Sunday 16.06.2019 at 5PM at the residence of the Chief Justice, while a battery of media persons waiting outside, taking pictures and recording videos. There was tight security arrangement. The tribal's, Pleaders and the two professors appeared before the Bench. The Bench interacted with tribal family heads; on behalf of Forest Department, only

Sri M. Raja Ramana Reddy, Forest Divisional Officer, Kaghaznagar, was ushered into the chambers during the hearing. When his turn came, the FDO explained to the Bench the background of the encroachment and modus operandi of clearing the jungle for cultivation. The FDO produced the Google Time live Series Maps to show that the first encroachment took Place in 2013 and extended the cultivation extent by bringing in more encroachers. The FDO submitted that the forest around is dense and consists of rich biodiversity; it forms corridor for tigers not only from within the state but also across the borders from Maharashtra and Chhattisgarh.

The court enquired from Mr. Dilip Kumar Tribal Welfare Officer and the plans to rehabilitate the tribal's ousted from the forest. It was observed after hearing the District Tribal Welfare Officer Mr. Dilip Kumar and the Forest Divisional Officer Mr. Raja Ramana Reddy that dwelling houses are not constructed although the land for farming is identified. The petitioner requested the court to permit the tribal's to continue to live in the same land; but it was not acceded.

The Bench heard the arguments of the petitioner's Counsel as well as the Government Pleader for Home and Government Pleader for Forest and passed order with directions to the District Collector and the District Tribal Welfare Officer to allot land for cultivation and construct houses fixing a time bound programme. Pictures taken at the time of eviction and afterwards, and bringing the alleged detainees to Hyderabad to produce them before the High Court are furnished in the attachment.

Photographs taken on different occasions together with press cuttings are furnished as attachments to high light the events. The Principal Chief Conservator of Forests (HoFF) Telangana Hyderabad was following up and prepared a note given on brief account of the case.

**OUTCOME OF THE EPISODE:** Smt. Sobha, IFS, Prl. C.C.F., Sri Munindra, IFS, Addl. PCCF, Sri. P. Vinod Kumar, IFS FDPT, Nirmal and I/C Conservator of Forests of Adilabad Circle, following up the proceedings of the case and eagerly waiting for the outcome, were happy; and they all complimented me and my staff. Finally, Sri P.K. Jha, IFS. Principal Chief Conservator of Forests and Head of Forest Force of Telangana State is the source of the inspiration and he is the strength behind the **"operation retrieval of forest land of Gondi beat in Kaghaznagar division"** and its achievement. It is a rare case in which the High Court Bench met on a Saturday evening and also on Sunday evening to enquire into the allegations made in the Habeas Corpus Petition. Fortunately, the Court did not find fault with forest officers for evicting the encroachers from the forest land and upheld action of the forest department in evicting tribal from Reserve Forest land on 12.06.2019.

Many forest officers of Maharashtra over WhatsApp complimented me and my Staff for the achievement of successful eviction. One of the encomiums was interestingly reads something, to the following effect:

*Encroachments into the forest is like cancer in the human body and the forest officer who successfully evacuates the encroachers can be said to be a doctor who does surgical operation.*

All the encroachers have been sent to Wankdi under the supervision of FRO Kaghaznagar. All is well that ends well. It must be said respectfully that the judgment is topical and revealing.

During this rainy season in the month of July 2019 in entire Gondi encroachment retrieved area we have taken up SMM plantation .....

(To be continued)

**BREAK THE CHAIN**

by

**Konda Mohan**

Break the chain to make the Nation  
 Maintain the Lockdown to protect the Nation.  
 It is not the time for Motion & Emotion.  
 You should stay safe at home without any Violation.

Enemy is invisible and cunning Corona Virus.  
 It is most dangerous Pandemic and disastrous.  
 Collapsing countries and economies of intelligent Human Races.  
 without planning and preparedness tumbled worlds super powers.

Social Distance is only the Lakshmana Raksha.  
 Staying at home is only the Sri Rama Raksha.  
 Prime Minister, Chief Minister are begging with Folded hands  
 To stay safe at home instead keeping you on the walls in Photo frame.

Doctors are in the forefront at the cost of their lives.  
 Police brethren sleeping on roads leaving their lives at risk.  
 Safai Sisters cleaning drains leaving their families in danger.  
 Stay at home if not, in the Voter list, sure you miss your name.

Don't forget wearing always mask and social distance is the main task.  
 Time has come to win the world by only by staying at home.  
 Let us protect ourselves, our Families and our Nation.  
 Otherwise Corona may wipeout mankind on the mother earth.

**ANSWERS OF JULY QUIZ:**

1. c	2. b	3. c
4. Pan	5. closest	6. c
7. d	8. Predators	9. Dinosaurs
10. b	11. a	12. Lion, Tiger
13. Arunachal Pradesh	14. 10,000	15. d

## GREY HORNIBILLS, INDIRA PARK AND ME!

by

Sadhana Ramchander

I am not a serious birder, and really have no authority to write about hornbills or any bird for that matter. But I have been observing Indian grey hornbills for several years now, and they fascinate me! I record here the process of my discovery of and learning about the Indian Grey Hornbill.

During the recent Covid-19 lockdown, I attended a webinar by Dr Raju Kosambi, who did his PhD on the Indian Grey Hornbill, and his excellent talk connected many dots for me. I understood that Indira Park, which is my nature training ground, is a hornbill haven because it has the perfect habitat for them to thrive! The ecosystem these birds need includes certain species of trees for food, certain species for the bark, certain insects and chicks, and a water body from which they can source wet mud.

I first heard about the likelihood of there being grey hornbills in urban spaces from my cousin Rahul who said he saw grey hornbills in my home in Warangal. I did not believe him! Then our friend Giridhar said he had seen grey hornbills in Vidyananya School. At that time my children were very young and being very busy juggling work and home, I had not started my wanderings in nature.

When I did start going to parks with some regularity, I began seeing these large birds, and not being trained, I thought they were some species of water birds like cormorants. Slowly my attention was drawn to their interesting bills, bobbing tails and cacophonous arrival and departure - mostly in pairs! I have been very fortunate to have seen them with some regularity, in different combinations - single, in pairs, and families of three and four, sometimes the parents teaching their chicks to fly! I never really spent too much

time following them around, but have seen them do various things to intrigue me, and I began reading about them. The first thing I read that astounded me was about the loving relationship between male and female hornbills.

**Committed for life: A story of dedication:** Please magnify and see the photos below, of the male feeding the female. This is a very touching story of dedication of the male hornbill towards his family. When the female is ready to lay eggs, it goes into the nest cavity and slowly seals itself from inside using lumps of wet mud that the male brings, leaving just a vertical slit. The female then stays inside for a total of about 2 months, during which time the male feeds and takes care of it, through the process of egg laying, chicks hatching and fledglings growing up.

When the chicks come out of the eggs, they are naked, without any feathers, and they are blind and helpless. The mother bird has to take very good care of them, including maintaining adequate temperature inside the nest. When the chicks are a little older, the female finally comes out of the nest breaking the wall it had built with its beak. It squeezes itself out of the nest, and has lost its tail feathers, become weak and unsteady. It also cannot fly. The male continues to feed and take care of it, as well as the chicks, and it is only after a week that the female is slightly stronger and begins helping the male.

The nest cavity opening remains after the female comes out, and sometimes, the hyper active chicks fall down from the nest and die. However, if all goes well, within 2-3 days, the male and female start supplying the chicks with wet mud pellets, and they once again seal the cavity, although not as well as

their mom - but it is remarkable that they do that! Once the chicks are ready to fly, the opening is widened and they fly out into a large tree-filled world to be groomed by their parents to live their life as adults. The empty nest is immediately claimed by mynas, parakeets or other birds who have been eyeing it.

The female hornbill and its chicks are therefore completely dependent on the male. What if something happens to him? Well, the sad fact is that they just die of starvation. I read about an incident where, in Athirpally-Vazachal reserve in Kerala, a male hornbill died in a car accident - perhaps it was flying very low. It had in its beak, banyan figs that it was taking to its family. Bird watcher/photographer Baiju K Vasudevan discovered the dead bird, and knowing that its family would starve, he and his team looked for the nest, found it and fed the female and the chicks till they became independent. A happy ending this time, but it need not always be so, considering the extreme dependence on hornbill families on the male.

**Toilet hygiene:** How does the female poop while inside the nest? Well, she simply turns around to get her exterior to the cavity slit, and squirts out the poop with force! The ground beneath a hornbill nest is, as a result, scattered with poop.

What about the chicks' poop? Here is a complex process that will totally astound you. What happens is that the male keeps giving the female small pieces of bark. The female carefully chooses bark that is brittle and can **absorb** moisture because the poop is semi-solid and could cause infections to the female and the chicks if it is allowed to remain inside. Some bark pieces also need to **adsorb** the excreta, that is, they should be able to hold the excreta in the form of a thin film on their surfaces! Then when the pieces of bark get dirty, the female picks them up and throws them out, and replaces them with fresh bark, pretty

much like human beings' using diapers. Think of the complex science involved in keeping the nest clean. How clever these birds are, and what's more, their 'diapers' are completely biodegradable!

**What do hornbills eat and drink?** Hornbills are frugivorous birds during ordinary times and eat a lot of non-vegetarian food during the breeding season. Their diet largely includes figs of peepal and banyan in that order. Other fruits they eat are those of neem, guaicwood, khirni, bakula, Indian plum (ber or regu pandlu), lokhandi, cluster fig, palm fruit and of *jungli jilebi*. Hornbills also eat the pulp of yellow oleander, discarding the poisonous seed! As regards the non-vegetarian diet, they feed on garden lizards, grasshoppers and chicks of other birds when they find them.

