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VANA PREMI



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Chinkara (*Gazella bennettii*) Mother with fawn



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- 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.

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EDITORIAL

World Forestry Day: World Forestry Day is Celebrated on March 21, which was chosen as a day dedicated to increase public awareness to know the value of forests and forestry to all the human beings of this planet. This day is also known as International Day of Forests, it is a worldwide celebration and the concept of World Forestry Day originated at the 23rd General Assembly of the European Confederation of Agriculture in 1971. World Forestry Day commemorates the contribution and value of forests and forestry to us. It has been celebrated around the world for almost 50 years to remind people about the importance of forests and the many benefits we gain from them. Forests are critical for all life on Earth, as they provide shelter, shade, refuge, & clean air and water. World Forestry day also brings awareness of the importance of all types of forests, and trees outside forests, for the benefit of current and future generations. The world's forests are at constant risk from increased deforestation as demand for forest products increases every day and from natural calamities like fire, floods, landslides (e.g. Recent floods in Kerala and fire in Australia & Amazon). Each year more than 13 million hectares of forests are lost. Most importantly, forests play a critical role in climate change including global warming. Today, forests cover approximately 31% of the world's land area, just slightly over 4 billion hectares, and this is down from the pre-industrial area of 5.9 billion hectares. Human population is increasing very fast throughout the globe and our requirement of oxygen has increased many folds. In fact we need to increase the area under forest to have clean air to breath and improve the quality of our environment. Forests contain more than 60,000 tree species, many as of yet unidentified. Eighty percent of the world's

known terrestrial plant and animal species can be found in forests, and tropical rainforests are home to more species than any other terrestrial habitat. A square kilometre of forest may be home to more than 1,000 species. Forests provide food, fibre, water and medicines for approximately 1.6 billion of the world's poorest people, including indigenous peoples with unique cultures. According to the World Bank: Forested watersheds and wetlands supply 75 percent of the world's accessible fresh water for domestic, agricultural, industrial and ecological use. They further act as natural filters for air. The importance of forests cannot be underestimated. We depend on forests for our survival, from the air we breathe, Water, food and to the wood we use. Besides providing habitats for animals and livelihoods for humans, forests also offer watershed protection, prevent soil erosion and mitigate climate change. Forests pump out oxygen we need to live and absorb the carbon dioxide we exhale. Forests are a key source of quality air.

Forest is the house to many living organisms. It is a precious resource provided by nature. The organisms living in forests are interdependent on each other and supports biodiversity of locality. Life in forests is governed by factors like air, water and sunlight. There are variety of plants found in most forests: herbs, shrubs and trees depending upon the climate of the region. Plants make their own food by the process of photosynthesis and wild animals like herbivores depend on plants and other carnivorous animals depend on herbivores for their food. Many a times time plants also depend on animals for processes like pollination and seed dispersal. Most of our food producing plant's pollination is by wild animals including insects. Forests also comprise

of non-living components such as lakes, Rivers, ponds, soil, rocks, peat etc. A forest is defined as an area forming an ecosystem. Forests, their sustainable management and use of resources, including in fragile ecosystems, are key to combating climate change, and to contributing to the prosperity and well-being of current and future generations. Forests also play a crucial role in poverty alleviation and in the achievement of the Sustainable Development Goals. Forests can be vital safety nets, helping rural people to avoid, mitigate or rise out of poverty. Forests provide a wide range of resources and benefits to people, providing timber, non-timber forest products, and ecosystem services. Those living in or near forests draw substantial parts of their subsistence needs from forests. Forests are part of our life in more ways than we realize. When we drink a glass of water, write in a notebook, take medicine for a fever or build a house, we do not always make the connection with forests. And yet, these and many other aspects of our lives are linked to forests in one way or another. Understanding our forests and keeping them healthy is crucial for our future. Forests will be more important than ever as the world population is expected to climb to 8.5 billion by 2030 which is not very far.

One of the most immediate and obvious effects of global warming is the increase in temperatures around the world. The average global temperature has increased by about 0.8 degrees Celsius over the past 100 years, according to the National Oceanic and Atmospheric Administration. Due to this increase of temperature forest fires are occurring throughout the globe, due to which the quality and area under forests is getting reduced. This we are observing even in our country and the fire accidents are occurring throughout the year in cities as well as in forests, which used to be only during the summer

months few decades ago. In the year 2019 we have seen forest fires in Amazon and Australia in which large areas of forests were burnt and slowly the quality and quantity of forests is depleting. This will result in death of animals due to lack of food, water and shelter for animals. Forests fires will also create shortage of water for humans.

Every year a theme is chosen for celebration of World Forestry Day by the Collaborative Partnership on Forests. The theme of the International Day of Forests in 2018 was "Forests and Sustainable Cities". The theme for World Forestry Day 2019 was "Forests and Education" and the theme for 2020 is "Forests and Biodiversity".

Forests are of great importance to mankind. Following are some points illustrating the importance of forests:

- Forests help in maintaining water cycle on earth. Plants absorb water from the soil through their roots during rainy season. The process of releasing excess water by plants into the atmosphere in the form of water vapor is known as transpiration. The process in which water vapor from oceans rises and condenses to form clouds is known as condensation and the process of moving clouds to land due to sea breeze is known as precipitation and this eventually leads to rainfall. All these processes together form the water cycle and hence forests play a significant role in continuing water cycle.
- Forests absorb and store carbon, without forests where would the carbon go? Forests control noise pollution. Forests clean the air of nasty materials such as sulphur dioxide, nitrogen dioxide etc.

Forests act as wind breaks to protect people. Forests regulate the climate around the globe, and moderate our weather and rainfall patterns.

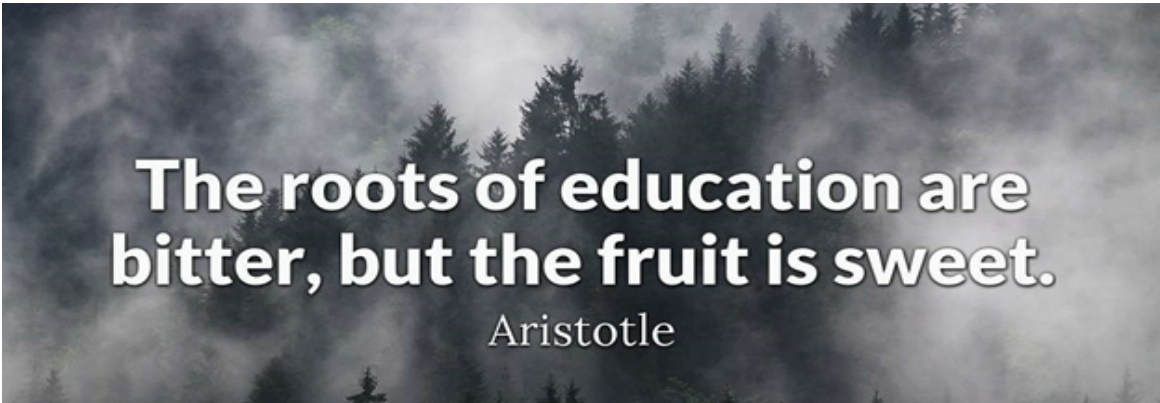
- Forests regulate temperature by providing shade for homes and buildings and reduce our need to use air-conditioning to stay cool, and to help us to keep warm when it's cold. They are a source of food and medicine Forests provide the rubber for the tires on our vehicles
- Forests sustain many of the animals like goats, sheep, buffalos, Cows, and oxen. Forests provide wood for buildings, tools, furniture, firewood, paper and other products such as resins honey and wax and many more.
- Forests help in maintaining the temperature and oxygen level of the atmosphere. Plants release oxygen during photosynthesis and consume carbon dioxide. Forests being a huge reserve of plants and trees, they play a significant role in balancing oxygen level in the atmosphere.
- Forests help in preventing global warming. Forests prevent soil erosion. Trees present in the forests hold the soil parti-

cles strongly with the roots and prevent them from erosion.

- Forests are a habitat for animals, birds and insects, that sustains the food chain that we rely upon to exist.
- Forests help prevent flooding and conserve the soil and water that we drink. They prevent dust storms and stop the world from becoming one big desert
- Forests provide the paper that we use to educate all of us and entertain ourselves.

We are getting above-mentioned benefits and many more benefits from forests. Life cannot exist on this planet without the forests. Hence it is in our own interest to protect forests for continuation of life on this planet.

Vana Premi wishes that all nations together protect our forests from all types of damages and appealing to all to take care of the health of our planet and treat it respectfully so that it can be bequeathed to the coming generations in good condition as “we have not inherited this earth from our forefathers but, we had borrowed it from our children”. We are Trustees only and have to safely hand over it to our next generation in a very good condition – not as degraded and polluted planet. **QMK**



The roots of education are bitter, but the fruit is sweet.

Aristotle

Letters to the Editor

Dear Editor,

Greetings!!

Your exhaustive and deft editorial in the latest issue of VP on Forest fires (known as bush fires in OZ, parleys which continue to devastate that continent like never before) is so well-analysed since you happened to even have ringside views a couple of times during stays with your son & his family, settled in Sydney (capital of New South Wales), like Sri Rajeev who could do similarly once, as he visited his son at Melbourne in Victoria. The world is able to know and show its concern for the great tragedy of such monumental proportions, because of its ability to cover with the help of enormously developed technology of our times.

Further, Sri KBR (known to me from our school days as an avid reader & a gifted writer) had expressed his appreciations for the articles "A Valentine for love (in Urdu Poetry)", "Badrinath, playground of the gods" & "A Book Review", stating that they are all well-written, and benefit the present readers & the posterity. He knows the worth of such write-ups as only he can, being himself the founder-editor of VP for a considerable period, continuing to regularly contribute to date impressively.

The beautifully got-up sixty-page issue with a dozen articles, & features like 'News & Notes', etc., are an apple to the eye for which you deserve to be complimented.

With Best wishes,

Dr Raghotham Rao Desai.

***A good leader can engage in a debate frankly and thoroughly,
knowing that at the end he and the other side must be closer,
and thus emerge stronger.***

***You don't have that idea when you are arrogant,
superficial, and uninformed.***

***If you talk to a man in a language he understands,
that goes to his head. If you talk to him in his language,
that goes to his heart.***

- Nelson Mandela

MAN - ANIMAL CONFLICT - A SERIOUS CONCERN

By
Dr. UMA SHANKER SINGH

The series of human-wildlife conflicts goes way back to primitive times, especially in a country like India that has a huge human population and a vast range of biodiversity. The land is limited and so are the resources. But, since the human settlements have reached the edges of forests, episodes of human-animal conflicts have increased as the wild animals often wander into the human colonies due to the dwindling forest area. Last year, a six-year-old tigress named Avni was shot dead by a private hunter's son for allegedly killing 13 people in Maharashtra. After the incident, there was an outpouring of grief, anger, and protests from many regions of the country. Maharashtra government was criticized for ordering the kill despite opposition from several stakeholders. Just a day after the 'ghastly murder' of Avni, another tigress was run over and beaten to death by angry villagers after she mauled a 50-year-old man in Uttar Pradesh. On the same day, a leopard snuck into the Gujarat secretariat and the sprawling complex had to be cordoned off. Seven elephants died of electrocution in Odisha only a week before that incident. An adult female elephant was deliberately electrocuted in the state's Rourkela forest division for frequently damaging crops in the area. The killing was labelled a 'revenge killing' which is becoming an increasingly common phenomenon as human-animal conflict gradually becomes the order of the day. In Assam, 62 elephants have died since January 2019 whereas 63 people have died in man-elephant conflict. Uttarakhand is no exception where the state has lost 35 human lives in Man-animal conflict. In a response to parliamentary ques-

tion the government of India replied that 1,608 people have been killed in between 2014 and 2017 due to man-animal conflict which averages a little more than one person per day. In last five years more than 2000 people have been killed in elephant attacks and over 200 people have lost their lives in tiger attacks. In yet another estimate by Wildlife Protection Society of India (WPSI), an NGO this has been stated that 1,000 tigers were killed by poachers in last two decades whereas 650 instances of road-kill have been reported. The report further claims that 32,000 animals including castles, leopards, lions, elephants were killed in railway track accidents in last three years.

WHY IS THIS CONFLICT INCREASING?

There are many reasons for example, human population explosion, shrinking forest cover, poaching, rapid and unplanned urbanization, which entails electrification penetrating into forest areas, increasing road density, destruction of natural animal corridors, agricultural expansion and cultivation up to forest boundaries. The population is growing at a massive rate and obviously, our land and borders are not expanding, so the problem is obvious and inevitable, which means, at best, we can only delay the disaster. But it's going to come. We have the 2019 state of forest report which highlights that northeast India continues to lose forests when compared to ISFR 2017 and previous reports. The forest report also reveals that the forest area under the category "recorded forest area" (land notified as forest by the government) in tribal districts, which are home to about 60 percent of

India's forests, is decreasing as well. Recently in 2020 in response to a parliamentary question the Ministry of Environment, Forest and Climate Change said that in between 2014-15 and 2018-19, 2,361 humans were killed as a result of conflict with elephants, while 510 elephants were killed in incidents of electrocution, train accidents, poaching and poisoning during the same period. Additionally, conflict with tigers caused 275 human deaths between 2014 and 2019 (the Ministry of Environment, Forest and Climate Change, in response to a question).

TABLE-1 HUMAN DEATHS DUE TO ELEPHANTS (ALL INDIA)

YEAR	DEATHS
2014-2015	418
2015-2016	469
2016-2017	516
2017-2018	506
2018-2019	452
TOTAL	2,361

TABLE-2 HUMAN DEATHS DUE TO TIGERS (ALL INDIA)

YEAR	DEATHS
2014	47
2015	42
2016	62
2017	44
2018	31
2019	49
TOTAL	275

SOURCE: (the Ministry of Environment, Forest and Climate Change, in response to a question 2020).

West Bengal had the highest number of human

deaths caused by elephants and tigers during these periods, 403 died due to conflict with elephants, and 74 due to tigers. West Bengal is followed by Odisha in the number of human deaths caused by elephants (397) and by Maharashtra the number of deaths caused by tigers (74). Among elephant deaths caused in conflict with humans, electrocution is the primary cause, accounting for nearly two-thirds of the deaths (333 out of 510).

REASONS: There have been many studies done in the field of man-animal conflict and multiple of factors have been found to be responsible. Some of them are: human population growth and expansion, habitat degradation and fragmentation, land use transformation and increasing densities of livestock grazing in protected areas are considered as major causes of man-carnivore conflicts².

LOSS OF FOREST: India's greenest region, the north-east has been consistently losing tree cover over the last 18 years. The loss has been doubled in the last five years³ (Global Forest Watch report 2019). The state wise data shows that the loss of tree cover in north-east India amounts to over 70% of all tree loss in India that occurred between 2001 and 2018. Net loss of tree cover between 2000 and 2018 in India is 16,744 sq. km. Out of this, 12,523 sq. km, a whopping 74.7%, is from the north-eastern states of Assam, Arunachal Pradesh, Meghalaya and others. Data shows that 6,867.57 sq. km of tree cover got eroded in the period between 2013 and 2018. This is a little less than half of the loss occurred between the periods of 2001-2018. Assam tops the chart for the period between 2001 and 2018 with 2388.46 sq. km tree cover loss, while Mizoram lost maximum trees between 2013 and 2018, amounting to an area of 1392 sq. km. Coal mining, industries and factories like cement plants planned on the

hills of Meghalaya are primarily blamed for the forest cover loss in Meghalaya. Those involved in illegal coal mines clear the forests first and then dig pits to extract coal without adhering to any environmental norms. The greed of money is prompting them to dig new pits inside thick forests in connivance with our politicians and forest bureaucrats. The death of 15 miners in a rat-hole mine in East Jaintia Hills district in January last year triggered demand for closure of illegal coal mines but surprisingly Meghalaya government supported coal mine saying the closure will impact livelihoods. We can't justify the destruction of our forests and illegal cutting of the hills just because some people are earning livelihood from the destruction of the forest.

