

# VANA PREMI

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# EDITORIAL

**World Tsunami awareness Day:** -The term tsunami has its origin in the Japanese language and an English equivalent is "Seismic Sea Waves". A tsunami is a long, high sea wave caused by an earthquake or other disturbance or an arrival or occurrence of something in overwhelming quantities or amounts.

In December 2015, the UN General Assembly designated 5 November as World Tsunami Awareness Day and it is observed on 5 November every year throughout the globe. The date for the annual celebration was chosen in honor of the Japanese story of "Inamura-no-hi", meaning the "burning of the rice bunches". The significance of this day, the 5 November, to tsunami awareness can be traced back to the year 1854. A villager, in Japan, was concerned about an approaching tsunami after a high-intensity earthquake on November 5, 1854. He set up a fire to rice sheaves i.e. paddy bunches on the top of a hill to warn villagers who were in the village downhill. Fellow villagers, who went atop to put off the fire, were saved even as a tsunami destroyed their village down below. He sacrificed his entire paddy to save fellow villagers. This was the first documented instance of a tsunami early warning. To commemorate that day of "Inamura-no-Hi" (the burning of rice sheaves), a resolution was jointly proposed by 142 countries including Japan as a follow up of the third UN World Conference on Disaster Risk Reduction.

How do tsunamis occur? Tsunami are actually waves caused by sudden movement of the ocean due to earthquakes, landslides on the sea floor, land slumping into the ocean, major volcanic

eruptions or large meteorite impacts. Tsunamis occur most often in the Pacific Ocean and Indonesia because the Pacific Rim bordering the Ocean has a large number of active submarine earthquake zones. However, tsunamis have also occurred recently in the Mediterranean Sea region and are expected in the Caribbean Sea as well. On an average, two tsunamis occur per year throughout the world which inflicts damage near the source. Approximately every 15 years a destructive, ocean-wide tsunami occurs. Tsunamis are not tidal waves. Tidal waves are caused by the forces of the moon, sun, and planets upon the tides, as well as the wind as it moves over the water.

The international community came together in Japan's Hyogo region and also created the Indian Ocean Tsunami Warning and Mitigation System. This system gives warning signals of seismographic and sea-level monitoring stations and disseminates alerts to national tsunami information centers which are located in USA and the second one is in Palmer, Alaska. The purpose of tsunami day is to raise awareness among people in the world of the dangers of tsunami and stressing the importance of early warning systems in order to mitigate damage.

Though Tsunamis are rare events but it is extremely dangerous and fatal. In the last 100 years 58 of them have claimed more than 260000 lives which is highest than any other natural calamity. The highest number of deaths in that period was in the Indian Ocean tsunami of December 2004. It caused an estimated 227,000 deaths in 14 countries, with Indonesia,

Sri Lanka, India and Thailand hardest-hit. The UN General Assembly has called on all countries, international bodies and civil societies to observe the day, in order to raise tsunami awareness and share innovative approaches to risk reduction. India, along with 23 other Indian Ocean countries, participated in a tsunami mock drill on September 7 and 8, 2016. Besides increasing awareness, the drill evaluated the preparedness of participating nations to handle tsunami and other similar emergency situations. The exercise involves evacuation of around 35,000 people from the coastal regions of India. The evacuation was taken up in Andaman and Nicobar Islands, Odisha, Andhra Pradesh, Tamil Nadu, West Bengal, Kerala, Gujarat and Goa. The following are some of severe Tsunamis in the past.

April 1, 1946: triggered by an earthquake in Alaska, killed 159 people, mostly in Hawaii.

July 9, 1958: In Lituya Bay, Alaska was caused by a landslide triggered by an 8.3 magnitude earthquake. Waves reached a height of 1,720 feet (576 meters) in the bay. It sank a single boat, killing two fishermen.

May 22, 1960: The earthquake, magnitude 8.6 in Chile, created a tsunami that hit the Chilean coast. The surge, up to 75 feet (25 meters) high, killed an estimated 1,500 people in Chile and Hawaii.

March 27, 1964: The Alaskan Good Friday earthquake, magnitude between 8.4. It traveled at over 400 mph, killing more than 120 people.

Aug. 23, 1976: A tsunami in the southwest Philippines killed 8,000 on the heels of an earthquake.

July 17, 1998: A magnitude 7.1 earthquake

generated a tsunami in Papua New Guinea that killed 2,200.

Dec. 26, 2004: A colossal earthquake with a magnitude between 9.1 and 9.3 shook Indonesia and killed an estimated 227,000 people, most due to the tsunami and the lack of aid afterward. The quake was named the Sumatra-Andaman earthquake, and the tsunami has become known as the 2004 Indian Ocean tsunami.

March 11, 2011: A massive 8.9-magnitude earthquake struck northern Japan, triggering tsunamis that reportedly swept up cars, buildings and other debris and 25,000 Japanese were killed by the tsunami.

World Tsunami Awareness Day was the brainchild of Japan, which due to its repeated, bitter experience has over the years built up major expertise in areas such as tsunami early warning. The observance of the day would help to spread awareness among people across the world in matters related to the dangers of tsunami and shall stress on the importance of early warning systems in order to mitigate damage from the often devastating natural hazard. It also aims at reviving traditional knowledge about tsunamis.

Planting mangrove species and other forest species all along our coast line at least to a width of two kilometers is the best solution to overcome the dangerous, fatal and devastating property damage and loss of life.

Vana Premi wishes that we all should understand the importance of plants and plant as many seedlings as possible to save ourselves from natural calamities and increase bio-moss for our consumption.

**QMK**

## LETTERS TO THE EDITOR

Dear Sir,

I read the article by K.B.R. Reddy, 'Sri E.V.Ram Reddy & Capt. Thyabji - the Saviors of Karlapalli Forest' with great interest.

While I don't pretend to understand all the legalities of the case, I did come to the conclusion that the author being very modest has given all the credit of saving the said forest to others.

But for his perseverance and hard work coupled with his knowledge of *Ijaras*, the State could have never realized so much Forest worth so much wealth. In my humble opinion, the author is the real hero in this case.

**Jagan Mohan (Canada)**

Dear Qamar saheb,

You deserve to be congratulated, having caused (the risky task of) bringing-out Vana Premi commemorating the year's Wildlife Week with a matching Editorial, an attractive cover-design (representative of the theme) and quite a few notable articles (covering the topical subject), from rather parsimonious contributors!

An attempt appears to have been made to savor the tastes of heterogeneous readership with articles from Sarvasri, "Sharma," "Babu," "Mohan" and "Reddy," among others — "Sharma" outshining among them, while the popular "Legal Notes" (by KBR) having been given a holiday! Be it so.

Untiring efforts (to collect the articles), coupled with the required dedication (to edit the Journal) resulted so far, in punctual publication of the Monthly, keeping it afloat, devoid of any hiccups. May the "*Nau-Say Navvay Sall Tak-Ke Bachon-Ka Sathi*" continue to prosper in the days to come!

Sincerely,

**Dr. Raghotham Rao Desai**

### Innocence at its best...

A small boy parks his bicycle nearby the parliament house and walks on...

A police constable stops him and asks :Why did you park your bicycle here? Don't you know about this road? Many M.Ps, sometimes CMs, even President and cabinet ministers and politicians pass from here...

The boy replied innocently : Don't worry, I have locked my bicycle.

# VISIT TO MASAI MARA IN KENYA

By

**D.V. Rao**

My son Roop Kumar from Usa and myself visited, Masai in Kenya from 2nd September 2017 to 5th September 2017. The flight from Nairobi to Masai Mara takes about 42 minutes. There is no regular airport, The plane lands on a grass strip bounded by white stones.

The resort where we stayed is called "Olare Mara Kempinski". There are in all twelve tents like structures with all modern facilities. The tent is made up of thick canvas. The entrance to this is zip controlled. There is a lounge where dining hall, lobby & library are located.

**Masai Mara** comprises of two Divisions:

1. The Olare Motorogi conservancy
2. Masai Mara national reserve.

The total area of Masai Mara is 1510 square kilometers. The conservancy has an area of 33,000 hectares which belongs to the Masai tribe and is called as the Olare Motorogi conservancy.

The topography of the entire area is undulating with hills and streams interspersed. Generally you notice tree growth only along the banks of the streams. Otherwise it is purely grass land with occasional trees, for kilometers together. The trees are stunted in the grassland. It is mainly *Acacia Gerade*.

In this conservancy there are five safari resorts, which combinedly pay the Masai tribe annually.

The Masai tribe has agreed to limit cattle grazing in the conservancy, so as to allow prolific wild life in the conservancy area.

The Masai Mara National Reserve is controlled by the Narok County Government. The Masai Mara National Reserve is contiguous with Serengeti National Reserve of Tanzania.

Every year there is a general migration of all animals from the Kenyan forests to the Tanzanian forests and back to Kenyan forests.

The migration takes place from June to October, from Tanzanian forests to Kenyan forests. The reverse migration takes place from November till the rains start.

The reason for these migrations is purely due to availability of water and pasture.

We were lucky to see the actual migration. The migration point is the river Mara, where thousands of animals cross. It is a sight, worth seeing when animals jump into the water from the banks. Prides of lions will be waiting on the Kenyan side of the bank of the river for purposes of preying.

We were actually lucky to see a lioness attack and kill three wildebeests, one after the other in about ten minutes with the result, the migration stopped temporarily.

In one trip we were lucky to witness the pursuit of wild buffaloes by the lions and the reverse

pursuit of wild buffaloes by the lions for nearly half an hour. Actually this pursuit started because a pair of lioness attacked a wildebeest for prey purposes. Immediately a herd of wild buffaloes attacked the lioness, luckily the wildebeest got up after some time and walked off, It was really very exciting to watch this drama unfold right next to our vehicle.

**LION:** The African lion is bigger in size than the Indian lion, However the male African lion has a very small mane when compared to the Indian lion. It is only the lioness which attacks the prey for the pride.

**ELEPHANT:** The elephants travel in herds. The African elephants are much bigger in size when compared to the Indian elephant. The ears of the African elephant are very much bigger when compared to Indian elephant. The female African elephant has tusks, while the Indian one does not have tusks.

The animals commonly seen are Lion, Elephants, Hippopotamus, Wild buffalo, Zebra, Giraffe, Grants gazelle, Impala, Thomson gazelle, Topi, Common eland, Bush buck and Wildebeest. The population of the wildebeest is enormous. Cheetah and Leopard are also seen. We were rather unlucky not to see a rhino.

Lot of birds are also visible, common ostrich, brown snake eagle, bateleur, king fisher rednecked spur fowl, stork little, bee eater, lilac breasted roller, African white backed vulture and wild guinea fowl.

**TREES:** Gardenias, bosia, euphorbia, African green hurt, (tooth, brush tree) and balanytes. Trees are generally seen along the banks of streams; otherwise you rarely see trees in the grass lands. The trees in the grasslands are generally stunted and it's mainly acacia grade. Water in the streams is murky, It seems, this is due to the dissolved salts.

We had a very good guide in Mr. Raphael, who holds a degree in wild life. He has 12 years' experience. He is a remarkable guide, who took us to see the lions as close as 2 meters, So also elephants. Cheetah and leopard can be seen from a distance of about 3 to 5 meters.

We also had a balloon ride in Masai Mara. It was a rare phenomenon to see the wild life from 100 to 300 meters height; we could see lions, elephants, hippo and other animals.

We visited the Masai village; they live in groups of five families. The entire area is fenced with brush-wood; all huts are constructed along the fence leaving the central area for the cattle. A small area in one corner is reserved for the sheep. The Masai are polygamous. Women construct thatched houses. When the Masai marries for the second time, the second wife constructs the house for herself to the right of the first house. If he marries for a third time, the new wife constructs the hut to the left of the first wife's hut. The food mainly consists of milk and meat only.

# LOUD THINKING BY AN OLD FORESTER- II INTER-TRIBE DISPUTE IN ASIFABAD DISTRICT: FOREST PERSPECTIVE

By  
**J. V. Sharma**

When I saw the news report in *The Hindu* dated 13<sup>th</sup> October 2017 that protesting Adivasi Raj Gonds of Kumram Bheem Asifabad District (former Adilabad District) in Telangana State, ransacked the property in the District Collectorate, I felt really alarmed. Having spent much of my service in tribal areas and mostly in Adilabad District, I had the opportunity to see the tribes and learn about them. Raj Gonds are a docile tribe known for its simplicity, shy nature and generally law-abiding history. Instances of their turning aggressive are very few in history and they can be treated as exceptions. Kumram Bheem taking to arms in Jodeghat during Nizam's rule or Indervelli incident of 1982 when they were involved in direct confrontation with the police was either due to desperation and extreme provocation or highly sensitive incitement by external agencies.

As reported in the media, the protest by Raj Gonds is a counter to the protest by Lambada community staged on 3<sup>rd</sup> October 2017 at Kerimeri against vandalising the statue of a Lambada woman in traditional attire, installed in a tribal museum established at Jodeghat, allegedly by Gonds. Police have registered a case and started arresting persons alleged to be connected with the vandalism. Peeved by the arrests, the Gonds too are said to have sought permission for conducting a protest rally and *dharna* which was denied. Incensed further by denial, Gonds numbering about a thousand in number resorted to the incident at the Asifabad Collectorate. Two more reports appeared in *The Hindu* in close succession by S. Harpal Singh who writes extensively on Adilabad (erstwhile) District. The reporter generally traced the struggle for land by Raj Gonds and the raw deal meted out to them and how their lands passed on to non-tribals and the Lambadas over the years and how the social fabric changed after the Lambadas were notified as Scheduled Tribe. The Gonds appear to feel that they are being discriminated against by the administration. Mr. Champalal, the Collector of the District, himself a Lambada, appears to have been caught in the crossfire for alleged discrimination by him.

Allegations and counter allegations apart, the fact remains that there is an unbridgeable gap between the two tribal communities. Discrimination by the Collector is an over simplification of the problem on hand. A bureaucrat will do what in his judgment is appropriate in that particular situation. In order to assess the situation now prevailing in the tribal tracts of erstwhile Adilabad

District, the matter has to be seen in its detail as it developed over the past seven or eight decades in particular. Piece meal information gathered here and there may not lead to accurate assessment. Should we ever venture to know the truth of tribal history or the land problem they faced, it may be appropriate to fall back to authentic sources and Christoph von Furer-Haimendorf, the German anthropologist who spent his best years in the midst of Raj Gonds of Adilabad during the Nizam's Princely rule, should indisputably be the most authentic choice. I venture to quote below the excerpts from Mr. Haimendorf, to reconstruct the actual story:

"... .. we will now turn to the situation as it prevailed in Hyderabad State, both in the days of the Nizam's rule and after the incorporation of the state in the Republic of India in 1948.

