

VANA PREMI

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Photo by Agastya Chandra Kumar, FRO

Can you guess the name of this tree? It is neither a Croton nor a Bonsai. It is an evergreen tree having countless branches. How beautifully it is shaped, protected and maintained. It is not located in a park. It is in the "Chow Mohalla Palace".

Pl. see page No 3 for the name of the tree

**JOURNAL OF THE ASSOCIATION OF RETIRED FOREST OFFICERS
ANDHRA PRADESH**

VANA PREMI

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June - 2014

No. 6

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EDITORIAL

World Environment Day: - World Environment Day is held each year on June 5 to raise global awareness to protect nature and the planet Earth and is a day that stimulates awareness of the environment and enhances political attention and public action. The first World Environment Day was observed in 1973. It is one of the principal vehicles through which the United Nations stimulates worldwide awareness of the environment and enhances political attention and action. World Environment Day was established by the United Nations General Assembly in 1972 to mark the opening of the Stockholm Conference on Human Environment. Another resolution, adopted by the General Assembly the same day, led to the creation of United Nations Environment Programme (UNEP). World Environment Day is hosted every year by a different city and commemorated with an international exposition through the week of June 5 where at least 100 countries participate in it. Each year the United Nations appoints a host city to organize different events for the cause of celebrations. Celebrations of World Environment Day each year are based on a particular theme declared by the United Nations. Importance of a clean and healthy environment should be emphasized on each and every individual. When it comes to maintaining a clean and healthy environment, it's everybody's responsibility and there should be no

compromise to achieve a healthy life. The United Nations designed World Environment Day as the main tool to create worldwide awareness about critical environmental issues. Main objectives of the United Nations behind declaration of the World Environment Day was to give a human face to environmental issues, empower people to become agents of sustainable and equitable development, promote to a change in the attitude of people towards the environment and advocate partnership between human beings and society to ensure a safe future. World Environment Day is celebrated around the globe to promote alertness regarding scorching issues of environment pollution, drastic climatic changes, greenhouse effect, global warming, black hole effect etc., among human beings on the planet Earth. World Environment Day is the opportunity for everyone to realize not only the responsibility to care for the Earth and to become agents of change. However it is very happy to note that at least in the past few decades the study of environment has gained enormous importance. The environment is not a single factor but lot of things which interact and interfere with human activities, most of the times, are not eco-friendly. It is very essential to have proper hygienic conditions in and around our environment for an unhygienic environment leads to pollution and ultimately affects human health.

"Earth Anthem" by poet-diplomat Abhay K., was launched in June 2013 on the occasion of the World Environment Day by Kapil Sibal and Shashi Tharoor, Union Ministers at a function organized by the Indian Council of Cultural Relations in New Delhi. It is in eight languages including all official languages of the United Nations viz. Arabic, Chinese, English, French, Russian, and Spanish. The other two languages are Hindi and Nepali.

As mentioned earlier every year a theme is selected and the theme for 2014 World Environment Day will focus on 'Small Islands and Climate Change'. The official slogan for the year 2014 is 'Raise Your Voice Not the Sea Level'. The slogan was developed through months of global debate and voting process to select the most preferred slogan for the event out of several topical areas. Barbados a Caribbean island at the cutting edge of the fight against climate change, will host this year's World Environment Day global celebrations. The theme calls for increased awareness of the effects of Climate Change and minimizing of carbon emissions in the atmosphere which contribute to global warming and subsequently the rise in sea-levels. The 2013 theme for World Environment Day was *Think Eat Save*. The campaign addressed the huge annual wastage and losses in food, which, if conserved, would save a large quantity of food as well as reduce the overall carbon footprint. The campaign aimed to bring about awareness

in countries with affluent lifestyles resulting in food wastage. It also aimed to empower people to make informed choices about the food they eat so as to reduce the overall ecological impact due to the worldwide production of food.

The theme for the 2012 World Environment Day was *Green Economy: Does it include you?* The theme aimed to invite people to examine their activities and lifestyle and see how the concept of a "Green Economy" fits into it. The host country for the year's celebrations was Brazil.

The theme for 2011 was Forests-Nature at Your Service. Thousands of activities were organized worldwide, with beach clean-ups, concerts, exhibits, film festivals, community events and much more. This year's global host, India, is a country of wide biodiversity.

Vana Premi wishes all its readers to take part whole heartedly, in this year's World Environment Day's celebrations and bring awareness among the general public to save our planet earth from the scorching issues of environment pollution, drastic climatic changes, greenhouse effect, global warming, black hole effect, and all other ill effects of it, so that we can hand over the planet earth to our next generation at least in the same shape as we have borrowed it from our elders if not in a better and improved shape. **QMK**

LETTERS TO EDITOR

Dear Sir,

As usual, the Editorials of Vana Premi continue to inspire the readers, because of the burning issues taken up as subjects & the informative content, month after month. The style being attractive, it compels the reader to peruse the same from start to finish. You deserve to be congratulated on that count.

Taking a cue from the book-review made sometime in the past by Sri. J.V. Sharma (on KBR's Autobiography), I am to enclose herewith three short reviews, on three books which are connected with forestry and allied subjects. These reviews may please be treated as the substitute for an article, for the ensuing issue of your Journal.

As I am required to be in Delhi between 10th-26th of May 2014, in connection with the publication of voluminous Trilingual Dictionary (Urdu-English-Kannada,) with two more vertical columns provided for pronunciation in Roman English & Kannada)being seen through the Press (under NCPUL, Ministry of HRD, G.o.I), I am hurrying through to send the same before the said departure. Hope it caters to your requirements.

Thanking you,

Sincerely,

(Dr. Raghotham Rao Desai)

Sir,

The article "stress management" written by Sri Santhaseela babu in MAY issue is informative and highly useful to one and all. These kinds of articles are bound to increase the readership of VANA PREMI. The writer has gone the whole hog by presenting the article with all required inputs. One has to understand that the simple realization that we are in control of our lives is the foundation of stress management. Managing stress is all about taking charge of our thoughts, emotions, schedule, and the way we deal with problems. "SUDARSAN KRIYA" of Dr. RAVI SANKAR the GURU of ART OF LIVING is quite useful in stress management. One has to practice it to understand the impact of it. With warm regards

V.V.HARIPRASAD

ROLE OF FOREST IN SOIL CONSERVATION

(First Prize: Open Essay Writing Competition for College & University Students

Conducted by Soil Conservation Society of India, Dehra Dun, UP in November 1961)

M. Kamal Naidu, M. Sc. (Agriculture) Final Year

Introduction:—This is an article written by me for open competition for the students from College and Universities in India as advertised by “Soil Conservation Society of India”, Dehra Dun, in News Papers in 1961 July, before I joined Forest Service in 1962, as a student in M. Sc. (Agriculture) of Agriculture College, specializing in ‘Soil Science & Animal Nutrition’ as part of Agriculture Chemistry subject.

(**Reprinted from** College of Agriculture Magazine, 1961-62: Agriculture University, Rajendranagar, Hyderabad. **Editors Comment**

on Article: “*He is a silent observer of things, with varied interests in life, good both in class and on the field; has taken active part in college activities and occupied responsible positions in the Students Union Cabinet.*”)

In India today, population is very high and so is the case with food consumption. In order to meet the growing food demands land has to be utilized in a proper and intelligent manner, so that the fertility of soil be maintained.

In India in particular, and the rest of the world in general much of the available land is being put to exhaustive cultivation, which results in the removal of soil fertility. These menacing practices have led to the encouragement of the public

enemy number one, that is soil erosion, the silent thief of the soil. For example in most of the places, the soils are so much eroded that only sub-soil cultivation is being practiced resulting in an extremely low yields, barely sufficient to meet the farmers primary requirement.