DIVERSION OF FOREST LAND: The Indian government has diverted over 20,000 hectares of forest area for developmental activities such as mining, thermal power plants, dams, road, railways and irrigation projects in the past three years (2015-'18) across India. According to the official data revealed by the National Democratic Alliance government in Parliament in December 2018, a total of 20,314.12 hectares of forest land (almost the size of Kolkata) was diverted in three years 2015-2018 (till December 13, 2018). During this period, the ministry had received a total of 4,552 proposals and of those 1,280 (28.11%) got approved. According to information revealed in the Parliament, Telangana topped the list with 5,137.38 hectares of forest land diverted, followed by Madhya Pradesh with 4,093.38 hectares and Odisha with 3,386.67 hectares of forest area diverted. The three states together account for over 62% (12,617.43 hectares) of the total forest land diverted during the said three-year period. The reasons for diversion of forest area varied from irrigation, hydropower, road and railway projects to defence, mining, transmission line,

schools and wind power projects. Of the total forest area diverted during the said time, the highest amount was diverted for irrigation projects, followed by mining and thermal power plants. This is commonly believed that forest is the first charge of wildlife but we haven't cared about their wellbeing, it is for sure. The data till 2019 has a different story to tell altogether. India approved 99% of proposals to fell forests for non-forestry uses (until June 2019) despite of the fact that it ranked 13th among the most water-stressed nations in 2019. In the first six months of 2019, out of 240 proposals seeking diversion of forest land, the government of India only rejected seven--98.99% of forest land considered for diversion was allowed to be put to non-forestry uses, till August 2019. This rate of diversion is a matter of serious concern. The forest area approved for diversion till June 2019 was about 92.20 sq. km. This, combined with diversion approvals from 2017 and 2018, amounts to 588.20 sq. km--larger than the union territory of Puducherry. About 43% of forest land recommended for diversion in 2019 falls in ecologically sensitive wildlife habitats. Over 500 projects were cleared in India's Protected Areas and their 'Eco-Sensitive Zones' by the National Board of Wildlife over the four years of National Democratic Alliance government between June 2014 and May 2018. In comparison, the preceding United Progressive Alliance (UPA) government had cleared 260 projects between 2009 and 2013. No more than 1.1% of projects were rejected annually, on average, between June 2014 and May 2018, dropping from 11.9% under the previous UPA government between 2009 and 2013. This would be proper to mention a very controversial case of forest land transfer of Maharashtra. Although the government has an elaborate set of guidelines on the basis of which forest land can be diverted for non-forest purposes, diversion continues to take place

for practices such as mining, road and highway construction and other developmental work. In the midst of the Avni brouhaha, the Maharashtra government's Forest Advisory Committee (FAC) reportedly cleared an 87.98-hectare defence manufacturing project for explosives company Solar Industries India Ltd (SIIL) in Chakdoh, in a tiger-bearing forest.

WILDLIFE CORRIDORS: After coming close to being extinguished from the wild, India's tiger population has more than doubled in 12 years⁴. The tiger status report 2018 claims that wild tiger numbers increased in India from 1,411 in 2006 to an estimated 2,967 in 2018. India's tigers represent roughly 70% of the global tiger population. However, even as the numbers of wild tigers generally increased, the total area that they occupy decreased significantly from 88,000-89,000 km² (54,680 square miles) in 2014 to 40,000 km² (24,850 square miles) in 2018. According to the study's authors, this loss in range was based on a lack of evidence for the presence of tigers, whereas a small portion resulted from a lack of sampling forests known to be occupied by tigers in 2014. Yet, despite tigers' rarity and protected status, people and their livestock, roads, canals and railways are increasingly encroaching on tiger habitats, corridors and even into tiger reserves. This inevitably leads to conflicts provoked by killings of livestock or attacks on people, making tragedies inevitable. Such conflicts between tigers and humans occur mostly along the edges of protected reserves, forests and plantations, because India still needs to expand its tiger reserves to meet the needs of its tiny (but growing) tiger population. A 'wildlife corridor' is an area in the environment that functions as a passageway for the purpose of providing connectivity between wild species by means of dispersal and migration of individuals. These

corridors are often vegetation-based habitats that facilitate movement, while offering less risk of predation compared to when travelling through open lands. Wildlife corridors vary in size, shape, length and composition but who cares? In Vidarbha, two widened highways namely, NH6 & NH7 alone have destroyed at least six tiger corridors. It includes Nagzira-Navegaon, Kanha-Indravati, Bor-Melghat on NH6 and Tadoba-Kawal, Tadoba-Bor, and Tadoba-Tipeshwar on NH7. Despite a common belief that India's forest cover has gone up to over 21 per cent from 14 per cent back in the 1950s, the reality is that wildlife habitats have been fragmented and islands of forests have been created in the midst of agricultural and urban landscapes⁵. The islands do not offer connectivity to the animals living in these areas. Just like how roads connect cities, wildlife corridors also connect two big forest landscapes. For instance, the Kanha-Pench Corridor in the Satpura Maikal landscape in Madhya Pradesh and Maharashtra is essential for tiger movement, and the Rajaji corridor in Uttarakhand that connects the western part of the state to the south-eastern part is essential for elephant migration⁶. The issue is further complicated by climate change, which has increased the droughts and floods in the country. Many animals are forced to move far away in search of water because of the reducing number of rainy days in a season, which leads to drying up of small ponds and streams. Additionally, tiger poaching is still alive and well, body parts such as whiskers, teeth, the tail and skins are sold on the black market or used in "alternative medicines" in China. For example, of the 657 tigers that died between 2010 and 2018, 21% were killed by poachers.

SOME INNOVATIVE IDEAS NEED TO BE DISCUSSED: Research into need-based, low-cost,

effective and efficient innovative crop-protection techniques would go a long way into reducing crop damage. Ideally, complete crop and property damage insurance (optimum easy access compensation) should be given to farmers, to cover life, crop and property damage. According to reports, only 0.1 to 8% farmers received compensation between 2009 and 2015, and while over 90% farmers near buffer zones suffered losses, not more than 20% of the actual loss was compensated. Who is the greater victim in this situation? The animals who seek to widen their territory in search of food because their habitats are encroached upon? Or the farmers who feed the world and whose livelihood are completely dependent on agriculture? To ensure a balance of justice, collective action needs to be taken by the government, policymakers, Forest Department, Revenue department, locals, NGOs and other stakeholders to ensure a balance of justice. So, any effective Special Management Plan in this regard would need to be a community-based one. Perhaps there is value in taking

inspiration from nations and communities that have learnt how to live with nature without harming it, evolving very sound co-existence practices that are tailored to preserve, conserve, protect and sustainably manage natural resources. Human encroachment upon natural wild territory is inevitability at the current juncture in human evolution, which is insatiable due to rising population. How can human beings be helped to find satisfaction in the territory they currently have is a question to ponder? Skill-development programmes for people living in and around the forest would offer them better opportunities for self-employment, and consequently reduce the combined pressures on agricultural land as well as forest land. Indian Forest Act and policies need reforms that help incorporate traditional practices as well as an inclusive lifestyle. Inculcating values of preservation and sustainability via the school syllabus could be a step in ensuring that the future citizen gets an early education about one's ethical and social responsibility towards nature conservation.

REFERENCES

1. Ministry of environment, forest and climate change; government of India; lok sabha starred question no. *62 answered on 07.02.2017
2. Aadil Habib, Ishfaq Nazir, Mustahson F. Fazili, Bilal A. Bhatt; Human-wildlife conflict-causes, consequences and mitigation measures with special reference to Kashmir; The journal of zoology studies; Vol. 2(1); pp.-26-30 · January 2015
3. Global Forest Watch Report 2019
4. Status of Tigers Report in India 2018, Ministry of environment, forest and climate change; government of India released in 2019
5. Jhala, Y. V, Qureshi, Q. and Nayak, A. K.; Summary Report: Status of tigers, co-predators and prey in India 2018; National Tiger Conservation Authority, Government of India, New Delhi & Wildlife Institute of India, Dehradun., 2019.
6. Sharif A. Mukul, Mohammed Alamgir, Md. Shawkat I. Sohel, Petina L. Pert, John Herbohn, Stephen M. Turton, Md. Saiful I. Khan, Shifath Ahmed Munim, A.H.M. Ali Reza, and William F. Laurance; Combined effects of climate change and sea-level rise project dramatic habitat loss of the globally endangered Bengal tiger in the Bangladesh Sundarbans; Science of The Total Environment, Vol.663; pp.-830-840 ,2019

ILLEGAL CULTIVATION OF AFRICAN CATFISH IN TELANGANA

By
P.S. Rao

1. An Application was filed under Section 18 (1) r/w Section 14 of the National Green Tribunal (NGT) Act, 2010 against alleged environmental violations committed by persons involved in illegally cultivation of banned African Catfish in the areas of Gadwal, Dharoor, Alampur, Atmakur, Kollapur, Itikyala, Wadapally, Matkal, Maganoor Mandals of Mahabubnagar District and backwaters of Priyadarshini Jurala Project, Srisalam Project, Krishna and Tungabhadra river belt. In all these areas Catfish mafia is illegally cultivating Catfish in agricultural lands without even seeking for conversion of land for non-agricultural purpose.

2. It was further submitted by the Applicant that Catfish rearing is done in an unprotected manner where there is every possibility of the fish escaping into the adjacent Krishna River waters and other nearby water bodies thereby causing grave threat to the existence of indigenous aquatic species and may lead to disturbance of ecological balance and this is reaffirmed by the aquatic studies conducted near the Krishna river in Mahabubnagar District, wherein it was found that nearly 109 indigenous species surviving in the River may become endangered due to the introduction of exotic species like African Catfish which can thrive in adverse conditions. Catfish is highly voracious and carnivorous compared to other exotic species. It is also scientifically established that the rearing of African Catfish disturbs the ecological balance. Further, the Applicant has stated that though the Central as well as State governments have banned rearing and distribution of African Catfish, illegal culti-

vation is still going on not only in Mahabubnagar District but other parts of the state also and in spite of several representations made to the concerned authorities, no action was taken in this regard. The Applicant thus prayed to direct the authorities concerned to take appropriate action against all those involved in the rearing of Catfish; to direct the authorities concerned to take action against the occupiers of the agricultural lands and illegally cultivating the banned Catfish thereby damaging the ecosystem under Environment (Protection) Act, 1986 and to direct those engaged in the rearing of Catfish to compensate by restituting the environment duly destroying the Catfish rearing ponds.

3. In the common reply filed by the first respondent, Assistant Director of Fisheries, Mahabubnagar it was stated that the Catfish culture is limited to some villages in Gadwal, Itikyala, Makthal, Dharoor, Pebbair and Weepangandla Mandals. Initially the ponds were destroyed and the farmers have started rearing the permitted Pangas fish in these ponds. The Government of Andhra Pradesh in the G.O. Ms No.54, A.H.D.D-7 Fisheries (Fish-II) Department dated 04.10.2005 banned the seed production, marketing, transportation, maintenance of stocks (live or dead) of the African Catfish (*Clarias gariepinus*). Since then sincere efforts are made by the Fisheries Department with the support of Revenue and Police officials, to implement the government orders. A total of 25 cases were booked in 09 villages with 17.40 lakh Catfish seed destroyed in the year 2011; 02 cases booked and 26 ponds destroyed in 04

villages with 600 lakh Catfish seed destroyed in the year 2012; 88 ponds destroyed in 06 villages with 700 lakh Catfish seed destroyed in the year 2013; 34 ponds destroyed in 06 villages with 300 lakh Catfish seed destroyed in the year 2014; 17 ponds destroyed in 06 villages in the year 2015; 14 cases booked, 15 ponds destroyed with 800 lakh Catfish seed destroyed in the year 2016 in several raids conducted on Catfish ponds since 2011. It is further stated in the common reply that the District Administration consisting Revenue, Police, Fisheries and Marketing Department officials are putting joint efforts to completely eradicate farming and marketing of African Catfish and initiating action against the land holders for allowing such illegal cultivation in their lands.

4. In the reply filed by the 4th respondent Superintendent of Police, Mahabubnagar District, it is stated that rearing of various kinds of fishes is prevalent in the areas of Gadwal, Dharror, Alampur, Atmakur, Kollapur, Itikyala and Wadapally Mandals including the back waters of Jurala and Srisailam projects. Action against illegal transportation of prohibited Catfish is also initiated and various criminal cases were booked in this regard. Particulars of the cases booked on illegal Catfish ponds and illegal transportation during the past 5 years, have been given by the 4th respondent. It is further stated by the 4th respondent that after receiving notice from NGT, the Police Department has made extensive enquires and gathered information about the operation of illegal Catfish ponds and in the joint operation conducted with the officials of the Fisheries Department, Catfish ponds were destroyed in the limits of the Itikyala Police Station and the Police Department will continue to extend full co-operation to the Fisheries Department in curbing the illegal activities of rearing Catfish.

5. Literature reveals that the African Catfish rapidly grows and feeds on a large variety of aquatic species and agricultural by-products. It highly tolerates adverse water quality conditions and can be raised in high density resulting in higher yields in a short period of time compared to Indian Catfish and other indigenous species. Considering the fact that cultivation of such exotic species is detrimental to the indigenous species and it may even upset the ecological balance and can lead to drastic changes in the ecosystem and can cause severe economic losses in the long run, the Ministry of Agriculture, Department of Animal Husbandry and Fisheries, Government of India issued orders dated 29.06.2000 prohibiting rearing of African Catfish in the country. In spite of such ban order it was found that because of its quick economic returns, this exotic species of fish is illegally cultivated. With the aim of higher yields and quicker economic returns, the fish is fed with chicken waste, decomposed wastes of sheep, cows, buffalos etc collected from slaughter houses and the decomposed waste stored on banks of water bodies and aquaculture ponds is causing severe pollution to the environment particularly water pollution.

6. After the aforesaid orders were issued by the Government of India, a number of State governments including the undivided State of Andhra Pradesh have issued orders prohibiting the cultivation of African Catfish in their States and when such orders were challenged before various High Courts including the Hon'ble High Court of Andhra Pradesh in the case of *D. Srinivasa Raju Vs. District Forest Officer and ors.* in the order dated 17.07.2002 the Hon'ble High Court has upheld such imposition of ban in carrying on the trade and business including the culture of African Catfish.

7. In a similar case dealt in W.P No. 30011/2012 Hon'ble High Court of Karnataka

in its order dated 06.02.2013 has observed as follows:

“9 We are of the view that the Deputy Commissioners of all the Districts have to take steps to eradicate the African Cat Fish keeping as it causes health hazard to the general public. In so far as Razaqsab Palya, Budensab Palya and Bagalur Villages are concerned, since Cat Fishing rearing ponds have already been dismantled, strict vigil has to be kept to ensure that no such activity is repeated again in these areas. In so far as all the other Districts are concerned, immediate steps have to be taken for dismantling the Cat Fish rearing ponds in accordance with law and vigil has to be kept to ensure that no such activity is repeated again. Ordered accordingly”.