"In contrast to the administration of adjoining provinces of British India, the government of Hyderabad State had not provided for any special privileges for tribal communities. Indeed it was not until the 1940s that the condition of the aboriginal tribes received serious attention from government. In his foreword to my book *The Chenchus* (vol. 1 of *The Aboriginal Tribes of Hyderabad*) the late Sir Wilfrid Grigson, then Revenue Minister of Hyderabad State, commented on the ignorance of the average Hyderabad official in regard to the tribal communities in the following words:

"This ignorance tends to blind him to the suffering and the loss of land and economic freedom that results in the backward areas when Hindu, Rohilla or Arab cultivators, contractors, traders and moneylenders are allowed freely to exploit the aboriginals. In such records therefore as can be traced of dealings between the governing classes of Hyderabad and the aboriginal and backward tribes little will be found of deliberate oppression or of positive policy. Laissez faire has been the governing principle, but, as everywhere in India, and not least in Hyderabad, laissez faire more than anything else has ruined the aboriginal and turned him into a landless drudge and serf."

"As a result of the interest shown by Grigson in the conditions in the tribal areas of Hyderabad State a number of ameliorative measures were taken which in a short time transformed the atmosphere, at least in Adilabad District, where as recently as 1940 ten Gonds had been killed in a bloody clash between tribals and policemen. A detailed account of this mini-rebellion will be given in chapter 2; here it suffices to say that the measures instituted by government soon changed the tribesmen's mood of gloom and despair to one of hope and confidence in the future."

"A beginning was made in 1943 when a scheme for the training of Gond teachers and the establishment of special schools for Gonds (see chapter 6) indicated a new concern by government for the welfare of the tribesmen. This was followed by the appointment of a special officer for the tribal area of Adilabad and the allotment of land on permanent tenure (*patta*) to numerous

aboriginals, both *Gonds* and *Kolams*, who until then had no legal titles to the land they and their forefathers had been cultivating, and who therefore had always been liable to eviction on various pretexts. These administrative measures were followed by the preparation of comprehensive legislation designed to afford protection to tribal populations. It was recognized that rights to land were of crucial importance. Only by placing aboriginals in a position in which they were safe in the possession of their land was it possible to free them once and for all from the threat of economic enslavement by moneylenders and landlords. Even before legislation recognized the aboriginals' prior rights to land, administrative measures and the instructions given to the officers entrusted with the task of looking after the tribals' welfare brought about a change in the whole attitude to the aboriginals. The extortion of illegal fees which minor government servants, such as forest guards or police constables, used to collect from the villagers was stopped or at least greatly reduced simply by the enforcement of stricter discipline, and, while it was clearly impracticable to eradicate all cases of corruption, a great improvement in the situation was soon noticeable. By 1946 the conditions of the Gonds in most parts of Adilabad District had changed out of all recognition, and a community which used to be seriously under-privileged became suddenly the "most favored" ethnic group in the region."

"In recognition of the need for the creation of a special agency for the implementation of the new policy vis-à-vis the tribals of the state, the Nizam's government established a new department known as the Social Service Department, attached to the Revenue Department and headed by the adviser for tribes and backward classes. This department consisted of a number of gazetted officers, as well as of social service inspectors and organizers, all of whom were posted in tribal areas. Existing special tribes officers, who were in the rank of deputy collector and had been drawn from the Revenue Department, were incorporated in the cadre of the Social Service Department, whereas the more junior posts of inspectors and organizers were filled by graduates with qualifications in social anthropology or sociology. After gaining experience in administration many of these directly recruited graduates were promoted to gazetted posts and ultimately replaced the special tribes officers drawn from the Revenue Department."

"The culmination of the entire tribal policy of Hyderabad State was the promulgation of an Act known as the Tribal Areas Regulation 1356 Fasli (1946 A.D.). This regulation empowered the government to "make such rules as appear to them to be necessary or expedient for the better administration of any notified tribal area in respect of tribals and of their relations with non-tribals." The substance of this regulation was incorporated in the Tribal Areas Regulation 1359 Fasli (1949 A.D) and the rules giving effect to its provisions were issued by the Revenue Department

under the title Notified Tribal Areas Rules 1359 Fasli on 16 November 1949. A schedule annexed to the Tribal Areas Regulation notified as "tribal" 384 specified villages in Adilabad District plus all the 169 villages of Utnur Taluk, and 156 specified villages in Warangal District plus all the villages of Yellandu Taluk minus 3 named villages and all the villages of the Taluk and Samasthan of Paloncha minus 6 named villages. The schedule described the area to which the Notified Tribal Areas Rules were to apply."

"These rules vested the administration of the Notified Tribal Area in the *Awwal talukdar* (collector) as agent, in the special social service officer as assistant agent, and in a panchayat to be established by the agent."

"Instead of having to deal with a multitude of officials and depending on the judgments of distant courts whose proceedings were utterly unfamiliar and incomprehensible to them, the tribals were now in the care of officers of the Social Service Department who were sympathetic to their cause and vested with sufficient powers to prevent the alienation of tribal land as well as the exploitation of tribals by unscrupulous moneylenders and others."

"The establishment of tribal panchayat backed by the authority of government gave the tribesmen confidence that they could run their own affairs without outside interference. Some of these panchayats, whose proceedings I was able to observe when revisiting Adilabad District in the early 1950s, worked extraordinarily well, and though the rules did not prescribe the keeping of records, cases and decisions were carefully recorded. In one village of Utnur Taluk, Mankapur, which had a powerful and greatly respected headman, such a panchayat, attended by members from several villages, was still functioning in 1980, even though the Tribal Areas Regulation which had invested it with authority had long been repealed."

"The Gonds of Adilabad District still speak with nostalgia of the time when the Tribal Areas Regulation was in force and officers of the Social Service Department worked among them, for at that time they were secure in the possession of their land, and exploitation by outsiders had been greatly reduced. The presence of officers of the Social Service Department acted as a check even on the high-handedness of forest guards and *patwari*, who knew that corrupt practices and the extortion of illegal fees would be reported to their superiors."

"Even after the partition of Hyderabad State in 1956 and the merging of the Telengana districts with the Andhra districts in the new State of Andhra Pradesh, the Hyderabad Tribal Areas Regulation of 1949 remained in force for seven more years. Unfortunately for the aboriginals of the Telangana

districts, this regulation was repealed in 1963 and replaced by the Andhra Pradesh Scheduled Areas Land Transfer Regulation, 1959. While the latter regulation also protected the land of tribals, prohibiting any transfer to non-tribals, it did not contain any provision for the maintenance of tribal panchayat, and more importantly stripped the social service officers of the authority and judicial powers with which the Hyderabad regulation and rules had invested them.”

“The enforcement of the laws prohibiting the transfer of tribal land to non-tribals was now left to the ordinary revenue officials, who had neither the inclination nor the time to concern themselves with the welfare of the tribals. They were also much more exposed to the pressure of vested interest than the officers of the Social Service Department had been. Moreover, the authority of the civil courts, which the Hyderabad Tribal Areas Regulation had set aside in all cases involving tribal land, was now fully restored, and any non-tribal whose occupation of tribal land was challenged by a revenue official could, and still can, lodge an appeal in a civil court. The immediate consequence of all these changes was the alienation of large areas of tribal land in several of the taluks of Adilabad District.”

“Some relief to the tribals threatened by non-tribal land grabbers was subsequently provided by amendments of the Land Transfer Regulation, 1959, enacted in 1970 and 1971, which prohibit all transfer of land in scheduled areas, not only from tribal to non-tribal but even from non-tribal to non-tribal, by providing for conducting suo-moto enquiries into non-tribal occupations of lands in tribal areas and for the restoration of such land to the tribal owner if the non-tribal is an illegal occupant, and by prohibiting attachment of tribal land in execution of money decrees. However, we shall see in chapter 2 that despite the absolute ban on transfer of immovable property in scheduled areas to non-tribals from a tribal or non-tribal except in the case of partition or devolution by succession, large areas of tribal land were in fact illegally occupied by non-tribals in the years 1970 to 1979.”

“Protection of the tribesmen against the alienation of their land, which in Hyderabad State was the cornerstone of tribal policy, seems to have taken second place in the thinking of planners as soon as tribal development was merged with the multisided activities of programmes known as Community Development and extending throughout India as part of the first Five Year Plan, which commenced in 1952. Community projects were not particularly geared to tribal needs, and in Andhra Pradesh only one out of four pilot projects covered tribal areas. In the second Five Year Plan there was a greater concentration on specific tribal areas, and the projects were now renamed Multipurpose Projects. In Andhra Pradesh four such projects covered predominantly tribal areas:

one in Utnur Taluk of Adilabad District, one in Narsampet Taluk of Warangal District, and two in Vishakhapatnam District."

"It is inherent in any plan for the protection and support of tribal minorities that whatever benefits are envisaged for tribesmen must adversely affect the interests of some more advanced sections of the population. Alienation of tribal land cannot be prevented without depriving non-tribal landowners of the chance to enlarge their holdings, a curb on exploitation by moneylenders interferes with the activities of local businessmen, and any attempt to eradicate corrupt practices of minor officials diminishes the income such persons are accustomed to derive from dealings with ignorant and illiterate tribals. Thus any policy of tribal rehabilitation arouses the opposition of vested interests. When the Nizam's government embarked on schemes for the betterment of tribals, there arose a good deal of resentment among members of the landlord and business community in districts such as Adilabad, and this resentment led to attacks on the policy in the press. But a system of benevolent autocracy could easily dismiss such attacks by vested interests, whereas nowadays similar vested interests can influence members of the Legislative Assembly and through them even ministers, with the result that measures designed to benefit tribal minorities tend to be watered down or abandoned altogether. In such situations officers sympathetic to tribals and assiduous in the protection of their interests are likely to be transferred and replaced by officers more pliable to the wishes of locally powerful pressure groups. It is therefore no exaggeration to say that only an administration of high integrity can successfully implement a policy of tribal development, and it would seem that the failure of many plans for tribal betterment is due to the lack of such integrity in high places and not to any inherent fault in the plans worked out by civil servants."

"Despite all such obstacles the allocation of land to the tribals of Adilabad which began in 1944 made good progress. By 1945 a total of 45,417 acres of land had been granted to 3,144 tribals, and by 1949 the amount of land assigned on *patta* to tribals had risen to 160,000 acres and the number of beneficiaries to 11,198. The work continued until about 85 percent of the tribal householders of Adilabad District were in possession of adequate holdings of cultivable land."

"At that time sympathetic observers seemed justified in assuming that the economic basis of the tribal populations of Adilabad was reasonably secure, and even in 1960, when I revisited the district, there appeared to be no serious erosion of the Gonds' hold on their land. We shall see, however, that any optimism one might then have expressed was premature and that the gains achieved in the 1940s were largely lost in the 1970s-."

"In a note submitted to the Government of Andhra Pradesh in 1960 at the end of a visit to Adilabad, I commented on the situation of the Gonds as follows: "There appears to be at present no acute land-problem, and as far as I could see there has been no serious encroachment on the tribals' land. The position will have to be watched, however, when the road-link Utnur-Kerimeri-Asifabad is completed, for the most isolated part of the highlands will then become more easily accessible to outsiders."

"The last sentence of this comment proved prophetic, for since this motorable road was constructed a great wave of non-tribal immigrants has swept over the highlands, and many of the Gonds and Kolams who had been settled and provided with *patta* in the 1940s were once again deprived of their land. When in 1976 I began an intensive restudy of the Gonds of Utnur, I found a scene completely transformed by the presence of innumerable settlers, most of them emigrants from Maharashtra. There were Marathas, Hatkars, Mahars, members of various merchant castes, and many Muslims, mainly from the districts of Nanded, Osmanabad, and Parbhani, as well as newly arrived Banjaras from Berar. It is not quite clear what triggered this invasion, but local Gonds as well as officials tell of the long columns of bullock carts on which the immigrants carried household goods and grain stores, and of the herds of cattle which they brought with them. It seems that this movement of non-tribals into the tribal area of Utnur reached its climax between 1965 and 1975, but even at the time of writing, i.e. 1980, it has not completely stopped. It coincided with widespread illegal fellings of forest, which resulted in the almost complete deforestation of most of the land along the road between Gudi Hatnur and Utnur."

"It seems that a few senior district officers made some feeble attempts to stop the flow of immigrants, but on the whole neither, revenue nor forest officers succeeded in stemming the tide. As many of the newcomers were able to occupy cultivable land, there can be no doubt that the minor revenue officials, and particularly *patwari* and revenue inspectors, were won over by the immigrants, many of whom were wealthy enough to pay large bribes. The laws prohibiting the acquisition of tribal land by non-tribals were obviously ignored. Otherwise it would have been impossible for recent immigrants with no claim to tribal status to acquire house sites and arable land at the expense of Gonds who lost all or most of their land within a span of a few years. The methods used to achieve this aim were similar to those which forty years earlier were used to dispossess the tribals of the lowlands. Apart from outright trickery and the bribing of *patwari* and members of the revenue staff fraudulently to change entries in the land register, the newcomers deliberately led Gonds into debt, then induced them to lease their land for limited periods, and

finally refused to return the leased land to the owner. With the connivance of *patwari* and revenue inspectors, it was then not difficult to enter the new occupier's name as "owner" in the village and tahsil records."

"The results of this process of large-scale land alienation are obvious to anyone familiar with the area. Villages on or near the motorable roads, which in the 1940s and 1950s had still a purely tribal population and consisted of the usual thatched huts, are now teeming with newcomers, whose shops and large masonry houses, often painted in garish colours, have completely transformed the scene. Many of these villages no longer contain any Gonds, whereas in others small clusters of Gond houses in traditional style form incongruous accretions to the modern settlements. Thus Indraveli, once the seat of a Gond raja, has grown into a large commercial center with brick houses and cement structures lining both sides of the road. Jainur, which in 1946 was a small Gond hamlet surrounded by forest, now contains a market center with many shops and masonry houses, all owned by non-tribals who settled there less than ten years ago."

"Visual impressions of the process of ethnic and cultural change are supported by demographic figures. While in 1951 the population of Utnur Taluk was only 34,404, the majority of whom were tribals, by 1961 it had risen to 55,099 and by 1971, to 93,823. No official census figures are available for later years, but according to a malaria survey of 1977 the population of the taluk had then reached a total of 112,000. This phenomenal increase is clearly due to immigration, and all the newcomers are non-tribals. The change in the composition of the population is reflected in the figures for tribals in individual circles. Thus in the Marlavai Circle, which in 1941 was almost totally tribal, the percentage of tribals in 1961 was still 90.38 percent, but by 1971 it had dropped to 65.52 percent, a figure which undoubtedly has diminished since then."

"A similar, though perhaps less rapid, displacement of tribals by recent immigrants occurred in Asifabad Taluk, as described by Michael Yorke in chapter 9. There too the mechanism of land alienation followed the pattern observed in the 1930s and 1940s."