I have seen *all* these trees in Indira Park, as also the trees whose bark the female prefers! It turns out that the female has a preference for the bark of certain trees - neem, mahogany, mango, Siris, gul mohur and Arjuna (scientific names in footnote).

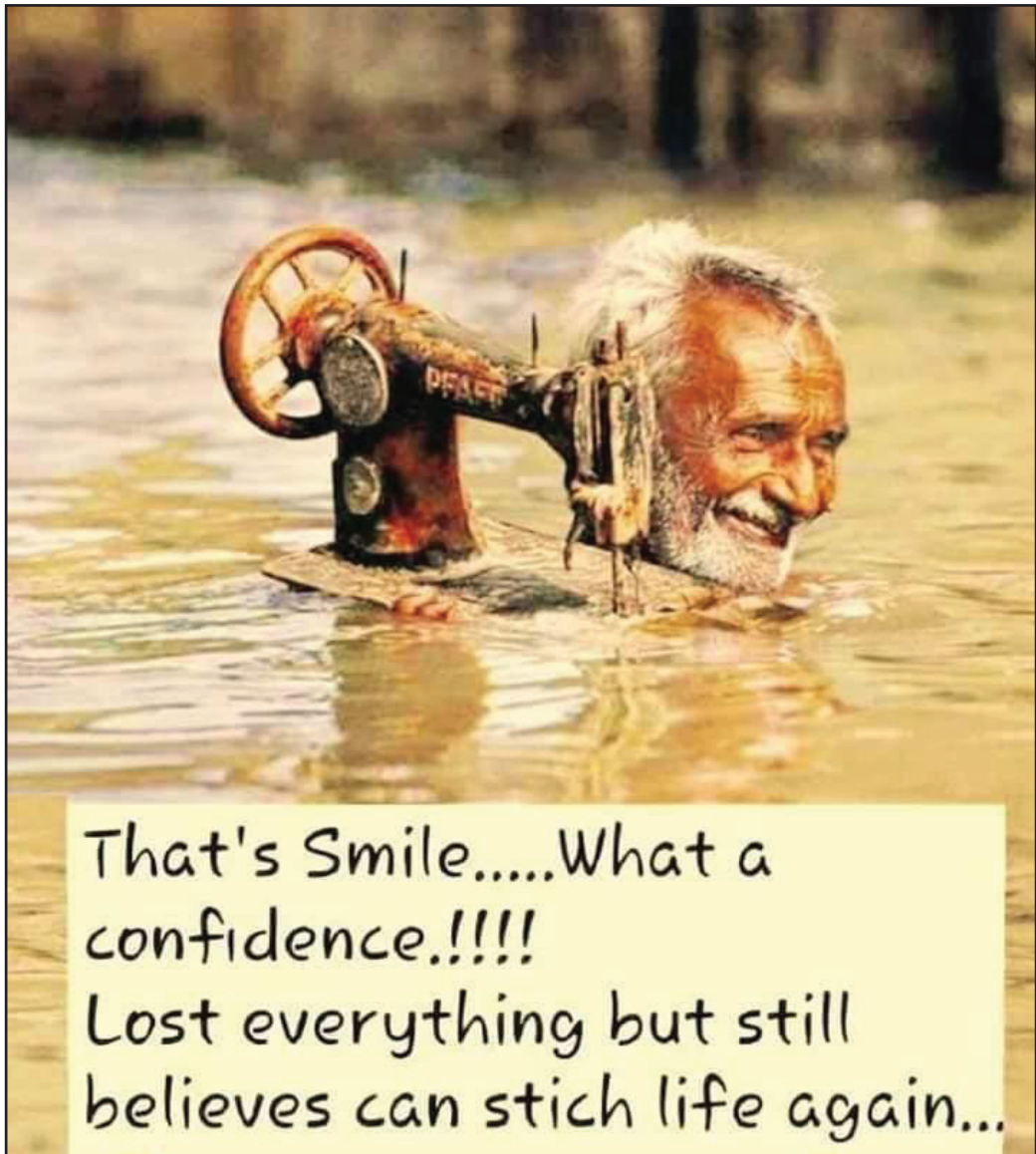
Also, the breeding time of hornbills coincides with the time when peepal and banyan have figs - yet another of the many fascinating connections in nature. What about water? The water content in the diet of hornbills comes from the figs they eat. So, they don't need to drink water, especially while inside the nest.

**Aerial jousting:** One of the days when I was walking in Indira Park, I suddenly came upon a pair of hornbills noisily fighting on a jamun tree. They seemed to be wrestling on the tree and as I watched, they came down, wings flapping, holding each other's bills, and fell on the ground with a thud. I was worried that they would get hurt, but they flew to another tree. I quickly took out my phone hoping that it would happen again. It did, and I successfully caught it on my phone camera!

I assumed it was a territorial fight between two males. Now I know that this is called aerial jousting. Sometimes apparently, two hornbills fly from different directions, clash in mid-air, hold each other's bills and come down free falling. That is so very cool!

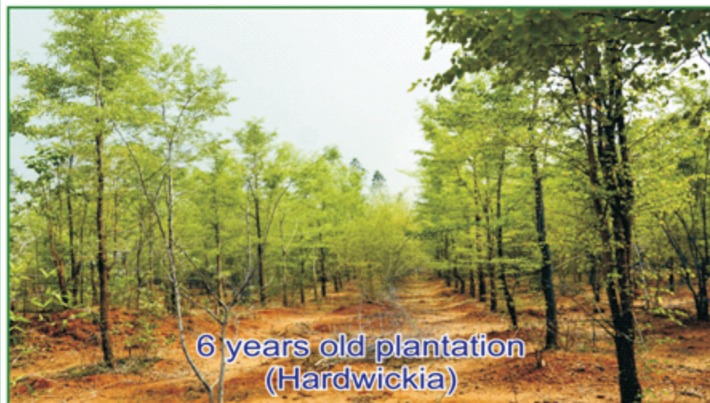
All this practical learning from my observation of grey hornbills has been precious and delightful, and I will value it always. The life cycle of grey hornbills is a

very good example of how an ecosystem is so very important for any species to thrive. I understand now why there are so many grey hornbills in Indira Park and in no other park in Hyderabad. I am waiting for the lockdown to be lifted so I can go back and see them, with the hope that there will be many more birds of all kinds because they have had a break from human beings for nearly three months!





Sri N.Sridhar, I.A.S., C&MD, SCCL inaugurating Telanganaku Harithaharam in Singareni



6 years old plantation (Hardwickia)

- SCCL contributes 10% of country's total coal production. SCCL achieved the highest ever coal dispatches of 64.6 M.T. during 2017-18.
- SCCL planted 3.72 crores of saplings in 10,932 Hectars of land (up to July 2017)

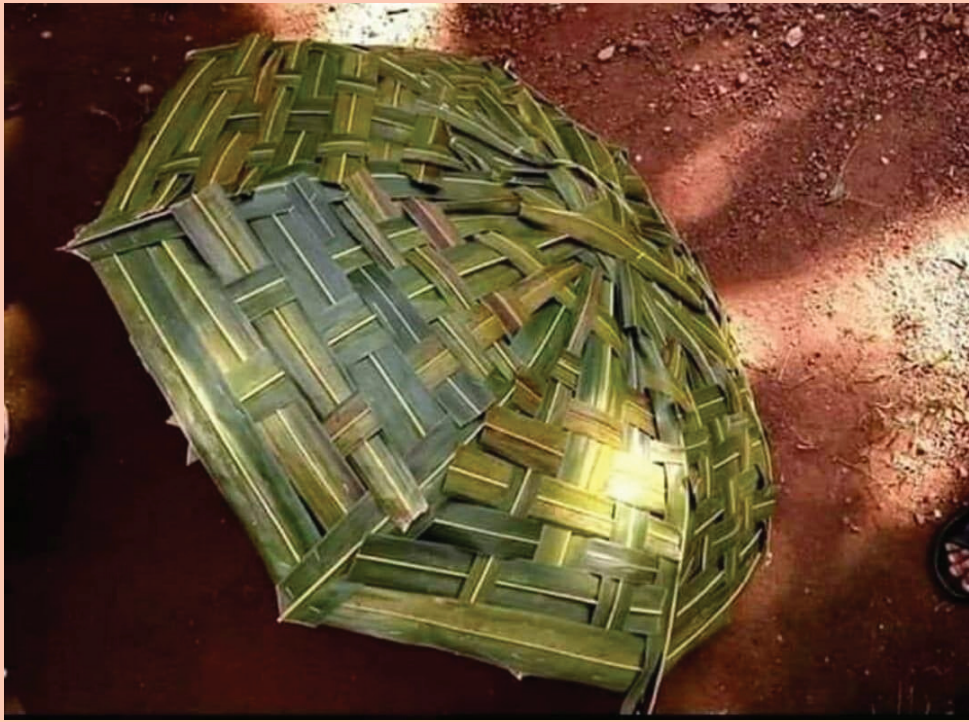
### Rehabilitation of RF land (Non mandated)

- SCCL honoured with "Indira Gandhi Vriksha Mitra Award - 2004", "Teri Corporate Environment Award - 2004", "Golden Peacock Environment Management Award-2005" and "Golden Peacock Innovative Product/ service award -2015" and many more for it's Eco & Environmental friendly mining.
- Sri N.Sridhar I.A.S., C&MD SCCL honoured with "Asia Pacific Enterprenuer Ship Award - 2018" and "Outstanding Leadership Award - 2018".