8. The fact is that in spite of the ban imposed on cultivation, trade and business involving the exotic African Catfish, as long as back in 2000, and in spite of the fact that the issue was dealt by various High Courts and strict orders were issued, it is still clandestinely and illegally cultivated. On perusal of the pleadings and of the documents filed, NGT was of the considered view that the Department of Fisheries with the support of the District Administration is taking efforts to curb the menace of rearing and marketing of banned Catfish in the District. But these measures are not adequate. It requires concerted efforts.

9. GT observed that though the Applicant has raised the issue concerning illegal cultivation of banned African Catfish only in Mahbubnagar District, it is likely that such illegal cultivation might be going on in other parts of the State. Therefore unless the issue is taken up seriously and a strict vigil is enforced and offenders are

dealt with severely, the problem may continue leading to not only causing of pollution but also damaging the local ecosystem and valuable indigenous aquatic species may be lost in the long run though Catfish cultivation may fetch quick returns and handsome profits for a few people involved in the business which is at the cost of society.

10. NGT observed that no specific orders are required in this regard at this juncture except for a direction against the Commissioner of Fisheries, District Administration and Asst Director of Fisheries to regularly monitor the Catfish rearing ponds and to strictly implement the G.O dated 04.10.2005 and book criminal cases against the offenders. But mere superficial inspection and booking cases without ensuring strict compliance will not serve the purpose and the problem may continue to recur. NGT directed that the matter shall be regularly reviewed by the Commissioner of Fisheries, Government of Telangana taking the assistance of District Administration to completely eradicate the menace. NGT directed the Chief Secretary and Direct General of Police to give strict instructions to all the District Collectors and to all the Superintendents of Police in Telangana to give prompt assistance to the Fisheries Department in raiding the suspected localities and take severe action against the habitual offenders to deter them from illegal cultivation of the banned exotic African Catfish.

With the above directions, the Application was disposed.

Answers of green Quiz:

1. c	2. b	3. b
4. a	5. c	6. a
7. b	8. c	9. c
10. b	11. a	12. b
13. d	14. a	15. c

BADRINATH: PLAYGROUND OF GODS

By

Dr B Raghotham Rao Desai

“Those who set out to see the world cannot afford to be patient ----- they don’t have the time! And it is my conviction that all the universe conspires to help them achieve it when they want something”

[It was the year 2006 when my cousin (Late Sri Anirudh Desai, IAS-R), elder by four years, asked me to accompany, as he embarked on the pilgrimage to Badrinath (& Kedarnath) along-with late Bhabhi (Dr Vasudha Desai, Retired Surgeon), as we were by then in our seventies & already late. We reached Hardwar (via Delhi) by train and then left by a car to traverse a distance of 325 km, pre-arranged by the Uttarakhand Tourism Development Corporation, with accommodation reserved during the period of about a week. We returned to Hardwar as scheduled, after a reasonably comfortable sojourn, visiting two of the four Dhams of Badrinath (at an elevation of 3,133 M), and 3584 M elevated Kedarnath (by coming back to Rudraprayag, and taking a helicopter of Defence Services (to and fro the shrine, 30 km away) at Agasthyamuni Ashram (750 M, 20 kms from Rudraprayag by road), located upstream of Mandakini.]

Badrinath happens to be the last leg (or first) of the holy Char Dham Yatra of Kedarnath, Gangotri and Yamunotri in Uttarakhand (Uttaranchal, earlier). The drive thereto was through a stunning terrain: humped mountains (with double chins and fissured folds) rising around us, seemingly dwarfing the convoy of cars that bumped along the ravine, hugging filament-thin roads. Quite a few of our elderly pilgrims trudged in the olden days (to attain the release from an ‘endless cycle of rebirths’) would attain *Moksha* or sal-

vation even before reaching Badrinath, trekking after their way back (if they were slightly luckier) by the hostile bridle-path (ascending continuously from 292 M at Hardwar as no road was even formed) through the steep hilly-terrain, full of deep treacherous valleys & having torrential- streams ----- often covered with fog, while mountain peaks were smothered in snow. They used to camp and spend nights en route at Devaprayag (475 M at the confluence of Alaknanda & Bhagirathi), Rudraprayag (610 M at the confluence of Alaknanda & Mandakini), Karnaprayag (730 M at the confluence of Alaknanda & Pindar), Nandprayag (870 M at the confluence of Alaknanda & Nandakini), Joshimath (1890 M) on the bank of Alaknanda, Vishnuprayag (1,872 M at the confluence of Saraswati & Dhaul Ganga) and finally at Govindghat (1,828 M) or Pandukeshwar (1,857 M) or Hanuman Chatty (2,280 M), before reaching Badrinath (3100 M), the last four places being on the banks of Saraswati.

However, we journeyed through **(which lassoed ‘views of an amphitheatre’ of mountains), the swirling waters of the Alaknanda river keeping us company most of the way.** The route to Badrinath, entire stretch from Rishikesh being typical Ghat-road, never lets one forget how powerful and capricious nature can indeed be, with delightful scenes beholding you ----- tree-trunks (stark brown against the glistening green leaves), tiny buds (blushing sheepishly), birds (twittering excitedly), colourful butterflies (skimming daintily over pretty flowers), and frogs (croaking boldly from beneath the rocks) ----- giving such a sudden and **unaccountable changes of mood or behaviour,**

having seemingly fragile bridges straddling a mighty river, pine-forests clinging desperately to otherwise bare mountain-slopes, and homes too seemingly clinging for dear life to precarious ridges.

Leaving the gorgeous primeval landscape behind, we arrived in **Badrinath, a frenetic little town, fast and energetic in a rather wild and uncontrolled way, infused with piety. We plunged into the melee and were swallowed up by the ebb and flow of humanity seeking answers to the human condition; some looking for solace, others a boon or two, and many more for 'moksha' or salvation!**

Behind the clamorous town, soared Neelkanth (6600 M), smothered in snow and cloud, seeming to underscore the presence of the Divine. A long queue of pilgrims snaked away from the tall gateway of the resplendent stone-temple, with arched windows and a conical gold-gilt-roof. Devotees generally take a dip in 'Tapt-kund' the hot spring nearby, and then queue-up at the entrance for a 'darshan' (from 3 A.M. as May-June is the peak season), the temple being closed in the beginning of (November while rituals continue to be performed at the 'Narasimha-Temple at Joshimath'), and the shrine reopening by April-end. In the Sanctum Sanctorum is a metre-tall black-stone idol of *Vishnu* in the form of 'Lord Badri Narayan', seated in a meditative-pose. We prostrated, after punctiliously taking stock of the goings-around & tiptoeing to reach Him via a vast-pillared hall, and surfaced breathless from the cauldron of devotion & faith, that swirled around us and seemed to pull us into the vortex. **So powerful were the soothing-vibes that emanated from the Sanctum, that we simply felt their embrace and were swept-along (as though on the tide of the heavy ocean).** The priests at the temple are 'Namboodiris' from Kerala, the

tradition being that the temple was established by Kerala -born 'Adi Shankaracharya' over a thousand years ago. The present structure was built by the then Maharaja of Tehri-Garhwal whose descendants till today decide on the day on which the temple-doors are to be opened --- -- a ceremony and a pooja beforehand being conducted at the 'Maharaja's palace' (near Rishikesh) and then the temple-doors are opened with much fanfare. **Soon after descending the steps outside the temple, life sucked us back from the unique spiritual-summit that we had briefly touched and got transmogrified (or transformed in a surprising manner)!**

On the way back to the entrance of our cottage, we passed by an ash-smearred Sadhu who smiled at us as we paid him alms, and said (in Hindi): "you will be returning one day". Was that a prediction or a prophecy? "May be, we are searching among the branches for what only appears in roots." said Rumi long long ago, "While branches might help us touch the sky, the roots will take us home." **In those rarified Himalayan heights, the reality and the surreal merge & blur!** We never leave a place ---- we carry it with us in our memories and anecdotal stories of where we have been and what we have experienced. **The sunshine in the rain and the rain in the sunshine elucidates that 'pain & happiness mingle in life.'**

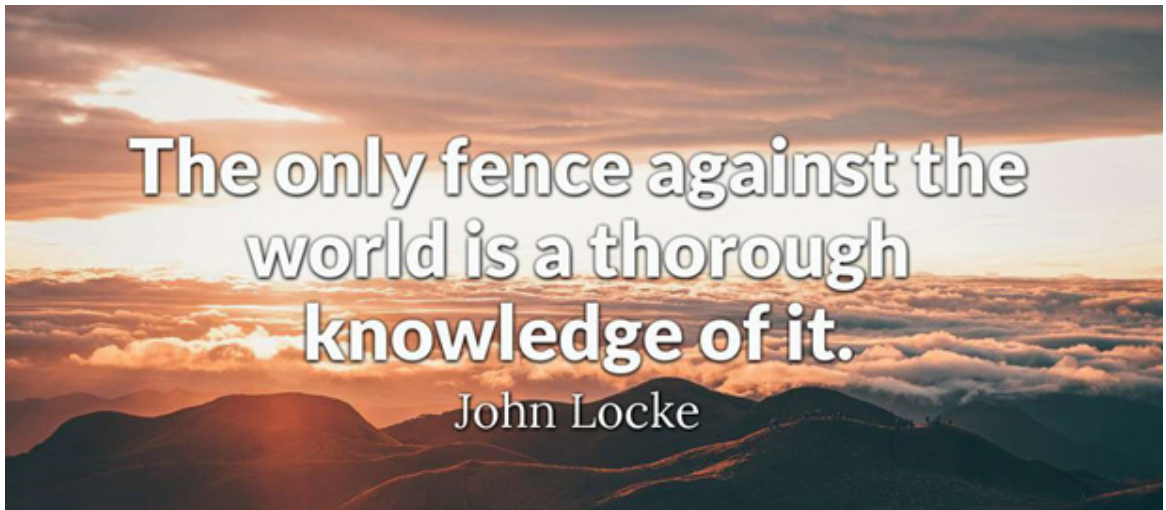
The body is the brass-container which be wound with the threads of devotion, be filled with the water of contentment—— human form being divine, is like a tender-shoot and mature conviction is like a coconut —— hence sacred verses be chanted while consecrating the body & ideally offering it to the Creator to drive out all evil tendencies and infuse it with purity & thereby ennoble or elevate the humans.

Concludingly a word of caution after what we

learnt during the said visit of such a long duration to the hallowed Himalayas which effectively provide a great amount of ecological security and ecosystem services to the world ----- the Centre is stated to provide wings to its new decision to build walkways & roads and clear areas for camp-sites. The decision is likely to adversely impact mountains and the people depending on it, as the green-cover will be lost, the soil will be eroded, streams will be changing course, environs will be becoming polluted and wildlife will be disturbed. Invasive species might creep-in and make things worse for the indige-

nous flora & fauna.

The Himalayan range as whole is considered as sacred because it is in the North, which for Indians is the direction of wisdom and spiritual re-birth. From times immemorial these mountains have always invited sages, yogis, artists & philosophers ----- they having come to embody the highest ideals & aspirations, the sight of their peaks, sublimely soaring high & clean above the dusty/congested plains of India, inspiring for centuries the visions of transcendent splendour & spiritual liberation.



*Anybody can become angry - that is easy,
but to be angry with the right person
and to the right degree and at the right time
and for the right purpose, and in the right way
- that is not within everybody's power and is not easy.*

- Aristotle

FICTION:**THE GODS ARE WATCHING****By****J. V. Sharma***Part - I***THE OTHER WORLD**

NOTE: *In India, most of the people believe that all persons, after their death, go either to heaven or hell depending upon their good or bad deeds in life. The Hindus speak of Swarg & Narak and the Muslims believe in Jannat & Jahannum (Dozaq), while the Christians use more popular phrases of Heaven & Hell. This is a theme centric article. Readers are requested to take note of this and ignore the mythological background. –Author.*

According to Hindu mythology, the entire universe is divided into eight directional territories identified as the East, South-East, South, South-West, West, North-West, North and North-East, ruled by eight functional lords Indra, Agni, Yama, Nairuthi, Varuna, Vayu, Kubera and Ishanya. Indra, the lord of the East, who has 'heaven' in his jurisdiction, is also the Head of functional lords, as first among the equals, a status somewhat similar to the present-day prime minister.

It all started with a communication received from Yama, the lord of Hell, requesting Indra to convene an emergency Cabinet Meeting to discuss some important issues urgently. These days Yama, is finding it extremely difficult to perform his duties as lord of hell. For ages, he is considered as an embodiment of justice and was discharging his duties with ease. Now, he appears to have some genuine problems on hand. Penal laws in the hell are not updated for centuries. World is changing fast and Legislatures world over, more importantly in India, are making new laws every day. In many cases what was considered a sin in the past is no longer a sin now. The fact is that many legislatures on earth are so innovative in thought and proactive in action, that yesterday's sins are made welcome virtues today. Persons convicted and sentenced to even death or life imprisonment, are also shown extravagant lenience in matters of implementation of the punishment awarded. Flagrant violations of law are viewed benignly and the offenders are rewarded instead of holding them accountable for the crime.

Case in point is the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 which condones all encroachments of forest lands. When some old-fashioned persons calling themselves 'environmentalists' cried foul and called for the law in force (existing Forest Law) to take its own course, the Government in power considered it necessary to condone the violations even up to 2005 instead of 1980 as originally envisaged. As if condoning the breach of law is not enough, the new law provided for a reward of 4 hectares of forest land to each offender in place of 2 1/2 hectares originally contemplated and the land vested would be of encroacher's choice and place. In the process, the dividing line between crime and innocence has become totally obliterated. For those who administer justice, like Lord Yama, the predicament is more complex and very often embarrassing.

Hitherto, he was deciding the cases single handed on the basis of inputs provided by his able Assistant Chitragupta. Now the population on earth had increased manifold and more so in India where such aberrations and legal inconsistencies are innumerable. Legal jurisprudence in hell is simple and straight, applicable to all without discrimination. While people on earth talk of crime, it is taken as sin in hell. Sinner surely got his due without any consideration for leniency. Yama, the presiding judge is so learned and upright, he does not need lawyers to help him in dispensation of justice.

In the recent past, Yama had an unpleasant encounter. An old lawyer collapsed in the Court Hall in India even as he was arguing an important criminal case. He was the most sought-after criminal lawyer in the country. Hard core criminals, particularly the rich and the influential, were his clientele. He charged fabulous remuneration but no client ever murmured because his acquittal was almost certain. Most of the powerful persons feel indebted to him and he was always flooded with lucrative offers from the ruling elite. Bowing to the pressure, he did work as a Minister for some time but that did not provide him the thrill, he enjoyed in Courts nor was it financially as rewarding as a lawyer. He promptly resigned as minister and resumed his legal practice. This enhanced his stock much more and his earnings skyrocketed. He had become very old and infirmities of old age were very evident but he continued to be a permanent fixture in the courts.