So in order to make the country prosperous and have a better status amongst nations of the world, ‘Soil Conservation’ programmes must be given top priority. This term ‘soil conservation’ does not just refer to the control of soil erosion, but to all aspects connected with soil maintenance in relation to crop yields, such as high fertility, absorption of maximum rain water, planned utilization of land and water. Thus ‘a sound conservation programme should result in increased production and improvement of resources both at the same time.’

The chief means by which soils are destroyed is by soil erosion. It is caused by various agents. The two main ones being wind and water. They show their effect by removing the fertile topsoil in a series of continuous successions. This is not the only evil but has many more following its occurrence, to name one, accumulation of silt on fertile lower levels which makes cultivation

difficult. It also results in floods by raising the river bed level and also frequent changes of course, as was experienced by many rivers especially in north India. Water also erodes the soils by forming ravines and gullies through the land, which keeps deepening and broadening gradually, thus taking away the fertile adjacent lands. Such erosions are called 'gully erosions' and are a real menace to a country as well as the farmer. The damages caused by erosion by various means are enormous as is seen from the growing menace of Rajasthan desert, which is encroaching north-east on to lands in and around Agra at the rate of almost 32,000 acres per year. Already 3 million acres of first-rate lands have been converted into arid ravines, while another 6 million acres have only 25% to 50% fertility. The damages caused by rivers are to be seen in the neighborhood of large rivers like the Indus, the Ganges, etc. the damages in UP, Punjab and the NWFP amount to about 5000 sq miles, which have been rendered completely useless, thus constituting a danger to the neighboring good lands. The damages could be very well seen on the hill slopes of Nilgiris where owing to the high demand of vegetables like potatoes, the luxuriant growth of the dense forests which has eventually resulted in severe erosion of these lands, and rendered them completely useless for any form of cultivation.

Seeing such great losses resulting from improper use of land, the govt. has taken and is taking pains to control soil erosion by soil conservation

programmes. It had proposed to undertake soil conservation work over an area of 3 million acres by the end of the second 5-year plan. One of the important means of land reclamation of these eroded wastes was proposed as re-forestation. In 1949-50 the area under forests in India was 147.7 million acres, that is 18% of total land area. The Forest Policy of May 1952 suggested that 'India as a whole should aim at maintaining one-third of its total land area under forests'. The gap between this target and the area under forests is very large. Furthermore the forests are confined mainly to Himalayas, Vindhya and the Deccan plateau; the Indo-Gangetic plains are almost bare. Hence a planned extension of regular forests is highly essential.

Forests play a great part in the role of soil conservation as was suggested in Shri KM Munshi's words: "We want tree in order to regulate our rains; to prevent the water running away with the fertile top-soil in our channels and to prevent floods. They are the cheapest means of preserving water for each tree is a dam. The challenges of billions of raindrops can only be met by the millions of tremulous leaves".

Forests act as windbreaks and thus prevent wind erosion to a considerable extent. The chief causes of wind erosion are that the winds traveling over the ground surface, unhindered move with an accelerating velocity, which upon attaining a great speed develops a tremendous

power capable of moving soil particles off the ground, and carry it air borne to considerable distances. Thus fine particles of fertile soil are carried away, thereby making the soil depleted of soil fertility. Hence the presence of obstructions in the way of the wind reduces its speed, and so the forest or trees serve the purpose of acting as these obstructions, and thereby reduces erosion caused by wind. 'it has been estimated in San Francisco Bay approximately 4% of dust movement was due to direct blowing of winds, 30% due to dust whirls, and the other 30% due to factors related to crop culture'. Studies had also revealed the effect of trees as wind barriers and the protection they afford on the windward and leeward sides. Studies show that a windbreak of 35ft height gives protection to soils to a distance of 175ft on the windward side and 1500 ft on the leeward side against a wind current of 300mph. Approximately each foot of a trees height gives protection to the land on the leeward side to a distance of about 60ft. 'The best protection is afforded by growing trees in rows in such a manner that the tall growing trees are in the center with proper spacing between individual trees and rows'.

Water especially rainfall creates a lot of evil effects on bare unprotected land surface. The raindrops falling from great heights at a very great velocity have a tremendous power and hence the impact of their fall breaks the compact soil surface and thereby makes the

loose particles easy to be carried away by the running surface water. The evil effect is met to a large degree by the canopy of foliage leaves which directly intercept and disperse, thus breaking the velocity of the falling raindrops. Moreover the beating action of raindrops on bare lands during rainfall breaks down clods and soil aggregates forming a tight layer on the soil surface thus preventing infiltration capacity of soils. This decrease in infiltration causes greater surface runoff, which results in greater erosion of soil surface. But in forest soils the trees produce heavy deep and broad root system that helps to hold soil particles together. In addition they scatter over the ground a covering consisting of a mass of leaves, dead twigs often their own bodies. This litter absorbs large quantities of rainfall and enables a great amount of it to be stored and drained through the sponge like cover into the soil below without cutting the ground surface. They also permit growth of other vegetation in their midst like weeds, grasses, shrubs, vines, etc. which make the covering more effective in holding water and releasing it gradually to the streams. Forsling found that with 16% of vegetative cover the annual surface runoff was 4.6% which caused an erosion of 84.5% but with the increase of vegetative cover to 40% the soil losses of surface runoff came down to 1.7% and erosion to 47% respectively. Studies conducted at Connecticut showed that soils in forests are more loose and porous containing considerable

organic matter and have a much higher water holding capacity than cultivated soils. Top soils in forests exclusive of litter contain 48% more nitrogen than topsoil of cultivated fields and are able to hold 40% more water and are about 22% lighter indicating a better state of aggregation. These facts hence reveal that increase in plant cover is directly proportional to increase in infiltration capacity, porosity and fertility of soils, and are inversely prepositional to decrease in erosion and surface runoff.

Reclamation of badly eroded hillsides, which have been made unfit for any form of vegetation, cannot be done no matter how much so ever fertilization and cultural practices are adopted. Such lands can be reclaimed only by planting of suitable trees, especially those with dense foliage, quick growing, spreading root system and above all a hardy variety capable of withstanding droughts. Soil conservation experimental station at Oklahoma showed that the average yearly runoff from old growth woodlands with a slope of 5.17% was only 0.2% that is a loss of 0.17 tons per acre; while runoff from soil of a slope of 7.7% continuously cultivated was 14.22% an annual loss of 24.29 tons per acre. These results clearly show the beneficial aspects of growing forest on hill slopes as a means of reclaiming eroded soils as well as for soil erosion control.

Thus forests have a profound influence over climate and rainfall, thus helps soil development

processes in an indirect manner. As a result of dense forests the climate is milder and also the humidity of the atmosphere is greater above it, hence it induces the saturated rain clouds to shed its burden rather than pass away unheeded. This effect of forests on rainfall had been greatly experienced in the Nilgiris where owing to the rapidly clearing up of the forests resulted in decrease of annual rainfall also accompanied by delay in rains and being erratic as reported by the Soil Conservation Centre at Ooty.

Hence as a measure of soil conservation new forests should be grown and the existing ones maintained. The national festival of tree planting that is 'Vanamahatsava' started on 1st July 1952 by Shri KM Munshi has done a useful work in the direction of afforestation, as noticed by me of the tree planted in Lovedale as a school boy, and these areas were seen by me in 1960 while on an educational tour of Nilgiris and its vicinity.

It is thus from the varied benefits accruing from trees and forests they have been rightly called as 'Man's last line of defense when all other expedients have failed'.