**"Neither in Utnur nor in Asifabad Taluk are figures for the tribal land alienated in recent years available, but the population figures for Utnur alone speak in very clear terms. To enliven these figures and illustrate the process of the exploitation and dispossession of tribals by members of advanced communities, I propose to quote from entries in my notebooks written in 1976, 1977, and 1978, when numerous Gonds approached me with stories of oppression by non-tribals and minor government officials."**

**"In Utnur Taluk a great deal of Gond land has passed into the hands of Banjaras, an immigrant community who had moved into Adilabad District from Berar only at the turn of the century. Well organized, aggressive, and often affluent, they succeeded in dislodging many Gonds from their holdings. A recent case, in which, even the intervention of the special deputy collector (tribal welfare) had no lasting effect"**

"In the 1970s there were innumerable cases of illegal occupation of Gond land by Banjaras, but at that time there was at least the theoretical possibility of restoring the land to the Gond owners because the Banjaras were not notified as a scheduled tribe. In 1977, however, the Banjaras were included in the list of scheduled tribes (see chapter 8), and ever since then there has been no legal bar to the transfer of land from Gonds to Banjaras, for such transactions are permitted between tribals."

"The foregoing examples of the alienation of Gond land are only a small selection of the innumerable cases which I recorded in 1976 and 1977. They show that the stabilization of the Gonds' position brought about by the efforts undertaken in the years 1944 to 1949 has been largely undone. Indeed it seems that, notwithstanding the existence of legislation apparently adequate for the protection of tribal interests, the position of the Gonds is as precarious and insecure as it was in the 1930s and early 1940s. There is, however, one important difference. In those years there was still some vacant land in the forested highlands where Gonds evicted from their holdings could find at least temporary refuge. This possibility no longer exists, and many Gonds are once more threatened by the likelihood of being reduced to the state of landless laborers."

"It would be unfair to the officers charged with the protection and restoration of tribal land to give the impression that nothing was done to counteract the powerful forces engaged in the ongoing process of the illegal alienation of tribal land. The records of these officers reflect the magnitude of the problem and allow us to assess the progress made so far."

"The following statistics compiled by the special deputy collector (tribal welfare) in December 1979 relate to the acreage of originally tribal land occupied by non-tribals, the number of cases registered for restoration procedures, and the decisions reached."

"From the beginning of the scheme of restoring alienated tribal land to the original tribal owners in 1976 until the end of November 1979, 3,985 cases involving acreage of 31,943.15 acres were booked. Of these, 2,296 cases involving 19,386.15 acres were decided, including those rejected because of the inapplicability of the Land Transfer Regulation. Of the total cases, 1,642, involving

13,639.5 acres, were decided in favor of the tribals. These include causes in which an appeal by the non-tribal parties resulted in a stay-order issued by a higher authority, and such stay-orders covered a total of 1,270.3 acres.

"In October 1980 there was a balance of 1,536 undecided cases involving an area of 11,051.38 acres, and it stands to reason that, even with the help of a modest staff of assistants, a single special deputy collector would not be able to dispose within a reasonable time of so many hundreds of cases, investigate the circumstances of the alienation, and follow up his verdicts to restore possession to individual tribals. This assessment of the situation is confirmed by the fact that, despite strenuous efforts by the special deputy collector in the first nine months of 1980, only 54 cases involving 454 acres could be decided in favor of tribals. It is obvious that the administration would have to adopt more effective measures to redress the loss of tribal land, and it is regrettably not at all likely that this will happen in the foreseeable future."

"Indeed, there are ominous portents that mounting pressure by vested interests and political groups is eroding the government's determination to implement the legislation designed to protect tribal rights to land. Thus, in August 1979 the Revenue Secretariat issued instructions to district officers that further evictions of non-tribals from tribal land should be carried out only in cases relating to encroachments by persons owning more than five acres of irrigated land or ten acres of dry land. By the end of 1980 these instructions, which legal experts regard as conflicting with existing legislation, were still operative, and this leads one inevitably to the conclusion that the policy of restoring alienated tribal land no longer enjoys the support of the Government of Andhra Pradesh, even though protective legislation has so far remained on the statute book."

Despite his known sympathy for the local aboriginal tribal population, Haimendorf had given fairly truthful account of events and developments tracing the history to Nizam's period and also what happened thereafter. One may differ with opinions but the facts cannot be disputed, just for the reason he, himself was in the thick of the activity and watched the situation with committed involvement. Basing on his narration of facts, the following conclusions can be drawn:

1. The local tribal population did not practice settled farming in good old days and did not possess the land rights for a long time during the princely rule.
2. The interior tribal belt of Utnoor and Asifabad Taluks was totally inhabited by local tribes only, even after non-tribals migrated in large numbers and occupied the plains all along Godavari in Adilabad District with the formation of Nirmal-Mancherial Road, obviously displacing the local tribal population forcing many of them to migrate to interior and inaccessible central

and northern parts of the District..

3. With the arrival of Haimendorf and on account of interest evinced by Grigson, the Revenue Member of the Nizam's Cabinet, proactive measures were initiated in 1943 with the appointment of a Special Officer for Adilabad District who issued *patta* certificates to local tribes for the first time for the lands under their cultivation and also for the lands required for cultivation. This has also put an end to their exploitation by petty officials to a great extent.
4. The Hyderabad State Tribal Areas Regulation 1356 F. (1946) and subsequent Regulations promulgated in 1949 paved the way for notification of "tribal" areas and the rules for implementation.
5. 85% of the tribal households of Adilabad District had adequate land holdings of cultivable land. Their land problem thus got effectively solved.
6. The comfort of possessing land covered by title was short lived for the local aboriginal tribals. The Banjaras and other non-tribals took possession of many of their holdings by devious methods.
7. Banjaras were non-tribals and they were notified as Scheduled Tribes only in 1976. Their occupation of tribal land prior to the issue of notification is illegal.
8. Land Transfer Regulation of 1971 too did not provide significant relief to local tribals and more than 50% of their land continued to be under ineligible persons.
9. There has been unprecedented large scale influx of non-tribals into the heartland of local tribals in 70s. They included not only the Banjaras but also Muslims, Marathas and various other communities from adjoining States and from other districts of the State itself. This has brought landslide changes in ethnicity, culture and more importantly, made significant difference in the demographic picture of the area.
10. Major blame for all the irregularities is placed at the lower officials at the ground level.

I had worked as Divisional Forest Officer, Illicit Cultivation, Adilabad District during 1977 and continued to be in the District for more than another ten years uninterrupted. Mr. Haimendorf avoided mentioning the damage suffered by forests in the whole episode. The unfortunate incident of Jodeghat in which Kumram Bheem and his associates were killed in police firing in 1940 had since become folklore. It was pre-police action time and the administrative logistics were not cohesive, particularly where the communication facilities were absent. Ground situation offered opportunity for commission of indiscretions by lower functionaries of Government Departments and this is what appeared to be the case in Jodeghat. Though romanticized versions of the incident are in wide circulation, a fairly accurate picture was given by the German Professor in his book and

my article on the incident appeared in *Vana Premi* about a year ago. General insensitivity to tribal cause on the part of the Government and arbitrary behavior of lower functionaries gave rise to the unfortunate situation.

On the other side, the reservation process even in those days of princely rule was not a totally arbitrary exercise at the discretion of forest officials as is believed by many. The Collector and the Dy. Collector had decisive role to play and the procedure involved setting apart areas for *gairan* and other community needs. It was mandatory to leave 10% of the cultivated area of the village for future extensions of cultivable land. Thus in every case of forest reservation, substantial chunk of wooded land was left out of reservation proposals and kept at the disposal of revenue officials for assignment etc. Conflicts arose when the revenue officials did not consider the claims and assign the land judiciously. Unfortunately, this was the lapse in Jodeghat. Entire land is Government land under the control of revenue department until it is demarcated on the ground and reservation proceedings are initiated under the law. Conflicts also arose when the claimants insisted upon grant of the land included in a proposed block and were not interested in the land that could be spared/offered by the revenue authorities. This aspect remained unclarified in the whole episode.

As stated by the Professor, ameliorative measures commenced in 1943 yielded results and the local tribals started acquiring a new identity and the Tribal Areas Regulation 1946 strengthened their position further. When the condition of local tribal was showing improvement, the Hyderabad Tribal Area Regulation was repealed in 1963. Thereafter, AP Land Regulations came to be promulgated which proved to be ineffective in protecting the tribal interests. Much of their land passed into the hands of Lambadas and other non-tribals. It is by about this time, encroachments of forest lands by local aboriginal tribals began. There was reason to suspect that these encroachments were actively encouraged by those who usurped the tribal land and backed by the political leaders. A case of hardship to tribals was made out and orders were issued by Government for identification of pre-1964 illegal occupations and consequently vast chunks of forest lands were de reserved. Surprisingly, Professor Haimendorf did not refer to these illegal encroachments by tribals and the damage caused to forests. It is also difficult to comprehend as to why the tribals took to encroach upon forest land at all when they had adequate holdings of cultivable land as accepted by Mr. Haimendorf himself.

I must also refer to another unfortunate incident relating to forest land. Even as the process of demarcation of pre-1964 illegal occupations was coming to an end, there was a hue and cry that the forest staff entrusted with the survey of illegal cultivation patches ignored many cultivated

patches causing hardship to poor tribal farmers. The then Honorable Minister for Revenue, who incidentally hailed from Adilabad District, held a meeting in his chambers and minutes were drawn up with instructions to go into complaints filed. Once Pandora's Box is opened, forest encroachments became more rampant and there is spate of claims for regularization. The situation was exploited to the hilt by all and sundry that entered the District. They included Muslims, Banjaras, Marathas and many other communities from far off places like Osmanabad, Parbhani, Nanded and Berar from Maharashtra State. It is pertinent to mention that Banjaras are not in the list of Scheduled Tribes in Maharashtra. All the high lands and plateaus along Utnoor-Kerimeri Road and Mamidpally plateau were totally lost. Daboli Block of about one lakh acres extent which was under the process of reservation was severely fragmented into a few patches of insignificant size. Wadgaon Block, a *pucca* Reserved Forest of about 20,000 acres has totally vanished. Extensive areas from the Reserved Forest Blocks of famous Sirkonda, Sirchalma, Utnoor, Satnala, Kawal Blocks have gone under encroachments. Forest Blocks of lesser extent were the first casualty. What was once a citadel of pristine forests of luxuriant tree growth has turned into a desolate terrain with a number of new habitations sprouting every where.

It needs to be stated here that these developments transformed Adilabad District into a veritable no-man's land where anybody and everybody could come and have a piece of forest land. It has become a sort of *Dharmasala*. These developments in the District make it an ideal example of case study of monumental failure of general administration and lack of governance. Notification including the Banjaras into the list of Scheduled Tribes in 1976 made many of the community from outside to migrate to Adilabad District. I do not readily have district-wise figures of Banjaras, but figures for the undivided State speak for themselves that there is unbelievable spurt in Lambada population after 1976. Their population which was a mere 96,174 in 1961 rose to 1,32,464 in 1971 census. It recorded a phenomenal increase reaching 11,58,342 in 1981 census and escalated to 16,41,897 in 1991 census. The decadal growth which was **137.7%** during 1961-71, rose to **874.5%** during 1971-81 and then to **141.7%** during 1981-91. The percentage of increase in Lambada population in the undivided AP State in 30 years from 1961 to 1991 was as high as **1707%**. Phenomenal rise during the decade 1971 to 1981 is significant in as much as it was the period when Banjaras are notified as Scheduled Tribe (1976). No other community recorded such high growth rate in the State and not even remotely comparable.

Banjara population figures are mentioned in the context of the on-going stand-off between the Raj Gond and Banjara communities in Asifabad District. Since the issue cannot be seen in isolation, some details with regard to the said communities were provided to have the right perspective of the problem. *The Hindu* article by Harpal Singh provided some important statistics which need mention here. As per 2001 census, total ST population of the District (Undivided) is 4.16 lakh of which Raj Gond and other local Adivasi tribes constituted about 78% and the Lambada community

the remaining 22%. But the benefits of welfare measures accrued most to Lambadas. To drive home the point, it is said that there are 263 Lambada teachers in Tribal Welfare Ashram Schools as against 155 Raj Gond and handful number of other Adivasi teachers. It is further stated that in 2009-10, as many as 4213 Lambada students got scholarships including 217 for Engineering Courses and 8 for Medicine against 2793 of Raj Gond students including 2 Engineering. Similar statistics have not been worked out thereafter but they say that the disparity had further gone up between the two communities.

The story cannot be complete without mentioning the recent developments relating to tribal population. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (commonly called as Forest Rights Act) provided for issue of certificates of title to STs and Other Traditional Forest Dwellers, over forest land under their occupation as on 13<sup>th</sup> December 2005 up to 4 hectare per nuclear family, on 'as is where is' basis. Even as I refrain from commenting upon the implementation, the fact remains that more than 11% of the forest area of the Telangana State has been distributed under FRA and the forest has been severely fragmented and even the remaining forest patches had undergone honeycombing. Wildlife habitats have shrunk and their corridors are choked. Adilabad District suffered the maximum. To look at this development in the context of inter-tribe dispute, the fact remains that of all the stakeholders it is only the forests who suffered the worst.

Composite Adilabad District had the dubious distinction of having the largest area of 1,01,631 hectares of forests under encroachment in 2005. It is an increase of 935% over 9820 hectares of 1980. I think it should be enough to describe the plight of Adilabad forests.

In the final analysis, when the local aboriginal tribes did not have the land and the land rights, they are provided with the forest land for which reservation proceedings were not finalised. When their lands were usurped by the non-tribals and the Banjaras, they encroached upon the forest lands which also included notified Reserved Forests and all such illegal pre-1964 encroachments were regularised. When even these possessions were high jacked by others, not only they but even the usurpers among tribes and Other Traditional Forest Dwellers also could get their illegal possessions regularised under FRA. Now, there shouldn't be any doubt about who is the real loser.

When I said in the opening sentence of this article that I am alarmed at the present stand-off between Raj Gonds and Banjaras, I meant it because whenever such aberrations crop up, the forests end up as worst sufferer.

Now coming to the present dispute in Asifabad District, the disparity in availing the benefits of welfare schemes appears to be geneses of the dispute. It is a grey area in our Constitution which does not permit categorisation among STs and SCs. I intend dealing with the legal aspect of the issue hopefully in another article.

# THE MOGHULS: AN UNBIASED ACCOUNT

By

-Dr. B. Raghotham Rao Desai

**"...it was always in my heart to possess Hindustan..."** – "Babur-Nama"

## **Origin:**

Thundering into history out of the steppes of Central Asia, the Moghuls changed India's fortune and the destiny of her peoples.