Old lawyer, after death, was promptly taken to Hell and produced before Yama. Chitragupta scanned through the lawyer's account and prepared a strong pitch for a very severe punishment. Yama, in routine, asked the lawyer if he had anything to say. Normally, the sinners never disputed the Chitragupta's account of imputations nor the sentence awarded. But here, the old lawyer firmly said; "Lord, I am entitled to defence. I come from India, a country on planet earth, with a huge population accounting for one-sixth of 7.14 billion people of the globe. Ours is a proven system of governance evolved on the bed rock of rule of law. We go by a Constitution we ourselves framed and it is the bulkiest document with as many as 395 Articles & 12 Schedules. This, by itself is a proof that we have a robust system of jurisprudence. That was the law given to us to comply. Now, Your Lordship is presiding over some alleged sins committed by me. Merits of allegations apart, the basic questions of jurisdiction and maintainability need to be decided. I pray for recording my submissions and seek detailed hearing before an order is passed."

No sinner ever spoke before Yama except pleading mercy. When the lawyer started speaking, the Lord of Hell was initially amused. After hearing what was said, he was surprised. But when the matter started sinking in, he was shocked. For a split second, he was shaken. "Is this man questioning my authority?". He looked at Chitragupta who appeared totally confused and clueless.

The Old Lawyer softly reminded Yama to record the proceedings.

"What recording? I heard you."

"Lord, you are presiding over judicial proceedings. What all happens needs to be reduced to writing to serve as record. As a person arraigned, I must be convinced that pleadings are taken note and properly addressed before a final order is passed. Justice should not only be done but seem to be done".

Yama is not used to procedures of record maintenance. Whatever heard, said or seen is promptly

recorded in his memory which never failed in this long history of universe. None complained of forgetfulness on his part. Yama tried to assure the old lawyer that every word will be remembered and that he had been doing it for ages. But the old man is not to be convinced. He said; "Lord, I heard about your phenomenal memory. That is hearsay and is subjective. Anything is admissible as fact and serves as evidence only when it is up to standards of Evidence Act. It is not a question of my having faith in the abilities of your lordship. It should legally be admissible. So, a record of proceedings should be documented truthfully not only for the benefit of contending parties but also to satisfy the sacred principles of justice. Or else, the proceedings stand vitiated."

Yama became uncomfortable. Justice is an article of faith for him. He will be the last to bring bad name to judicial process. He asked, "How exactly you want it to be done?"

"Lord, the presiding judge will have to maintain a docket duly recording the proceedings in the order of occurrence and evidences should be recorded on oath in writing and signed by the deponent and authenticated by the Presiding Judge."

The Lord of Hell did not see any harm in accepting the old man's suggestion. After all, he is asking to keep a record of events as they occur. When it enhances the credibility of judicial proceedings, why deny it? He conceded. Stationary & other necessary tools were promptly brought. He asked the old man to put in his plea about jurisdiction.

The old lawyer from India raised a plethora of issues. He asked to show the authority that India came within the territorial jurisdiction of the Lord of Hell. And whether it did not amount to trespassing into others' jurisdiction. He adduced lengthy arguments on these and other points making it difficult for the judge to clarify point by point. Chitragupta was not in a position to intervene or guide.

After hearing the old lawyer, Yama ruled; "Notwithstanding the points raised by the old man, the fact remains that the old man happened to come to Hell to stand trial for his earthly omissions and commissions. He is very much physically present within the jurisdiction of the Lord of Hell. This single fact settles the question of jurisdiction and the old man shall stand trial before the Lord of Hell."

This case had already taken a lot of time. Never did any case was heard so long at preliminary level. So far only the question of jurisdiction is addressed and substantive issues are yet to be heard. Yama felt that the old lawyer will not allow proceedings to run smooth. He called Chitragupta and had a quick consultation. Quite unexpectedly, the case is adjourned without spelling out the next date of hearing. This is the first instance a case is adjourned by Yama. The order said that the old man remains in Hell as an under-trial until further orders.

Part – II

THE LEGAL MUDDLE & GODS DELIBERATE

Being a past-master in court-craft, the old lawyer took the ruling without further arguments. He knew this is the best way to impress Yama that he is no less law-abiding. He had already charted his future course of defence for more serious legal battles ahead. The old lawyer from India surely created quite a few ripples in the otherwise placid waters of administration. Yama anticipated more trouble when

the case is taken up for next hearing. He wondered why these issues were not anticipated all these years. The old man caught the Hell administration off-guard.

Yama discussed the issue with Chitragupta who also expected the lawyer to raise more questions at future hearings for which it may be difficult to find answers. He said; "Lord, if you permit me, I will talk to the old man and find out his mind." But there is a hitch; –the judiciary is not expected to discuss a matter under judicial scrutiny with the under-trials. It was therefore decided that Chitragupta, as a court officer, would meet the old man to find out the problems of under-trials and the facilities extended to them.

Chitragupta met the old lawyer and enquired about the facilities in the Home for Under-trials (HU). The old man suggested some more amenities. Chitragupta visited the HU again after some days to verify whether improvements suggested were indeed carried out. A few more visits followed. Casual questioning and answering could make the shrewd emissary of Hell more enlightened on events to follow. The old lawyer was not naïve in revealing his strategy. He deliberately leaked out the legal issues that would arise in future.

Chitragupta's interaction with the lawyer was eventful. It covered a wide range of legal and constitutional issues and included complex matters like Fundamental Rights, Rule of Law, Due process of law, conflict of laws of different lands, Equality before law & Equal protection of laws, Penal Code, Criminal Procedure Code, Law of Evidence, Law of Contracts and salient features of jurisprudence. To quote the old lawyer, "We, in India attach so much of importance to basic principles of justice and fair play that the accused is convicted only when the charges laid against him are conclusively proved beyond all reasonable doubt. The underlying principle is; 'not one innocent man should be punished under any circumstances even if it means acquitting 100 suspected criminals. I may not sound out of context to cite an example of a judge who deliberately let off 100 criminals before he ordered the first conviction! Judiciary's commitment to sacred principles is so intense in India. Judges are equally conscious in awarding sentence to ensure that punishment handed out is rational and equitable, commensurate with crime established. I am yet to know whether the laws in Hell are equally transparent and judicious."

But what worried Chitragupta the most is the old man's cleverly disguised warning about future. He said; "I am a new entrant in the Hell. My trial in Hell started even before I became aware of local law. In India ignorance of law is no excuse. But that applies to only Indian Citizens. I am a foreigner here and it is illegal to presume I am thoroughly conversant with local law. The trial of the accused is fair only when he is provided all the opportunity to defend himself. So, I may have to question the very judicial proceedings."

"This apart, I have not come here on my own. I have been brought here without my consent. I do not know whether your laws permit kidnap, abduction and forceful bringing of foreigners. You may have such laws, –I don't dispute but such laws are excessive, arbitrary and illegal amounting to an assault not only on personal freedom & liberty of the individual but will also constitute serious violation of sovereignty of fellow nation. There is an International law to take care of such developments. What is proper can be determined only after the scope and intrinsic value of laws in force in a nation (here

it is India), International laws on earth of universal applicability and the laws in the celestial world are compared, assessed and analysed and their applicability is mandated by competent authority. I do not know whether there is any mechanism to accomplish this.”

“Let us see what happened in my case. I was arguing a case when I was suddenly incapacitated. That I was promptly rushed to Hell without any loss of time or process, is proof enough to suspect that my ‘end’ was plotted in advance and executed, and the needle of suspicion points at Hell. It is not a simple case of death what we call on earth. I was bound by a subsisting contract to defend a client and I had also received a fee for doing so. While I was discharging my professional obligations, I was removed from earth obstructing/preventing me from discharge of duties. Nor I was put on notice to settle my professional obligations earlier. My contract with the client stands breached. Whoever is instrumental is accountable for damages as well as compensation not excluding criminal action.”

“In some of the countries on the globe, a civil wrong is called ‘tort’ which entitles the victim for reparations. In India we do not have this law but there are several laws including the Law of Contracts to ensure specific performance of the conditions agreed upon. Criminal liability is separately dealt under criminal law. Burden of my incapacity to perform my part of contract therefore shifts to persons who interfered with my work. There is blatant interference in dispensation of justice and pre-empted due process of law. It attracts further criminal liability in case my client on earth suffers punishment which I would have most probably avoided. Here, the statistics and law of averages come into play since determination on facts is rendered impossible by others.”

“Finally, as I said, my life was extinguished suddenly while I was on my legs. It only means that I was hale and healthy till then. In my country, sudden termination of life by an external agency is called murder and it is the gravest crime according to Penal Code and can attract capital punishment. I have grave doubts whether those who caused my death on earth and brought me here, are in league with those who are opposed to my professional pursuits, and they may include even the establishment there. A conspiracy cannot be ruled out and section 120-B of IPC gets invoked. According to our law, the abettor is equally guilty as person who commits the crime and I am yet to figure out who all are suspects and whether there is any mechanism which can investigate and fix up responsibility of offence, committed across different worlds, impartially. There can’t be discrimination in the standards of conduct for individuals whether it is on earth or the other world. Equality before law is a cardinal principle which puts the mortals and immortals on the same footing.”

After the sermon, Chitragupta felt he learnt many things which never existed even in his wildest dreams. He now started believing that the laws in Hell are indeed archaic and need improvement. More importantly, he felt that people on earth are more innovative, talented and knowledgeable. He smelt that the old Indian lawyer could prove to be a potential threat to celestial regime. He could not but admire the old man (silently, of course) for his sharp intellect and legal acumen.

Now, Chitragupta’s briefing has almost had similar impact on Yama. They decided to put the old man’s case on the back burner. Until the case is taken up and decided, the old lawyer shall remain an under-trial in Hell but with all the comforts of Heaven. Thus, in round Two, the lawyer gained the advantage. It is an informal arrangement where Chitragupta could be a conduit to elicit information

about recent trends and events on earth from the lawyer. But the wily lawyer is a hard nut and is too selective of information he is prepared to part with.

Yama is no longer the old un-inhibited Lord of Hell he was till now. Experience with Indian lawyer made him over-cautious. He started feeling that the law given to him is insufficient on occasions.

Pendency of cases in hell started mounting and he has completely run out of ideas to improve the situation. Till recently, Chitragugupta was managing the entire show with a single register which contained an account of sins committed by each soul entering the hell. The changed scenario compelled him to maintain many registers, and of late, he has been losing track as well as count of the registers maintained. Worse is, he is often left in a dilemma to decide whether it is a sin or not. This is crucial for him because he is mandated to catalogue only the sins.

Ever since he heard from one of the recent entrants that people on Earth are managing the workload with the help of a machine called 'computer', Chitragupta has become too curious about it and is eager to acquire one. He gathered some more information from the lawyer and started pressing his boss to initiate some meaningful action over the entire issue. Even on quick thinking Lord Yama realized that the issue is not as simple as Chitragupta made it look. Going for computers involves procurement of machines, acquisition of software, drafting computer operators & providing them the entry & access to hell in flesh and blood. This is not permissible at all.

Yama thought that he can no longer shove the recent problems under the carpet. He felt that he cannot afford to keep the problems to himself indefinitely and hence his request for an emergency Cabinet Meeting.

Lord Indra, the Chief of all functional Heads is not happy either. His domain, 'The Heaven', is a good place to live. It has all the comforts and pleasures of life. Pain, misery and hardship are unknown there. Entry into heaven is a reward earned for righteous life spent on earth rather than a favour granted. Attractions of heaven, therefore, dissuade people on earth from unethical conduct. Of late a different situation is unfolding. On account of the increase in number of sinners and their ingenious capacity for manipulation, many sinners are able to hoodwink Lord Yama and succeed in earning 'benefit of doubt' to gain entry into heaven, by deceit and default. Evidently Indra must be uncomfortable with the influx of undeserving souls as it was already stretching heaven's infrastructural facilities beyond manageable limits.

Even other functional lords are not free from worry. They are beginning to realize that the ground below their feet is not as firm as it was in the past. Agni started feeling that he is being hustled into manifestation of global warming. Rain god Varuna is being forced to be erratic much against his will. Even the Wind god Vayu is losing self-control. All the natural events which conformed to a particular pattern for ages are becoming increasingly erratic. Thus, the functional lords, whether they openly make out a case or not, are surely worried that they are losing sheen of their efficiency. It is certainly a worrisome situation.

It was not difficult for the functional gods to realize that these unusual changes are happening without their consent. They were being simply pushed into the vortex. In the broader sense it amounts

to functional deficiency on their part. There is also an element of erosion of their authority over the domain they are supposed to preside. Events of universe have been going on for millions of years and the changes in the recent past are sudden, drastic and fast. When Gods created universe, they provided space for all and laid down strict norms of conduct. Millions of life forms of plants, animals and microorganisms were created and assigned specific functions to them. Balance has been maintained in their life and functions for ages. But things seem to go awry in the recent past. Some life forms are becoming extinct hurting the balance of biodiversity.

Indra convened the Cabinet Meeting which was attended by all functional lords. Each functional lord gave a detailed account of problems they are facing and sought clear cut operational guidelines in their respective fields of duty. They made it abundantly clear that it is not possible to carry on with the existing manual and some drastic initiatives are urgently needed to be taken. Indra prepared an exhaustive note of the Cabinet Meeting and circulated it among the Collegium of Gods.

Collegium of Gods (CoG) is an Apex Body of gods which includes Supreme Lords like Brahma, Vishnu and Shiva. This is the highest decision-making authority, something like a Polit Bureau, much above the cabinet of functional lords mentioned above. Lord Indra's position is something like a Member-Secretary to the Supreme Body. The Collegium of Gods met and had a detailed briefing of the situation from Indra. Even otherwise Gods keep a constant watch over events of universe and have noted with concern some paradigm changes taking place. They found that while the systems and practices which were in vogue for ages in all other planets go on as ordained, they appear threatened by changes that have come about on earth. Man is no longer the ordinary mortal the gods had conceived and fashioned him to be. With his relentless pursuit in development of science and technology, he has not only mastered different facets of human life and the environs, but is also on the way to reach out to other planets to conquer and rule. Gods could not have been oblivious to these developments.

Greatest of their concerns is that laws of nature that were keeping the universe in shape with unerring regularity are under strain if not threatened totally. But they follow a strict code of conduct not to interfere for each and sundry aberration. They expect the functional lords to be vigilant and make minor course corrections if necessary. They rule the universe with dignity and aplomb unlike the Forest (for that matter any) Ministers or people's representatives who debase themselves by interfering with the transfers and postings of departmental personnel like FGs, Foresters, Rangers, DFOs etc.

Recent developments raised more serious concerns. Annual average temperatures are on rise. Eternal snowline which confined to its limits for centuries is receding fast. Natural calamities have become too frequent with disastrous effects of loss of life and property. Sea levels are rising and low-level coast lines and some island nations feel threatened of submergence. Seasonal schedule is becoming erratic. Unseasonal rains and severe draughts have become too common. Some life forms which are part of nature for hundreds and thousands of years with inbuilt regulatory management are either becoming extinct and some others are proliferating beyond carrying capacity. Should these dangerous trends continue, the world is in for irreversible disaster.

Collegium of Gods is aware that there are many atheists who do not believe in God at all and much

less their dictates. Majority of the people have different religious beliefs and they believe in addicts of their own religion. And there are some who are irreligious or non-religious. Beliefs are not cantered round one God. Collegium of Gods has the most unenviable job of moderating all such diverse tendencies. Affairs of the universe cannot be subordinated to fractured opinions in the society. People are so stupid not to realize that there is only one God to run the universe or in the alternative, there is unison and coordination/cooperation between Gods of different religions. They go on drawing distinctions according to their personal choice and often continue to squabble for petty reasons. These are sensitive issues and the Gods normally ignore freak developments in the larger interest of the world. This came for mention because the basic religious edicts of good conduct in various religions are becoming increasingly irrelevant.