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FOREST PROTECTION AND LIVELIHOOD OF FOREST DWELLERS

By
S.D. Mukherji

Prior to the British rule in India the forest dwellers lead their undisturbed and peaceful life style, wandering in dense forests among the wild beasts and enjoying the nature. Forest provided them all necessities of life. It provided edible fruits and tubers, meat from small game- hunted by bows and arrows - and fish from the streams. A part of their food was met from shifting cultivation - clearing small pockets of forest, dibbling seeds and harvesting the multiple crops as and when it matured. After a couple of crop rotation the land was left for the nature to cover it while moving to another spot. The scanty population living in the vast expanse of forest was in complete harmony with nature.

For the colonial rulers India's forests were a major source of wood for commerce and the rich wild life for the pleasure hunting. They wanted, therefore, the forests to be reserved for their use. The dense forest blocks were, therefore, declared as 'Reserved Forest (RF)'. Public had no right on the RFs. Even the entry was prohibited by law. Rights of the people, if any, was settled either through compensation or deletion of a portion from RF. In the process, the traditionally forest dwellers, the tribals, lost all their rights to live in these forests in absence of any legal document. The British government did not bother about their livelihood. There were instances of revolts by the tribal people but

finally the might of the government prevailed. The forest dwellers had no alternative but to move to deeper forests, beyond the reach of forest administration or to forest areas not included in RFs. However, seed of hatred against the forest administration was sown in the hearts of traditional forest dwellers.

The management of forests was confined to the extraction of valuable timber species under silviculture principles that ensured natural regeneration. Plantations were limited to small patches of 5 to 10 acres. There were laws for hunting the wild animals - by fixing the hunting season, number of animals to be shot and only males to be shot. As sufficient forests were still available outside the government forests, the livelihood of forest dependent communities was dented to a limited extent.

After independence, the forest management was continued in the same fashion as before. However, National Forest Policy of 1952 pronounced to bring one third of the geographical area under forests to maintain ecological balance and environmental stability. New blocks of forests were, therefore, brought under RFs, following the Indian Forest Act of 1927. No attention was paid on the livelihood of the affected forest dwellers. The 1952 National Forest Policy has been widely credited with further eroding the legitimacy of

community's claims on the commons while extending the monopoly right of the State on the forests. Instead of looking after the security of the forest dependent communities the policy stated: "Village communities in the neighborhood of a forest will naturally make greater use of its produce for the satisfaction of their domestic and agriculture needs. Such use, however, should in no event be permitted at the cost of national interests. The accident of a village being situated close to a forest does not prejudice the right of the country as a whole to receive the benefits of a national asset. Restrictions should be imposed in the interest not only of the existing generation, but also of posterity."

This was a blow on the livelihood of the traditional forest dwellers. They could neither claim rights over the forestland nor move out as forests were everything for them. It turned the people living in the forests for generations as forest encroachers. Forest dwellers were subjected to threat of eviction and legal action. As the years passed and more forestlands were brought under government control livelihood of the forest dependent communities turned miserable and remained an unresolved issue. The seeds of hatred sown by the colonial government developed to a size that started posing serious threat to forest administration. India being a democratic country the people's voice does make a difference in political domain. The repeated injustice to the forest dwellers and their pathetic condition made them to unite and pleaded for justice. In order to take electoral

advantage, some of the land under the possession of the tribal people was regularized by the State governments. This was generally repeated before each election. However, it benefited only a few leaving a large population that continued the agitation to regularize their holdings. Simultaneously, the rising population and consequent demand of food forced the State governments to surrender some of the forestland to grow more food. Forestlands were also allotted by the States to the mining companies and industrial houses for economic development. It placed on the forests. The forest administration was, therefore, facing tremendous pressure to discharge its responsibility towards national development.

In 1976, the National Commission on Agriculture (NCA) provided an unambiguous statement on the management of forests. It stated that: "Production of industrial wood would have to be the main stay for the existence of forests. It should be project oriented and commercially feasible from the point of view of cost and return." It recommended creating Forest Development Corporations (FDCs) to attract institutional finances. It further said: "There should be change over from the conservation oriented forestry to a more dynamic programme of production forestry. The future production programme should concentrate on clear felling of valuable mixed forests and inaccessible hard wood forests and planting these areas with suitable fast growing species yielding higher return per unit area.... Resources for industrial raw material, both for

internal consumption and export, should be stepped up through large scale industrial plantations”.

Following the NCA recommendation 26 States set up FDCs to raise industrial plantations on forestlands. FDCs were allotted vast extent of best forestlands to grow successful industrial plantations by availing institutional finances. The interior forest areas were opened up at the cost of livelihood of the forest dwellers. The mixed forests - yielding non timber forest products (NTFP), a major source of livelihood of the forest dwellers - were clear felled, stumps were uprooted with heavy machinery, land was ploughed and fast growing species were planted. This was a major blow to the livelihood of the forest dwellers living in interior forests and largely dependent on NTFP. Government did not bother about the plight of the forest dwellers and they were left to fend for themselves.

The combined effect of increased population, diversion of forestlands for growing food and for the economic development, increased demand of wood for industrial development and apathetic attitude of the government towards the forest dwellers made the forests vulnerable. Government, through 42nd Amendment to Indian Constitution, made forestry a subject of concurrence jurisdiction. This empowered the Central government to legislate on forestry matters. Prior to this Amendment forests were solely a State subject. Following this, the Central government promulgated the Forest (Conservation) ordinance in the year 1980,

prohibiting the State governments from diverting the forestland for any non-forestry purpose without its approval. The ordinance was later passed as an Act (no.69 of 1980). This imposed a complete ban on the regularization of forestland in favor of the forest dwellers. This was the final blow to the aspirations of the tribal people, living in the forests for generations and waiting for a favorable solution to their plight.

However, official ban could not stop the encroachments on forestlands. Forest dwellers dependence on forestland was increasing as the forest management catered to commercial interest of the government. The forest administration was trying to free the encroachments through eviction of forest dwellers. This was the time when the left-wing extremism was spreading fast and government was trying to exterminate the Maoists from the forest areas. The government apathy towards the forest dwellers provided ideal situation for the Maoists. They joined hands with the forest dwellers, facing threat of eviction, by assuring them safety in exchange of a safe haven in deep forests. Maoists warned the forest officers against any action on the forest dwellers. Assaults on forest officers and some cases of killing were reported whenever attempts were made by the forest administration to vacate the forest encroachments. The situation in 1980s deteriorated to such an extent that most of the interior forest areas were virtually out of bound for the forest officers. Forest administration failed to protect the forests in absence of cooperation from the forest dwellers.

Government realized its folly of neglecting the people dependent on forests. This led to the historic change in forest management through the 1988 National Forest Policy (NFP). The symbiotic relation between the tribal people and the forests was accepted in principle. NFP gave the tribal people first right over the forest produce to meet their legitimate requirement. It banned clear felling of forests and plantation of monoculture crop. For the first time cooperation of the tribal people, living in and around the forests, was considered essential for the protection and development of forests. NFP recommended providing gainful employment to the forest dependent people in the development of forests. It recommended a policy whereby the local people would protect and develop the forests in partnership with forest administration and get a share of the forest produce. It also recommended for area development so that livelihood concerns of the forest dwellers were adequately met.

This opened a new chapter in the management of forests. Central government issued guidelines in 1990 for forming a partnership between forest department and forest fringe villages in the protection and development of the forests. This participatory approach was termed as Joint Forest Management (JFM). The States were obliged to adopt JFM to avail Central assistance for forest development, including seeking external aided forestry projects. This forced the States, suffering from financial constraint, to accept JFM in spite of strong opposition from the forest bureaucracy, who had no faith on the

people. The implementation of JFM by the States, therefore, moved slowly. The problem was from both sides. The gulf created between the forest dwellers and the forest administration over centuries made it very difficult to implement JFM. While the forest officers held forest dwellers responsible for the degeneration of forests the forest dwellers looked at the forest officers as a threat to their survival. It was uphill task to bridge the differences built over generations.