**THE SINGARENI COLLIERIES COMPANY LIMITED**

(A Government Company)  
Telangana State



Umbrella made from coconut leaves in Konkan area



Loten's sunbird (*Cinnyris lotenius*)



**New building of Forest College and Research Institute at Mulugu**



**Sri K. Chandrashekar Rao Chief Minister of Telangana inaugurating the FCRI building at Mulugu**



- ◆ With a vision to increase green spaces and to improve the quality of life of the people, **Andhra Pradesh** Government has come up with a unique initiative with the support of APG&BC in launching **GreenAP** mobile application.
- ◆ This app helps in bridging the gap between consumers and the vast vendor eco-system across the country who are dealing with green products and services.
- ◆ Consumers will now have access to vendors to procure plants of various kinds including indoor, exotic, lawns, roof top gardens, vertical gardens, etc.
- ◆ With this mobile app they will have access to the products like pot vendors, aquariums, landscape designers and many more.

● **Salient Features** ●



Vendor Directory



News



Enquiries



Forums



Events

Consumers can select vendors who are closer to their city or town for any purchase by browsing through the hundreds of profiles available in the **GreenAP** mobile app. Consumers can access vendors via WhatsApp, SMS or Phone.



Download **GreenAP** app today!



For more information, please contact our help line number: **+91 7997650835**

# THE IMPORTANCE OF SEED BALLS IN IMPROVEMENT OF VEGETATION IN FORESTS

by

Dr P. Shivakumar Singh

**Abstract:** A seed ball is a limestone sized ball made of clay, earth and seeds which is used to replant areas where the natural flora has been shattered. Also, referred to as seed bombs for guerrilla gardening, which first developed how to make seed balls is a bit of a mystery. In the present elucidation is concerted to the seed balls importance and their preparation methods. The requirements for the preparation of seed balls, preparation methods, usage, spreading and outcome of the seed balls also discussed in detailed. The present report results to be spreads to the elementary wisdom for the pastoral, rural, indigenous and folkloric people, government biodiversity departments, forest departments, educational institutions for the development of foliage in the regional, state and nation level.

**Introduction:** When human activities push the balance of natural systems far from their symmetry, the self-healing ability of nature may be disrupted (Rolston, 1994; Whisenant, 1999) and the healing processes require deliberate repair, restoration (Jordan 1994, Rolston 1994). Some ecological philosophers argue that restoration is unfeasible and that we should focus more on preserving what already exists (Elliot 1982; Katz 1992). Others emphasize that while complete restoration is impossible, conservation is on the same line (Rolston, 1994; Jordan 1994). Although a restored ecosystem may not be a perfect replica, a goal of ecological restoration should remain to re-establish co evolutionary species in a self-sustaining homeostatic system (Westman, 1991) of both structural and functional integrity (Cairns, 1991). Ecological restoration should, with minimal intervention,

encourage the self-healing process that leads to a properly functioning ecosystem (Turner, 1985; Jordan, 1994; Whisenant, 1999). According to Jordan (Jordan, 1994) restoration practice is "to provide a healthy relationship between nature and culture." Although there are some cases in which reversions of lands used by humans have been successful without any restoration efforts (Wells, et al 1976; Marrs and Gough, 1990), the likelihood of natural recolonization by many native plant species usually shows decline (Lowday, 1984; Miller, this report), and actually shifting community structure away from original ecosystem condition (Jackson, 1985).

**What is a Seed Ball?** A seed ball is a marble sized ball made of clay, earth and seeds which is used to replant areas where the natural flora has been destroyed. Also, referred to as seed bombs for guerrilla gardening, which first developed how to make seed balls is a bit of a mystery. Some say it originated in Japan while others claim Greece, but the important thing is that the native plant seed ball has now been used around the world to reseed land that has been abused by man or by Mother Nature herself. Before the development of the native plant seed ball, reseeded some natural areas was difficult. The traditional method of broadcasting seed comes with several major drawbacks. The seed is sown on top of the soil where it may be baked dry by the sun, blown away by the wind, washed away by heavy rains, or nibbled away by birds or other small wildlife. Very little is left to germinate and grow. Making seed balls addresses all of these problems. These clay balls protect the seed from the heat of the

sun. They're heavy enough to be unaffected by the wind or heavy rains and the hard clay casing deters animal nibblers as well. Before we talk about how to make seed balls, let's see how they work.

**Significance of seed balls in the germination:** In dry areas, the shape of the ball actually gives enough shade to conserve moisture. The seeds begin to germinate and the ball breaks apart. The small pile of crumbles provides the start for the root system, but is still heavy enough to anchor the emerging seeds to the ground. The small leaves of the new plants provide enough shade for the soil to conserve more moisture. The plants then mature and produce their own seeds and provide shelter once the second-generation seeds fall to the ground. The seeding and re-growth continues until complete plant cover is achieved. Making seed balls gives nature the extra boost it needs to make things right. Learning how to make seed balls is a great activity for kids. It's fun, easy to do and can be easily adapted to the environmental needs of the community. The seed ball recipe can be altered simply by changing the seeds. Want to plant wildflowers along a rural highway? How to make flower seed balls is no different than how to make a native plant seed ball. Change the seeds to bird seed and you've got the ingredients for a bird food garden in the suburbs. Turn a vacant city lot into a wonderland of grasses, cosmos and zinnias. Let your kid's imaginations run wild. Making seed balls is a terrific way to spend a rainy afternoon at the kitchen table or out in the garage. The seed ball recipe is easy to follow and, for older children, doesn't require intense adult supervision. Why not gather the ingredients ahead of time so they're ready for that rainy day.

**Requirements for making of seed balls.** 2 parts potting soil, 5 parts pottery clay mix from your local art store, 1-2 parts water, 1-2 parts seeds of your choice, Large tub to mix ingredients, Large box to dry and store seed balls

**Steps involves in the preparations of seed balls.**

**First step:** Mix the soil, clay and 1-part water thoroughly. There should be no lumps. Slowly add more water until the mixture is the consistency of the toy store molding clay that comes in a can.

**Second step:** Add seeds. Keep kneading the dough until the seeds are well mixed in. Add more water if necessary.

**Third step:** Take small bits of the clay mixture and roll into ball about one inch in diameter. The balls should hold together easily. If they're crumbly, add more water.

**Fourth step:** Dry seed balls for 24-48 hours in a shady place before sowing or storing. They store best in a cardboard box. Do not use plastic bags

**Fifth step:** The last step in how to make flower seed balls is sowing them. Yes, you can place them carefully over the area to be planted or you can gently toss them one at a time, which is a lot more fun. Don't bury them and don't water them.

**Brief preparation technique of Seed balls:** The ingredients are prepared in the following proportions: 1 part of dry seed mix, 3 parts of dry native soil, 5 parts of dry red clay and 1-2 parts of water. Locally collected soil, used to replicate the natural environment, is dried and sifted to remove large pieces destroying uniformity. Large pieces of soil and rocks occupy considerable volume in seed balls, thus making one less dense with seeds than others. Dry red clay powder, purchased from Clay People Co. in Richmond, Calif., was also sifted. Seeds are collected locally to preserve the genetic variation between the restoration area and areas outside the park. Some seeds are more difficult to collect in a large amount than others, thus available

seeds for each species vary significantly (Van Noord 2002, pers. comm.). The weight of seeds used, year of harvest, the total number of seeds per gram and the number of seeds in seed balls are listed for each species should be recorded for further calculations if in need.

**Summary:** A little seed ball can create miracle in the development of vegetation in forests. By using of this technique, we can spread local plants species abundantly. Sometimes according to surrounding vegetation, soil, the new, rare species also spreads. For this reason, the local documentation of forest

species to be needed. In the present report the resolute to the seed balls importance and their preparation methods, the requirements for the preparation of seed balls, preparation special techniques, precautions, usage, spreading and outcome of the seed balls also discussed in detailed. These results would be spreading the basic knowledge, importance of seed balls to the rustic, rural, aboriginal people, government biodiversity departments and forest departments, educational, research institutions for the development of foliage in the regional, state and nation level.

*“I, Corona Speaking. Nature has been crying, yet you paid no heed. Glaciers have been frying, yet you kept sleeping in greed. Forests kept on burning, yet your eyes shed no tear. Hurricanes kept on brewing, yet your luxuries didn't disappear. Hence my arrival, not to punish you, but only to give a wakeup call. I haven't come to lock you up, But only to expose your downfall. Now you know the horrors you committed, I plea o wise one's live life illuminated.”*

— Abhijit Naskar

Fools multiply when  
wise men are silent.  
— Nelson Mandela



# WORLD ENVIRONMENT DAY ON BIODIVERSITY...

by

**E. Manikanta Reddy**

World Environment Day (WED) 2020 would be celebrated on Friday, June 5<sup>th</sup>, 2020 in Colombia. World Environment Day 2020: theme will be on “**Biodiversity.**” The theme aims are a call to action combat the accelerating species loss and degradation of the natural world. One million plant and animal species risk extinction, largely due to human activities. UN Environment Program (UNEP) announced that Colombia will be hosting WED-2020 in partnership with Germany. WED urges us to rethink how our economic system have evolved and the impact they have on the environment. These are issues the world cannot lose sight of even as we tackle the coronavirus pandemic and the ongoing climate crisis.

## **What is Biodiversity and why does it matter?**

Biodiversity, or biological diversity, is the variability of living things that makes up life on Earth. It encompasses the 8 million or so species on the planet – from plants and animals to fungi and bacteria – the ecosystems that house them – such as oceans, forests, mountain environments and coral reefs – as well as the genetic diversity found among them.

Healthy ecosystems, rich with biodiversity, are fundamental to human existence. Ecosystems sustain human life in a myriad of ways, cleaning our air, purifying our water, ensuring the availability of nutritious foods, nature-based medicines and raw materials, and reducing the occurrence of disasters.

But we have not taken care of nature. We are witnessing unparalleled bushfires in Brazil, United States and Australia, locust invasions in the Horn of Africa, and the death of coral reefs. The ongoing COVID-19 pandemic – the latest in a string of zoonotic disease outbreaks – shows that the planet’s

health is linked to our health.