CoG is not inclined to act without a thorough assessment of the situation. They are not in favour of *ad hoc* and kneejerk solutions. There are a number of issues that come for reckoning in this context. Accusing finger for all these aberrations is however being pointed towards the man.

The supremacy of Gods *vis-à-vis* man, which had been vogue since ages can no longer be taken for granted and it is time, they think of some way either to rein in the man or to explore the possibility of arriving at a 'working relationship' with him. The hawks among Gods are not prepared for any dilution of their power enjoyed since the creation of the universe. After a great deal of deliberations, it was decided to constitute a One God Commission (OGC) to go into the matter and come up with specific recommendations. The Lord of Heaven was chosen for the purpose for the reason only good people come to heaven and Indra would have the benefit of their counsel & inputs which he can access from the inmates who can be trusted for objective assessment of the situation and even relied. If need be, he can use their good offices to thrash out an honourable settlement with humans. Needless to say, that the action initiated by Gods, though with good intentions, is the standard practice followed by man on earth to put important and urgent issues on back burner to avoid embarrassment to the establishment with diplomacy and deceit as the guiding principles. Thus, the man has already scored a point over gods.

The Lord of Heaven decided to make his assignment as extensive and elaborate as possible. Among several modules in practice on earth, he liked the Indian model the most. He drew inspiration from Indian genius as to how they managed to stall very important and vital issues like administrative reforms, electoral reforms, anti-corruption laws, laws to prevent illegal immigration etc. for decades and how they use the constitutional machinery to perpetuate poverty and crime. He realized that Indians are way ahead in the field and the gods are not yet equipped to copy them fully. Indra came to the conclusion that an in-depth study of Indian model would help him identify the grey areas and also find possible solutions. He settled for a modest beginning to embark upon an unending exercise of gathering and studying material relating to oldest period and evolution of civilization on earth. India appeared the ideal ground for field study and the States of Andhra Pradesh and Telangana in particular, the right sample.

(To be continued)

Man is still the most extraordinary computer of all.

- John F. Kennedy



Sri N.Sridhar, I.A.S., C&MD, SCCL inaugurating Telanganaku Harihaharam 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



Chinkara (*Gazella bennettii*)





Reunion of 1968-70 S.F.R.C. Batch at Indore



GreenAP Mobile App



- ◆ 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.

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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.



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GREEN QUIZ CHAMPIONSHIP- MARCH 2020

Quiz Master: Dr K. Tirupataiah

This month's quiz is on **"Health Epidemics"**. Pick correct answers from among the choices:

1. H1N1, the 2009 Flu epidemic had its origin in which animals? a) Bats, b) Rats, c) Swine, d) Birds	2. What is the name given to a disease spread over a large region cutting across countries and continents? a) Epidemic, b) Pandemic, c), Pan-epidemic, d) Exo-epidemic
3. Cholera pandemic originated on the Banks of a famous River and spread to Asia and Europe in Seven Epidemics killing millions. Which country was the source of the epidemic? a) Pakistan, b) India, c) Nepal, d) Afghanistan	4. Which health epidemic originates in contaminated water and food material and spreads through human faeces causing "Blue Death"? a) Cholera, b) Plague, c) Flu, d) Polio
5. Before the present epidemic, China contributed to another epidemic during 1956-58 that originated in Guizhou province and killed over 2 million across the Globe. Name the epidemic? a) Influenza, b) Flu, c) Asian Flu, d) Chinese Flu	6. Which Epidemic almost wiped out the Byzantine Empire & the Mediterranean port cities during 541-542 AD killing more than 25 Million? a) Bubonic Plague, b) Zoonic Plague, c) Rhesus Plague, d) East European Plague
7. WHO declared India Polio Free in 2014 after observing that no new "Wild Polio" case was detected for ----- years. How many years? a) 02, b) 05, c) 03, d) 01	8. Diseases that are transmitted from Animals to Humans are called? a) Zoological, b) Zoonile c) Zoonotic, d) Zoobased
9. Severe Acute Respiratory Syndrome (SARS) virus was spread through: a) Rats, b) Bats, c) Civet Cats d) Pigs	10. Middle East Respiratory Syndrome (MERS) is spread to Humans from: a) Horses, b) Camels, c) Eagles, d) Donkeys
11. The Nova Corona Virus is believed to have been transmitted to Humans through: a) Bats, b) Pigs, c) Snakes, d) Rats	12. The Ebola Virus that originated in Democratic Republic of Congo and became a Pandemic in 2014 was suspected to have been transmitted to Humans through: a) Pig, b) Primates, c) Bats, d) Mosquitos
13. Largest post-Independence migration in India happened in 1994 in Surat from where over 3.0 lakh people fled fearing Plague epidemic caused by: a) Virus, b) Fungi, c) Nematodes, d) Bacteria	14. This Plague pandemic resulted in the death of over 75-200 million people in Eurasia & Europe during 1347-1351. It took 200 years to rebuild the population. It was termed: a) Black Death, b) White Death, c) Blue Death, d) Red Death
15. Which Pandemic was Globally Eradicated in 1980? a) Cholera, b) Chicken Pox, c) Small Pox, d) Measles	

For Answers please see page no. 15

CHINKARA, *GAZELLA BENNETTII*

Source: Internet.

Chinkara (*Gazella bennettii*), also known as the **Indian gazelle**, is a gazelle species native to Iran, Afghanistan, Pakistan and India

Characteristics: It stands at 65 cm (26 in) tall and weighs about 23 kg (51 lb). It has a reddish-buff summer coat with smooth, glossy fur. In winter, the white belly and throat fur is in greater contrast. The sides of the face have dark chestnut stripes from the corner of the eye to the muzzle, bordered by white stripes. Its horns reach over 39 cm (15 in).

Distribution and habitat: Chinkara live in arid plains and hills, deserts, dry scrub and light forests. They inhabit more than 80 protected areas in India. In Pakistan, they range up to elevations of 1,500 m (4,900 ft). In 2001, the Indian chinkara population was estimated at 100,000 with 80,000 living in the Thar Desert. The population in Pakistan is scattered, and has been severely reduced by hunting. Also, in Iran, the population is fragmented. In Afghanistan, chinkaras are probably very rare.^[7]

Ecology: Chinkaras are shy and avoid human habitation. They can go without water for long periods and can get sufficient fluids from plants and dew. Although most are seen alone, they can sometimes be spotted in groups of up to four animals. They share their habitat with several other herbivores, such as nilgai, blackbuck, chausingha, wild goat, and wild boar. Chinkaras mate once a year. Males compete for access to females. Chinkaras are preyed upon by leopards, Bengal tigers, Asiatic lions and dholes. The chinkara was a common prey of the Asiatic cheetah in India alongside blackbucks. Outside protected areas they may be attacked by pariah

dogs, and both wolves and golden jackals are also known to hunt them.

Conservation: The chinkara occurs in over 80 protected areas in India.^[9] In January 2016, the Karnataka government issued a notification to establish a sanctuary especially for chinkara in the Yadahalli village in the Bagalkot district of the state. This region shelters a major population of chinkara.^[10] The Karnataka Government also notified the Bukkapatna Chinkara Wildlife Sanctuary in Tumakuru district in May 2019.^[11] The chinkara is protected in nine areas of Iran and five of Pakistan.^[2]

Threats: The chinkara is threatened by extensive hunting for meat and trophies in Afghanistan, Iran and Pakistan. Other threats include habitat loss due to agricultural and industrial expansion. The status in these countries is unclear. Around 1,300 individuals occur in Iran. However, the situation in India is not so grim; in 2001, populations were estimated at over one million in the country, of which nearly 80,000 occur in the Thar desert, with a stable population trend. Since 2003, it has been listed as Vulnerable on the IUCN Red List. In 1993, a controversy erupted when the Gujarat government issued a decree to de notify the Narayan Sarovar Sanctuary, that contains a small population of chinkara, to allow mining of lignite, limestone, bentonite and bauxite inside the sanctuary. This was, however, rejected by the Gujarat High Court, and the sanctuary was restored to its earlier limits.

THE FACELESS MULTITUDE

By
V. V. Hariprasad

*I am after all a "commoner",
A speck in the ocean called "Indians",
A tiny beleaguered citizen of India,
Beset with umpteen problems,
every day I wake up early in the morning,
Clamoring for a job being penniless,
Finding myself dejected and rudderless.*

*More than seven decades passed,
After the dawn of self-rule on India,
At the altar of sacrifices,
Made by not a few but innumerable,
Great and selfless patriots of our nation.*

*But I am at a loss to understand,
When our economists still find,
The GDP of India declining and
The country going up,
In the incidence of poverty,
And in its global hunger rank,
which terms are Greek and Latin to me,
Beyond the comprehension of a layman.*

I am desperate,
*When I find my children malnourished,
And I run from pillar to post,
To eke out my livelihood,
To feed my family with a morsel of food,
And to provide them a shelter to live in.*

I am clueless,
*When the clan of politicians of India,
Blame each other for all the maladies of the
country,
"While rising from rags to riches" and
"While making hay when the Sun shines",
Reminding me of the proverb,
"The kettle calling the pot black",
In pursuit of their "POLITRICS",
A synonym for an enterprise.*

*I one among the faceless multitude,
Look forward for the dawn of real freedom,
Not the de jure, but de facto
On millions of impoverished lot of India,
Not to crave for a square meal a day,
To lead a life replete with bread and butter,
And to have a roof to live under.*

Don't limit a child to your own learning, for he was born in another time.

- Rabindranath Tagore

Education's purpose is to replace an empty mind with an open one.

- Malcolm Forbes

The whole purpose of education is to turn mirrors into windows.

- Sydney J. Harris

LEARNING RESOURCE CENTRE @ FCRI, MULUGU BY

Dr G. Rajeshwar Kumar, Librarian

Forest College and Research Institute is established in the year 2016, to serve as the Premier Forestry Institution in the State of Telangana. The institution came into existence with the initiative of the Hon'ble Chief Minister of Telangana Shri K. Chandrashekar Rao. It is located in the vibrant conjunction of Mulugu forest area, with an objective to facilitate the best forestry education to the students and contribute towards meeting the need of skilled and technically conversant forest professionals, for the state and country that embarked on an Environment and Economic Growth Plan. Working hand-in-hand with the state's forest department and other best academic institutions in the state. It is gaining reputation as the best Forest College and Research Institute.

An Institute of Excellence: The students of the institute were constantly interacting with all the prominent persons for a better know-how of the system works and what are the measures to be taken to serve nature. This constant endeavour to achieve excellence in the field of forestry is one of the prime virtues that set this institute apart.

Learning Resource Centre: The FCRI library is also called as "*Learning Resource Centre*". The primary objective of our learning resource centre is ***to acquire, organize and disseminate excellent and all relevant information on forestry and related fields to its students and staff through its document collection.*** To ensure more academic excellence, all the relevant text books and a vast

collection of reference books is in place. Standard journals, magazines and various e-resources are procured by the library to cater to the needs and the requirements of the faculty members, researchers and students. It works with a vision to satisfy the requirements of the users using its collections and innovative services and become one of the leading libraries in the country in the field of forestry resources, services, and technology.

The library is spacious and well equipped with modern facilities, where 250 students can be accommodated at a time and provides conducive environment for study. Exclusive reading room, reference section, Periodical section and Digital Library are available in the library. The services and operations in the Library are fully computerized. The library follows Open Access System for the benefit of the readers.

Library Webpage: Separate library website developed for the benefit of the library users. Users can access library website by using the following link. <https://libraryfcri.webs.com/>

Users also access FCRI Library by scanning below QR Code.



Library webpage enables you to:

- Access of entire library collection subject wise and semester wise.
- Search by author, title, subject or keyword
- Suggest new books for the library.
- Browse through the new arrivals list.
- Alerts for various jobs and conferences.
- Easy access to previous papers and press information of FCRI.
- Easy access to electronic resources like e-books, e-journals. e-newspapers etc.,
- Easy access of various research/educational websites.

LIBRARY COLLECTION: Library has a total number of **3500+ volumes** with **576 titles** besides number of printed journals, magazines, newspapers online journals and databases etc.

The library is open from 8.00 am to 8.30 pm on all week days throughout the year, except a few Holidays of national and social importance.

The college library has the following sections. They are

- Circulation Section
- Course Library
- Reference Section
- News Papers Section
- Periodical Section
- Digital Library
- OPAC (Online Public Access Catalogue)
- Reading Room/Study Hall

MEMBERSHIP: Membership of the library is open to all the UG & PG students, faculty and Administrative officers and ministerial and supporting staff of the institute.

DIGITAL LIBRARY: The library provides facility of Digital Library through which e-journals, e-books and latest information can be downloaded. 15 systems with network facility are installed for browsing of e-resources. There are a number of free and subscription-based journals and reports that are accessible to students and faculty of FCRI.

The users can access E-resources through

- Science Direct
- ICAR (Indian Council of Agricultural Research)
- NISCAIR (National Institute of Science Communication and Information Resources)
- Indian Academy of Science
- Indianjournals.com and
- National Digital Library

Apart from these 200+ open access Journals and 500+ open access books can also access by the users of Digital Library. Also planned to subscribe a greater number of e-resources from reputed publishers.

OPAC (Online Public Access Catalogue): Provide more assistance to the users for searching a document in the library. We have introduced an OPAC (Online Public Access Catalogue) system through which student / staff locate any type of document in the library. The user can search for books by Author, Title, Subject and Classification No. through OPAC terminals installed near the circulation desk.

CAREER GUIDANCE: Information regarding career development and displaying important

information to the students has been done by the library to support the student's career and guide them to enrich their skills and opportunities.

Awareness Programmes: Library conducting various programmes to attract the users. Every year library is conducting book exhibition from various publishers for selection of books. Every year conducted library orientation programme to the newly admitted candidates. Library also celebrates Librarians day on 12th August and National library week celebrations from Nov 14th -20th every year.

Conclusion: The FCRI library motivates students, scholars, faculty, scientists and other users to use existing and new arrivals by providing cosy and congenial atmosphere inside the library and provide access to the information

in an easy and efficient manner to locate the desired documents, consulting print and e-resources, etc. The Learning Resource Centre also organize book exhibitions, library orientation programmes and awareness programmes frequently to get attractions of the users. With the application of ICT, library services have totally been changed. The traditional library collection is going to transforms into digital collection. Users need electronic resources to meet their requirements. So, FCRI Library is providing these services to the users according to their demands.

(The author is from Dept. of Library and information science, Forest College & Research Institute, Mulugu, Siddipet-502279, Email: librarianfcri@gmail.com)

A child miseducated is a child lost.

- John F. Kennedy

Mankind must put an end to war before war puts an end to mankind.

- John F. Kennedy

NOTICE

The 95th GENERAL BODY MEETING of the Association of Retired Forest Officers of Telangana and Andhra Pradesh will be held on 22nd March 2020 (Sunday) at 11.00 a.m. in Aranya Bhavan, Hyderabad.

All the members of the Association are requested to make it convenient to attend the meeting with their spouses.