The all-conquering Genghis Khan was among their forbears — hence the name Mogul, the Indian version of Mongol. But the forbear they most admired was another conqueror, Timur, or Tamerlane. Timur was a Turk — not a Turk of Constantinople but of their homeland in Central Asia. Though he was as much a scourge as Genghis, Timur also appreciated knowledge and embellished his capital, Samarkand, with lovely buildings. His passions flowed through the family tree. **Were they living today, one would find the great Moguls decorative guests at a cocktail party: all save one would imbibe; Islamic abstinence was not to their taste!**

Though they originated from far-off, in what was until recently Soviet Central Asia, and were Muslim lords in a realm largely Hindu, the Moguls stamped the Indian subcontinent with a culture and style remarkably resilient. Painters perpetuate a Mogul style in miniatures, delicately stroking paper with brushes made of hair from squirrel's tail — one hair to a brush. **For millions in polyglot India, Pakistan, Bangladesh, the tongue that surmounts regional differences in Urdu, dominantly a blend of Hindi with Persian, the language of the Mogul Court.** Mogul ways also survive in

politics unfortunately, for brother often fought brother!

## **Fact file:**

**At the height of their power**, in the 1500s and 1600s, **the Moguls ruled as many as 150 million people in an empire that today would stretch across Afghanistan, Pakistan, India and Bangladesh.** Akbar, whom most historians regard as the greatest Mogul — indeed, "**Akbar**" means "great" — **was the most powerful ruler of his time, far exceeding, for example, his contemporary Queen Elizabeth I of England in wealth and number of men under arms.**

Historians count six rulers as Great Moguls, beginning with Babur in 1526 and continuing through Aurungzeb, who died in 1707. **Though a cruel streak ran through them all, they often gave generous terms to enemy chieftains, and on the whole they were intelligent, urbane overlords.**

**Babur, whose name means "Tiger" – his real name being Zaheeruddin** – had become a chieftain at the age of 11, after the death of his father, who ruled the region called Fergana, now part of Uzbek and Kirghiz Republics ( Uzbekistan and Kyrgyzstan). His father, Mirza (Prince) Umar Shaikh had been in his pigeon house at the edge of a ravine. Apparently the foundation collapsed. Babur records "**Umar Shaikh Mirza flew, with his pigeons and their house, and became a falcon!**" Fortunately there were loyal nobles to aid the young leader, for Fergana was

threatened by neighbors eager for land and spoils. **Boy ruler soon became boy buccaneer**, seeking spoils himself. West of Fergana gleamed rich Samarkand which looked like an easy prize. Babur was 14 when he won it. He lost it the next year, won it again, but still could not hold on. And while preoccupied with Samarkand, he lost Fergana. Wandering south in 1504 into present-day Afghanistan, he found the ruler of Kabul unprepared to withstand a siege — this easy victory giving him a base for future conquests. **Also he felt secure enough to promote himself from mirza to padshah, “supreme lord”**; a title his successors too adopted. Kabul was his home from 1504, when he captured it, until 1526, when he launched the Mogul Empire in Hindustan. Sixteen of his children (he had seven wives) were born Kabulis. Some years after his death in Agra in 1530 his remains were removed, as was his wish, to a garden he had laid out on Kabul’s fringe. He took Qandahar, the major city, of Afghan South, **and four times enriched himself on raids into Hindustan. The fifth time he meant to stay. Although Babur had a pedigree for plunder as a descendant of both Genghis Khan and Timur (Tamerlane), he sometimes restrained his troops, conciliating foes to rule them effectively. Babur, a candid fellow, confessed in his memoir, the Babur-Nama, a moonstruck yearning for a boy**, but he fathered at least 19 children!

**Humayun (“Fortunate”) — his name being Naseeruddin** — might talk of books; in ignominious flight much of the time after succeeding Babur in 1530, he packed his library along. He was too easy going. But he emerged

on top, handing a fledgling empire to Akbar in 1556.

**Akbar (“Great”) — his real name being Jalaluddin** — would question a person about his religion— and might incorporate its tenets into one he was fashioning. He was so fascinated with religions that he created one of his own. As he discoursed on diverse subjects, it would never occur to anyone that he could not read. Infatuation with the sporting life kept Akbar, alone among the Great Moguls, essentially illiterate — he dazzled his subjects with polo, played at night with burning wooden balls.

**Jahangir (“World Seizer”) — his real name being Nooruddin** — also would talk of gardens and the artists of his court. After taking the imperial reins in 1605, he surrendered to alcohol and opium; his shrewd wife ran the empire until he died in 1627.

**Shah Jahan (“Sovereign of the World”) — his real name being Shahabuddin** — would expound from the time he seized throne in 1627, on symmetry in architecture. His taste for grandeur had a flipside of sadness; he ended life as a prisoner gazing out at his grand creation, the Taj Mahal. After the death of Mumtaz Mahal, his beloved queen during childbirth during 1631, the grief-stricken ruler created for her the quintessential Mogul tomb, where he joined her in 1666.

**Finally Aurangzeb (“Ornament of the Throne”) — his real name being Mohiuddin** — also known after proclaiming himself as Emperor in 1658 as **Alamgir (“Seizer of the Universe”)**. He thought music and pomp sinful, and he’d decline

a drink, by saying “thank you!” Possessed of bulldozing determination, he expanded the empire to its greatest limits in spite of his nobles cursing Deccan, during his 26 year campaign against peoples such as Marathas — a conflict aggravated by puritanical Aurangzeb’s policies. But while he was off campaigning, the empire collapsed internally.

All in all, theirs was a remarkable 181-year run of fathers and sons. Their common failing was the inability to pass on the crown without a family-fight, usually bloody.

### **Epilogue:**

Happening to be 17<sup>th</sup> successor to the Mogul throne after the inexorable dissolution sets in at the death of Aurangzeb in 1707, and eventually the last, Bahaddur Shah II was a gentle man, poet and calligrapher. Under the pseudonym “Zafar” he composed some memorable poetry in Urdu——contemporary to Ibrahim “Zouq” and Asadullakhan “Ghalib” —— but had the misfortune to sit on the throne of Delhi in 1857, the year of fire & storms.

On a May morning, mutinying Indian troops of East India Company galloped to the Red Fort and displayed a rare confidence in the aging monarch. Though respected by many in India, his kingship was a fiction. His family, of the lineage called Mogul, had been under the British thumb for half-a-century. By the evidence, he wanted no leading hand in the Sepoy Mutiny (which we now call a war for Independence), but he could not avoid being swept along on the bloody tide. And when the fighting was done, vengeance began. Bahaddur Shah was incarcerated, accused of abetting the mutiny and

of being at least an accessory to the massacre of 49 European-descended-citizens.

**Three and a quarter centuries of sovereignty would crash in the Mogul high temple, the *Diwan-i-khas*, the private audience hall within the Red Fort —— where diplomats and courtiers had once been dazzled by the gold and jewels of the Peacock Throne.** To this sanctum wizened Bahaddur Shah was brought humiliatingly for a trial, under guard and made to stand as an accused. Witnesses were called, documents presented before the military judges, who were seated. Sentence was pronounced: exile to Burma (present day Myanmar).

He was led away, while he, an epitome of misfortune, sadly looked-up for one last time, at the Persian-script flowing above the pavilion’s arches: the majesty of his ancestors having been proclaimed thus in the chiseled characters —— “If there is a paradise on earth, it is this, it is this, it is this!” Bahaddur Shah might have found, in all probability, the legend mocking, and might have managed a little smile within his flowing-beard, knowing that Mogul glory would endure long, beyond that day —— indeed, it is veiled by the mists of time.

Bahaddur Shah died in exile in 1862, and was buried there, within prison walls of Rangoon (present day Yangon), after his request to at least bury his body in his native country India was unceremoniously turned down by the British.

*“Umar-daraz maang-kar laaye the chaar-din,*

*Do aarzo-me kat-gaye do intezaar-mae”*

*“Kithna bad-naseeb-hai “Zafar” dafn-ke-liye,*

*Do-gaz zameen-bhi na-mili kooy-e yaar-mae.”*

## RED SANDERS (*Pterocarpus santalinus*) – WHETHER ENDEMIC SPECIES?

By  
Dr.Akula Kishan

**1. Introduction;** *Pterocarpus* is a well-recognised genus of trees and woody climbers, there are only four species found in India, *Pterocarpus dalbergioides*, *P. indicus*, *P. marsupium* and *P. santalinus*. Out of these four species, International Union for Conservation of Nature (IUCN) has listed *P. indicus* and *P. marsupium* as vulnerable and *P. santalinus* as endangered. *P. dalbergioides*, an endemic species of Andaman, has not been classified by IUCN due to data deficiency (IUCN, 2014).

*Pterocarpus santalinus* (Family: Fabaceae) an endemic species restricted to Southern parts of Eastern Ghats of India. Being a commercially important tree of Indian forests, it is popularly known as Red Sanders, Red sandalwood, Almug and Saunders wood. Red Sanders is a typical leguminous species of tropical dry deciduous forests of Andhra Pradesh being localized and predominantly confined to YSR Kadapa district. It is distributed in an area of approximately 5160 sq.km in its geographical spread of scattered forests and in elevated parts of Chittoor, Cuddapah and Nellore districts of Seshachalam hill ranges (150 to 900 m). It is also found partly distributed in the Arcot and Chengalpattu districts of Tamil Nadu and also in Karnataka. It is

reported that *P. santalinus* occurs in other countries like China, Pakistan, Sri Lanka and Taiwan, but must have been an introduced species.

In its natural habitat, the temperature varies from a minimum of 11° C to a maximum of 46° C and rainfall varying from as low as 100 mm to 1,000 mm indicative of the excessive dry climate prevailing throughout the year. The tree prefers growing in hilly terrain and their slopes and soils in general are shallow, poor, stony and well drained. About 82% of the natural population occurs in subsurface formation of quartzite indicating the soil preference for its growth. It is a heavy light demander and avoids waterlogged areas. Some of the important associated species of *P. santalinus* are *Pterocarpus marsupium*, *Chloroxylon swietenia*, *Hardwickia binata*, *Anogeissus latifolia* and *Albizia lebbeck*).

**2. Endemism;** Endemism is the ecological state of a species being unique to a defined geographic location, such as an island, nation, country or other defined zone, or habitat type; organisms that are indigenous to a place are not endemic to it if they are also found elsewhere. The extreme opposite of endemism

is cosmopolitan distribution. An alternative term for a species that is endemic is **precinctive**, which applies to species (and sub specific categories) that are restricted to a defined geographical area.

There are three major difficulties encountered by those dealing with the phenomenon of endemism: a semantic problem, the absence of a clear conceptual framework, and an analytical problem. First, the terms endemic and endemism are used in the literature in unclear or contradictory ways.. Following the usage that tends to prevail among zoogeographers, a species or other taxon is regarded as **endemic to an area if it occurs only in that area**. To speak of a taxon as endemic in this context without specifying an area is meaningless. Since geographic ranges of taxa change with time, time must also be specified, or at least understood. Second, a conceptual model is provided in which only changes in ranges (occurring frequently) and speciation (occurring relatively rarely) is seen to change the percentage of endemism in any given area.

**3. Occurrence of Red Sanders;**The Species *Pterocarpus santalinus* is no more restricted to the exclusive region in Andhra Pradesh , and its occurrence is seen in India as well as other countries. However, commercial value timber is seen to be available in Andhra Pradesh.

#### **4. Government of Andhra Pradesh 'U' turn**

(**source:Times of India, 11.04.2015**);Forsaking an environmental cause for monetary gain, the Andhra Pradesh government wants the Centre to lift the ban on felling the endangered and precious red sander trees. The state government has written to the Union forests ministry for removing red sanders from the endangered list, a move that has attracted protests from environmentalists.

Red sanders was placed on the endangered list by the Convention on International Trade in Endangered Species (CITES) in 1995. The International Union for Conservation of Nature seconded CITES two years later. The AP government declared the wood endangered after the Centre's recommendation on the grounds that the species faced threat of extinction. As late as 2012, the state government had stuck to its earlier decision to keep red sanders in the endangered list.

But AP has now done a U-turn arguing that the tree is no more endangered. In its letter, AP has listed the five major criteria for a species of flora to be declared endangered. They are: There should be 50 per cent reduction of the species in the last three generations; the extent of occurrence should be in less than 5,000 sq. km; at least 20 per cent of the plant should have been felled; only 250 mature trees should remain; and, in the next 100 years, the existence of the species should be projected to be

reduced to 20 per cent. The government says red sanders trees do not meet any of these conditions. It stresses that the precious wood is available in the Seshachalam forests in an area of about 5,500 sq. km and there are 1.4 crore red sanders trees.

### **5. Amended Forest Act is non-deterrent**

**(Source: The Hindu, 22.08.2017);** Though red sanders smuggling had been going on for four decades in the Seshachalam biosphere in Chittoor and Kadapa districts and the adjoining wildlife sanctuaries in Kurnool, Prakasam and Nellore and the vital transit zone of Anantapur, the magnitude and seriousness of the crime surfaced in 2013 with the brutal killing of two forest officials, allegedly by a mob of woodcutters in the thickets near Tirumala.

During the last two years (2015-16), the police and the Task Force had booked 970 cases against 11,723 people, belonging to A.P., Tamil Nadu, Karnataka, and northern States.

Of these a remarkable number of 7,187 were arrested and among them 7,164 were remanded in jails with terms of one month to six months. As many as 6,745 accused came out of jail on bail. By June end this year, only 442 accused were lodged in jails as under trials. Alarming, the conviction rate is just one per cent.

Senior police officers pursuing the cases deplored that nearly 1,000 warrants had remained pending since two years. When the A.P.

Forest Act 2016 (Amended) came into effect, the police and the forest officials went agog with statements that it would prove to be an effective deterrent to the smugglers with enhanced punishments for the guilty and extension of remand periods for the accused.

This Act also enabled the officials in the ranks of Divisional Forest Officer and Deputy Superintendent of Police to process the attachment of the properties of the accused based on the findings of their investigation. But, in reality, the picture proved otherwise.

Not only police and forest officials, but judicial and forensic labs officers observe that red sanders smuggling is a highly specialised crime and it definitely required separate law-enforcing modules. The regular staff in, police and forest wings working for red sanders protection are not a match to the colossal spectrum of the crime and its perpetrators.

For instance, the Red Sanders Task Force has fewer than 150 personnel against its regular strength of about 500.

Though it has a police station to run by itself, shortage of staff made its functioning slack and pursuit of the cases ineffective.

The regular civil police are mostly confined to the plain-area crimes, protocol and *bandobust* duties. The forest wing personnel are left with no option but to depend on the police for escort in combing operations and filing of cases.

A couple of senior police personnel said going after the elusive accused with fake addresses in the hilly areas of T.N. districts and crisscrossing the hamlets of the Jawadi Hills was like going on a wild goose chase.