**What is at Stake?** One million plant and animal species are facing extinction – some within decades – according to the latest report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Every species plays an important role in keeping an ecosystem balanced and healthy. Losses in biodiversity and habitat can increase the spread of infectious diseases and viruses.

The global economy is intricately tied to biodiversity. Services provided by biodiversity are worth an estimated US\$ 125-140 trillion per year, more than one and a half times the size of global GDP. The food we eat, the air we breathe and the water we drink come from nature. As we head towards a population of 10 billion people on this planet, we must embrace the opportunities and value of the natural environment and not work against it.

The good news is that we can reverse the trends of biodiversity loss by reimagining our relationship with nature and acting now to increase ambition and accountability for its protection. We must conserve and restore wildlife and wild spaces, change the way we produce and consume food, promote environmentally friendly infrastructure and transform economies to become custodians of nature.

The world’s response to the COVID-19 pandemic has shown early action and solidarity to tackle pressing issues that threaten our societies. As countries start to plan ways to build back better, getting nature at the heart of all decision making for people and the planet must be our top priority.

**What are the drivers of biodiversity loss?** The five main drivers of biodiversity loss as identified by the latest IPBES and GEO-6 report stem from our activity. Biodiversity loss can be prevented through changing what we consume, how we produce and where we protect nature. Stronger environmental policies and accountability measures will help drive these changes in behavior.

**1.LAND-USE CHANGE:** Our demand for food and resources is driving deforestation, changing patterns of land use, and destroying natural habitats across the globe. Twenty-six per cent of the planet's ice-free land is used for livestock grazing and 33 per cent of croplands are for livestock feed. Today, one-third of the world's topsoil has been degraded from acidification, pollution and other unsustainable land management practices.

**2.OVEREXPLOITATION OF PLANTS AND ANIMALS:** The over-exploitation of resources by people, including for fishing, logging and wildlife poaching is threatening the very existence of creatures great and small; from iconic wildlife, like the pangolin, the most illegally trafficked mammal on the planet, to the beluga sturgeon, prized for its caviar. Poverty can force people into activities like poaching and illegal logging, while unsustainable development encroaches upon wild areas and fuels demand for wildlife products.

**3.CLIMATE EMERGENCY:** Climate change and the increase in extreme weather drives habitat loss and degradation. For example, warming seas are melting sea ice; intact ice flows are critical for sustaining polar bears, seals and fishing birds, meanwhile acidifying oceans are bleaching coral reefs. One estimate suggests that by 2050, one in six species could be threatened with extinction if current warming trends continue.

**4.POLLUTION:** Pollution is a major and growing threat to biodiversity, with devastating effects on

freshwater and marine habitats. There may now be around 5 trillion macro and microplastic pieces floating in the ocean, making up 60 to 90 per cent of marine debris. Open waste dumps impact plants and animals, while pesticides, fertilizers and other chemicals harm pollinators like bees and bats, which are natural predators of pests.

**5.INVASIVE ALIEN SPECIES:** Invasive species threaten biodiversity by acting as parasites or competitors, altering habitats, crossbreeding with local species and bringing diseases. Globalization has increased the movement and introduction of species beyond their original ranges through trade and tourism, disrupting their new host communities and habitats.

**Biodiversity loss and COVID-19:** This World Environment Day, as many are isolated at home, let us reflect on what got us here.

The COVID 19 pandemic is a reminder that human health is linked to the planet's health. Coronaviruses are zoonotic, meaning they are transmitted between animals and people and research shows that these diseases are on the rise. At present, about 1 billion cases of illness, and millions of deaths, occur every year from zoonoses. Sixty per cent of all known infectious diseases in humans are zoonotic, as are 75 per cent of all emerging infectious diseases.

Scientists predict that if we do not change our behavior towards wild habitats, we are in danger of more virus outbreaks. To prevent future zoonoses, we must address the multiple threats to ecosystems and wildlife, including habitat loss and fragmentation, illegal trade, pollution, invasive species and, increasingly, climate change.

World Environment Day aims to inspire everyone to make their voices heard — citizens need to urge their governments to deliver on their commitments to safeguard nature, end pollution and ensure that

environmental laws are upheld. Companies need to develop sustainable supply chains, as well as agricultural and manufacturing practices that do not harm the environment. Citizens and civil society groups should look at how to preserve and restore degraded ecosystems. And consumers should rethink what they buy. With our lives upended, we can unite to find ways not only to live well in harmony with each other but also with nature.

To help prevent further outbreaks of zoonotic viruses like COVID-19, the illegal wildlife trade and the destruction of habitats must stop. We cannot go back

to business as usual. And we will need to rebuild by working with nature, not against it.

Finally, each one of us has a role to play in ending biodiversity loss and preserving nature for human well-being. As individuals we must rethink what we buy and use and become conscious consumers. If we are to change our current course of destruction to one of custodianship of nature, we must first LEARN about what we can do; SHARE that knowledge with our family and friends on World Environment Day and beyond; and ACT on the things we need to change.



## **PROJECT NAWAH - AN UNRELENTING DRIVE TOWARDS A PLASTIC-FREE WORLD**

by  
**Paras Khurana**

Innovation is the change that unlocks value. It is often said that there is only one thing stronger than all the armies of the world: and that is an idea whose time has come. Enactus, Dyal Singh College, resolutely believes in revolutionizing and therefore, bringing a change by their pioneering efforts with utmost passion and integrity.

It is with an unrelenting drive to break the status quo and develop a new, that their youngest initiative, Project Nawah is endowed upon. Plastic is one of the biggest nemesis of the environment and requires instantaneous eradication. Therefore, Project Nawah is a twin fold initiative, that aims at substituting plastic with the green gold, bamboo and utilizing the pre-existing plastic in an efficient and ecological manner so as to reduce the quantum of plastic waste in the ecosystem, conserving life and the world as a whole.

Having been scientifically proven to be the fastest-growing plant, Bamboo is a highly renewable, biodegradable, and an environment-friendly substance. By promulgating the market for bamboo products, the project strives to cut down the use of single-use plastic at the source, provide efficient substitutes for plastic products and thereby, prevent plastic from entering and polluting the land or marines.

For example, instead of using 2 plastic toothbrushes, a person can now use one bamboo toothbrush manufactured by our beneficiaries. Similarly, the project has maneuvered an efficient product line including bamboo trays, cutlery, straws, earbuds, disposables, bottles, baskets and flower pots that

will enable the project to substitute plastic products easily. The prices of the bamboo products are equivalent to the plastic products, thereby, curbing the problem of affordability in the first place itself.

Rigorous cleanliness drives, awareness sessions and environment-friendly campaigns have also been organized in areas of Govindpuri, Munirka, Bahadurgarh, Dallupura and Badarpur where plastic dumping is a major menace so as to divert the preferences of consumers towards an ecological and viable alternative. Information is being regularly disseminated through various social media platforms about the same. The research team is currently working to propose efficient solutions for sewage treatment also. This will not only discourage the obstruction of environmental stability but significantly contribute to eradicating plastic completely in the long run, as well.

The project vehemently aspires to strengthen the standard of living of socially deprived and a marginalized community of women residing in Dallupura who are on the brunt of vulnerability. Built upon the roots of social entrepreneurship, innovation and ecological stability, the project aims to alleviate the stature of these women to make them self-supportive.

Through a collaboration with CIBART (Center for Indian Bamboo Resource And Technology), the beneficiaries were imparted with the requisite training and skills to make utility bamboo products in association with Alina Parmarthan Foundation.

Furnishing the women with monetary assistance, economic stability and skill development, the project also breaks the lines of patriarchy and gender inequality, thus, promising plausibility for a secured future.

The natural world shows us in so many ways a

simple truth: there is strength in number. Enactus, Dyal Singh College believes this to the full extent. The team members work conjointly to bring about a positive change in the ever-changing society. The path to this journey has no end. They strive to remain on this path to a better future for as long as they can because this is the only way forward.

Did you know that the Persian scholar of medicine, Ibn Sina (980-1037) suspected that some diseases were spread by microorganisms? To prevent human-to-human contamination, he came up with the method of isolating people for 40 days. He called this method al-Arba'iniya ("the forty").

Traders from Venice heard of his successful method and took this knowledge back to contemporary Italy. They called it "quarantena" ("the forty" in Italian). This is where the word "quarantine" comes from. The origin of the methods currently being used in much of the world to fight pandemics have their origins in the Islamic world.

Allah says in the Quran: "Who saves one human life, it is as if he has saved all mankind" (5:32). Even today Ibn Sina's method saves thousands, perhaps millions, of lives. Ma sha Allah, that is another legacy filled with barakah!

**Note:** Ibn Sina's full name was Abu Ali Al-Hussein Ibn Abdullah Ibn Sina. In the west he is also known by the Latin version of his name: Avicenna.



## News and Notes

**Forest College & Research Institute Mulugu Telangana gets A+ recognition, KCR Greets Forest Officials:-** Indian Forest Council gives A+ recognition: Good result for government's efforts: Says CM congratulates Forest department officials, staff and students. Dr G. Chandrasekhar Reddy IFS, Addl. PCCF & Dean FCRI Mulugu, happily informed that The Telangana Forest College and Research Institute (FCRI) got A+ Category Institute recognition from Central government for maintaining the highest standards in forest education and research. Indian Council of Forestry Research and Education (ICFRE), which examines the Forest Colleges, their standard of education and facilities, have given this the most important recognition.