State governments, under financial crisis, placed tremendous pressure on the forest administration to implement JFM. In order to reconcile the conflicting postures between the people and the forest officers, many incentives were added in the implementation of JFM. It included an entry point activity through which forest department took up village development programme like supply of drinking water, construction of school building, construction of approach road, etc., depending on the preference of the villagers. Non-government organizations were roped in to work as mediator between the Forest Department and the villagers. Training sessions were arranged for the forest officers for effective communication with forest dwellers. Frequent meetings were arranged between the forest officers and the villagers to explain the salient features of JFM. Preference was given to the participation of women in the JFM committees. With repeated efforts over a period through regular meetings between the forest officers and the villagers the dead lock was broken in a few villages. Forest

dwellers were assured of no threat of eviction and enjoyment of the lands under cultivation. Wage employment was provided to the villagers at their door step through forest development works. The success stories soon spread to other villages. Gradually more villagers came forward to accept JFM and form committees for developing the forests surrounding their villages. The villages in the interior forests, out of bound for the forest officers, were opened up as villagers assured protection to forest officers. Finally, the barrier between the forest officers and forest dwellers was broken. JFM became a major activity for the forest development in 1990s. Degraded forests around the villages were planted with the species as per the villager's choice. People took up the responsibility to protect the forests.

Leadership played a vital role in the success of JFM. The success was in proportion to interest of the level of forest officers. For example, where Principal Chief Conservator of Forests took keen interest JFM was successful in the whole State. Where individual field officers were interested the success was limited to their jurisdiction. Moreover, the success of JFM was depended on continuity of programme, regular flow of funds and income to the forest dwellers. Assured livelihood to the forest dependent people played a decisive role in the success of JFM. However, the entire programme collapsed wherever the continuity was disrupted with change in leadership, closure of the project and disruption in the flow of funds. Implementation of JFM witnessed many cases of success and

failure mostly revolving around the livelihood issues of the forest dwellers.

Since forest development alone could not provide a sustainable livelihood, the issue of forest dwellers legal right on the forestland continued to remain a contentious issue as it remained unresolved. The Forest (Conservation) Act of 1980 had stopped the regularization process. However, the political leadership of the Left parties was agitating continuously to give legal rights to the forest dwellers on the forestland. The opportunity came after the 2004 Parliament election when the Left parties joined the United Progressive Alliance (UPA) to form the government at the Centre. Left parties prevailed over the UPA government to give forestlands to the forest dwellers as per their existing enjoyment to provide them sustainable livelihood. Government succumbed to the pressure as it was obliged to have their continued support to survive. Finally, Parliament passed the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, in short FRA. It recognized individual rights of the tribals and other forest dwellers on the forestland under their possession as on 13th December 2005 and community rights over the forests traditionally enjoyed. This was a step to undo the "historic injustice" to the tribals and other forest dwellers and assert their rights over the forestland over which they were traditionally dependent.

As per the data compiled by the Ministry of Tribal Affairs, the Ministry responsible for the

implementation of FRA, 32, 56, 367 claims were filed till 30th June 2013 and 13, 08, 626 claims were settled covering 19, 87, 919.84 hectares of forestland. Most of the claims were for individual rights. The State forest departments were, generally, blamed for delaying the process and denying claims of individuals and community on forestlands. There are still claims pending settlement and new claims are being made. Government has taken credit in passing this 'historic' Act and tried to gain electoral advantage. However, there is lot of work pending to make the FRA a tool of sustainable livelihood by providing desired benefit to the forest dwellers and sustainable management of the forests. However, sustainable livelihood to the forest dependent people can be achieved only through the desired development of the remote forest areas in all fronts and not only by implementing FRA. Many interior forest areas are still under the grip of Maoists where government has failed to take up the developmental works in spite of allocating resources. A large contingent of security forces has not been able to reduce the grip of the Maoists over these remote areas. A way has to be found to develop the remote villages, generally on the fringes of the forests, for a better livelihood to the population that has remained neglected since independence.

One of the most encouraging aspects of the 2014 Parliamentary elections has been the significant higher voter turnout in areas affected by left wing extremism. In spite of the total boycott of elections called by the Maoists in their strong

hold people have come out and voted for a change for their good. The voting percentages in Baster region in Chattisgarh, Gadchiroli in Maharashtra, Medinipur, Purulia, Bankura and Jhargram in West Bengal – all with strong Maoists presence - have been 60, 65.21, 81.41, 78.75, 80.55, and 88 per cent respectively. The people have come out to vote without caring for the risk to their life. The government effort to provide security to the people played a major role to make it possible. Most of these areas are remote forest areas and forest dwellers form a majority, aspiring for a sympathetic government to come out of poverty that has left them untouched even after 67 years of independence. One major reason why the Maoists were able to entrench themselves in these regions was that the governments, both Central and State, had completely forsaken its people. The void was filled by the Maoists. The challenge before the new government would, therefore, be to focus on the development of the red corridor and provide security to the people, especially when they have expressed their faith in democracy.

Government must analyze the reasons for the poor implementation of the developmental programmes in Maoist affected regions by the departments entrusted with the responsibility. Under the government method of allocation of works and responsibilities forest department has no role to look after the development works in these regions even when forest dwellers, mostly tribals, constitute the major population. The Tribal Welfare Department (TWD) is

entrusted with the task of looking after the livelihood of the tribal people. However, most of their time is spent on the tribals living in non-forest areas leaving very little time to visit the interior forest fringe villages where the poorest of the poor tribals live. Forest Department and TWD are generally at logger heads as ecological consideration and development do not match. Many times developmental works are taken up in contravention to the Forest Act that is harmful to the forests. It must be kept in mind that diminishing and degraded forests would harm the forest dependent communities more than anybody else as drought, floods, soil erosion, scarcity of water, fodder and fuel wood, etc. would make their life unsustainable. Development must go hand in hand with ecological security. It must be accepted that livelihood security to the forest dwellers is a precondition for ecological security. Therefore, development of the forest fringe villages is a must to protect the forests and environment.

The remoteness of the forest fringe villages is a major reason for lack of development. The officers from other departments find it difficult to visit these villages regularly and attend to the problems facing the timely execution of works. On the other hand forest officers regularly pass through these forest fringe villages, while attending to their forestry works. Indian Forest

Service (IFS) officers are now successfully working in various government departments. It may be desirable, therefore, to enlarge the role of forest officers to justify their inclusion in All India Services. The mandate of the Forest Service must include additional responsibility to look after the livelihood issues of the forest dependent communities. Forest officer's role should, therefore, include proper implementation of all developmental programmes in the forest fringe villages. They should regularly review the implementation of the welfare schemes and keep the departments, district administration and State administration informed of the progress and bottlenecks for its timely resolution. Moreover, it will make much easier for the forest dwellers to approach the forest officer and narrate their problems. Forest Department would find it easy to play a role where development can be made complementary to environmental security. Development of forest fringe villages and livelihood security to the forest dwellers will improve their participation in the protection and development of forests for their own good. The new government may look into the suggestion with all the urgency and seriousness it deserves. Once it is agreed in principle modalities for its implementation can be worked out.

WINDS OF CHANGE –TURNING POINT IN HISTORY

By
J. V. Sharma

National scene:

The Nation has been gripped with election fever for almost two months. With counting of votes on 16th May 2014, the element of anxiety and uncertainty waned and people are relatively more relaxed their happiness or disappointment over the nature of verdict notwithstanding. The sheer size of the electorate comprising of about 815 million, by itself, is a challenging task and the Election Commission of India acquitted itself creditably and lived up to its envious reputation of being trustworthy sentinel of world's largest democracy.