Except for some statistics of the accused, their arrests and bail, neither the police nor the forest departments hold any mechanism for maintenance of scientific data of the crime.

The departments lack coordination and instances of meetings for evolving combined strategies are rare. The departments are also handicapped in the absence of any fool proof management to record the details of the accused, including their photographs or fingerprints.

The pursuit against red sanders smuggling is further bogged down as the officials could not initiate any effective talks with their T.N. and Karnataka counterparts in seeking their cooperation. Despite the gravity of the crime, the officials do not move beyond their radius to approach the State-level or Central agencies looking after the environmental and ecological concerns.

It is also observed that it had become a routine that thousands of accused are remanded but let off on bail. Instead of looking at the jails as

centres of correctional opportunities, the perpetrators in most cases are reportedly making them the breeding grounds for red sanders smuggling, luring other inmates who are not smugglers.

**6. Conclusion:** The Red sanders wood is not endangered as is projected and it needs to be taken out of CITES as per the facts mentioned above. The removal of restrictions would facilitate the easy marketing of the produce thereby reducing the smuggling. The propagation of the species is also to be encouraged, and it is seen that in the plantation drives in both Telugu States, the seedlings of Red Sanders are also being distributed. The Non-detriment study for *Pterocarpus santalinus* taken up by Institute of Forest Genetics and Tree Breeding, Coimbatore (2012) recommended for no legal harvesting till the study of the extent of availability outside wild trees is to be done. But the study did not recommend on status of endemism. The status of Red Sanders is not endangered as per parameters laid down by IUCN, hence it should be taken out of the list of endangered species, thereby conduct free sale of Red Sanders recovered, as is done for teak and thus have fewer problems in protection of the timber and Red sanders Forests.

**Husband :** How many times I told you not to look at mobile while cooking?  
"No Salt and tamarind in the rasam"

**Wife :** How many times I also told you not to watch mobile when you eat? .....  
It is not rasam but you added water to rice "

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

<b>S.No.</b>	<b>Name of the member</b>	<b>D.O.B.</b>			
	Sarva Sri		8.	Sanjeev Kumar Gupta	26-11-1970
			9.	P.Raghuveer	30-11-1960
1.	P.S.Sankar Reddy	09-11-1936	10.	Anoop Singh	01-12-1965
2.	C.Sivasankara Reddy	10-11-1951	12.	K.Lohitasyudu	01-12-1957
3.	G.K.Reddy	12-11-1931	13.	D.Bheema	15-11-1967
4.	K. Prabhakar Rao	01-12-1950	14.	D.V.Reddy	15-11-1964
5.	C.Madukar Raj	19-11-1951	15.	G.Mukund Reddy	16-11-1978
6.	D.Nagagopala Rao	23-11-1952	16.	V.Prabhakar Rao	26-11-1964
7.	K.Venkat Ramudu	23-11-1948	17.	K.Damodar Reddy	28-11-1967
8.	K.Murali Krishna Rao	29-11-1940			
9.	A.H.Moosvi	05-12-1936			
10.	P.K. Sharma	01-12-1956			

**Secretary**

<b>S.No.</b>	<b>Name of Serving Officers</b>	<b>D.O.B.</b>
1.	Pushkar Srivatsava	07-11-1957
2.	Alan Chong Teron	05-11-1976
3.	Elusing Meru	11-11-1957
4.	A.K.Srivatsava	13-11-1957
5.	P.Ram Mohan Rao	15-11-1962
6.	Anand Kumar Jha	25-11-1969
7.	Kanwar Jit Singh	25-11-1959



# TRIP TO MYSTICAL KINNAUR: HIMALAYA

By  
**K. Santok Singh**

Most people know Himachal Pradesh as beautiful tourist destination, with the queen of hills, Shimla finding pride of place in most itineraries to this Himalayan region. There are ofcourse other areas such as Chamba, Dharamshala, Palampur and Mandi which see tourists flocking there from other parts of the country. There is a recent phenomenon, however, of many heading towards remote, stark and yet resplendent Kinnaur towards the Eastern part of HP that borders Tibet. A large percentage of those, that brave this daunting journey proceed further into Spiti and then into Lahaul to complete the famous loop at Manali. So imagine my excitement, when during a recent trip to Chandigarh, to be with our youngest daughter, she suggested a sojourn into verdant Kinnaur. The fact that she had an armyman friend, who could help with the logistics in this far away area, convinced my wife and me to agree to her exciting proposition.

I, my wife and younger daughter set out from Chandigarh and after a long and winding ride through Shimla, we were finally beginning to arrive into unchartered territory as we saw the first glimpses of the mighty Sutlej River which

enters India at the famous Shipki La pass, located high on the ancient Hindustan-Tibet trade route in Kinnaur. We halted the night at Jakhri near Rampur, the erstwhile headquarters of the Bushahr Kingdom and the home of the present Chief Minister of the state, himself a descendant of the Bushahr dynasty. We were still though in Shimla district but Kinnaur awaited, just an hour away. Early next morning, we drove past Jeori and up a steep winding road into Sarahan to pay our obeisance at the Bhimakali temple, one of the 51 acknowledged *Shaktipeeths*, with some breathtaking views of the snowcapped peaks of the Great Himalayan Mounting Range. The architecture of the temple is unique and typically Kinnaur and ofcourse the thousands who pray to the goddess every year have implicit faith in her prowess, not to mention my daughter, who was on her third visit there. Having obtained our blessings, we drove to Karcham, our overnight halt located at the mouth of the famous Sangla Valley, also often referred to as the Switzerland of India. We were now well and truly into Kinnaur and as we drove up the precarious road into the Sangla Valley, next morning, the sheer beauty of the place

struck me. The Baspa River snaked through the Valley and the mighty Kinner Kailash mountain, the winter abode of Lord Shiva, rose majestically into the sky and towered over all else. Our drive took us to Chitkul, the last inhabited village before the Indo-Tibetan border, where a hot cup of the tea at the fittingly called, 'Hindustan Ka Akhri Dhaba' invigorated us. The gods had indeed singled out 'Sangla' and made it a very special place.

We set course the next morning, for Pooh, an army base, three hours, away from Karcham, to drive over what has been referred to, by no less than the National Geographic Channel, as the 'World's Most Treacherous Road', and for good reason too as we were to see. As we moved ahead along the Sutlej River, the road tread dangerously and almost miraculously at places over a loose, rocky and crumbly mountainside to remind you constantly about the impossibility of the road construction task. Yet we were on the route and moving ahead. After a gut wrenching ride, we arrived at Pooh, to be put at ease by our gracious army host with firm orders of course to rest and acclimatize; we were now at an altitude of about 9100 feet above mean sea level and any exaggerated movement was leading to immediate breathlessness.

After a fitful night's sleep, we hit the road the next morning to witness the most amazing confluence of the magnificent Sutlej and Spiti Rivers, an amazing spectacle of frothing anger as the tempestuous waters collided inside a deep gorge. It was indeed a remarkable and yet humbling sight. Up above, the majestic Reo Pargial, the highest mountain in Himachal stared down at us from the skies. This was Kinnaur at its rugged, wildest and most strikingly beautiful best. A short drive ahead along the Spiti River was to leave us stranded for three hours on the wrong side of a landslide which took a while for the border roads personnel to clear, reminding us, yet again about the hazardous countryside we were in. We topped off the day, that evening, by plucking the renowned Kinnaur Apple straight from the trees in the army base and my heavenly experience in this stark, remote and yet peaceful land was complete.

We drove out the next morning and I spent the return journey reminiscing about my remarkable tryst with this enticing land in deep remote Himachal and now firm in my belief that there was indeed life beyond Shimla.

*Each and every wild animal on earth has as much right to be here as you and me.*

# URBAN TREE PLANTING (URBAN HORTI-FORESTRY WITH VISION)

By  
**B.M.T. Rajeev**

I had opportunities to visit three new and beautiful capital cities with well-formed roads, parks and urban tree planting along roads with parks etc. They are Columbus the capital of Ohio state in US started as new capital in 1816 (visited in June, 2013); Washington DC, capital of USA planned in 1791 and moved in 1846 (visited in July, 2013); and Canberra, capital of Australia planned in 1908 and moved in by 1927 (visited in 2017). I used the whats-app to upload beautiful scenes of urban trees in Canberra to my colleagues in Karnataka- and I saw the reaction of an Officer in Forest wing of Bengaluru urban planting... why seniors are not guiding the urban planting in Bengaluru to the standard of developed countries... this reaction made me to pen this article for the information of the readers of this magazine with vision to make urban planting a success/ people friendly.

**Introduction:** Tree is a large perennial plant with woody trunk. It grows hundreds of feet tall and lives hundreds/thousands of years depending on their varieties of spp. Trees play major roles in maintaining ecological balance in nature and their utility value is high compare to any other forms of plants.

Trees are valued high in nature due to their capacity for sequestration of carbon dioxide (CO<sub>2</sub>) from the atmosphere, then splitting it in to carbon (C) and oxygen (O<sub>2</sub>) and letting O<sub>2</sub> into atmosphere by fixing (sinking) the C in it as wood. These acts of the trees are a panacea against all the ill effects of Global Warming (GW); the byproduct of the modern Science & Technological progressed through industrial revolution, urbanization, explosion of human population causing for raise in farming areas and sink in forests/ its areas etc.

With the raise of awareness against the ever raising GW and its ill effects on weather conditions, rain fall and seasons of nature....causing droughts, cyclones, heavy rains and floods etc. the tree planting gained importance. Efforts are in full swing all over the world since 1974 (the gathering of 100 countries and declaration of '**World Environment Day**' on June, 5<sup>th</sup> of every year in 1974) to raise more trees and it has taken momentum since the turn of the 21<sup>st</sup> century to fight against GW in addition to other mitigating measures against emission of CO<sub>2</sub> and other poisonous gasses in to the atmosphere.

The governments all over the world are busy in raising more and more trees in the urban areas by making use of the avenues/ streets, parks, margins of play grounds/ public institutions and the industries and in vacant lands around. Tree planting is part of forestry as well as horticulture. But, forestry in urban areas is not a pure forestry and it has to play the role of horticulture as it has entered in to parks which were either to run by the horticulture. Hence, 'urban tree planting' has to be looked as '**Urban Horti-Forestry**' with more conscious for scenic beauty which requires more of widow-dressings as in horticulture..

The urban tree planting took off in a scientific way since 1980s in Bengaluru and slowly in other cities in Karnataka. Bengaluru gained fame in urban tree planting as a pioneer in India and its expertise was lent all over India and the government of India adopted it as a national policy since 1984 in its '*Five Year Plan Programmes*'. Karnataka is a winner of '*Indira Priyadarshini Green Award*' for Planting in Bengaluru from Government of India.

Urban Tree Planting:

1. Horti-Forestry scientific considerations in urban tree planting are many and they are as follows.....

**i. The principles of trees planting in urban are....**

1. To green the town/ city with trees of flowering, fruiting, shade giving to enhance the aesthetic and ornamental values of the urban areas.
2. To provide green shelter/ filter against wind, dust, noise and hot Sun to citizens and denizens in the city.
3. For sequestration of CO<sub>2</sub> from the air, sink C and produce and let O<sub>2</sub> in to the atmosphere.
4. To maintain the temperature of the ambient air low/ cool/ clean.
5. To provide food/ shelter to the small wild animals/birds present in the urban areas.
6. To maintain agro-climatic conditions in balance, to attract clouds and induce rains.
7. To induce infiltration of runoff in to the earth and to increase underground water table.
8. To provide soothing, inspiring and healthy environment to the citizens.
9. To utilize vacant space for production of wood-the modified form of Carbon suck from the atmosphere.

**ii. Characteristics of trees to be selected for planting in urban areas....**

1. Tree spp. should grow straight with clear bole and branch well to form beautiful crown to provide shade/ aesthetic look.
2. Tree spp. should be flowering tree with attractive colors to provide nectar / food to animals/

birds in addition to providing aesthetic value of grandeur to city.

3. Tree spp. should also fruit profusely- palatable pulpy/ berry fruits to provide food to birds and other form of animals.

4. Tree spp. should grow to moderate height, strong against wind with moderate crown.

5. Tree spp. should have long life, wood/ timber value and should be semi/ evergreen in nature.

6. Tree spp. should have pleasing physiognomy without formation of buttress, knots, crooked stems/ branches, thorns and robust rooting...

7. Tree spp. should be of known fast growing spp. for early development in the city.

iii. *Criteria for selection of tree/ species for urban planting....*

1. Tree species should fulfill most of the above cited principles and possess some of the characteristics to be selected for urban tree planting.

2. India is a biologically rich country and it is a home for many tree spp. so more importance should be given to known indigenous tree species.

3. There are more attractive and suitable exotic trees; such trees should not be forgotten since the towns/ cities are the global villages in this modern era; and the urban trees should also provide varieties to make outsiders feel homely by seeing the trees of their home lands. e.g. I could see '*Melia azadirachta*' trees planted in the street of my son's residence in Melbourne, Oz.