Chief Minister K Chandrashekhar Rao said it was good result for the efforts put in by the state government. The CM congratulated the officials of the Forest department, College management, Staff and the students. With a view to give more importance to the protection of forests and the environment, the CM constituted an exclusive Forest College and encouraged it. This decision was taken in the initial days of the state's formation. With the CM's directive that the Forest College should be on par with the Mettupalem College in Tamilnadu, was started in 2015 and the first batch of B Sc (Forestry) started with four-year duration course.

The final year students are completing their course this year. The College moved to its own campus on 11 Dec 2019 at Mulugu. The CM inaugurated the new campus, which had the state-of-the-art facilities and hostels. The College from where the first batch of B Sc students are passing out this year, is starting two-year M Sc (Forestry) course and three-year Ph D Course also. Initially, B Sc Course admissions were done based on the marks obtained at the

Intermediate course but later they were done on the basis of the Eamcet rankings.

While maintaining the highest standards in teaching, the College signed MoUs with Columbia University and Auburn University. The Auburn University offered a free M Sc seat recently to a girl student from this college. With the A+ recognition now, the College may get more national and international recognitions. There will also be an opportunity to collaborate with from other institutions in the education and research fields' development.

**COVID-19 peak in India may arrive mid-Nov, paucity of ICU beds, ventilators likely: Study: -** The peak stage of COVID-19 pandemic in India has been delayed by the eight-week lockdown along with strengthened public health measures and it may now arrive around mid-November during which there could be a paucity of isolation and ICU beds, and ventilators, according to a study.

The study conducted by researchers from an Operations Research Group constituted by ICMR said the lockdown shifted the peak of the pandemic by an estimated 34 to 76 days and helped bring down the number of infections by 69 to 97 per cent thereby allowing time for the healthcare system to shore up resources and infrastructure.

In the scenario of intensified public health measures with 60 per cent effectiveness after lockdown, the demand can be met until the first week of November. After that, isolation beds could be inadequate for 5.4 months, ICU beds for 4.6 and ventilators for 3.9 months, projections by the health researchers showed.

However, this shortfall is estimated to be 83 per

cent less than what it could have been without the lockdown and public health measures.

With sustained government steps at increasing the infrastructure and different pace of epidemic in different regions, the impact of unmet need can be reduced. If the coverage of public health measures can be increased to 80 per cent, the epidemic can be mitigated, the researchers stated.

According to the model-based analysis for COVID-19 pandemic in India, with the additional capacity which has been built up for testing, treating and isolating patients during the lockdown period, the number of cases at the peak would come down by 70 per cent and the cumulative cases may come down by nearly 27 per cent. In terms of COVID-19 mortality, approximately 60 per cent deaths were prevented and one-third of this mortality prevention is attributed to the reduction in unmet need for critical care as a result of the intervention, the analysis showed.

The researchers said the management of COVID-19 will involve a dynamic review of policies and significant strengthening of the healthcare system.

'While lockdowns will delay the onset of peak and will give the much needed time for the health system to respond, strengthening the health system response in terms of testing, isolation of cases, treatment and contact tracing, as is being done currently, will have to be the mainstay to reduce the impact of the pandemic in India until vaccine becomes available,' it said. The overall economic health system cost of this pandemic is estimated to be 6.2 per cent of India's gross domestic product (GDP).

The country saw a record spike of 11,929 cases pushing India's COVID-19 caseload to 3,20,922 on Sunday while the death toll rose to 9,195 with

an increase of 311 fatalities, according to the Union Health Ministry data.

India registered more than 10,000 cases for the third day in a row and is the fourth worst-hit nation by the COVID-19 pandemic.

The ministry on June 9 said coronavirus related health infrastructure in the country has been strengthened with the availability of 958 dedicated COVID-19 hospitals with 1,67,883 isolation beds, 21,614 ICU and 73,469 oxygen supported beds.

Also, 2,313 dedicated COVID Health Centres with 1,33,037 isolation beds, 10,748 ICU beds and 46,635 oxygen supported beds have also been operationalised. Moreover, 7,525 COVID Care Centres with 7,10,642 beds are now available to combat COVID-19 in the country.

The ventilators available for COVID beds are 21,494, the ministry had said, adding that order of 60,848 more ventilators has been placed.

**Forest dept rescues copper headed trinket snake in Odisha's Mayurbhanj:** - Mayurbhanj (Odisha), June 13 (ANI): A rare 'copper headed trinket snake' was rescued by the forest department officials in Odisha's Mayurbhanj district. They rescued the snake with the help of locals on June 12. It was rescued from district collector's residential office in Mayurbhanj.

**Coronavirus antibodies remain in the blood for almost two months, study shows:** - Up to one in 12 people who have had coronavirus will not develop antibodies – but people who do still have them two months later, research suggests.

The NHS has begun rolling out antibody tests, which it is hoped will show who has previously had the virus and whether they have become immune to it.

However, scientists are unclear about the degree of protection and how long it lasts, meaning it has not so far been possible to develop “immunity certificates” showing who is protected.

The new study shows that Covid-19 antibodies remain stable in the blood of the majority of infected people for almost two months after diagnosis – and possibly longer – but it also found antibodies were not detectable in everyone exposed to the virus.

In the study, between two per cent and 8.5 per cent of patients did not develop Covid-19 antibodies at all.

Researchers said this could be because the immune response in these patients could have come through other immune response mechanisms, such as different antigens or T-cells. Alternatively, relatively mild infections may be restricted to particular locations in the body that are not picked up in antibody responses.

The study was led by researchers and clinicians at St George’s, University of London and St George’s University Hospitals NHS Foundation Trust in collaboration with the Liverpool School of Tropical Medicine, Mo logic Ltd and the Institute Pasteur de Dakar, Senegal. It analysed antibody test results from 177 individuals who had previously been diagnosed with Covid-19.

The pre-print study, which has not been peer-reviewed, measured the levels of antibodies in patients exposed to coronavirus. It found that, in those patients with an antibody response, the levels remained stable for the duration of the study – almost two months.

Patients with the most severe infections with the largest inflammatory response were more likely to develop antibodies.

This may be due to antibody responses working in parallel with an inflammatory response to severe disease, or that a higher viral load could lead to greater stimulation of the inflammatory and antibody development pathways, researchers said.

Sampling by the Office for National Statistics suggests that at least 70 per cent of coronavirus sufferers are asymptomatic, and the new findings suggest such cases are less likely to develop an immune response.

Professor Sanjeev Krishna, corresponding author on the paper from St George’s, University of London, said: “Our results provide an improved understanding of how best to use viral and antibody tests for coronavirus, especially when not every person exposed to the virus will have a positive response.

“We need to understand how best to interpret the results from these tests to control the spread of the virus, as well as identifying those who may be immune to the disease.

“With the number of infections in the UK going down, we now have the very welcome challenge of attempting to carry out more tests to understand whether other factors are associated with an immune response, such as viral load and genetic factors.

“We hope that, by sharing our data at an early stage, this will accelerate progress towards effective use of test results around the world.”

The study also explored associations between different characteristics and antibody responses.

Being of non-white ethnicity was associated with a higher antibody response, which researchers

said was likely to be because non-white ethnic groups were more likely to develop severe disease.

Older patients and those with other conditions, such as hypertension or being overweight, were also more likely to have an antibody response.

**Mulugu FCRI student gets scholarship in University of Auburn:-** A final year B. Sc Forestry student at Mulugu based Forest College and Research Institute (FCRI) has made it to the M.S. program in School of Forestry and wildlife sciences at University of Auburn, Alabama (USA). Surya Deepika a native of Ranga Reddy district is a final year student of B.Sc. forestry at FCRI.

Her guide Dr Janna Willoughby is the well-known geneticist in the field of wildlife. The two years study programme at Auburn will be without tuition fee for two years. In addition to the waiving off of \$ 15000 annual tuition fee, she has been offered \$ 1500 per month Scholarship for two years. Together for two years the scholarship is worth Rs 50 lakh in Indian currency.

Surya Deepika is a brilliant student and active wildlife enthusiast and a birder. She is one among the top 5 students at the institute. Looking at her enthusiasm in wildlife she has been encouraged to apply for the M.S. program. Dr A Jankiram Reddy Dean school forestry and wildlife biology facilitated her admission.

Three more students are yet to get their admission but they are worried about the cost of education. FCRI is exploring the possible tie up for the Government of Telangana abroad scholarship program for students. Students are encouraged to apply for the University of British Columbia in Canada as well.

Looking at the enthusiasm of Mulugu students the ICFRE (Indian Council of Forestry Research

and Education) sanctioned centre for writing PG entrance exam at Hyderabad this year for the first time There are 20 students among the first batch who are undergoing civil services coaching on day to day basis under guidance of A Narasimha Reddy DCF and are waiting for the UPSC civil services examination dates.

**These wild animals also practice social distancing to avoid getting sick-** Some species, such as chimpanzees and honeybees, enforce strict measures to prevent the spread of disease. hit by the coronavirus pandemic are struggling to avoid contact with others and stay at home, including millions of Americans ordered by authorities to shelter in place to slow the spread of COVID-19. But social distancing is not a novel concept in the natural world, where infectious diseases are commonplace. In fact, several social species will expel members within their own community if they are infected with a pathogen.

It's challenging because infectious individuals are not always "easy to see," explains Joseph Kiesecker, a lead scientist at The Nature Conservancy.

However, through specialized senses animals can detect certain diseases—sometimes before visible symptoms appear—and change their behaviour to avoid getting ill.

Honeybees and chimpanzees, for instance, can be ruthless when it comes to ousting the sick.

that strike honeybee colonies, like American foulbrood, are particularly devastating, liquifying honeybee larvae from the inside. "That's where the name comes from, that brown gooey mess. It smells very, very foul," explains Alison McAfee, a postdoctoral fellow with North Carolina State University's Entomology and Plant Pathology department.