Though I am not a person with committed interest in politics or the likes and dislikes that go with it, I tend to look at the political events as an informed citizen especially in the fields of environment and good governance. The people of India have administered comprehensive drubbing to the incumbent UPA Government headed by Indian National Congress. The National Democratic Alliance (NDA) headed by Bharatiya Janata Party (BJP) is voted to power. Political pundits, who have been emphatically arguing that coalition governance had become a permanent feature, are proved wrong by the people of India. The BJP which leads the NDA secured absolute majority on its own by winning 282 seats out of 543 in Lok Sabha. Mr. Narendra Modi of BJP will be the Prime Minister.

These elections have also thrown up some

other issues for people to ponder. Though India lived with NDA rule for six years prior to 2004, Mr. Atal Behari Vajpayee who headed the government had an acceptable personal image across the political spectrum which his party did not command. Logically, the situation should be more hostile to BJP to gain acceptability what with its one time friends and allies deserting it. BJP chose him for the top job on the basis of his governance record for over a decade in Gujarat. He led the election campaign from the front which turned into a massive wave in his favor securing more than 330 seats to NDA.

The Congress Party which had been in power at the Centre for 10 years stands totally decimated. It failed to win even 50 seats and does not qualify to be a recognizable Opposition Party. The Left parties, who make much noise without matching strength or substance, are equally ill-placed. However, the regional parties viz. Mamata's TMC in West Bengal, Jayalalithaa's AIADMK in Tamilnadu and Naveen Patnaik's BJD in Odissa have put up their best ever performance. The national parties faring very badly, the regional parties do not measure up to throw any challenge to NDA and their dreams of third front lay shattered. Thus the BJP/NDA is firmly in control of situation with no credible challenge from any quarter.

It is however necessary for the BJP, on assuming power, to prove that the allegations leading to

its unsociability were misconceived/ill-conceived. Mr. Modi has been making the right noises and succeeded in steering clear of controversies in the run-up to the elections. After all, the taste of the pudding is in its eating. It is now his responsibility to prove his critics wrong. His slogan of India First is welcome. His emphasis on governance and economic change is welcome. The Idea of India includes much more. India is a secular democracy. All Indians are equal. He should walk the extra mile to remove any suspicion or distrust lurking in the minds of minority community. India is a democracy and Mr. Modi is chosen to be its Prime Minister. It is only appropriate that those differ with him including the minority communities, give him a fair chance to perform and judge him on merits. To condemn without trial is not fair.

In this connection, I consider it appropriate to quote excerpts from a letter written by Mr. V. R. Krishna Iyer, former Judge of the Supreme Court to Mr. Modi. As far as I know Mr. Iyer and Mr. Modi are not on same page either on background or on political philosophy. Felicitating Mr. Modi, Mr. Iyer says:

"Fate of Bharat has decreed that a great new dynamic chapter will dawn and the sublime instrument of this magnificent transformation will be through a million hands symbolized in a single sober humanist"

He advised Modi; *"to undo colonialism under the British Law and make the majesty of the people and their fundamental rights through a paramount jurisprudence"*

Expressing the hope that India under the new Prime Minister will be a place where humanity and not legality is the pride of democratic Republic. Mr. Iyer appealed; *"Don't be a ruler but*

rise to be avatar so that when the story of India comes to be written the Modi chapter will be illustrious to inspire coming generations."

So, the democratically elected government must be allowed to function and its performance keenly watched. As for me, I am skeptical about the fate of environment and forests even in NDA rule. The BJP did not say much about it in their agenda. To go by their public utterances, the BJP Government is likely to go for large scale industrial development. It is however not clear whether the said development would be at the cost of environment.

It needs to be said at this point of time that the UPA was particularly hostile to forests and environment. Forests suffered as never before under Dr. Manmohan Singh. Environmental activists prayed not so much for the exit of Congress as it was for Dr. Singh. More than 55 lakh acres of forest land was lost in implementation of forest Rights Act. Another 2.43 lakh hectares of forest land was diverted for non-forest purposes during the UPA regime. Mining leases and coal blocks were allotted in valuable forest tracts. Prime areas of great environmental value were given away for eco-tourism and commercial projects. Pristine glory of about 25% coastline is lost and strategically sensitive coastline is diverted at roughly 100 Kms. per year in violation of principles underlying CRZ mostly for fancy projects and unviable ports under PPP. It is gross abuse of power and an act against the larger interests of nation. It is heartening to learn that Dr. Montek Singh Ahluwalia, Vice Chairman, Planning Commission, who was a key player in the abuse of power, had also resigned. It is a good riddance

-to put it in simple words.

Mr. Jairam Ramesh and Ms. Jayanthi Natarajan, as Ministers in charge of Ministry of Environment & Forests, one after the other, have largely been responsible for the damage caused. Statutory agencies have been reduced to a farce and regulatory agencies like Forest Departments and Environmental Protection Agencies were rendered ineffective. They served the interests of private parties much against the public interest.

To sum up the performance of UPA in the decade it held power, the Prime Minister and his band of functionaries have conducted the affairs of MoEF without understanding what the environment, ecology, biodiversity and climate change are. They richly deserved the ignominious defeat at polls. Let us fervently hope the new Government will address these problems in right perspective.

Home front:

Nearer home in Andhra Pradesh, momentous changes of historical importance have taken place. Erstwhile State of Andhra Pradesh is bifurcated and the States of Telangana and (residuary) Andhra Pradesh would have come into existence w.e.f. 2nd June 2014. Fortunately, the term of State legislature coincided with the reorganization of the State and the elections held in April-May 2014 (along with Lok Sabha elections) threw up clear mandate in both the new States. Congress Party which was in power for 10 years lost in both the regions. Mr. K. Chandrasekhar Rao, President, Telangana Rashtra Samithi, with 63 seats in a House of 119 will form the Government of Telangana State while the old war horse, Mr. N. Chandra Babu Naidu of Telugu Desam Party with 106 seats (in alliance with BJP) in a House of 175 will be the Chief Minister in

residuary Andhra Pradesh. Hyderabad City of Telangana State will also serve as capital for the State of Andhra Pradesh for a maximum period of 10 years.

For those who are 80+, like me, it is an experience. We belonged to the era when the Nizam was the ruler of Princely State of Hyderabad. It was a multilingual State of 16 Districts comprising of people speaking Telugu, Marathi and Kannada. Medium of instruction was Urdu language. After the merger of the State into Indian Union, Hyderabad State remained intact until 1956 when linguistic States came into existence. While Marathi speaking areas were merged with then bilingual State of Bombay, the Kannada speaking areas formed part of Karnataka State. Telangana, the Telugu speaking part of erstwhile princely State of Hyderabad together with the Andhra State which was carved out from the Madras State a few years earlier, came into existence as the State of Andhra Pradesh. In fact, I was selected in Hyderabad State and sent for training in 1955-57 batch of Forest College, Coimbatore. I returned back from training in 1957 to serve the State of Andhra Pradesh. While we are still around, the State had to be split and Telangana becomes the 29th state of India. We are witness to all the twists and turns of history during the period.

Now that the new States have come into existence, it is necessary for the foresters to dwell upon the challenges on environmental front they may have to contend with in respective States in future. The Telangana State with a geographical area of 114863 Sq. Km. will have 29,242 Sq. Km. under forests working out to about 25% of TGA. Apart from urban District

of Hyderabad, three districts namely, Medak, Rangareddy and Nalgonda are extremely deficient in forests with less than 10% forest area. Only two districts of Adilabad and Khammam have forests more than one-third of geographical area. But these figures may not mean anything as large extents of forest lands were lost in implementing the FRA. Besides, forest encroachments are a long time menace confronting the Forest Department in Telangana area especially in Adilabad, Khammam and Warangal Districts.