**iv. Grading of trees with the characteristics of the spp. for selection to plant in cities..**

There are 7-8 characteristics for selection of spp. They are.....: ..Flowers (Fl)-All trees flowers but flowers which are ornamentally attractive only have been quoted;

Fruits (Fr)- Most of the trees fruits but only edible/ pulpy fruits are taken in to consideration and not woody fruits;

Crown (Cg/Cn)- Crown is classified as good/normal; Ornamental (Or)- good looking trees are considered as ornamental trees; Grows tall(Gt); Grows strong& sturdy(Ss), Timber value tree (T):

Soft wood (w), Grows to a very big size (VB);

1.	<i>Albezziaodoritissima</i> ..... ..	—,—,Cn,Or, Gt, Ss, T
2.	<i>Albezziaprocera</i> .....	—, —,Cn,Or,Gt, Ss,T
3.	<i>Alstoniascholaris</i> .. ..	Fl, —,Cg,Or, Gt, Ss,T
4.	<i>Alstoniaspectabilis</i> ..	Fl,—,Cg, Or,Gt, Ss,T
5.	<i>Azadirachaindica</i> (Neem) .. ..	Fl, Fr,Cn,Or,Gt, Ss,T
6.	<i>Bauhinia purpuria</i> ... ..	Fl, —,Cn, Or, —,Ss, W

7.	<i>Bauhinia purpuria</i> .....	..	Fl, —, Cn, Or, —, Ss, W
8.	<i>Bauhinia variegata</i> .....	..	Fl, —, Cn, Or, —, Ss, W
9.	<i>Cassia grandis</i> ....	...	Fl, —, Cn, Or, —, —, W
10.	<i>Cassia javanica</i> .....		.Fl, —, Cn, Or, —, —, W
11.	<i>Cassia fistula</i> .....	.	Fl, —, Cn, Or, —, —, W
12.	<i>Cassia purpuria</i> .....	..	Fl —, Cn, Or, —, —, W
13.	<i>Cassia spectabilis</i> ....	..	Fl, —, Cn, Or, —, —, W
14.	<i>Couroupitaguianensis</i> (Naglinga) ..		Fl, Fr, Cg, Or, Gt, Ss, W
15.	<i>Dalbergiasisoo</i> ....	..	—, —, Cg, Or, —, Ss, T
16.	<i>Dalbergislatifolia</i> ....	..	Fl, —, Cg, Or, Gt, Ss, T
17.	<i>Dalbergiapaniculata</i> .....	..	Fl, —, Cg, Or, Gt, Ss, W
18.	<i>Delonixregia</i> (May flower) ...		Fl, —, Cg, Or, —, —, W
19.	<i>Eucalyptus phythocarpa</i> (flowering) ....		Fl, —, Cg, Or, Gt, Ss, T
20.	<i>Eucalyptus hybrid</i> (Nilgiri) ...	..	Fl, —, Cn, Or, Gt, Ss, T
21.	<i>Ficus religiosa</i> (Aswat) ...	. . . . .	—, Fr, Cg, Or, Gt, Ss, VB
22.	<i>Ficus glomerata</i> (Cluster fig tree) ..		—, Fr, Cg, Or, Gt, Ss, VB
23.	<i>Ficus mysuriensis</i> (Goni) ..	...,	—, Fr, Cg, Or, Gt, Ss, VB
24.	<i>Grevilliarobusta</i> (Silver oak) .....		—, —, Cn, Or, Gt, Ss, T
25.	<i>Khayasenegalensis</i> (Mahogany) ....		—, —, Cg, Or, Gt, Ss, T, VB
26.	<i>Kigeliapinnata</i> .....	....	Fl, —, Cn, Or, —, Ss, W
27.	<i>Lagerstroemia speciosa</i> .....	.....	Fl, —, Cg, Or, —, Ss, W
28.	<i>Madhuca latifolia</i> .....	.	Fl, Fr, Cg, Or, Gt, Ss, T
29.	<i>Mangifera indica</i> (wild mango) .....		Fl, Fr, Cg, Or, Gt, Ss, T
30.	<i>Melia azadirachta</i> .....		Fl, Fr, Cg, Or, Gt, Ss, T
31.	<i>Micheliachampeca</i> , (Champak)... ..	.....	Fl, Fr, Cg, Or, Gt, Ss, T
32.	<i>Mellingtonia hortensis</i> (Cark wood) .....		Fl, —, Cn, Or, Gt, Ss, W
33.	<i>Mimusops elangi</i> (Bakula) ....	.....	Fl, —, Cg, Or, Gt, Ss, W
34.	<i>Muntingiacalabura</i> (Singapore cherry) .....		Fl, Fr, Cg, Or, —, Ss, W
35.	<i>Ochrocarpus longifolia</i> (Suragi) .....	.....	Fl, —, Cg, Or, Gt, Ss, W
36.	<i>Peltophorum ferrugineum</i> .....		Fl, —, Cg, Or, Gt, —, W
37.	<i>Polyalthelongifolia</i> (Ashoka) .....		Fl, Fr, Cn, Or, Gt, —, W

38.	<i>Pongamiapinnata</i> (Honge)	.....	Fl,—,Cg, Or,—, Ss, W
39.	<i>Salamaliamalabaricum</i> (Silk cotton)	.....	Fl,—,—,Cn,— Gt,—,W,VB
40.	<i>Samaneasaman</i> ( <i>Albezziasaman</i> -Rain tree)	...	Fl,—,Cn, Or,Gt, Ss,T,VB
41.	<i>Simaroubaglauca</i> ( <i>Semarouba</i> )	.....	Fl,Fr,Cg, Or, Gt Ss, T
42.	<i>Spathodiacompanulata</i> (African Tulif)	.....	Fl,—,Cg, Or, Gt, Ss, W
43.	<i>Swieteniamachrophylla</i> (Mahagony)	.....	—,—,Cg,Or, Gt, Ss,T,VB
44.	<i>Swieteniamichrophylla</i> (Mah..small leaf)	.....	—,—,Cg,Or, Gt,Ss, T,VB
45.	<i>Syzygiumcumini</i> (Jamun)	.....	—, Fr,Cg, Or, Gt, Ss, T
46.	<i>Tecomaargentina</i>	.... ..	Fl,—,Cn, Or,—,—, W
47.	<i>Terminalia catappa</i> (Wild badam)	... ..	Fl, Fr, Cg, Or,Gt, Ss, W
48.	<i>Tabebuiaavellanedae</i>	.... ..	Fl,—,—,Cn, Or,Gt,—,W
49.	<i>Tabebuiarosea</i>	.... ..	Fl,—,Cn, Or, Gt,—,W
50.	<i>Tabebuiaagyacana</i>	..... ..	Fl,—,Cn, Or, Gt,—, W
51.	<i>Thespesiapopulnia</i> ( <i>Top tree</i> )	..... ..	Fl,—,Cg, Or,—,Ss,—,W

v. Background for trees selection in urban areas.

1. The tree spp. selection depends on the agroclimatic conditions of the city; ie its soils, weather and rainfall and the space for planting, width of the road etc., these factors are more important in selecting the spp.

2. Trees not Ss i.e. not strong and sturdy has to be avoided in roads/ streets

3. Trees of Fl, Fr, Cg/n, Gt, Ss, T/W to be preferred along roads/ streets to make the urban planting aesthetically worthy.

4. Trees growing VB- very big size need to be preferred along the boundaries of grounds/ streams/ ponds and in waste lands only



Pic: Urban planting in Canberra

**vi. School of thoughts for selection of tree spp. for urban planting:**

i) Planting trees of single spp. in a street- which gives uniformity in aesthetic physiognomy in growth, greenery, flowering, fruiting, leaf shedding and grandeur etc.

ii) Mixture of tree spp. present the cosmetic scene of physiognomy, growth, greenery, flowering and fruiting and aesthetic grandeur- which always presents freshness since leaf shedding is not at a time- one or the other spp. will remain in flowers to project flowers throughout the year.

*E.g. The mixture of spp. should not be less than 10 spp. in a road and no spp. should be preferred more than 10 % except trees of known flowers and fruits to be not more than 20%.*

By looking in to the above two school of thoughts the mixture of tree spp. looks better for Indian conditions compare to/ against planting of single spp. in a street. Single spp. can be seen in FRI, campus Dehra Dun and in some developed countries where coniferous trees rule the preference.



Pic: Urban planting model in China- trees planted in straight rows

vii. My/ any Foresters' selection of trees for urban tree planting will be as follows: e.g. Bengaluru

1. 100 feet wide Double Roads:

Trees in Sl. no: 3, 5, 14, 18, 25, 26, 28, 29, 36, 42, 43, 44, 45, 47,

2. 60 feet wide Main Roads:

Trees in Sl. no: 1, 2, 4,5, 13, 14, 15, 24, 27, 31, 36, 38, 42, 43, 44, 45, 47, 48, 50.

3. 40 feet wide Cross Roads:

Trees in Sl. no: 4,5,6, 7, 8, 17, 19, 24, 27, 30,31, 32, 33, 38, 41, 45, 46, 48, 50

4. 30 feet wide Cross Roads:

Trees in Sl. no:6, 7, 8, 19, 24,27, 30,31, 32, 33, 38, 41, 48, 49,51

5. Parks:

Trees in Sl. no: 6, 7, 8, 14, 15, 16, 18, 19, 21, 22, 23, 24, 25, 27, 31, 32, 38, 40, 41, 43, 44, 45, 49

6. Boundaries of Schools/ Colleges/ Offices and Industries:

Trees in Sl. no:7, 8, 9, 10, 15, 18, 19, 21, 22, 23, 24, 27, 31, 32, 38, 40, 41, 42, 43, 44, 45, 49,

7. Open grounds of Kharab/ Ponds/ Nalahs:

Trees in Sl no: 10,11, 18, 20, 21, 23, 24, 38, 40, 42, 43,44, 45, 46, 50, 51

8. Medians between two way roads:

Sl. no: 20, 27, 32, 37,48,49,50

9. Single spp. in a street:

Sl. 19, or 27, or 32, or 37,48,49,50

10. Median below Metro elevated track:

*Generally flowering plants are planted; instead it is better to plant trees in Sl. no- 19, 27, 32, 37,*

## 2. *Seed collection*

It is a routine job and Foresters are well versed in collecting seeds from good mother trees in the right seasons but the job is generally outsourced.

## 3. *Nursery*

Raising of seedlings

Generally potted seedlings are raised for urban tree planting. Netted PBs or bigger size polythene bags of higher gauge are used for raising tall seedlings for urban planting

First the seedlings are raised in small bags by directly dibbling seeds or raised in mother beds and transplanted to smaller bags to have seedlings of 60 cm/90 cm tall to keep them ready to raise in bigger size bags in the next season.

Then the well developed and sturdy seedlings from the smaller bags of 5x6 or 6x9 inches are transplanted in to big size bags of 12x16 or 14x 18 or 16X 24 inches; instead it is better raise in bags of size 12x18 or 14X 24 or 16 X 30 inches to develop them in to 2m tall and sturdy seedlings with better tap root in a year.(In developed countries they raise up to 3m tall e.g. seen in Australia-2017)- *while transplanting to bigger size bags — lean and lanky weaklings should be mercilessly discarded and only robust and healthy seedlings should be preferred to have a good nursery stock. There should be a provision for discarding 25-33 % of the primary stock of small*

*bags in the interest of quality nursery stock to have success in the field.*

25 % of the stock should be developed for 3 m height by keeping for 2 years in bags of 16x24 inches to prefer them to the plant in busy streets. E.g. M G Road in CBD of Bengaluru and also in lieu of the trees harvested due to their posing danger to life and property/ moribund/ dead etc. (E.g. China is famous in planting tall trees in cities )

*NB: Planting seedlings of haphazard/ random in size/ quality and in spp. mixture has become the practice or way of standard in the urban tree planting in the Bengaluru city in the past decade. Any comments in the press regarding these practices have no effect towards improvement. To check these maladies the Horticulture department in Karnataka gave up the raising of nursery in favor of the nursery men societies; who produce a very quality seedlings and supply to government and to the public. It appears to be wise to outsource the raising and supply of tall seedlings from the horticulture or forestry nursery men or societies well in two or 3 years advance by prescribing name of the spp. size of bag, size of seedlings and quality with age and number of seedlings for etc. on tender....The entry of nursery men may solve the maladies affecting the standard of urban tree planting in Bengaluru city or Pay the cost of seedlings to line department in advance and lift the quality*

seedlings from the nursery. It is better to depend on out sourcing to have quality seedlings for urban tree planting (E.g. Saplings plated in urban tree



planting in Melbourne were seen tagged by the supplier with botanical name and the supplier).

Pic: 3-4 m high sapling- Eucalyptus tied to 3 wind guard posts with belt in Melbourne-photo taken immediately after planting before saucer formation and

watering in May 2017 by the Author

#### 4. **Ground preparation:**

Before pitting, the rows should be aligned with the rope. The pits should be of 60 cm or 75 cm square...

Most of the urban planting is done in pits. The size of the pits depends on the rainfall, type of soils and the width of the road margin to accommodate planting. Pitting or preparation of the site can be done in advance only in new extensions where as in inhabited areas- it has to be done just before planting, refill and then plant.

#### 5. **TreePlanting:**

Planting of tall potted seedlings of 2.00 m height has to be done in right time. Planting in the beginning of the monsoon rains is always better and gives good result. It makes the plants to benefit with all the rains of the year to develop well in the first year itself.



Pic: Planting in rows in a park, Vijaynagara, Bengaluru

*Planting should be done by holding rope so that all the stems of the seedlings stand in the rows/straight line to give a aesthetic and beautiful look to the Avenue or road when grown/developed like Horticulture park.*

The plants should be given with 20 gm Muratof-potash + 10 gm DAP while planting and a watering once if there happens to be no follow up rains. It should be followed by a soil working or hoeing in the month of December or January with watering in (March, April and May- 3 watering @ one pot per plant)



Pic: Trees planted in Zig-zag in a tender sure-road, Vijayanagar.

## 6. Tree Guards:

Protection to plants is a must in the urban areas. It depends on the locality and the pressure of



human population/stray cattle on the planted plants. Tree guards can be any of the following types.....

a) Tar coated wooden sturdy stakes of 2.5 m tall with a shoe of plastic pipe for 0.5 m deep in to the ground wrapped with phoenix

or coconut leaves including the tree-sapling with plastic thread tying at 3 points.-

e.g. All Saplings of 3-4 m height and the saplings of known-unpalatable spp. like in Para 1-iv vide SI nos.. 3,9,10,11,12,14,19,24,25, 27, 32,34,36,37,38,41,42,43,44,46.51 need only sturdy stakes as wind guards. Providing tree guards to this spp. is a waste of resources. (NB: Money being spent for tree guards for these spp. can be partly used for raising tall seedlings/ partly saved)

b) Bamboo tatts/splits fence woven in wire- it is worth for tall seedlings, if not- they will fall with white ants attack within a year and end up in waste by exposing the plant to die....

c) Rectangle or triangle tree guards of wooden sawn sizes /Niligiri tops framed with chicken

mesh with tar coating- a good TG in busy roads  
Pic: A tree guard in a busiest street leading to Opera House, Sydney, Oz

c) Tree guards of rectangle steel frame with wire mesh and painting fitted with hinges and latches in opposite corners to open and remove after 4 years for reuse.

d) Tree guard of circular/ tubular steel frame with wire mesh and painting with hinges/ latches in opposite side to open and remove after 4 years for reuse.

e) Even Aluminum framed tree guards are used in Melbourne (Central Business Dist) and steel bars in rectangle frame are also seen used in Sydney, Hobart and Columbus cities.



Pic: Aluminum tree guard in CBD, Melbourne.

f) *The steel tree guards should be salvaged for reuse in the 5<sup>th</sup> or 6<sup>th</sup> year without fail; otherwise, they will become eye sores and finally get embedded in to the stem of the trees- a danger causing element at the time of utilizing the out product- wood. Moreover, it is a waste of resource if not salvaged and reused. e.g. Even wind guard posts are salvaged in Melbourne (As seen)*

### 7. Maintenance:

Maintenance is most important to make the urban tree planting a success.

*In the 2<sup>nd</sup> year-* Two hoeing should be done- once in the beginning of the monsoon and another in the end of the monsoon. The casualties should be replaced in the beginning of the monsoon with tall seedlings. One dose of Urea @ 15 gm per plant should be administered during rains. Watering during summer for 25 % say for weaklings in April and May be done.

*In the 3<sup>rd</sup> Year-* One hoeing should be done in the monsoon with one dose of 15 gm of urea per plant.

*In the 4<sup>th</sup> year-* One hoeing should be done- at the beginning of the monsoon.