- Secretary

GANODERMA AS A BIO-DEFORESTING AGENT

By

Dr P. Shivakumar Singh

Introduction: *Ganoderma* is a genus of polypore mushrooms that grow on wood, and include about 80 species, many from tropical regions. Because of their extensive use in traditional Asian medicines, and their potential in bioremediation, they are a very important genus economically. *Ganoderma* can be differentiated from other polypore because they have a thickened layer. They are popularly referred to as shelf mushrooms or bracket fungi. The name *Ganoderma* is derived from the Greek *ganos* "brightness, sheen", hence "shining" and *derma* "skin". *Ganoderma* are characterized by their appearance that are large, perennial, woody brackets also called "conks". They are in light brownish and leathery either with or without a stem. The fruit bodies typically grow in a fan-like or hoof-like form on the trunks of living or dead trees. They have double-walled, truncate spores with yellow to brown ornamented inner layers. The genus was named by Karsten. Members of the family Ganodermataceae were traditionally considered difficult to classify because of the lack of reliable morphological characteristics, the over-abundance of synonyms, and the widespread misuse of names. Until recently, the genus was divided into two sections – Section *Ganoderma* with a shiny cap surface and *Elfvigia*, with a dull cap surface, like *Ganoderma applanatum*. Phylogenetic analysis using DNA sequence information derived from mitochondrial genome, have helped to clarify our understanding of the relationships amongst *Ganoderma* species. The genus may now be divided into six monophyletic groups. Like *G. colossus* group, *G. applanatum* group,

G. tsugae group, Asian *G. lucidum* group, *G. meredithiae* group, *G. resinaceum* group. The *Ganoderma* infected trees with *G. lucidum* often are showing decline type symptoms including increasing larger branch death, sparse crowns, slow growth, and sometimes wilting of leaves and other symptoms of root death or impact. More rapid decline is reported on some species such as honey locust.

It is necessary to document the species in the forest it results the percentage of live trees loss. Besides of wood decaying, trees destroying nature it is also showing the other biological significances with special references to novel drug properties, active components. The outcome of the article also gives the awareness to the upcoming researchers.



Figure 1: *Ganoderma lucidum*, *Ganoderma* species.

***Ganoderma* as slaughterer of trees:** The root pathogen, *Ganoderma lucidum* generally enters a tree through wounds, tears, cuts or damaged roots. Most trees in forests can be affected by this disease. The DNA of the disease is slightly different between hardwood trees and palm trees. This means that neither strain of *Ganoderma* is transferrable between the two types of plants. A young hard-

wood can be planted near the site of an old hardwood that had *Ganoderma* with very little risk of transferring the disease from the old tree to the new one. However, *Ganoderma* which kills palm trees is different, and newly planted palms near the site of a palm that had *Ganoderma* will contract the disease. Some studies suggest that the fungus infests a tree's root system slowly and may take as many as 10-20 years to kill the tree. Other studies have concluded that *Ganoderma* is a natural occurring element of many mature trees. New information has found that *Ganoderma* may be quite a bit more aggressive in killing trees than originally thought. This information makes this disease quite dangerous considering that *Ganoderma* attacks the structural root system.

Trees have two primary root systems. The fibrous root system uptakes the water and nutrients. The structural root system of a tree holds the tree into the ground preventing it from tipping over. Once *Ganoderma* has begun to degrade the structural roots of the tree it quickly becomes unstable. This makes the tree very susceptible to a complete tree failure.

One major issue with *Ganoderma* is many trees with this disease often appear to be healthy to the untrained eye. Many trees have a decent looking canopy, dieback with dead wood in the canopy and no fungal conks on the trunk. Some trees have many fungal conks on the trunk or other tree parts, and no signs of dieback in the canopy. If a tree is showing any signs of *Ganoderma*, further investigation should be done to determine the extent of the damage to the structural roots and heartwood of the tree. Unfortunately, *Ganoderma* is incurable. Once this fungus has begun to colonize the tree's systems

there is no treatment or cure for the disease. The best preventative measure for ensuring this fungus to set it is to avoid root injury. This isn't all that likely in an urban forest, but fortunately after some sleuthing, many trees with *Ganoderma* don't need immediate removal.

Ganoderma lucidum, commonly known as the Lingzi mushroom, is frequently used in Traditional Chinese Medicine. Its popularity extends to Japanese and Korean medicine, and it has been making its way west. *Ganoderma lucidum* has anti-oxidative effects when supplemented. It also has a therapeutic effect on insulin resistance, reduces the risk of prostate cancer, and can help treat a variety of conditions associated with metabolic syndrome. The Lingzi mushroom is well known for its anti-cancer effects. It is able to activate natural killer cells, increasing their activity and the body's ability to fight tumours. Supplementing *Ganoderma lucidum* reduces the chances of metastasis, which is when cancer spreads to another part of the body. *Ganoderma lucidum* has a variety of mechanisms, but they are focused on moderating the immune system. The Lingzi mushroom is able to reduce immune system activity when the system is overstimulated, and bolster the immune system when it is weakened. In general, *Ganoderma lucidum* increases the amount of active immune system cells. Though further research is needed to confirm these effects, *Ganoderma lucidum* shows promise for a wide variety of cancer-related therapies. It has been shown to be an effective adjunct therapy, which means it improves health when taken alongside other medications, for breast cancer, hepatitis, fatigue syndrome, and prostate cancer. There are not many promising supplements with anti-cancer properties available over-the-counter but *Ganoderma lucidum* appears to be one of them.

Common species: *Ganoderma applanatum* - Also known as the artist's conk. An infestation of this species was the main factor in the loss of the Anne Frank Tree. *Ganoderma lucidum* - Also known as reishi or lingzhi. A very valuable medicine in Asian herbal medicine, known as the "King of Herbs". *Ganoderma multipileum* - A genomic study in 2009 discovered that populations of *G. lucidum* in Tropical Asia are actually a separate species. *Ganoderma philippii* - A plant pathogen. *Ganoderma pseudoferreum* - Responsible for the root rot of cacao, coffee, rubber and tea trees. *Ganoderma tsugae* - A polypore which grows on conifers, especially hemlock; thus the common name, hemlock varnish shelf. Similar in appearance to *Ganoderma lucidum*, which typically grows on hardwoods.

Industrial significances of *Ganoderma*: *Ganoderma* are wood-decaying fungi with a cosmopolitan distribution. They can grow on both coniferous and hardwood species. They are white-rot fungi with enzymes that allow them to break down wood components such as lignin and cellulose. There has been significant research interest in trying to harness the power

of these wood-degrading enzymes for industrial applications such as bio pulping or bioremediation.

Summary: In the present article how the *Ganoderma* (Ganodermaceae) destroy the trees as bio- de-foresting the foliage is being defined. Because trees are the major assets of the forests. This is a type of root pathogen, *Ganoderma lucidum*, generally enters a tree through wounds, tears, cuts or damaged roots. Most trees in forests can be affected by this disease. This is called wood decaying fungi of the living trees. It is mainly affecting roots of trees. The species has been separated into multiple phylogenic groupings based on DNA analysis. This fungus it is well adapted as a saprophyte and often fruits on stumps or roots for many years after a tree has been removed. The medicinal importance and other biological significances with special references to pharmaceutical properties, active components also isolated. But although it is necessary to document the species in the forest, it results the percentage of live trees loss.

*An education isn't how much you have
committed to memory,
or even how much you know.
It's being able to differentiate between
what you know and what you don't.*

- Anatole France

*Education is the ability to listen to almost anything
without losing your temper or your self-confidence.*

- Robert Frost

ECOLOGICAL REJUVENATION OF MANDAKINI RIVER – A CASE STUDY

By
Madhukar Swayambhu

Mandakini – as the name suggests, Mand (मन्द) = slow, aakini (आकनी) = flow, is the river flowing from Madhya Pradesh to Uttar Pradesh, towards North. One of the very few rivers flowing from South to North.

Though it is a small river of mere 50 kilometers, originating from Satna district in Madhya Pradesh and culminating to Yamuna River in Uttar Pradesh at Rajapur village, but it still is of huge socio-economic value and is considered to be the lifeline of Chitrakoot (which is just a small town in Satna District of Madhya Pradesh, but a huge district in itself in the state of Uttar Pradesh). The river also creates a physical boundary between the two states.

The Mandakini River is called Paisuani in State and Central Government records. As per the government records and Geographical Survey of India reports, it originates in the Western upland of Majhgawan in district Satna (MP), travels 39km, before reaching Anusuya Ghat. In these 35 km, it is seasonal stream flowing only in monsoon.

As per the popular belief and textual reference of Shri Ramcharitmanas by Goswami Tulsidas due to which there's a huge pilgrim value attached to the river, it is at this Anusuya Ghat – where the river originates.

As per Survey of India records, at Anusuya Ghat, a number of springs from nearby hillocks enter into the river, converting it into Perennial River with the minimum flow recorded as 1.2 m³/sec in May 1993. The contiguous flow in the

river is observed only from the Anusuya Ghat, confirming the popular belief too. In Madhya Pradesh, river flows effectively from Anusuya Ghat up to Ram Ghat and find its way into Uttar Pradesh at Ram Ghat. Total length of the river in Madhya Pradesh is approximately 18 Km. The river Mandakini join River Yamuna at Rajapur in Uttar Pradesh.

Nearly half of the Chitrakoot population's thirst is satiated by water supplied from Mandakini River. The river water pulled up by motors and pumped through pipes to be stored in 0.45-million-liter tank in an over-head service reservoir.

Beside this the Ghats on the bank of river are being used for public bathing and rituals round the year. At some points the river water is also being used for irrigation. The Ghats, which are the source of pilgrim and tourist revenue, also need to be brimming with Water for the simple reason of remaining relevant to the purpose, as people not just take boat rides, but also bathe at the Ghats and carry the River Water home as souvenir. The special occasions for visiting the Ghats keep falling throughout the year from full moons to moonless nights, Sankranti till Ramnavmi, Shivratri till Deepavali – all occasions are crowd gatherers, thus the Ghat have to be perennially brimming with Water.

Thus, calling Mandakini as the lifeline of Chitrakoot, wouldn't be an overstatement at all, as it is serving not just for Water supply, but also the socio-economic purpose and is the cause of livelihood of many.

The Rejuvenation Efforts by Central & State Governments: Ministry of Environment & Forest (GoI) sanctioned a project under NRCP for abatement and conservation of Mandakini River, Chitrakoot (M.P.). The project was sanctioned on the basis of cost sharing of 70% & 30% by Central & State Government respectively. Initial estimated cost of the project was ₹ 620.0 lakhs which was later revised by the State Govt. to ₹ 882.68 Lakh on 26th February, 2018.

Environment Planning & Coordination Organization (EPCO) Bhopal was the Nodal Agency and Public Health Engineering Department Satna (M.P) along with Nagar Parishad, Chitrakoot, Distt. Satna (M.P) were the executing agencies for the project.

This was utilized for making a 4.7 MLD Sewage Treatment Plant at Chitrakoot, so solving the problem of river pollution. Furthermore, efforts were put in for dredging the river in this stretch from Anusuya Ghat till Ram Ghat, and even civil construction and pitching was done on the embankment area of various stretches.

It was the floods in the river in 2016 that forced a case in NGT resulting in to the above action. And the second flood in 2019 washed all the promises away.

It was evident that the bottom was getting filled up with sludge, which caused the overflow flooding and invading the banks on both sides. Now this flooding is not just a direct loss of the local residents, but also jeopardizes the local economy by putting a hold on tourist inflow, which causes revenue loss to the Government and livelihood losses to the people associated with tourism industry, people making livelihood by fishing and a lot of associated businesses.

The Challenges

In the given circumstances, the rejuvenation River Mandakini had some peculiar challenges

and a unique requirement, unlike most of the Waterbody rejuvenation projects –

- Water couldn't be diverted from the Ghats, as the pilgrims need it in all times. This, rules out any physical treatment with diversion, de-sludging, dredging and re-diversion / refilling of Water.
- Chemical treatment was ruled out, since the pilgrims have to bath in the Water.
- No biological invasive species like cyano-bacteria / floating islands or similar arrangements were possible, since the Ghats always need flowing Water and human interaction with the River Waters.

The Water was required to be clean and clear, at the same time it should remain good for not just bathing, but also meet the drinking Water standards, as many pilgrims carry it home for their religious beliefs and purposes.

The Ecological Rejuvenation: Therefore understanding these challenges, Nagar Parishad – Chitrakoot, on 28th December, 2019 planned to work out an experiment, wherein a new concept of Ecological Restoration of Water in association with Cownomics© Technology was to be conducted at a 500 meters stretch around Ram Ghat of Mandakini River, which was to be done in a completely in-situ conditions without any chemical, biological or heavy earthmoving physical machinery like a dredger or a JCB.

They had to ensure that there was no disruption of any activity at the Ghats and none of the pilgrim activity was getting effected during the course of treatment. The treatment started on 12th January, 2020.

It was very easy to work on the Cownomics© method, perhaps the development of the Cownomics methodology was done keeping in mind

the facilities and available arrangements of the urban local bodies. The key requirement was of 5000 liters of fresh water tanker and a pump, which is anyways available with every panchayat, municipal council and Municipal Corporation. The project implementation group, simply dilute the Cownomics © mother concoction material into fresh Water of the tanker and this dilution is sprayed through the pipe on to the surface of the River. The natural ecology was supposed to take over from here and the whole work was done by the sunlight.

Local Resident's testimony of Success: The local residents, the boatmen, the local fishermen, the pilgrims from the ashrams @ Ghats – all were giving a positive testimony about the difference observed by them in Water.

They could experience that the **viscosity of Water has reduced, the flow was better,** the

color was growing lighter from dark greenish, and the **transparency** of Water was **growing** too with a clarity in the visibility of the river bed.

They could now see the fishes in the bottom. The boatmen reported a much better ease in rowing and maneuvering the boats at the Ghats. **Weeds were reduced** and weakened, thus weren't trapping the boat pads.

During the rejuvenation process with each treatment the samples have been collected before and after treatment and the samples were submitted to the government laboratories for the complete analysis, but the reports are yet to come.

On the other hand, the look, the feel, the ambience and the user experience confirming the big observable difference is a bigger proof of success.

Invitation

The following Officers are retiring from service on attaining the superannuation on 31-3-2020.

<i>Name</i>	<i>Date of Birth</i>
1. Sri. B. Chandra Shekar, DFO.	13-03-1962
2. Sri. B. Dhanunjaya Rao, DFO.	15-03-1960
3. Sri. R. Ravinder, DFO.	24-03-1962
4. Sri. B. Venkataramana, DFO.	31-03-1960

Association of Retired Forest Officers, Telangana and Andhra Pradesh invite the officers to join the Association. For further details please contact Sri. A. V. Govindarajulu, Secretary on mobile number 9440764611 or Sri. A. Shankaran, Joint Secretary on mobile number 9494019595.

Secretary.

*When I get a little money I buy books;
and if any is left I buy food and clothes.*

- Desiderius Erasmus

NEWS AND NOTES

NGT orders probe against NGO for encroachment of public land in Govardhan: - New Delhi, Jan 31 (PTI) The National Green Tribunal Friday ordered probe by a central agency against an NGO after a plea alleged that under the garb of social service it has indulged in encroachment of public land, heritage sites and water bodies in the pilgrimage town of Govardhan in Mathura.

A bench headed by Justice Raghuvendra S Rathore said a prima-facie case of encroachment of public land, heritage sites as well as water bodies is made out against the NGO Brij Foundation.

'Therefore, State of Uttar Pradesh should have this case investigated by any central agency who shall place a report before the competent authority for appropriate orders. This is immediately warranted because of continuous destruction of environment in respect of water and water bodies,' said the bench, also comprising expert member Satyawand Singh Garbhal.