Infected larvae emit certain tell-tale chemicals that older bees can smell, like oleic acid and  $\beta$ -ocimene, a bee pheromone, according to McAfee's research. Once identified, the bees will physically toss these diseased members from the hive, she says.

Since this evolutionary adaptation safeguards the health of a colony, beekeepers and researchers have selectively bred for this behaviour for decades. These more "hygienic" bees now buzz across the U.S.

In 1966, while studying chimpanzees in Gombe Stream National Park, Tanzania, Jane Goodall observed a chimpanzee named McGregor who had contracted polio, caused by a highly contagious virus.

His fellow chimps attacked him and cast him out of the troop., In one instance, the partially paralyzed chimp approached chimps grooming in a tree; starved of social contact, he reached out a hand in greeting, but the others moved away without a backward glance.

"For a full two minutes old [McGregor] sat motionless, staring after them," Goodall notes in her 1971 book *In the Shadow of Man*.

"It's really not that different to how some societies react today to such a tragedy," she told the *Sun Sentinel* newspaper in 1985.

**Elephant death: 2 Odisha Forest dept personnel suspended for negligence of duty:** - Keonjhar (Odisha), June 17 (PTI) Two Forest department personnel were suspended for negligence of duty in Odisha on Wednesday, three days after two wild elephants were found electrocuted by poachers in Keonjhar district, officials said.

Forester of Joda forest section Pean Nayak and forest guard Dolagobinda Deo have been placed

under suspension with immediate effect, a forest official said.

A preliminary investigation into the death of the two elephants suggested that there was negligence on part of the forester and the forest guard and both have been suspended, Keonjhar Divisional Forest Officer (DFO), Santosh Joshi said.

The death of a female and a male elephant had raised questions about field intelligence and patrolling as the forest officials in the area were clueless about the incident till they were informed by local people.

The Forest Department had launched a thorough probe on Monday after the wild elephants were found dead inside a reserve forest area.

The carcasses of the female and male elephants were recovered by forest officials near Gurubeda area from Baitarani (B) reserve forest on Sunday following inputs from locals, a forest official said.

The tusks of the male elephant were missing and efforts were on to ascertain the actual cause of the death of the jumbos, officials said, adding preliminary investigation suggested that the animals were killed after being electrocuted by poachers

**Half of world's population exposed to increasing air pollution, study finds:** - More than half of the world's population is exposed to increasing air pollution despite global efforts to tackle toxic fumes, a study has found. In some regions pollution has soared five times above safe levels set by the World Health Organisation (WHO), according to researchers at the University of Exeter.

They warned poor air quality posed a "major, and in many areas growing, threat to public health".

Professor Gavin Shaddick, the university's chair of data sciences and statistics, said: "While long-term policies to reduce air pollution have been shown to be effective in many regions, notably in Europe and the United States, there are still regions that have dangerously high levels of air pollution, some as much as five times greater than World Health Organisation guidelines, and in some countries air pollution is still increasing."

The study, carried out with WHO, found the highest levels of air pollution in middle-income nations, particularly in central and south eastern Asia and sub-Saharan Africa.

More than 99 per cent of the population in central and south eastern Asian nations is breathing unsafe air.

This pollution is not confined to cities, with the vast majority of people living in rural areas also exposed to dangerous levels.

"Addressing air pollution in both rural and urban settings should therefore be a key priority in effectively reducing the burden of disease associated with air pollution," the study said.

**Tamarind Seed Husk Patented:** - The ICAR-

National Institute of Animal Nutrition and Physiology, Bengaluru has got the patent on the use of Tamarind seed husk to ameliorate enteric methane emission in ruminants. This will be a giant step towards reducing the enteric methane emission in livestock through this "Green Technology" and a classic example of "Waste to Wealth".

The tamarind (*Tamarindus indica*, common name in Hindi Imli) is grown in more than 50 countries worldwide. India alone annually produces more than 98 thousand metric tons of tamarind. Its seed is roasted for removing the outer covering (dark brown in color) and the inside white colored seed is used for extraction of starch. The Tamarind seed husk is an agricultural waste and constitutes 35% of the decorticated seed. Generally, it is used as a manure and sometimes, biomass fuel in replacement to wood and any other alternate biomass fuels. The tamarind seed husk contains 13% to 15% of tannins (a natural polyphenolic compound) and highly effective in the modulation of rumen fermentation. The husk is relatively inexpensive and costs only Rs. 3 to 4 per kilogram. The systematic studies in different livestock species have established that a reduction of about 17% to 20% in enteric methane emission is achievable by inclusion of Tamarind Seed Husk in the ruminant diet, without any adverse effect.

*"The harsh truth is that the majority of those sickest from coronavirus suffer from lifestyle induced conditions and/or aging. Both negatively impact our immune system. At this time, we can only control the former. Let this be a wake-up call and a time in social isolation to begin getting healthier."*

— Charles F Glassman

## LOTEN'S SUNBIRD

*(Cinnyris lotenius)*

Source: Internet

The **Loten's sunbird**, **long-billed sunbird** or **maroon-breasted sunbird**, (*Cinnyris lotenius*) is a sunbird endemic to peninsular India and Sri Lanka. Named after Joan Gideon Loten, who was the Dutch governor of colonial Ceylon, it is very similar to the purple sunbird that is found in the same areas and also tends to hover at flowers for nectar, but can be distinguished by the longer bill, the maroon band on the breast and brownish wings. Like other sunbirds, it is also insectivorous and builds characteristic hanging nests.

The yellow and orange pectoral tufts are exaggerated in John Gould's painting

Loten's sunbirds are small, only 12–13 cm long. The long bill separates this from the syntopic purple sunbird. The wings are browner and the maroon breast band is visible on the male under good lighting conditions. The males have pectoral tufts of yellow mixed with crimson that are used in displays.[1] The adult male is mainly glossy purple with a grey-brown belly. The female has yellow-grey upperparts and yellowish underparts, but lacks Purple's faint supercilium. The call is distinctive buzzy *zwick zwick* and they are also very active often bobbing their head while foraging. Their long down-curved bills and brush-tipped tubular tongues, are adaptations to their nectar feeding. The bill lengths vary across populations with the longest bills are found on the east of Peninsular India and in Sri Lanka.[2] The song of the male is a long repeated *wue-wue-wue...* with the last notes accelerated. The song has been likened to the call of the cinereous tit.[2] The males may sing from the tops of bare trees or telegraph wires.

The male in winter has an eclipse plumage with a

yellowish underside resembling that of the female but having a broad central streak of dark metallic violet from the chin to the belly.[3][4][5] The existence of an eclipse plumage in the adult male has been questioned by Rasmussen & Anderton (2005) due to the lack of specimens in evidence. Jerdon noted however that:

A specimen in the Museum As. Soc., Calcutta, has the winter or plumage of the last, viz., a central glossy green stripe on the throat and breast, and a spot on the shoulders of the wings ; otherwise as in the female. I do not recollect seeing the bird in this plumage in Malabar, where I had many opportunities of observing it, and rather think that it must have been a young bird.

**Taxonomy:** -The name of the bird commemorates Joan Gideon Loten, the Dutch governor to Sri Lanka (Ceylon) who commissioned the artist Pieter Cornelis de Bovere to illustrate the natural history of the region from living and collected specimens.[7] The plates by de Bovere included illustrations of many bird species and when Loten went back to England, he loaned these to various naturalists including George Edwards (1694–1773) who used them in his *Gleanings of Natural History*.

**Distribution and habitat:**- Found only in peninsular India and Sri Lanka. The main region is along the Western Ghats and into the southern peninsula. There are scattered records from central India and into the northern Eastern Ghats north until Orissa. Race *hindustanicus*, southern Peninsular populations of which have a slightly shorter bill, is found in India while the nominate race is found in Sri Lanka. They are locally common in both forests, cultivation. They are also common in urban gardens

and in some areas such as the city of Madras, they are commoner than other sunbirds.

**Behaviour and ecology:-** The species is resident and no seasonal movements are known. While foraging for nectar they hover at flowers a lot unlike the purple sunbirds that prefers to perch beside flowers.[14] Like other sunbirds, they also feed on small insects and spiders.

The breeding season is November to March in India, February to May in Sri Lanka. The nest is built by the female which may however be accompanied by the male. Two eggs are laid in a suspended nest in a tree. The eggs are incubated only by the female for about 15 days. The nest is a bag of webs, bark and caterpillar frass. The nest is built by the female

and young are fed by both parents.[18] Nests may sometimes be reused for a second brood. It often builds its nest within the nests of «social spiders» (Eresidae).

The nest is usually, not the little hanging structure made by most species, but placed in the large flocculent masses of cobweb spun in low bushes by a certain species of spider. In the interior of the mass the birds press out a more or less globular chamber, lining the walls with vegetable down, and generally providing a little cave of cobweb over the entrance, which is at one side. If spider's webs are not available, they appear on occasions to construct a little pear-shaped, hanging structure like that of the next species.

## **Coronavirus has proved that everything around us is so temporary.**

Things our lives revolved around - work, gym, malls, movies, society have all gone for a toss as we are learning to live without them.

It has taught us that in the end, it's your own home and family that keeps you safe.

## LEGAL NOTES

### 1. Kunja Nagaiah and 17 Ors, Vs. State of Telangana rep. by Prl. Secretary, Reveue Dept.

The judgment dated 13.12.2019 of the High Court for the State of Telangana in Writ Petition No. 30 of 2019 and Batch, Petitioners numbering 18 belonging to koya tribe, claimed ownership of land of an extent about Acs. 45.60 in Sy. No. 17 of Lakshmidivipalli village of Kothagudem Mandal in Khammam district.