As regards residuary State of Andhra Pradesh, the forest area will be 34,572 Sq. Km. forming about 21.5% of the total geographical area of 160106 Sq. Km. While Visakhapatnam, Kadapa, East Godavari and Chittoor Districts have more or less the desired one-third of TGA under forests, Krishna, Anantapur, West Godavari and Srikakulam Districts are very deficient in tree cover. The AP has a very long coastline which is environmentally and strategically sensitive and it will be a great challenge to save its pristine

glory against the onslaughts of vested interests. Protection of Mangroves in Coastal Andhra and Red Sanders in Rayalaseema area will continue to be a difficult problem.

There is perceptible decline in the efficacy of regulatory functions of the Forest Department in both the regions with unbridled interference of the political class at all levels of administration. Disturbing rumors are thick in air that smuggling syndicates and land mafias are operating promoting organized smuggling of forest produce and illegal encroachments of forest land. Professional approach to any problem is no longer in evidence. Unless and until these trends are arrested and reversed, the forests and environment will continue to suffer. The polity will have to realize the importance of environment and the forest fraternity will have to stand up to be counted.

Let both the States take stock of the situation sooner than later and manage the environment with vision and wisdom.

EARTH ANTHEM, BY K. ABHAY

Our cosmic oasis, cosmic blue pearl
the most beautiful planet in the universe
our cosmic oasis, cosmic blue pearl
all the continents and the oceans of the world
united we stand as flora and fauna
united we stand as species of one earth

black, brown, white, different colors
we are humans, the earth is our home
we are humans, the earth is our home
we are humans, the earth is our home
we are humans, the earth is our home.

Our cosmic oasis, cosmic blue pearl
the most beautiful planet in the universe
our cosmic oasis, cosmic blue pearl
all the people and the nations of the world
all for one, one for all, all for one, one for all
united we unfurl the blue marble flag

black, brown, white, different colors
we are humans, the earth is our home
we are humans, the earth is our home
we are humans, the earth is our home
we are humans, the earth is our home

MONEY GROWS ON TREES- A SILVICULTURE BASED ASSESSMENT TO AN ECONOMIST INDIAN PRIME MINISTER

By

Dr. V. B. Ramana Murthy

“I-Tree tools” an urban forester’s Decision Support System for Assessment of Payment of Ecosystem Services (PES).

During the interaction with the resource persons at the Baltimore Pennsylvania (PA) Chesapeake Bay case study presentation Ms. Sally Claggett of U.S. Forest Department (USFD) who addressed the forestry component of Chesapeake Bay has informed that the USFD has developed and utilized the “i- Tree tools.org” as a Decision Support System for Payment of Ecosystem Services. The software enabled the assessment of the PES of 100 trees in Urban areas which are 40 years old worked out as \$ 379,000/-

Pittsburgh, for example, used I Tree to calculate that city trees provided a monetary benefit three times greater than the annual cost of upkeep, leading the city to develop a master plan for expanding its tree canopy. The data from I Tree also provided evidence to help push forward a major tree planting initiative in New York City, and has been used in Milwaukee, Chattanooga, Tenn., and Casper, Wyo. As on date I Tree has been used in more than 100 countries and has had about 12,000 users since the initial software suite was launched in 2006,

Nowak, the man behind I Tree, the USDA forest officer has helped a number of cities complete urban forest surveys and assess the data using the I Tree web tool, including Chicago, Philadelphia, Baltimore, Atlanta, Boston, Kansas City, Los Angeles and San Francisco. He said trees in these and other urban areas are being lost to old age, insects, disease and to development, requiring communities to understand what is happening and take the necessary steps to stem the negative tide. Some are being hurt more than others. The 2012 survey of 20 cities, for example, showed the biggest losses in New Orleans, Houston and Albuquerque. Only Syracuse showed a gain in tree coverage and two cities, Denver and Pittsburgh, essentially showed no change.

THE BOTTOM-UP APPROACH: FIELD-BASED ASSESSMENTS

The bottom-up approach involves collecting field data on vegetation. It provides the most detailed information needed for urban forest management and to assess urban forest structure and its associated ecosystem services and values. To aid in sampling or inventorying urban trees and forests, and for calculating their

ecosystem services and values, the free i-Tree Eco and Streets models were developed.

There are three common top-down approaches for assessing urban tree canopy cover and all three methods will produce estimates of tree and other cover types in an area, but with differing resolution, costs, and accuracy. The three methods are:

- NLCD analyses

- High-resolution image analyses

- Aerial photo interpretation

THE TOP -DOWN APPROACH: SKY-BASED ASSESSMENTS.

The i-Tree software suite v 5.0 includes the following urban forest analysis tools and utility programs.

i-Tree Eco provides a broad picture of the entire urban forest. It is designed to use field data from randomly located plots throughout a community along with local hourly air pollution and meteorological data to quantify urban forest structure, environmental effects, and value to communities.

i-Tree Streets focuses on the ecosystem services and structure of a municipality's street tree population. It makes use of a sample or complete inventory to quantify and put a dollar value on the trees' annual environmental and aesthetic benefits, including energy conservation, air quality improvement, carbon

dioxide reduction, storm water control, and property value increases.

i-Tree Hydro is the first vegetation-specific urban hydrology model. It is designed to model the effects of changes in urban tree cover and impervious surfaces on hourly stream flows and water quality at the watershed level.

i-Tree Vue allows you to make use of the freely available National Land Cover Database (NLCD) satellite-based imagery to assess your community's land cover, including tree canopy, and some of the ecosystem services provided by your current urban forest. The effects of planting scenarios on future benefits can also be modelled.

i-Tree Species Selector is a free-standing utility designed to help urban foresters select the most appropriate tree species based on environmental function and geographic area.

i-Tree Storm helps you to assess widespread community damage in a simple, credible, and efficient manner immediately after a severe storm. It is adaptable to various community types and sizes and provides information on the time and funds needed to mitigate storm damage.

i-Tree Design is a simple online tool that provides a platform for assessments of individual trees at the parcel level. This tool links to Google Maps and allows you to see how tree

selection, tree size, and placement around your home effects energy use and other benefits. This tool is in the early stages of development; more sophisticated options will be available in future versions.

i-Tree Canopy offers a quick and easy way to produce a statistically valid estimate of land cover types (e.g., tree cover) using aerial images available in Google Maps. The data can be used by urban forest managers to estimate tree canopy cover, set canopy goals, and track success; and to estimate inputs for use in *i-Tree Hydro* and elsewhere where land cover data are needed, practical utility

The *i-Tree Tools* are first and foremost urban forest assessment tools designed to provide ecosystem service information of a given resource based on inventory data. Therefore, they do not have the same features and functions of other traditional inventory tools that are designed for daily or frequent management of trees, tracking work history, generating work orders, etc. As such, there will be some limitations to using *i-Tree* assessment tools in a traditional tree inventory capacity. Nonetheless, the limitations of *i-Tree* used for inventories may be acceptable depending on your objectives and available resources. The (2) *i-Tree Tools* which have an inventory component are as follows:

-Tree Eco is designed for assessing trees in all areas including parks, campuses, cemeteries, etc. and would be applicable for your project. *Eco* has extensive data requirements which could be challenging as it requires data such as tree height, canopy width and much more. Again this is an assessment tool and you are basically providing the field data needed for the model to estimate ecosystem services based on species, canopy metrics and environmental variables such as local pollution and weather. *Eco* has an option to allow for complete inventory data collection but has limited outputs [http://www.itreetools.org/eco/resources ... tables.pdf](http://www.itreetools.org/eco/resources...tables.pdf) and no flexibility to add additional fields. Nonetheless, *Eco* is applicable for campus assessment project and several institutions have used *Eco* such as Auburn University and University of Georgia.

i-Tree Streets program is designed for street tree assessments and has some additional fields to collect optional data. The *Streets* program is intended for determining ecosystem services of right-of-way trees. Therefore, ecosystem service estimates in a campus setting may not be as applicable. Nonetheless, *Streets* has more functions that are similar to traditional inventory tools and may meet your needs for a very basic inventory tool as long as you understand that the ecosystem service

estimates may not be accurate. Although not intended for parks and campuses, some users will still use Streets and accept the limitations as it is more flexible and simple to use.