The direction came on a plea filed by Giriraj Parikrama Sanrakshan Sansthan seeking directions to Uttar Pradesh government for conducting investigation against the 'illegal' actions of Brij Foundation in respect of destruction of various conventional water sources, kunds, ponds, water bodies etc. which are situated in and around Giriraj Govardhan Parikrama Marg. PTI PKS SA

As forests burn around the world, drinking water is at risk: In Australia's national capital of Canberra, authorities are keeping a wary eye on burning forests and bushland, hoping a new water treatment plant and other measures will prevent a repeat of water quality problems and disruption that followed deadly wildfires 17 years ago.

There have not yet been major impacts on drinking water systems in southeast Australia from the intense fires that have burned more than 40,000 square miles (104,000 square kilometres) since September. But authorities know from experience that the biggest risks will come with repeated rains over many months or years while the damaged watersheds, or catchment areas, recover.

And because of the size and intensity of the fires, the potential impacts are not clear yet.

"The forest area burned in Australia within a single fire season is just staggering," said Stefan Doerr, a professor at Swansea University in England who studies the effects of forest fires on sediment and ash runoff. "We haven't seen anything like it in recorded history."

The situation in Australia illustrates a growing global concern: Forests, grasslands and other areas that supply drinking water to hundreds of millions of people are increasingly vulnerable to fire due in large part to hotter, drier weather that has extended fire seasons, and more people moving into those areas, where they can accidentally set fires.

More than 60% of the water supply for the world's 100 largest cities originates in fire-prone watersheds — and countless smaller communities also rely on surface water in vulnerable areas, researchers say.

When rain does fall, it can be intense, dumping a lot of water in a short period of time, which can quickly erode denuded slopes and wash huge volumes of ash, sediment and debris into crucial waterways and reservoirs. Besides reducing the amount of water available, the runoff also can introduce pollutants, as well as nutrients that create algae blooms.

What's more, the area that burns each year in many forest ecosystems has increased in recent decades, and that expansion likely will continue through the century because of a warmer climate, experts say.

Most of the 25,000 square miles (64,000 square kilometres) that have burned in Victoria and New South Wales have been forest, including rainforests, according to scientists in New South Wales and the Victorian government. Some believe that high temperatures, drought and more frequent fires may make it impossible for some areas to be fully restored.

Very hot fires burn organic matter and topsoil needed for trees and other vegetation to regenerate, leaving nothing to absorb water. The heat also can seal and harden the ground, causing water to run off quickly, carrying everything in its path.

That in turn can clog streams, killing fish, plants and other aquatic life necessary for high-quality water before it reaches reservoirs. Already, thunderstorms in southeast Australia in recent weeks have caused debris flows and fish kills in some rivers, though fires continue to burn.

"You potentially get this feedback cycle," where vegetation can't recolonize an area, which intensifies erosion of any remaining soil, said Joel Sankey, research geologist for the U.S. Geological Survey

The role of climate change is often difficult to pin down in specific wildfires, said Gary Sheridan, a researcher at the University of Melbourne. But he said the drying effects of wildfire — combined with hotter weather and less rainfall in much of Australia, even as more rain falls in the northern part of the country — mean that "we should expect more fires."

But climate change has affected areas such as northern Canada and Alaska, where average annual temperatures have risen by almost 4 degrees (2.2 degrees Celsius) since the 1960s, compared to about 1 degree (0.55 degrees Celsius) farther south. As a result, the forested area burned annually has more than doubled over the past 20 to 30 years, said Doerr, from Swansea University.

Although there might be fewer cities and towns in the path of runoff in those areas, problems do occur. In Canada's Fort McMurray, Alberta, the cost of treating ash-tainted water in its drinking-water system increased dramatically after a 2016 wildfire.

In the Western U.S., 65% of all surface water supplies originate in forested watersheds where the risk of wildfires is growing — including in the historically wet Pacific Northwest. By mid-century almost 90% of them will experience an increase — doubling in some — in post-fire sedimentation that could affect drinking water supplies, according to a federally funded 2017 study.

"The results are striking and alarming," said Sankey, the USGS geologist, who helped lead the study. "But a lot of communities are working to address these issues," he added. "It's not all doom and gloom because there are a lot of opportunities to reduce risks,"

Denver Water, which serves 1.4 million customers, discovered "the high cost of being reactive" after ash and sediment runoff from two large, high-intensity fires, in 1996 and 2002, clogged a reservoir that handles 80% of the water for its 1.4 million customers, said Christina Burri, a watershed scientist for the utility.

It spent about \$28 million to recover, mostly to dredge 1 million cubic yards (765,555 cubic meters) of sediment from the reservoir.

Since then, the utility has spent tens of millions more to protect the forests, partnering with the U.S. Forest Service and others. to protect the watershed and proactively battle future fires, including by clearing some trees and controlling vegetation in populated areas.

Utilities also can treat slopes with wood chips and other cover and install barriers to slow ash runoff. They purposely burn vegetation when fire danger is low to get rid of undergrowth.

Canberra's water utility has built in redundancies in case of fire, such as collecting water from three watersheds instead of two, and it can switch among sources if necessary, said Kristy Wilson, a spokeswoman for Icon Water, which operates the system. Water can be withdrawn from eight different levels within the largest dam to ensure the best-quality water, even if there is some sediment, she said.

That is paired with simpler measures such as using straw bales, sediment traps and booms with curtains to control silt, and physically removing vegetation around reservoirs and in watersheds to reduce fire fuel, she said.

Eventually, some communities might need to switch their water sources because of fires and drought. Perth, on the western coast, has turned to groundwater and systems that treat saltwater because rainfall has decreased significantly since the early 1970s, said Sheridan of University of Melbourne.

But, for now, millions of people will continue to drink water that originates in increasingly fire-prone forests.

Elephant rescued from well with physics principle. 'What an idea,' says Twitter: - The forest department along with people from the nearby village rescued the elephant using the Archimedes principle.

A heart-warming rescue of a baby elephant with the help of physics is winning the Internet. A tweet by IFS officer Ramesh Pandey gives a glimpse of the rescue efforts made by people and officials in Gumla, Jharkhand.

According to the tweet, the forest department along with people from the nearby village rescued the elephant using the Archimedes principle. Officials and locals filled the well with water to help the elephant out. The elephant was rescued without any injury.

"Heart-warming pictures of how intelligently the team @dfo gumla and villagers used Archimedes' physical law of buoyancy to save an elephant calf who fell in a well. They pumped water into well to float the elephant to surface. Great work," says the caption posted by Pandey.

Australia wildfires: Canberra declares state of emergency as massive blaze threatens capital: Authorities in Australia have declared a state of emergency for the country's capital city for the first time since 2003.

Soaring temperatures and high winds threatened to send a large bushfire spiralling out of control in Canberra's Orroral Valley and its surrounding regions, prompting the declaration on Friday.

Andrew Barr, chief minister for the Australian Capital Territory (ACT), said during a televised briefing there is "now no higher priority for the ACT government at this time than the bushfire threat.

"This fire may become unpredictable. It may become uncontrollable. The combination of extreme heat, wind and a dry landscape will place suburbs in Canberra's south at risk."

The Rural Fire Service advised residents to leave immediately and added: "Conditions are now very dangerous and the fire may pose a threat to all lives directly in its path.

"Fire crews may not be able to protect you and your property. You should not expect a firefighter at your door."

The state of emergency will stay in place for 72 hours to allow authorities greater power to order evacuations, close roads and take control of private property.

Heatwave conditions are expected to worsen, with the Bureau of Meteorology warning of strong winds and "elevated fire danger" in parts of New South Wales, while severe thunderstorms are set to hit Victoria and Melbourne.

There are currently 58 active fires in NSW, 20 in Victoria and 22 in south Australia, which authorities are warning may worsen as temperatures are forecast to reach 41C on Saturday.

ACT Emergency Services Agency commissioner Georgeina Whelan told The Canberra Times: "What we're seeing nationally and across the ACT is that we have the conditions conducive to bushfire activity, some are similar to 2003.

"What we're seeing in 2020 is the fact that we have unprecedented bushfire behaviour, as a result of the weather, the drought and the volume of fire activity that's across our landscape," she added.

In 2003, bushfires wreaked havoc and caused severe damage to suburbs and outer areas of the capital city, razing nearly 70 percent of its pastures and nature parks, and destroying most of the Mount Stromlo Observatory. Four people were killed and 470 homes were destroyed.

The current bushfire was sparked by an army helicopter that was in the area to provide support for bushfire operations, said the Department of Defence.

The helicopter crew were conducting aerial reconnaissance and ground clearance to enable access to emergency services personnel when heat from the aircraft's landing light started a grassfire underneath it while it was grounded.

The Department of Defence said in a statement: "It is deeply regrettable that our support operations have likely started this fire.

"Defence has taken immediate action to reduce the risk of fires being started by helicopters, including not using certain aircraft lighting in extreme weather conditions."

Australia is still in the early months of fire season, which has been especially fierce this summer and resulted in the deaths of 33 people and an estimated one billion native animals since September.

Here's what will happen when our Sun dies:

What do you think will happen when our Sun dies?

Scientists have predicted that around six billion years from now, the Sun will run out of fuel and die. However, researchers have found out that before the Sun calls it quit, it will expand massively and emit powerful electromagnetic radiations in the process which could pulverize the solar system's asteroids.

According to a study published in the Monthly Notices of the Royal Astronomical Society, the radiation given off by stars like our sun in their death throes can spin asteroids to such high speeds that they break apart into successively smaller fragments.

Around 90 per cent of the stars in the universe, including our own Sun, are "main sequence" stars. When these stars use up all of their hydrogen fuel, they balloon to hundreds of times their normal size. This phase -- known as the "giant branch" -- lasts a few million years, which is too short in cosmic terms.

During this time, the stars not only grow in size but also experience a huge increase in their luminosity while they emit electromagnetic radiation. As per the study, the inflated stars then shed their expanded outer layers and collapse into a dense remnant-- known as a white dwarf.

According to the lead authors of the paper, Dimitri Veras from the University of Warwick in the UK and Daniel Scheeres at the University of Colorado, the increasingly intense radiation emitted by main-sequence stars during the "giant branch" phase will be absorbed by asteroids.

As per the study, this radiation will be redistributed internally and then emitted from a different location within the asteroid. It will create an imbalance, which in turn will create a torque effect gradually spinning up the asteroid. This will lead them to break-up speed at one full rotation every two hours. This effect is known as the YORP effect, named after four scientists -- Yarkovsky, O'Keefe, Radzievskii, and Paddack -- who contributed ideas to the concept.

This torque will pull the asteroid apart into smaller pieces and the process will keep on repeating itself in several stages breaking asteroids down into smaller and smaller objects until the pieces become too small to be affected, which is between 1 and 100 meters in diameter.

According to the researchers, larger asteroids are loosely held together and have weaker internal strength, whereas, the smaller asteroids have more internal strength and don't break up easily.

Veras said that the results of the study indicate that during the sun's giant branch phase, asteroids even further away from the sun than Neptune or Pluto would be pulverized by this effect, leaving behind the asteroids that are

small and have sufficient internal strength to stay intact.

Climate crisis: One-third of all plant and animal species could be extinct in 50 years,

study suggests: In just 50 years' time, a third of all plant and animal species on our planet could be wiped out due to man-made climate change, US scientists have warned.

The damning new study of humanity's impact on ecosystems around the world examined recent extinctions due to climate change, along with rates of species movement and various projections of future climatic conditions.

The researchers said their study is probably the first to estimate broad-scale extinction patterns due to the climate crisis by using data from recent climate-related extinctions and from rates of species movements.

It is the latest research to paint a bleak picture of future biodiversity on Earth, as other scientists have warned our species is responsible for bringing about a sixth mass extinction event.

The research team, from the University of Arizona used data from 538 species at 581 sites around the globe and focused on species which had been studied at the same place at least 10 years apart.

They found 44 per cent of the 538 species had already gone extinct at one or more of the sites they had earlier inhabited.

They also generated climate data through measurements taken at the time of the earliest survey of each site and at more recent surveys.

"By analysing the change in 19 climatic variables at each site, we could determine which variables drive local extinctions and how much change a population can tolerate without going extinct," said Cristian Román-Pala-

cios of the department of ecology and evolutionary biology at the University of Arizona.

“We also estimated how quickly populations can move to try and escape rising temperatures.

“When we put all of these pieces of information together for each species, we can come up with detailed estimates of global extinction rates for hundreds of plant and animal species.”

The study identified maximum annual temperatures – the hottest daily highs in summer – as the key variable that best explains whether a population will become extinct.

But the researchers found average yearly temperatures showed smaller changes at sites with local extinction, even though average temperatures are widely used as a proxy for overall climate change.

“This means that using changes in mean annual temperatures to predict extinction from climate change might be positively misleading,” said Professor John Wiens, also of the University of Arizona.

The researchers said previous studies have focused on species dispersal – or migration to cooler habitats – as a means for animals and plants to “escape” from warming climates.

But the new research indicates most species will not be able to disperse quickly enough to avoid extinction, based on their past rates of movement.

Instead, they found many species were able to tolerate some increases in maximum temperatures, but only up to a point.

About 50 per cent of the species had local extinctions if maximum temperatures increased by more than 0.5C, and 95 per cent if temperatures increase by more than 2.9C.

Projections of species loss depend on just how much warmer the local climate will become in the future.

“In a way, it’s a ‘choose your own adventure’,” Professor Wiens said. “If we stick to the Paris Agreement to combat climate change, we may lose fewer than two out of every 10 plant and animal species on Earth by 2070.

“But if humans cause larger temperature increases, we could lose more than a third or even half of all animal and plant species, based on our results.”

The paper’s projections of species loss are similar for plants and animals, but extinctions are projected to be two to four times more common in the tropics than in temperate regions.

“This is a big problem, because the majority of plant and animal species occur in the tropics,” Mr Román-Palacios said.

Rajasthan: Villagers attack officials, cops who went to nab poachers: JAIPUR: Four foresters and policemen were injured in an attack by villagers in Sawai Madhopur when a joint team went to nab suspected poachers in Jetpur village of Khandar Tehsil on Thursday.

On a tip off, the forest staff, along with a police team, reached the village around 4am and started a search operation to arrest the poachers whose images were captured in a trap camera after they hunted a Cheetal (spotted deer) in Ranthambore Tiger Reserve (RTR). According to an official, after one poacher was caught in the raid, the villagers pelted stones. As it was dark, police and forest department personnel were injured in the sudden attack. Sources said, police also opened fire in air in retaliation to keep attackers at bay. “After reaching the village around 4am, police gheraoed the village. The houses of the poachers were al-

ready zeroed in. The team started searching the houses. After one poacher was nabbed, the villagers started pelting stones,” said a source

As per the reports, assistant conservator of forest Arvind Kumar Jha and assistant forester Mukesh Gurjar were injured along with policemen and forest staff. They are being treated at the district hospital.

Though the team returned bare-handed in the morning, two poachers surrendered around 3pm after officials put pressure on the locals. Ranthambore Tiger Project field director Manoj Parashar said, “A case has been registered under appropriate sections of Wildlife Protection Act, 1972.”

In a first, forest department uses drone for land survey: For the first time, the forest department used a drone to assess the encroachment of forest areas at Shettihalli and Chitrashettihalli villages in the Shettihalli Wildlife Sanctuary of the Shivamogga district. The department claimed that this is the first time in the country that a drone was used to conduct such an assessment. Global Positioning System (GPS) technology has been helping authorities survey and accurately mark land. But the forest department has tried a new way to conduct the survey with more accuracy.