*The ground around the tree should be formed in to a basin of 15 cms. deep and left open without Asphaltting/CC bed / BS slab/ tiles pavement for 1.00 m square and later to the require size of the stem to allow the rain water that runs down on the tree trunk to percolate in to the soil. Eg: i) Flowering plants are grown around trees in US ii) Mulching with wood chips done in temperate countries around trees in OZ and USA to save trees from snow/frost*



Pic: 4x4 ft grill fitted above the pit of the tree planted- left open for nursing along road in CBD, Columbus, US (Author- showing the grill at ground level)

### 8. Training/ Pruning of trees:

This is a very important item of maintenance in which the trees will be trained to grow in the way or pattern we want. If they are left to nature most of the trees branch at lower height and develop in to dwarf trees obstructing movement below/ by the side of them. To make them to grow straight and form uniform crown they have to be trained with pruning of branches.



Pic: Pongamiatrees along street in need of pruning (Vijayanagar, Bengaluru)

*In 5<sup>th</sup> year:* Pruning of side branches of the trees up to 2/3 of its height with sharp sickle or hand saw without causing injuries to the main bole to ensure formation of clear bole for at least 3 - 5 m height

*In the 7<sup>th</sup> year:* Final pruning of the side branches of trees to train the trees to



branch above 4 m height to ensure that they will not obstruct the movement of vehicles in the road.

Pic: Pruning trees is done systematically in Melbourne city -*M.azadiracta*

### 9. **Wind fall of trees:**

Reasons for fall of trees in wind in cities are many i. The wind with force along with torrential heavy rains causes fall of trees.

Pic: Wind fallen tree- there were 3 deaths in Sept, 2017



i n Bengaluru

in addition to damage of many vehicles.

ii. The trees planted along streets or roads of cities are subjected for restrictions in development of roots- one side is storm water drain and further building which prevents the deep roots from spreading and the other side is the road- which are generally cut year after years for laying cables of electricity/telephones or pipes of water and even sanitary etc.- preventing the trees from spreading roots in two opposite sides and they have to spread roots only for two lateral sides -which acts as determinant for their anchorage against center of gravity of its body above ground and induce the trees to fall in winds when soil is wet.

iii) Trees in city roads are subjected for all sorts of damages and develop hollowness in branches which causes for breakdown of branches due to the weight of their own foliage during wind and rain.

All these cause are unavoidable which cause havoc in monsoon in cities. The remedy lies in harvest of over grown, dead, diseased and

malformed trees and replant immediately with tall saplings to minimize the damages to the life/ property/vehicles of the people.

### 10: **Harvest of danger posing, moribund and dead trees:**

Tree is also a form of life. It grows with time, matures, regenerates, suffers natural calamities and dies as any other form of lives. It has to be salvaged regularly. In addition, there are huge trees in Bengaluru and other cities posing dangers to the life and property of the citizens. They need to be enumerated and scientifically harvested to ease the accidents in the course of rains/winds and also natural falls to make use of the wealth-wood produced in the city for the society. The

Revenue earned from sale of trees should be recycled for tree planting in the urban area. There should be a mechanism to harvest trees posing danger and plant tall seedlings immediately in lieu of such trees felled/ removed.



Pic: A huge Rain tree

spread over a building in Vijayanagar, Bengaluru

### 11. **Translocation of trees:**

Conscious to save the trees in urban areas is high among the citizens. Many come forward to contribute for the cost of translocation of huge trees especially religiously noted trees like- Aswath, Neem and Nagalinga when marked for felling for..... Many times, people force the authorities to do tree transplanting.

Such operations have costed over Rs. 20 K to 100K and the results are ...tree dried up or it has started sprouting after 6 months or so.....Eg; Experiments in Bengaluru in 2014 and 2016and 2017 . This operation is nontechnical and most of the Foresters do not support it. The better way to handle this type of pressure is.... Raise 4 m -5 m tall saplings of *Ficus religiosa*,



*Azadirachta indica*, *Couroupita guianensis*, *Michelia champaca*, *Syzygium cumini* and *Ficus glabra* etc. in big size bags or plastic drums of 18 x 36 or 24 x 36 inches for 3 years to plant in lieu of the trees being demanded for translocation; so that such trees will develop faster than the trees translocated by fulfilling all the aspirations of people/ environment

Pic: A *Ficus religiosa* tree ready for translocation in Bengaluru. (How can an old tree of this size -above 4 m at GHB transplanted after clipping of all its roots and branches can survive? In reality, either it can absorb nutrients with water from soil without lateral roots /root hairs or perform photosynthesis in Sunlight without foliage; but some trees sprout with the potential of its stored food in stem/ hormones injections & special watering treatments; some dies later .... In some cases *Ficus* spp. survives as it is a spp. of latex as its stem can strike roots, but, growth will be slow and stunted with a grave yard look compare to the robust

growth in trees of 4-5 m tall saplings planted.

**12. Conclusion:** Urban tree planting is a peoples' programme. All citizens want trees grown in cities. The governments need it to be make it a permanent programme by allotting funds without forcing it to be spent or with drawing it by the end of financial year which is the root cause for all haphazard trees planting; So that the tree authorities can plan for systematic yearly plans for nursery, planting, maintenance and tree training and tree harvesting works and execute seasonally with precision. It should be included in the road extension/ development works and transferred to forestry wing which is bound to execute as per seasons and render accounts in tune with the financial cannon of rules.

The Urban tree planting should have **vision:** 1) only selected tree species should be planted with tall seedlings of 2 m and above in line with base of fertilizer. 2) Tree guards/ sturdy stakes given, nursed and pruning done to make them grow fast/straight. 3) Diseased, moribund and oversized trees harvested and replanted with tall saplings of 3m and above in lieu of the harvested. 4) Grants once made by govt. to remain for at least 2 yrs without withdrawal to enable the Tree Officer to accomplish the job- as it is a job to deal with life form.

**Reference:** 1). Forest Conservations Concerns in India By S. Shyam Sunder and S. Parameshwarappa 2) Urban Tree Planting by Sri N.V. Ramachandra Chetty, in Vanavikas magazine. 4) Urban tree planting By S.G. Neginhal; 4). My experience in urban tree planting during my service and observations in Karnataka and abroad.

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# SALAR JUNG MUSEUM HYDERABAD

## Source Internet

Located on the southern bank of the river Musi, Salar Jung Museum is popularly known for its one of largest one-man collections of the world. The museum is one of the Hyderabad sightseeing places that must be visited. What makes this Salar Jung Museum all the more special is its location. It is located quite close to the other tourist spots of Hyderabad such as Charminar, Mecca Masjid, High Court, State Central Library, etc.

Salar Jung Museum of Hyderabad is the third largest museum in India. It was declared open in the year of 1951 by the first prime minister of India, Jawaharlal Nehru. In the year of 1968, the entire collection was shifted to the present building.

Spread across an area of 10 acres and built in 2 floors, the Salar Jung Museum present wide range of artefacts which have been majorly collected by Mir Yousuf Ali Khan who is also known as Salar Jung III along with Nawab Turab Ali Khan (Salar Jung I) and his descendants. Mir Yousuf Ali Khan dedicated his entire life collecting antiques and artefacts and spent considerable amount of his wealth collecting the same from all over the world.

With a collection of close to 43000 art objects, 9000 manuscripts and 47000 printed books, Salar Jung Museum promises a rich experience to all its visitors. The museum has 38 galleries which are spread in 2 floors. The ground floor of the museum is consisted of 20 galleries while the first floor has 18 galleries. There are many coordinating sections as well such as Education Wing, Chemical Conservation Laboratory, Photo section, Display section, Reception and Sales counter.

The collection in museum is consisted of Indian Art, Far Eastern Art, European Art, Children Art, Middle Eastern Art, as well as Founders gallery and rare manuscript section. One of the major attractions of the museum is the 19th Century British Musical Clock. This clock was sold by Cooke and Kelvey of England. Veiled marble statue of Rebecca which was created by an Italian sculptor G B Benzoni in 1876 is another highlight that attracts most of the attention. Another rare object at the museum is Veiled Rebecca, a marble statue, which was brought by Salar Jung I in 1876, on his trip to Italy.

There is also a set of ivory chairs, which was presented to Tippu Sultan of Mysore by Louis XVI of France. Rehal, the jade books stand; a dagger of Jehangir, a fruit knife of Noor Jehan, both decorated with precious stones; Arabic and Persian Manuscripts; a rare manuscript on mathematics – Lilawati; valuable medical encyclopedia belonging to ancient India; rare paintings, etc., are just a few of the extensive collection here at SalarJung Museum.

Along with the enviable collection, Salar Jung museum also plays active role in organizing various workshops and exhibitions. It also publishes books in English, Urdu and Hindi languages as well as guide books and brochures, offering a complete understanding of the museum and the history behind it.

Salar Jung Museum timings are from 10 am to 5 pm on all days except Fridays. The entry fee for SalarJung Museum is Rs 10 per person, while for children it is Rs. 5 per person. For foreign tourists, the ticket price is Rs. 150 per person. You can also click photos at the SalarJung Museum with a minimal camera fee.

## NEWS AND NOTES

**Paris Goes Car Free For A Day:** -Parisians were encouraged to roller-blade, bike or stroll through the city of Light on Sunday for a “car free” day intended to leave the streets vacant for slower, clean forms of transport. Sunday marks the third time the French capital has experimented with a car ban, but it is by far the most ambitious with the zone set aside for pedestrians or cyclists covering the entire historic heart of the city-105 square kilometers.

“This initiative requires an enormous amount of preparation”, city mayor Anne Hidalgo told *Le Parisian*. Particularly because this year the zone, has been enlarged to the whole of Paris. Ms Hidalgo a Socialist was elected in 2014 promising to tackle pollution in the capital and she has focused on building new bus and cycle lanes and reclaiming roads— leading critics to see her agenda as radical and anti-car. “What is it for” grumbled Pierre Chasseray the head of the lobby group “forty millions drivers when asked about the car free day” “It is just to say that cars are not good”. The restrictions came into force at 11; 00 am local time and will last until 6; 00 pm. Although billed as “The day without cars” some exceptions apply. Taxis, buses and emergency or social services vehicles are allowed to drive.

**Pollution Killed 2.5 Million People In India, Highest In The World, Says, Report:** - Globally the number of deaths due to pollution stood at

9 million - three times more than AIDS, tuberculosis and malaria combined, the report said. As many as 2.5 million people died because of pollution in the country in 2015, a figure which is highest in the world, according to The Lancet Commission on Pollution and Health.

China takes up the second spot with 1.8 million deaths, the report in the Lancet medical journal said adding that one in six of all deaths worldwide are caused by pollution, and the vast majority occurs in developing countries.

“With globalization, mining and manufacturing shifted to poorer countries, where environmental regulations and enforcement can be lax,” said Karti Sandilya, one of the authors and an adviser to environmental group Pure Earth. Exposure to high levels of air pollution, especially over many years, can affect human respiratory and inflammatory systems, and can lead to heart disease, stroke and lung cancer. Mr. Sandilya further said, “People in poorer countries - like construction workers in New Delhi - are more exposed to air pollution and less able to protect themselves from exposure, as they walk, bike or ride the bus to workplaces that may also be polluted.” In contrast, many people in developed countries commute to air-conditioned offices in air-conditioned cars, he

told news agency Reuters in an email.

Recently, the Supreme Court banned fire crackers in Delhi and NCR on Diwali to check the menace of air pollution but to no avail.

News agency PTI reported that the online indicators of the pollution monitoring stations in Delhi on Diwali night glowed red, indicating a 'very poor' air quality as the volume of ultra-fine particulates PM2.5 and PM10, which enter the respiratory system and manage to reach the bloodstream, sharply rose from around 7 pm.

Real time pollution data appeared alarming. The Delhi Pollution Control Committee's (DPCC) RK Puram monitoring station recorded PM2.5 and PM10 at 878 and 1,179 micrograms per cubic meter at around 11 pm. The pollutants had violated the corresponding 24-hour safe limits of 60 and 100 respectively by up to 10 times.

In Chennai as well, air pollution was at an alarming high on Deepavali night. The PM10 levels at Sowcarpet in north Chennai, for instance, touched 777, compared to 180 last year - four times the level. At Triplicane near the Marina, it was 597, compared to 200 last year, a threefold rise. Kolkata's RabindraBharati University area was the worst hit with pollution level reaching "severe" at 3 am.

The Lancet report said dirty air caused the highest number of deaths — 6.5 million. The report was prepared from a research

conducted by about 40 international scientists, who used data from the Global Burden of Disease study from the Institute for Health Metrics and Evaluation at the University of Washington.

### **Laws are perfect, but their implementation**

**imperfect:** -The callousness of the executive in enforcing laws can render meaningful efforts and laws useless, said Justice J.Chelameswar of Supreme Court while narrating an incident pertaining to an important occasion planned in connection with the Hyderabad visit of the then US President Bill Clinton in 2000.

Revealing this while delivering a talk on the 'Rule of Law' at the Manthan Samvaad-2017 lecture and debate series organized at ShilpakalaVedika, the apex court judge recalled that as the then US administration was supporting erstwhile Andhra Pradesh's initiatives in IT and healthcare, the political regime in charge of AP at that time thought of making use of the US President's visit to Hyderabad to get him to launch a children's vaccination programme.

But soon, the AP government found itself in a tricky situation as no one was able to help it trace the manufacturers of the vaccine. The AP government then wrote to the central government's human resource development ministry, requesting it to furnish the addresses of the manufacturers of the vaccine in question.

“Hold your breath,” Justice Chelameswar told the gathering, “the ministry wrote back to the AP government stating that it too was not very sure of the addresses of these vaccine manufacturers. However, the Centre’s letter did advise the AP government to enquire with the staff of the World Health Organization (WHO), which has an office in Delhi”.

Happening as it did 50 years after independence, this incident depicted a very sad state of affairs, Justice Chelameswar said, pointing out that upon receiving the AP government’s letter, WHO later replied that it was not very sure of the quality of the vaccine manufactured in India and suggested some international manufacturers whose quality was certified by the world health body.

“The law dealing with these medicines is a perfect piece of legislation that is on par with similar laws of the western world. Because all these laws were made by various governments after signing the relevant international treaties, the provisions of such laws are well drafted. What is lacking is their strict enforcement the judge said, hinting that the inability of the government to strictly implement the provisions of the law had resulted in a situation where the vaccines manufactured in the Indian market were rendered anonymous and untrustworthy.

Had the law been implemented properly, the

local manufacturers would have been forced to adhere to proper quality standards, leading to their recognition by WHO and the authorities would have become aware of the existence of these local manufacturers.

### **Ancient skull from oldest tsunami victim :**

An ancient human skull discovered in Papua New Guinea is likely to have belonged to the world’s oldest-known tsunami victim, scientists revealed on Thursday.