As an alternative, many people use i-Tree as a complementary tool with more traditional tree inventory and asset management systems to periodically determine ecosystem services of trees. Since it is not practical to manage tree data in an asset management system and i-Tree concurrently, there are methods to import in external inventory data into i-Tree for periodic ecosystem assessments. Typically, i-Tree users will conduct an assessment with i-Tree Streets or Eco every 5 years or so depending on management objectives and available resources.

In short, the i-Tree programs may be able to provide information to illustrate the ecosystem services value that campus trees are providing but the i-Tree programs may have limitations for more daily or frequent tree management objectives. Please see the following link to a University of Florida paper comparing more traditional inventory and management systems.

Assessment of the temperate tree species numbering >15000 is done and ranked based on users ranking on 1-10 scale. The parameters used are

1. Air pollution removal.
2. Air temperature reduction.
3. U.V. Radiation reduction.
4. Carbon sequestration.
5. Pollen allergicity.
6. Wind speed reduction.
7. Stream flow reduction.

Applicability of the I Tree tools in Indian URBAN FORESTRY SECTOR

- a) The database for Tropical species present in India needs to be compiled for ranking the tree species and for temperate and alpine species tree data can be used straight away.
- b) The assessment of contribution of PES in F.R.I. Campus can be initiated as a part curriculum of Silviculture of Species or Forest Menstruation field practical.
- c) Perusal of i Tree tools database indicate that the already 250 Indians registered /logged into and it is proposed to create a "pan Indian I Tree Tools network" of enthusiasts for popularizing the software among tree lovers and urban planners.
- d) Utilize the software for preparation of "Urban forestry management plan" in a standardized format. These steps will enable institutionalization of the technology for urban forestry management. (The author is Chief Conservator of Forests Govt. of A. P and can be contacted on mobile No. 09440810602)

“THE JOURNEY OF DEMOCRATIC INDIA” *IN A NUTSHELL*

By
V.V.HARI PRASAD

“Long years ago we made a tryst with destiny, and now the time has come when we shall redeem our pledge, not wholly or in full measure, but very substantially. At the stroke of the midnight hour, when world sleeps, India will, awake to life and freedom” said Jawaharlal Nehru, India’s first Prime Minister on 15th August 1947 while delivering his **formal** “tryst with destiny” speech at Parliament house in New Delhi.

India became independent more than 66 years ago and democratic India has been passing through different phases of development, and as per the report furnished by the Planning Commission of India on poverty estimates in July’2013; India’s poverty level fell to record 22%. As per the report 25.7% of people in rural areas, and 13.7% in urban areas were below poverty line. The critics comment that even after 66 years of Independence part sizable number of the Indian population is still below poverty line and adequate economic development did not take place so far. In 1947 Indian population was 350 million and as per 15th Indian census released on 31st March’2011 Indian population increased to 1210 million with a decadal growth of 17.64%. Did Democracy yield the desired results? Probably it is a million dollar question to be

answered only by an erudite that can carry out an unbiased and impartial analysis.

U.S. President Abraham Lincoln defined democracy as “Government of the people, by the people, for the people”. The so called “democracies” in classical antiquity (Athens and Rome) represent precursors of modern democracies.

Democratic India witnessed statesmen like former Prime Ministers of India Pandit Jawaharlal Nehru, Lal Bahadur sastry and eminent personalities like Sardar Vallabhai Patel, Dr. Rajendra Prasad and Dr. S. Radha krishnan who had a vision for developing India and who strove hard for its development politically, socially and economically in all conceivable ways until they breathed their last. During 21st century there is dearth of statesmen and statesmanship has become a rare commodity. We come across career oriented politicians in the present day political environment whose concern is only power and pelf. To most of them politics is an area where financial investments have to be made for winning the elections, come what may, by stooping down to any level and on winning the elections they are sure that they can make

money, does not matter whether the means is legal or illegal.

At its 67th year Indian democracy should be a matured one and it should have overcome all its teething problems. If we look back and question ourselves whether we the Indians could succeed in emulating successful and great democracies in the world I daresay the reply is negative. The functioning of Indian democracy and its journey till now has to be pondered over. May I attempt it?

Indian election scenario then and now

◆ General elections to the first *Lok Sabha* since independence were held in India between 25 October 1951 and 21st February'1952

◆ Then the voter turnout was 45.7%

◆ The creator of Indian constitution B. R. Ambedkar was defeated in the Bombay constituency by a little known Kejriolkar.

◆ The first *Lok Sabha* witnessed 677 sittings (3784 hours) the highest recorded count of number of sittings. From 1952 to 1967 the three Lok Sabhas sat for an average period of 600 days each and more than 3700 hours.

◆ In comparison 15th *Lok Sabha* from 2009 to 2014 has met for just 357 sittings and sat for about 1400 hours where in legislative work took a back seat. Is the attitude of *Lok Sabha* which should have been more responsive, and accountable to the people of India, not an indication of its apathy towards their plight? The rulers of this country appear to have least

concern in glossing over the aspirations of their fellow country men and women.

◆ 2014 general elections which took place in nine phases were the longest elections in the country's history.

◆ The election commission of India announced that India's 2014 general elections had recorded a cumulative total of 66.3% voter turnout at the end of 8th phase surpassing its previous highest voter turnout record of 64% in 1984 elections which took place after the assassination of Smt. Indira Gandhi. On completion of the 9th and final phase the voter turnout was recorded to be 66.8%.

◆ They were not only the longest but also the most expensive general elections in the history of the country. An amount of Rs.3426 crore was estimated to have been spent for conducting the general elections in 2014. Rs. 30,000 crore was estimated to have been spent by the contesting candidates in the elections. Electoral constituencies were reported to have been flooded with black money in the process of luring the electorate with pecuniary gains. Can we call our democracy a matured one? Probably not.

◆ NEWYORKTIMES of USA commented on 2014 general elections of India, "The sheer size of the electorate makes this election the largest even in the world and an inspiring celebration of adult suffrage.", but also wrote, "Lurking behind the feel-good spectacle is the reality

that India's elections are awash in illegal cash, serious violence and dirty tricks."

Constitutional amendments

◆ Indian constitution which is unitary in spirit and federal in nature came into effect on 26th January 1950 and so far 120 times constitutional amendment bills were introduced in the Parliament and a few of the amendments were not passed by the 15th Lok Sabha of India.

◆ Constitution of USA went into effect on March 1789 and was amended 27 times.

Five "political scams" *the tips of the icebergs* that shamed India

◆ **2013 Chopper Scam:** Better known as chopper gate, the scam involves several politicians and defense officials who have been accused of having accepted bribes from August Westland to clear contract to supply 12 August Westland AW101 Helicopters to India.

◆ **2012 Coal block allocation scam:** Dubbed as Coal gate by the media, the scam exposed corruption in the higher echelons of power in the country, reportedly causing a loss of Rs.1.86 lakhs crores to the government.

◆ **2011 Tatra truck Scam:** Top officials of Bharat Earth Movers Limited (BEML), a defense public sector undertaking and the defense ministry siphoned off Rs.750 crore in bribes and commissions over the preceding 14 years in the purchase of components of Tatra trucks.

◆ **2010 2G Spectrum :** One of the largest financial scams in the country, the 2G scam

involves under charging by government officials to various telecom companies during the allocation of 2G licenses for cell phone subscriptions. While CAG pegs the scam amount at Rs.1, 76,000 crore, the CBI estimates at Rs.30, 984 crore.