“There is a proverb that what cannot be measured cannot be conserved. If we want to conserve the forest, we have to measure it. As all of us know, GPS has been used in the survey. We update the data in a computer system after conducting the GPS mapping. But, while doing so, people have doubts if the survey was conducted properly or not. If the land area is large,

it requires more effort. They have to go to each place to conduct the GPS mapping, which is difficult,” Chief Conservator of Forests (CCF) Mr. Srinivasulu said, adding that he thought of using drones to address the problem.

“What we are doing now is going to the area where we want to conduct the survey. We are flying drones at a height of 100 or 150 feet. The drone takes a series of photographs. We stitch those photos and overlap them in Google Map, a process which is called ‘geo reference’. When we get a geo-referenced realistic topographic map, we can find where a house exists in the forest area and the boundary of that house. When we get the realistic topographic map, we identify the area. It helps us avoid doubts in people. The survey provides data which is realistic. We are conducting this kind of survey for the first time in the district. The effort is also the first of its kind in the state, and may be in the nation too,” he said.

When asked, why Shettihalli and Chitrashettihalli were chosen for the drone survey, the CCF said there was a demand from the people to conduct the survey in these villages. “The process of the survey which would take a month, has been finished in a few days. The survey saves time, effort, money, and more than anything, will avoid confusions in people as well as the government regarding the accuracy of surveys. If a farmland is situated in an area, the survey shows the same accurately. There is no room for confusion. I hope this kind of a survey method will be widely accepted,” Mr. Srinivasulu said, adding that the issues with regard to land can be solved through drone surveys, as the district has many cases of land disputes.

***Any man who reads too much and uses his own brain
too little falls into lazy habits of thinking.***

- Albert Einstein

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.		
	Sarva Sri		12. D. Phani Kumar Naidu	27-03-1988
			13. M. Guru Prabhakar	28-03-1965
1.	D. Satyanaranayana	11-03-1949	14. G. Satish	29-03-1984
2.	S. Ashiah	15-03-1949	15. B. Venkataramana	31-03-1960
3.	D.V. Jayaram Prasad	15-03-1942	16. V. Srinivasa Rao	01-04-1965
4.	S.M. Rasheedullah	19-03-1939	17. Ch. Prakasa Rao	02-04-1963
5.	I. Janardhan	23-03-1954	18. Y. Srinivas Reddy	03-04-1971
6.	K. Muralidhar Rao	01-04-1946	19. Chalumari Santhi Swaroop	05-04-1968
7.	B. Rangaiah	05-04-1946		

S.No. Name of the Serving Officers D.O.B.

Secretary

1.	B. Shafiullah	13-03-1976
2.	Smt. Shivani Dogra	17-03-1980
3.	Vinay Kumar	26-03-1968
4.	Ravi Sankara Madugula	07-03-1967
5.	P. Srinivasa Rao	10-03-1966
6.	B. Chandrasekhar	13-03-1962
7.	B. Dhanunjaya Rao	15-03-1960
8.	Ch. Nagabushanam	15-03-1960
9.	R. Ravinder	24-03-1962
10.	Tirumala Ravikiran	25-03-1985
11.	K. Ravinder	27-03-1961



BOOK REVIEW

Title: An Autobiography of a Kodava Forester: **Language:** English:

Author: Dr Kodira Achappa Kushalapa: **Pages:** 216+VIII+8 colour pages. **Year:** 2019

Price: Rs.200/- **Typesetting:** Surina Graphics, Mysuru: **Publisher:** The Author himself.

Taken as a whole, this is one of the most compelling narrations we have had to be gone through, and we do not miss the point that the author keeps rowing the boat of his life even during storms among rocks, with prayer to the Creator in gratitude for the mercies bestowed - be them big or at times small- but rowing away from the rocks: an ideal for the younger generations to nurse and resort to, the story reading smooth, rarely having any conflicts - certain niceness rather pervading it !

This book by Dr Kushalapa punctiliously mentions all those of his family, neighbourhood, and colleagues, all he came in contact with - meticulously the book getting printed and attractively bound, for posterity to savour. Writers like him suggest something comforting that **in each of us is reposed something too deep to name and for that very reason, had survived the glittering surfaces of our age.**

Let's be optimistic that the younger generations of Malnad region in general and of Kodagu in particular will be inspired to do a better job than us as caretakers of the earth after getting the message being given by the author through this book, as we hand-over this, planet messed up and wrecked, in all probability, to the **next generation - though obligated to equip them with skills that would help them to think for themselves & make better decisions than we did, and should have nudged them towards being valued as valuable citizens of the world.** Kushalapa clearly conveys the message that no one is too small to make the difference.

It is a surreal ride, building gradually and peaking, as Kushalapa gets deputed to MoEF&CC; the hugely prolific years, however, being between 1965 and 1975; seeking to release the creative potential, through which his modest middle-class life initially passed through'- an epic story of the illustrious forester whose imaginations gleam with threads of

many colours. **He is the one who prevailed, and the one to whom all that was possible!** The author is not of the type who considers temporary despairs or passing phases of disappointments and difficulties on personal front to conclude that **life is not that meaningful. He belongs to the elite who are indeed invaluable part of this universe and have a purpose to fulfil for the conservation of biodiversity and enrich the environment,** as he believes that he is not here (on earth) by fluke, but for a grand divine reason. **We humans are, after all, endowed with many innate and unique strengths, and the intelligence to make the most with what we have, and to create a masterpiece of life - even if any support from outside is not found at times.**

An admirable trait of Kushalapa had been his ability to constantly experiment, learn new things, adapt himself to changes, and reinvent - all the while honing his skills and craft to perfection, while delivering an engrossing inquiry into the nature of familiarity. Family stories and Kodavas' tribal identity, code words, places of special interest in the neighbourhood, et al find place in his narration. And as it comes to his siblings & childhood, a quiet sadness pervades. While readers get sufficiently acquainted with the Kodavas and the landscape of Kodagu, it is more than just a history of the region. **The ethnic hill-tribes are found to have warrior-like demeanours inhibiting them.** The author gives an inspiring account of himself as a 'distinguished forester in the making', chronicling the events and opportunities coming his way -following his heart, and changing the course of his career by daring to be different. He never disregarded the great gift to pursue his career and also achieve academically, never giving-up on it, though **majority of us often show disrespect to the gifts-of-life that we are bestowed upon - unconsciously giving up on them, belittling the**

great opportunities that were come across and which were there for us to seize.

It is certainly a satisfying and worthwhile effort on the part of Dr Kushalapa to write his memoirs in this laudable form of an autobiography - not at all long by modern standards. **When we have televisions and other distractions, it requires so much concentration** to compile a book of around 200 pages,

split in 16 chapters, interspersed with thoughtfully selected photos which enhance the acceptability of the book's contents, and suffixed with ten beautiful articles. The author deserves to be complimented for his effort - that too when he is passing through eighties, handicapped with age-related problems of health, and several personal inconveniences.

(By Dr Ragotham Rao Desai)

SHORT STORY

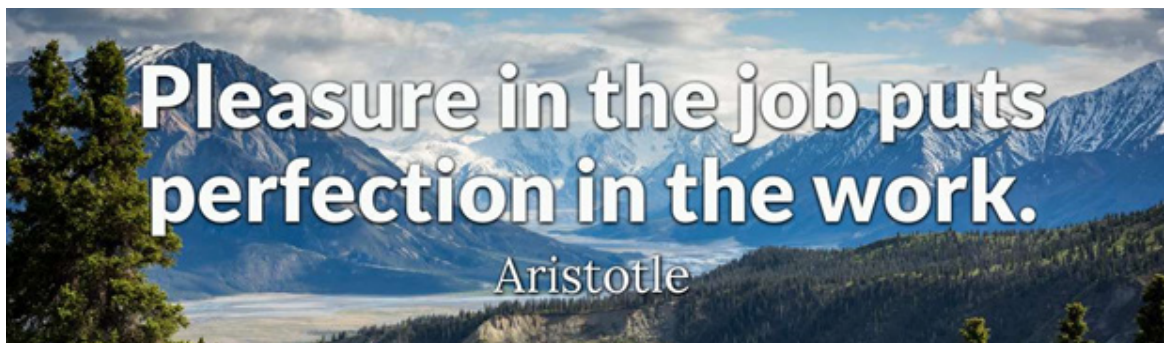
There was once a little grey planet that was very sad. The people living there hadn't looked after it, despite them having all the inventions and space ships you could ever need. They had contaminated the whole countryside so much with rubbish and pollution that there were no plants or animals left.

One day, a little boy was walking on the planet, when he passed a cave and noticed a small red flower inside. The flower was very sick - almost dying - so the boy carefully dug up the flower, with roots, soil and everything. Then, he started looking for a place where he could look after it. He searched all over the planet, but everywhere was so contaminated that there was no place the flower could possibly live in. Then he looked up at the sky and noticed the moon. It seemed to the boy that maybe the plant could survive there.

So the little boy put on his astronaut suit, and climbed into a space ship. He put the little red flower in the back, and off they went to the moon.

Far away from all that pollution - and with the boy visiting it every day to tend it - the flower started to grow. The flower was so well cared for, that it had soon germinated, giving birth to others, and these other flowers spread onto other flowers. Before long, the whole moon was completely covered with flowers.

That's why, whenever the little boy's flowers open up, for a few minutes the moon takes on a soft red sheen, like a warning light. Maybe it's telling us that if you don't look after your planet, a day will come when flowers will only be able to grow on the moon.



LEGAL NOTES

State of Orissa through Kumar Raghavendra Singh and others. Vs. Ganesh Chandra Jew

A team of six forest officers of the State of Orissa comprising Kumar Raghavendra Singh and others seized huge quantity of ivory from the possession of Ganesh Chandra Jew. After seizure of the ivory, the accused was arrested and produced before the Sub-Divisional Magistrate on the following day. The accused with the motive of taking revenge filed criminal complaint against the officers. The court of SDJM and the High Court passed orders against the officers and therefore the State of Orissa took the matter in appeal to the Supreme Court. The case in CrI. A. No.35/1988 was heard by the Hon'ble Justice Sri Dorai Swamy Raju and the Hon'ble Justice Sri Arijit Prasayat. The details of the proceedings are better illustrated by the Judgment of the court dated 24.03.2004; extracts of the same are reproduced below.

"Appellants have questioned legality of judgment rendered by Single Judge of the Orissa High Court rejecting the petition under section 482 of the Cr. P.C. Brief ground facts essentially are as follows:

Grievances were made against six officers of the Orissa State Forest Department, the present appellants by the respondent alleging that they had falsely implicated him for offences under the Orissa Forest Act 1972, the Wildlife Protection Act 1972 and being not content with the illegal acts, and seriously assaulted him thereby committing offences under sections 341, 323, 325, 506 and 386 read with section 34 of the I.P.C. They also publicly humiliated him. The appellants questioned the legality of the proceedings instituted by the respondent /complainant in ICC case No. 45/91 in the Court of SDJM at Barpada. Their primary stand was that the complaint was lodged as a counter blast as a retaliatory measure because large quantity of ivory was seized from the accused / complainant and

he could not produce any material to justify the possession thereof.

According to the complainant (Respondent), he is a reputed pharmacist and also a man of means and the owner of a cinema hall and producer of films. While on 27.02.1991 he was engaged in the professional work, the present appellants along with some police personnel entered into his clinic and arrested him alleging that some elephant tusks were recovered from his possession. He is a man having good reputation and standing in the society. There was absolutely no reason for appellants to apprehend that he would flee away from custody. Nevertheless, he was made to walk on the bazaar roads with hand cuff. He was taken to the range office and was made to sit under a tree with an intention to give an impression to the general public that he was an illicit trader in elephant tusks. An advocate requested the officials to allow the complainant /respondent to take insulin since he was a diabetic but the request was not heeded to. Complainant/respondent was treated as a criminal. On the next day he was produced before the SDJM. Before doing that some elephant tusks were put on his shoulders and photographs were taken. Appellants 5 and 6 assaulted him severely causing serious injuries. When he was produced before SDJM before evening, he was not in a proper state of mind. Subsequently, after releasing him on bail he got himself medically examined and complaint was lodged after consulting lawyers. Appellants questioned legality of the proceedings. According to them, they were officials to whom protection under section 197 of the Cr. P.C was applicable. In any event complaint was lodged with oblique motive and intention to get out of the illegalities committed and as a retaliatory measure. There was absolutely no material to take cognizance of the case. The acts

of search, seizure and arrest were done in pursuance of their official duty and they cannot be proceeded against without necessary sanction as contemplated under section 197 of the Cr. P.C. The Orissa High Court at the first instance permitted the appellants to make submission before SDJM. But the SDJM took the view that there was no necessity for sanction under section 197 of the Cr. P.C.

Matter was again brought before the High Court which by the impugned judgment was of the view that Section 197 of the Cr. P.C. has no application to the facts of the case.

In support of the appeal, learned counsel for the appellants submitted that the complaint instituted by the respondent is nothing but an abuse of the process of the court. The High Court has not taken note of the factual positions which were highlighted to substantiate the prayer for quashing of the proceedings in terms of section 482 of the Cr. P.C., particularly in the background of section 197 thereof. The alleged occurrence took place on 27.02.1991. On the next day i.e. 28.02.1991, the accused was produced before the Magistrate and prayer for remand to custody was made. Simultaneously the respondent moved for bail. While hearing the bail application, the SDJM specifically asked the respondent as to whether there was any ill-treatment. As the order of the learned SDJM clearly shows that the accused did not make any grievance of ill-treatment and on the contrary admitted that there was no ill-treatment. Interestingly, the respondent got himself examined after three days by a private doctor and the complaint was lodged after 13 days. These clearly establish the mala fides. In the complaint petition also, there was no specific allegation against many of the appellants and vague statements were made about the alleged assaults. To divert attention, the respondent filed several cases and the complaint in question is one of them. Acts

done were in accordance with law and part of official duty and the High Court was not justified in holding that section 197 of the Cr. P.C. is not applicable.

In response, learned counsel for the respondent/complainant submitted that assaults made by appellants cannot be construed to be in pursuance of official duty. Serious injuries can be gauged from the materials brought on record. It is not correct to say that any mala fides are involved. A citizen's liberties were seriously trampled by these officials who committed series of illegal acts. Merely because respondent who was in a dazed stage on account of the ignominies brought upon him by the acts of the appellants both mentally and physically battered, could not take steps instantly, that is of no consequence; more particularly when the bail application indicated the illegalities committed. Section 197 of the Cr. P.C. has therefore, rightly been held to be inapplicable."

The pivotal issue i.e. applicability of section 197 of the Cr. P.C. was carefully considered in the light of several rulings of the Supreme Court. The factual scenario of the case goes to show that on 28.02.1991 respondent was produced before the SDJM, when he was specifically asked as to whether there was any ill-treatment; learned Magistrate specifically recorded no complaint of any ill-treatment was made. This itself strikes at the credibility of the complaint. Their Lordships did not think it necessary to go into other aspects, because of the inherent improbabilities of the complainant's case and the patent mala fide. Continuance of the proceedings by way of prosecution in the case would amount to abuse of the process of law. The impugned judgment of the High Court is quashed and the appeal is allowed. Prosecution of the accused will go on uninfluenced by the judgment of the Supreme Court

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