The petitioners' plea was that the lands were assigned to their forefathers about 40 years ago and ever since they are in possession and enjoyment of the lands which are the only source of their livelihood. But, on the pretext that the lands are in the reserved forest, *patta* rights are cancelled. On the other hand, it was submitted on behalf of the respondent that the writ petitions are not maintainable as the Forest Department is not made party.

The matter was heard by the Hon'ble Justice P. Naveen Rao. After hearing arguments of either side, the following issues were framed for consideration:

- (i). Whether petitioners are entitled to restoration of assignment and possession on a land forming part of Reserve Forest?
- (ii). Whether inordinate delay and laches would vitiate decision to cancel assignment *pattas* on Reserve Forest?
- (iii) Whether non-joinder of Forest Department is fatal to the writ petitions?
- (iv) To what relief?

His Lordship in the preamble of the judgment dealt with the scope, meaning of 'forest' as a natural resource, which is reproduced verbatim in the following paragraphs:

"11. Natural Resources include forests, lakes, rivers and wildlife. Natural Resources are national assets and Stare acts as the custodian of natural resources on behalf of people. Public Trust doctrine is applicable to protecting and preserving the natural resources. It is the duty and responsibility of every citizen, the State Government and Union Government to conserve the natural resources.

12. Forest is a dominate terrestrial ecosystem of the earth. Though several legislations are brought out, none of the enactments define the word 'Forest'. Word 'FOREST' is as enigmatic as the 'forest' we visualize and connect. It appears, in the world over, there are 800 different meanings to the word. However, in normal parlance, we understand 'forest' as a large area dotted by huge trees and thick greenery. 'In T.N. *Godavarman Thirumalpad Vs. Union of India* {(1997) 2 SCC 267}, Supreme Court defined the word, 'Forest' must be understood according to its dictionary meaning. This description covers all statutorily recognized forests, whether designated as reserved, protected or otherwise for the purpose of Section 2 (i) Of the Forest Conservation Act. The term 'forest land', occurring in Section 2, will not only include 'forest' as understood in the dictionary sense, but also any area recorded as forest in the Government record irrespective of the ownership. This is how it has to be understood for the purpose of Section 2 of the Forest Conservation Act. 1980'. In the modern context FOREST stands for Food, Oxygen, Rain, Environment, Soil, Timber. These six are essential elements for survival of mankind.

13. Humans and forest are interdependent, but humans are more dependent on 'forest' for their survival. Extent of forest cover is proportionate to availability of all the other resources. Sad part is forest cover is dwindling over the years. It is the cutting of the branch on which one stands. It is not too late to increase forest cover or else perish. That being so, any step taken to divert forest land for any other purpose must be seen with circumspection.

14. ....

15. Forest is a 'concurrent' subject under the legislative lists of the Constitution of India which means that both the Centre and States are competent to enact laws for forest conservation and use in India. The States therefore have introduced a range of legal instruments that regulate Forestry in the respective states. The Indian Forest Act, 1927 and the rules made thereunder is the most significant statute that governs the use and management of forest. Typically, several rules are enacted at the State level under the above Act."

His Lordship dealt with the procedure of constituting an area as a reserved forest as laid down in the State and Indian Forest Act. The court observed that the enactments did not prevent deforestation and reducing the forest cover causing ecological imbalance leading to environmental degradation. To avert this dangerous consequence, a significant milestone was crossed when the Forest Conservation Act 1980 was enacted. The primary object of this legislation is to prevent further deforestation which has become a social menace as enunciated by Supreme Court in *Ambica Quarry Works Vs. State of Gujarat* --(1987) 1 SCC 213.

The court interpreted the provisions of Section 2 of the Forest Conservation Act and said that words and expressions used in the section have to be read in consonance with expansive definition/meaning of word 'Forest'. It is apparent that virtually the Act prohibits conversion of forest land for any purpose. It is an exhaustive provision and would cover cultivation by a private person also even if it is assigned by Government. The Forest Act 1967 and Forest Conservation Act strictly prohibit any kind of alienation or diversion of forest land and require the entire extent of notified forest has to be preserved only for the purpose of forest conservation and not for any other purpose.

The public trust doctrine developed in *M.C. Mehta Vs. Kamalnath* {(1997) 1 SCC 388} is also meant to ensure that all humans have equitable access to natural resources treating all-natural resources as property and not life. That principle also has its roots in anthropocentric principle.

In *T.N. Godavarman Thirumalpad Vs. Union of India* {(2012) SCC 362} it was held that the principle of sustainable development and intergenerational equity too presupposes the higher needs of humans and lays down the exploitation of natural resources must be equitably distributed between the present and future generations. Environmental ethics behind those principles were human need and exploitation, but such principles have no role to play when we are called upon to decide the fate of an endangered species or the need to protect the same irrespective of its instrumental value. That principle highlights human obligations towards environment arising out of instrumental, educational, scientific, cultural, recreational and aesthetic values that forests have to offer to humans. Under this approach, environment is only protected as a consequence of and to the extent needed to protect human well-being.

In *T.N. Godavarman Thirumalpad Vs. Union of India* {(2006) 1 SCC 1}, the Supreme Court held that natural resources are the assets of the entire nation. It is obligation of all concerned, including the Union Government

and the State Governments to conserve and not waste these resources. Article 48-A of the Constitution requires that the State shall endeavor to protect and improve the environment and to safeguard the forest and wildlife of the country. Under Article 51-A it is the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. Therefore, there is an absolute need to take all precautionary measures when forest lands are sought to be directed for no-forest purpose.

In respect of protected areas, it was said that "it has been recognized that one of the essentials for forest management is the conservation of total biological diversity, the network of national parks, sanctuaries, biosphere reserves and other protected areas to be strengthened and extended adequately."

The impugned proceedings of the District Collector canceling the assignments clearly point out the factual position on the ground. The report of the Tahsildar dated 12.07.2016 relied upon by the District Collector also would show that, on verification of the physical status neither the assignees nor their legal heirs are in physical possession and the land is under the control of the Forest Department. The petitioners do not dispute the factum of subject land as forming forest area, but they only contend that the Government on its own motion assigned the lands to the grand-fathers/parents/spouses of petitioners. Land in issue is reserved forest land. Reserve Forest land cannot be used /diverted for any purpose other than development of forest growth. Revenue authorities have no competence to deal with forest land and assign such land. Permitting petitioners to cultivate land in reserved forest is against public interest.

To grant equitable relief on the ground that assignment was granted 40 years ago, within a narrow window, even court holds that it is a forest land, overarching public interest and maintaining ecological balance, possession and enjoyment of land in issue is crucial. The Revenue authorities are denying claim of possession by petitioners. That it is all the more necessary to ascertain from Forest Department officials. For the reason best known, petitioners are reluctant to implead Forest Department represented by competent authority as respondents. In the absence of Forest Department officials, by adumance to implead Forest Department petitioners are disentitled to seek equitable relief.

Survey No. 17 comprises of Acs. 2194.20 guntas out of which an extent of Acs. 2180.20 *guntas* was included in the reserve forest. It was declared as reserved forest in the year 1355 Fasli. Assignments were granted illegally, originally in favor of tribal assignees; but they were dispossessed by the non-tribals by way of purchase or otherwise and the Government lands were encroached by the non-tribals. As per the orders of the District Collector enquiry was conducted under Section 166-B of the Telangana Land Revenue Act and passed orders for cancellation of assignments sanctioned to the ineligible persons and the persons were evicted from the lands by the Tahsildar and possession was handed over to the Forest Department in the year 1964.

For all the reasons, the claim of delay in initiating steps to cancel the assignment is not valid. Though the original intendment was to assign lands to the local tribals, in fact local tribals were dispossessed long ago and land changed hands from tribals to non-tribals.

The Government Pleader contended that Forest Department is a necessary party and in the absence of Forest Department being represented, the relief prayed by the petitioners cannot be granted. Having regard to the provision contained in the Telangana Forest Act 1967, the Telangana Land Revenue Act, 1317 Fasli and the Forest Conservation Act 1980, once area is notified as forest, the designated forest officials are the custodians

of the forest land, and they shall be maintaining entire record of the forest. The competent authority of the Forest Department would have assisted the court in rendering decision objectively. When the status of land is not disputed, the Forest Department represented by the competent authority is necessary and proper party on the issue concerning reserve forest and, in their absence, there cannot be proper adjudication.

All the issues are answered against the petitioners. Prayers sought in the writ petitions cannot be granted. However, if the petitioners are otherwise entitled to assignment of land, they may apply to the competent authority. Notwithstanding dismissal of the writ petitions, their request, if any made, be considered objectively. Writ Petitions are therefore dismissed.

Source: 2020 (1) ALT 437

K.B.R

## **2. The State of Madhya Pradesh Vs Uday Singh in Criminal Appeal No:524 of 2019 of Supreme Court.**

The vehicles which were seized under AP Forest Act 1967 and Wildlife (Protection) Act 1972 are generally released by the Hon'ble High Courts by the inherent jurisdiction under Section 482 Cr. P.C. The DFO.s and Our Officers raise to the occasion to enlighten the Hon'ble High Courts in explaining the riders in the Sec.482 Cr. P.C in preventing the release of the vehicles in a given circumstances.