The skull was discovered in 1929 near the town of Aitape and originally attributed to the Homo erectus species, an ancestor of modern humans, reports the BBC.

However, the scientists have now said that the area was once a coastal lagoon that was hit by a tsunami about 6,000 years ago. They believe the skull belonged to a person who died in the tsunami.

“While the bones had been well studied, little attention had previously been paid to the sediments where they were unearthed,” the BBC quoted first author James Goff, from the University of New South Wales, as saying on Thursday.

The “geographical similarities” in the sediments showed that humans had experienced tsunamis in the area for thousands of years, he said. “We conclude that this person who died there so long ago is probably the oldest-known

tsunami victim in the world.”

Researchers said the findings, published in the journal PLOS One, raise questions about whether other archaeological discoveries in coastal areas should be re-evaluated. IANS

**Karnataka Forest officer wins ‘Green Warrior’ award :** Karnataka forest officer Chandrakant R Naik has won the RBS Earth Heroes Award for



2017. The deputy range forest officer from Kali Tiger Reserve (KTR) has been selected in the ‘Green Warrior’ category which is given to an individual for exemplary work in protecting a habitat that hosts important species listed

under the Wildlife Protection Act.

A decorated forest officer, C R Naik’s working life has been spent in the recovery of KTR. During his long service in Kulgi and Kumbarwada wildlife ranges, he tirelessly confronted the poaching and timber mafia and also worked in containing forest fires. He has arrested many in forest offense cases.

Hailing from Sanekatta village of Kumta taluk in Uttar Kannada district, Naik told Express, “I am surprised, but I feel very humbled and proud that they have recognised the contributions of a field staff. My family is very proud of my achievements.” Naik’s forest knowledge is so formidable that he can identify 290 tree species, 183 birds, 60 butterflies, 38 snakes and 27 amphibians. Tracking big carnivores is his forte as he can easily identify their scent and scratch marks, etc. Further, he can identify 30 types of spiders, their behavior and habitat. He has rescued 546 snakes, including King Cobras, krait, etc in the last 10 years. His prowess in rescuing snakes and other species is well known.

**Vana Premi Congratulates Sri Chandrakant R Naik and wishes him all the best**

*We want to create a world where the environment does not need Protection. Dalai Lama.*

# LIVING IN A GREENER NEIGHBORHOOD COULD LOWER RISK OF EARLY DEATH: STUDY

By  
**Emily Chung**

A national study found that greener surroundings, like the Vancouver neighborhood pictured here, are linked to a lower risk of death among those living in Canada's 30 biggest cities. A national study found that greener surroundings, like the Vancouver neighborhood pictured here, are linked to a lower risk of death among those living in Canada's 30 biggest cities. (Lyle Stafford/Reuters)

Science and Technology Writer

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(Note: CBC does not endorse and is not responsible for the content of external links.)

Trees stretching their canopies over city streets and grass tickling the sidewalk near your home are more than just pretty, they could actually be helping you live longer, a new study suggests.

Researchers at the University of New Brunswick used census and tax data to track 1.3 million non-immigrant Canadian adults living in the 30 biggest cities across the country, from Victoria to St. John's, over 11 years starting in 2001. They measured the amount of greenery from trees, shrubs, grass and other plants within 250 meters (about two blocks) of the study subjects' homes, using postal codes and satellite data. And they found that as the amount of greenery increased, people's risk of premature death decreased

"significantly" from natural causes.

"There was a lot bigger effect than I think any of us had been expecting," said Dan Crouse, a health geographer and lead author of the study published this week in the journal *The Lancet Planetary Health*.

'Really, just having trees around where people are living is really important.'

- Dan Crouse, University of New Brunswick

Using NASA's Aqua satellite, the greenery was measured on a scale of 0 to 1. (Zero represented bare ground; 1 was complete coverage by dark green leafy plants.) The study found that each 0.15-point increase in greenness near the subjects' homes was associated with an eight to 12 per cent decrease in the risk of death over the course of the study.

Crouse said the link between greenness and lower death rates remained even after researchers accounted for the effects of air pollution.

While previous studies have shown that exposure to green space and parks can improve mental health and in some cases physical health, the researchers say this is the first big study to show a clear link between green surroundings and a lower risk of premature death.

Dan Crouse

Dan Crouse, a researcher at the University of New Brunswick, led the study. It tracked 1.3 million adults in Canada's 30 biggest cities over

more than a decade. (Rob Blanchard/University of New Brunswick)

It also suggests that green spaces don't have to be actual parks in order to have health benefits. "What we're able to show with this study is really just having trees around where people are living is really important," Crouse said.

The study found that the positive effect of green surroundings was greater for people in middle age than in other age groups.

The effect was also greater among those with higher incomes and more education, and among men compared to women. The researchers aren't sure why.

The study also couldn't tell what kind of greenery was being measured, although trees gave a higher score than grass. Nor could it explain why exposure to greenery had that kind of effect — researchers didn't know how much access people had to the green spaces or whether they were getting more exercise in greener areas, for example.

#### View of nature

But Crouse said there are benefits to living near green spaces such as golf courses even for people who don't use them.

"That space is still representing an absence of traffic congestion, an absence of the noise and pollution from cars. It's going to have a real cooling effect in an urban area," he said. "Just having a view of nature from your window ... can be restorative. There's a lot of ways that the greenness could be benefiting your health."

Dr. Gillian Booth is a researcher at St. Michael's Hospital who recently found that people who live in more walkable city neighborhoods have lower rates of diabetes and obesity. She says the

design of Crouse's study looks sound, and she has used similar techniques in her own work.

She added that the results make her wonder what it is about green surroundings that are lowering death rates, and what threshold of greenness is needed to get those health benefits.

"Where do you draw the line and say there's insufficient green space? And how much should you invest in it?" she said. "I think this is really exciting work in that it raises these types of questions."

The study, she added, highlights that the way we design our communities can have a profound influence on residents' health: "The potential reach is huge in terms of the number of people who could be benefiting from these health effects."

The study found that green spaces don't have to be actual parks in order to have health benefits. Just having trees around, as in the Roncesvalles neighborhood of Toronto pictured here, helped. (Shawn Goldberg/Shutterstock)

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## BOOK - REVIEW

Name of Book: Green Inspirational Experience in Forest Services

Name of Author: D. Raveendranathan, IFS (Rtd)

Name of the Publisher: Notion Press, Chennai – 600 031

Price: Rs. 220/-

Reviewed by: K.B.R. Reddy

The author entered Forest Service in the year 1970 in the State of Tamil Nadu and had his training for two years at the Southern Forest Rangers College (SFRC) Coimbatore. By dint of hard work and sincerity, he rose in ranks as Assistant Conservator of Forests (ACF) and Deputy Conservator of Forests (DCF) in the State Service and was appointed by promotion to the Indian Forest Service (IFS) on 01-01-2000. After distinguished service for about thirty seven years, he retired on 28-02-2007. This book is a product of his vast exercise in diverse areas.

It is for the readers or the reviewers and not for the author, to say whether or not his work is inspirational. The first few chapters on forest wealth, value of trees etc. are interestingly good. The author's description of the forest college training serves as a flashback to many alumni of their alma mater. Eviction of encroachers from forest land was then, and even now, is a knotty problem and the author not only tackled the situation diligently and tactfully that occurred at the foot of the Western *Ghat* but also described events beautifully at P. 26. The technique adopted by the author in nabbing the culprits engaged in cutting of sandalwood trees is incredible, but the delay in the disposal of the cases was avoidable. Vide P. 30. It would have

been better if the result of the prosecution was also mentioned.

Assignment of lands and granting *patta* rights to people is a power vested in the Revenue Department Officials. It is the experience of Foresters that in many cases the Revenue Officers without safeguarding public interest assign the lands to private people. When such illegal orders are passed by Revenue Officers and when corrupt Forest Officers join hands with the wrong-doer, the results are catastrophic. Raveendranathan described at P. 56 how a Revenue Divisional Officer made assignment of lands in Puliyarai Reserved Forest which resulted in a disaster when the District Forest Officer (DFO) was also a silent spectator for alteration of R.F. boundary and the DFO as well as the Chief Wildlife Warden in collusion with *pattadars* granted permission for cutting trees planted by Forest Department and ordered issue of permits for removal of timber. The author had brush with wild animals many a time and he cleverly escaped unhurt. These anecdotes in India and his observations abroad are well described. The articles on Biofertilizers, climate change, global warming etc. are highly technical and they may be useful to those who are interested in the subject.

I conclude that the author has taken enormous pains to put his pen to paper – the book in deed is insightful and inspirational to youngsters to understand the problems and prospects of forestry. The book will be a good addition to forest libraries, and forestry schools; the individuals may also add to their collection.

### Mrs. C.V. KONDA REDDY PASSED AWAY

Smt. Kausalya Devi, wife of the Late C.V. Konda Reddy, IFS, former Chief of Andhra Pradesh Forest Department passed away on 22-10-2017 at Bangaluru. She is survived and fondly remembered by son C.V. Pavan Kumar, daughter Suneetha Reddy and grand children. Our condolences to the bereaved family.

**K.B.R.**

# LEGAL NOTES

## A. Sathisha Vs. The State of A.P. Rep by the Police

A.Sathisha is the owner of ToyotoQualis Max cab bearing No. KA 04 A 6300 and this vehicle was involved in a case of contravention of the Forest Act while it was being used for carrying Red Sanders Wood weighing about 50kgs and valued Rs. 50,000/-.

The S.H.O. of Chagalamarri police station on credible information intercepted the vehicle on 20-05-2014 between C.K.Palli and mutyalampadu villages near Birds School. The police party reached the spot by about 17.15 hours. The vehicle was coming from Ahobilam area and on seeing the police party, the vehicle was reversed back suddenly to escape apprehension. However, the police could stop the vehicle from proceeding further and it was noticed that two persons besides the driver were in the vehicle and they were illegally transporting Red Sanders Wood. The driver was ChandanSateesh of Bengaluru city, old Madras road and this vehicle was illegally transporting the red sanders wood even earlier. The other two persons were Amjad Pasha and Shabbir Pasha who belonged to Bengaluru and were engaged in the smuggling of Red Sanders Wood. While the case was pending investigation, the owner of the vehicle approached the Judicial First Class Magistrate, at Allagadda, Kurnool District with a request for interim custody of the vehicle. The learned Magistrate passed an order on 27-06-2014 rejecting the request of the petitioner A. Sathisha.

Aggrieved by the order of the Magistrate, the owner of the vehicle filed Criminal Revision Case No. 1436/2014 in the High Court. The matter was heard by the Hon'ble Justice Dr. Siva Sankara Rao.

The Hon'ble High Court heard the arguments of the petitioner and also the Public Prosecutor. The points for determination in the matter were:

- (i) Whether the impugned order of the learned Judicial Magistrate, Allagadda Dt 27-06-2014 is not sustainable and to what extent the High Court can interfere in the revision petition
- (ii) To what result?

The High Court elaborately dealt with the facts of the case and examined the matter in the light of the following case law on the subject:

**1. Haji Begum Vs. State of AP:** This was a case in which a car was seized by Forest Range Officer, Hyderabad South, while it was transporting sandal wood without permit in contravention of the Sandal Wood Transit Rules. The seized property was produced before the DFO, Hyderabad and the arrested persons were produced before the Metropolitan Magistrate. The accused was remanded for (15) days in Judicial custody. The owner of the vehicle Haji Begum requested for interim custody of the vehicle and the vehicle was conditionally released by the Magistrate. The FRO questioned the order of the Magistrate in WP No. 5540/1977. It was held the Forest Act as amended has created two forums: one is the existing forum i.e. the Criminal Court and another is authorized officer. The seizing officer has a choice to produce the property before the authorized officer or to submit a report of seizure to the Magistrate concerned. A Writ appeal was filed against this order which was allowed but the order of the High court in

appeal was reversed by the Supreme Court.

**2. State of AP Vs. Anandmal Surajmal Sethia:**

In this case, the FRO seized the lorry for illegal transport, of forest produce and produced the same before the DFO Kadapa. The owner of the lorry approached the Magistrate at Rajampet and filed petition for release of the vehicle as interim custody under section 457 Cr.P.C. The Learned Magistrate ordered for release of the vehicle subject to certain conditions. Then the matter was moved before the High Court under section 482 Cr.P.C. It was held by the High Court that the Authorized Forest Officer only is competent to confiscate or release the vehicle pending investigation.

**3. DFO, Warangal vs. District Judge, Warangal:**

In this case the Hon'ble High Court held that so long as the seized vehicle is not produced before the Magistrate and that it was produced before the Authorized Officer under the Forest Act, the Authorized Officer is only empowered to confiscate or to release the vehicle.

**4. State of West Bengal Vs. Sujith Kumar Rana:**

The Supreme Court held in this case that the object of confiscation of the property involved in the forest offences is to protect and to maintain the ecological balance and to prevent the crimes under the Forest Act. The State Legislature amended the Forest Act in order to preserve the forest as National Wealth and it was within the spirit of Articles 48(a) and 58(g) of the Constitution of India. Confiscation envisages civil liability in respect of the property. The Criminal Courts have also Jurisdiction to entertain complaints under the Forest Act, but once confiscation proceedings are initiated the Criminal Court will have no jurisdiction and its power is excluded.

**5. Md. Yasin vs. Forest Range Officer:** It was held that the Forest Act provided a special

machinery for confiscation of the forest produce etc. by the Forest Officer concerned in the general public interest to suppress the mischief to worthless exploitation of Government Forest by illicit felling and removal of valuable forest produce. Even the acquittal of the accused by Trial Magistrate does not entail nullifying the confiscation order by the forest officer on his satisfaction. In the same judgement, the cases of State of AP Vs. T.K. Mahamood and State of West Bengal Vs. V. Gopal Sarkar were quoted. It was held that confiscation by Forest Officer is independent of any proceeding of prosecution of forest offence committed. In another case viz. State of Karnataka vs. K.A. Kunchidammed, it was held that for preserving forest and forest produce in the State, the provisions in the Act were made and the Forest Officer is empowered to confiscate the seized forest produce. The general power vested in the Magistrate for dealing with the interim custody of the seized vehicle under Cr.P.C. has to go away. The apex Court upheld the order of the Magistrate and the Sessions Court in revision has no jurisdiction to pass any interim custody of seized vehicle. Reference was made to another case viz. Section Forester vs. Mansoorali Khan which followed judgement in State of Karnataka Vs. K. Krishnan.

Having regard to the above rulings, the law is fairly settled in saying that because of the specific provision empowering the forest officials, the Criminal Courts cannot assume the general jurisdiction conferred under Cr.P.C. for ordering interim custody or release of vehicle. In the result the revision is dismissed on 07-08-2014.

Source Internet.

K.B.R.



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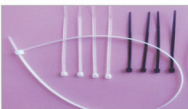
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