Supreme Court has clarified the powers of High Courts under S.482 Cr .P.C in the historic case of GV Sudhakar Rao Vs DFO of Andhra Pradesh; *High Court under S.482 Cr. P.C cannot stay confiscation proceedings , pending before Authorized Officer under Section 44 (2A) of AP Forest Act 1967 till the disposal of criminal case against the concerned accused pending before the Magistrate under S.20 & 29 of the Act. Provisions Criminal Procedure Code are not applicable where confiscation proceedings under Forest Act are taken up. (1985) 4 SCC 573.*

**The brief facts of the present case in which the Hon'ble Supreme Court delivered Judgement on 26th March 2019 in Criminal Appeal No. 524 of 2019 (@ Special Leave Petition (Crl) No 2001 of 2012 & (The State of Madhya Pradesh Vs Uday Singh) are as follows.**

On 26 March 2011, the Forest Officer apprehended a tractor and trolley belonging to the respondent alleged to have been carrying sand illegally excavated from a restricted area of Daljeet Pura Ghat at the National Sanctuary, Chambal without permission and in the absence of a transit pass. The tractor and trolley was seized together with the sand by the officers of the Forest Department under Sections 41, 52 and 52-A of the Indian Forest Act, 1927 ( Related to Sec. 44 of AP Forest Act 1967 ) and Sections 27, 29, 39(1)(d), 51 and 52 of the Wildlife Protection Act, 1972. Intimation of the seizure was given to the Magistrate under Section 52 of the Indian Forest Act, 1927 on 27 March 2011. The respondent moved an application under Section 451 of the Cr. PC before the JMFC, Ambah for interim release of the seized vehicle. The Magistrate dismissed the application by an order dated 21 April 2011. The Additional Sessions Judge had confirmed an order of the Judicial Magistrate First Class, Ambah dismissing an application under Section 451 of the Cr. PC seeking the release of a tractor and trolley which had been seized for being involved in the illegal excavation of sand from the Chambal river on 16<sup>th</sup> June 2011. The respondent then instituted proceedings under Section 482 of the Cr. PC before the High Court of Madhya Pradesh at its Gwalior Bench. The High Court set aside a revisional order

dated 16 June 2011 of the Additional Sessions Judge, Morena and directed the Magistrate to pass orders for the interim release of the vehicle. The State of Madhya Pradesh has instituted these proceedings under Article 136 of the Constitution to assail the judgment of the High Court.

The Hon'ble Supreme Court has reiterated the importance of Forests as per the Articles 48 A & 51A(g) of the Indian Constitution and stayed the orders of High Court of Madhya Pradesh. The facts mentioned in the Judgement are as follows.

*Protection of forests against depredation is a constitutionally mandated goal exemplified by Article 48A of the Directive Principles and the Fundamental Duty of every citizen incorporated in Article 51A(g). As an effective tool for protecting and preserving environment, these provisions must receive a purposive interpretation For, it is only when the interpretation of law keeps pace with the object of the Legislature that the grave evils which pose a danger to our natural environment can be suppressed. The avarice of humankind through the ages has resulted in an alarming depletion of the natural environment. The consequences of climate change are bearing down on every day of our existence. Statutory interpretation must remain eternally vigilant to the daily assaults on the environment. For the reasons which have been indicated in the judgment delivered today in Criminal Appeal @ Special Leave Petition (Crl.) No 2001 of 2012, the judgments and orders of the High Court shall stand set aside and the appeals are accordingly allowed.*


**COMMENTS:** The Hon'ble Supreme Court reiterated that Criminal prosecution is distinct from confiscation proceedings. The two proceedings are different and parallel, each having a distinct purpose. The object of confiscation proceeding is to enable speedy and effective adjudication with regard to confiscation of the produce and the means used for committing the offence while the object of the prosecution is to punish the offender. Hence, upon the receipt of an intimation by the Magistrate of the initiation of confiscation proceedings under Indian Forest Act 1927 in relation to the State of Madhya Pradesh, makes it abundantly clear that the direction which was issued by the High Court in the present case, in a petition under Section 482 of the Cr. PC, to the Magistrate to direct the interim release of the vehicle, which had been seized, was contrary to law. The jurisdiction under Section 451 of the Cr. PC was not available to the Magistrate, once the Authorized Officer initiated confiscation proceedings.

Inherent powers u/s 482 Cr. P.C include powers to quash FIR, investigation or any criminal proceedings pending before the High court or any courts subordinate to it and are of wide magnitude and ramification. Such powers can be exercised to secure ends of justice, prevent abuse of the process of any court and to make such orders as may be necessary to give effect to any order under this code, depending upon the facts of a given case. Court can always take note of any miscarriage of justice and prevent the same by exercising its powers u/s 482 of Cr. P.C. However, such inherent powers are to be exercised sparingly and with caution.

In this particular case the High Court has erred in directing the release of the seized vehicle in exercise of its inherent jurisdiction under Section 482 of the Cr. PC. The High Court failed to appreciate that in the present case confiscation proceedings have been initiated under Forest Act, the Magistrate in pursuance of the power conferred under Section 451 of the Cr. PC cannot direct release of the seized vehicle, as the jurisdiction of the criminal court stands excluded.

\*\*\*

*Birthday Greetings*  
*We wish the following born on the dates mentioned*  
*"A Very Happy Birth Day"*

S.No.	Name of the Member	D.O.B.	S.No.	Name of the Member	D.O.B.
<b>Sarva Sri</b>			<b>Sarva Sri</b>		
1.	K. Buchiram Reddy	07-07-1932	4.	Swargam Srinivas	15-07-1962
2.	Prashanth Kumar Jha	07-07-1963	5.	Smt. Arpana	15-07-1985
3.	K. Madan Mohan	10-07-1942	6.	G. Chandra Serkhar Reddy	18-07-1965
4.	N. Varaprasad Rao	10-08-1948	7.	Dr. Sunil S. Hiremath	20-07-1980
5.	M. Prasada Rao	10-07-1947	8.	Dr. K. Gopinath	21-07-1963
6.	C. Ramakrishna Reddy	11-07-1931	9.	Smt. T. Jyothi	23-07-1975
7.	M. Padmanabha Reddy	14-07-1941	10.	S.V. Pradeep Kumar Setty	01-08-1986
8.	M.K. Prasad	14-07-1945	11.	Ratnakar Jauhari	02-08-1970
9.	N. Shyam Prasad	16-07-1955	12.	Ajay Kumar Naik	03-08-1965
10.	A. Shankaran	16-07-1956	13.	N. Khadar Vali	06-07-1960
11.	B. Pratap Reddy	18-07-1928	14.	P. Prem Kumar	10-07-1983
12.	K. Santosh Singh	21-07-1937	15.	S. Ravi Shankar	16-07-1964
13.	G. Prakash	22-07-1952	16.	Smt. S. Sujatha	18-07-1975
14.	Mohd. Ibrahim	22-07-1954	17.	Mrs. G. Krishna Priya	24-07-1982
15.	Rajesh Mittal	25-07-1955	18.	V. Anjaneyulu	24-07-1966
16.	Omkar Singh	27-07-1953	19.	Smt. I. Padmaja Rani	26-07-1976
17.	S.M. Selvaraj	01-08-1953	20.	B. Janaki Rao	26-07-1961
18.	L.Ch. Tirupaelu Reddy	01-08-1956	21.	Ms. M. Babita	26-07-1972
19.	V. Parthasarathy	02-08-1944	22.	P. Dhanraj	28-07-1963
20.	Hitesh Malhotra	03-08-1952	23.	A.V. Ramana Murthy	28-07-1969
21.	P. Adivappa	03-08-1953	24.	Smt. M. Hima Sailaja	29-07-1980
22.	A.V. Joseph	05-08-1956	25.	Jagarapu Ganesh	04-08-1963
<b>S.No.</b>	<b>Name of Serving Officers</b>	<b>D.O.B.</b>	<b>- Secretary</b>		
1.	N. Pratheep Kumar	07-07-1963			
2.	Rahul Pandey	14-07-1974			
3.	D. Nalini Mohan	15-07-1962			



## ANDHRA PRADESH FOREST DEVELOPMENT CORPORATION LTD.



A fully owned, financially well managed State Government Company. Raising massive plantations to cater to the needs of the wood based industries.

- Watershed approach adopted for raising plantations, to make them ecologically sustainable, socially acceptable and commercially viable, with the long-term goal to improve the site quality of plantation areas.
- Largest grower of 31,991 ha. of Eucalyptus Clonal plantations in the country and is harvesting about 2.50 Lakh mt. of Pulpwood every year. Besides this, it has Bamboo, Cashew, Coffee and Teak Plantations over 12,000 ha.
- The Corporation has bagged awards “Flavour of India - Fine Cup Awards” for producing quality coffee during the years 2003, 2005, 2007 to 2016.
- The Corporation has bagged “CAPEXIL Excellence in Export Awards (Top)” for export of Red Sanders wood during the years 2015-16 and 2016-17 and by earning a total foreign exchange of Rs.388.00 crore during 2015-16 & 2016-17.
- The company has also got plans for exporting value added products of Red Sanders wood in the coming years.
- Diversifying its activities through promotion of Eco-Tourism, Tree Ambulance Services and Consultancy Services.

---

### Plant A Sapling And Protect The Environment

Vice Chairman & Managing Director,

A.P. Forest Development Corporation Ltd.,

Plot no. 80 A / 81 A, Sri Venkateswara Arcade, The Annapurna Nagar Public Servants'  
Co-Operative House Building Society, Gorantla (V), GUNTUR – 522 034.

Ph: 0863 – 2223800, 2230600 Fax: 0863 - 2230800

Website: <https://apfdcl.com> e-mail: [vcmd\\_apfdc@yahoo.co.in](mailto:vcmd_apfdc@yahoo.co.in)



**Dr. G. Chandrasekhar Reddy, IFS, Dean FCRI**

**BOOK POST**

**Registered with RNI R.No. Telang/2000/2185  
Postal Regn. No.HD/1154/2018-20**

To \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**If Undelivered, Please return to : Editor : VANA PREMI, Office of the Principal Chief  
Conservator of Forests, Aranya Bhavan, 5th Floor, Room No. 514, Saifabad, Hyd - 500 004, T.S.  
Date of Publication: 29-06-2020 Total Pages: 52 Date of Despatch: 4th or 5th of every month.**