◆ **2013 Uttar Pradesh NRHM scam :**

◆ Top politicians and bureaucrats are alleged to have siphoned off Rs.10, 000 crore from the National Rural Health Mission, a Central Government scheme meant to improve health care delivery in rural areas.

Scientific and technological development in India:

◆ The achievements made by the scientists, the intellectual cream of the society in the field of science and technology are worth mentioning. In the field of agriculture our scientific and technological researches have enabled us to be self-reliant and self-sufficient in food grains.

◆ We have carried out two underground nuclear tests at Pokhran in Rajasthan. This was a remarkable achievement by our nuclear scientists.

◆ Indian space programme rocketed to greater heights with the successful launch of the second Geosynchronous Satellite launch Vehicle (GSLV-D2) in May'2003 and also with the success of ISRO in subsequent launching of satellite launch vehicles into the space.

◆ Our success on Antarctica speaks volumes of our scientific genius and

technological wisdom in the field. Obviously, the technology has been used as effectively as a tool and instrument of national development and yet much remains to be achieved in order to make its benefits reach the masses.

CORRUPTION IN INDIA:

Corruption in India is a major issue that adversely affects its economy. A study conducted by Transparency international in 2005 found that more than 62% of Indians had first-hand experience of paying bribes or influence peddling to get jobs done in public offices successfully. As of December 2008 India's 523 parliament members were accused of crimes under India's First information report procedure where in any one can allege another of committing crime. Many of the biggest scandals since 2010 have involved very high level government officials including cabinet ministers and Chief Ministers.

A 2009 survey of the leading economies of India ,revealed Indian bureaucracy to be not only the least efficient out of Singapore, Hong Kong, Thailand, South Korea , Japan, Malaysia, Taiwan, Vietnam, China, Philippines and Indonesia but also that working with India's civil servants was a "slow and painful" process.

Professor Bibek Debroy and Laveeh Bhandari claim in their book CORRUPTION IN INDIA-The DNA and RNA, "The public officials in India may be garnering as much as Rs.921 billion (\$18.42 billion) or 1.26 percent of the GDP through corruption".

The incidents in the recent past proved the unholy nexus between corrupt politicians and bureaucrats whose symbiotic relationship resulted in amassing of wealth by both of those clans at the cost of fleecing the common man who has been yearning for social and economic justice.

BLACK MONEY IN INDIA:

In February 2012 the Director of the Central Bureau of Investigation said that Indians had \$500 billion of illegal funds in foreign tax havens more than any other country. According to white paper on black money in India, a report published in May 2012, Swiss National Bank estimates that total amount deposits in all Swiss banks at the end of 2010 by citizens of India were CHF 1.95 billion (INR 9295 CRORE, U.S \$2.1billion). The Swiss Ministry of External affairs has confirmed these figures upon request for information by the Indian Minister of External affairs

◆ Noted Jurist and former law minister Ram Jethmalani along with many other well-known citizens filed a writ petition in the Supreme Court of India seeking the court's direction to help bring back black money stashed in tax havens abroad.

◆ The Supreme court on 4th July 2011 ordered the appointment of Special investigation team (SIT) headed by former judge BP Jeevan Reddy to act as a watch dog and monitor investigations dealing with the black money.

◆ In April 2014 Indian government disclosed to the Supreme Court the names of 26 people who had accounts in bank "Liechtenstein" as revealed to India by German authorities.

◆ To curb black money India has signed TIEA (Tax information Exchange agreements) with 13 countries where money is believed to have been stashed away.

DEFENCE PREPAREDNESS OF INDIA:

The defense analyst Jaideep Prabhu in his article "defense preparedness has hit rock bottom in India" published on 31st March 2014 in the print media analyzed as follows:

The failure of defense Ministry of India to develop indigenous manufacturing and research, several scams that caused delays in procuring defense equipment and technology and its lethargy in implementing administrative reforms have added to decades of negligence and reduced Indian armed forces to a sad state of despair.

He added, "In addition to Indigenization and training ministry of defense has done little to develop a military of the future. Fewer states engage in large scale warfare with tanks and infantry across open plains as they used to even 50 years ago. The Indian army has done little to develop new doctrines for fighting low intensity conflict, insurgencies, or terrorism. Coordination between what exists in the name of cyber operations, intelligence gathering and special operations remains weak."

Indian Navy and Air force reportedly have had their own share of modernization problems.

ECONOMIC DEVELOPMENT OF INDIA: The economic development models in India followed socialist inspired policies for most of its independent history, including state ownership of many sectors. India's per capita income increased annually around 1% annualized rate in the three decades after independence. Since the mid-1980s India has slowly opened up its markets through economic liberalization. After more fundamental reforms since 1991 and their renewal in 2000s India has progressed towards the free market economy. In the late 2000s India's growth reached 7.5% which doubled the average income in a decade.

For 2012 India ranked 132nd in "Ease of Doing Business Index" which was a setback back as compared with CHINA 91st and BRAZIL 126th. According to Index of Economic Freedom, world ranking annual survey on economic freedom of the nations, India ranked 123rd as compared with CHINA and RUSSIA which ranked 138th and 144th respectively in 2012.

The growth in GDP during 2013-2014 was pegged at 4.9% as compared to the growth rate of 4.5% in 2012-2013 as per the information furnished by CENTRAL STATISTICAL ORGANIZATION. The growth rate in per capita income was estimated at 2.8% during 2013-14 as against the preceding year's estimate of 2.1% (as per CSO)

Indian Democracy has with stood the onslaughts of extremism, regionalism and parochialism and it has been sustained for more than six decades by us, the people of India. "Democracy is the worst form of government except for all those others that have been tried" said Winston Churchill former Prime Minister of Britain, one of the oldest democracies of the world.

British India witnessed poverty, exploitation of the downtrodden by the rich and powerful, and unemployment and illiteracy among millions. Among those who fought for independence some of them lost their lives, some of them lost their wealth and beloved ones, and some of them were sent to gallows their sole aim, being achievement of a democratic, and politically socially and economically a strong nation of their own with basic amenities of food clothing and shelter to all its citizens.

Democracy in India has ushered in a new era of self-rule and development and the process of development has been still going on. Even after more than six decades after independence democratic India has been witnessing unholy alliance among corrupt politicians and bureaucrats, still people below poverty line and illiterate and absence of basic amenities like

primary health care and drinking water to a considerable number of its citizens. Though it is an undisputed fact that development has been achieved in social, political and economic sectors in independent India, its positive impact has not been adequately felt by the country men because of maladies such as population explosion, illiteracy and rampant corruption that has been plaguing the nation. The goals set before the nation by the leadership and visionaries of the country after becoming independent of the British colonial and despotic rule are yet to be achieved. I am sure that the days are not far off before these goals are achieved with the increased political awareness among the people, intellectual honesty and personal integrity among the bureaucrats, technocrats, business men and educationists of the country and above all with the decrease in the number of career oriented politicians most of whose ulterior motive of entering the political arena has been making a fast buck, not serving the nation. "Eternal vigilance is the price of liberty" said the former US president Thomas Jefferson in 1817. Let us continue to be vigilant to preserve democracy.

"There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle."

-Albert Einstein

BOOKS' REVIEWS:

Reviewed by
Dr. B. Raghotham Rao Desai

1. GLIMPSES OF INDIAN WILDLIFE (in English):

By BMT Rajeev

Nekhara Prakasana, 2009, pp453

Rs. 895/-

Like a light fiber-glass frame that bears a heavy load—— with no protruding rivets and ribs to show how the whole holds together—— the scaffolding of this debut book compiled by BMT Rajeev bears the imprint of his command over the craft storytelling and his ability to navigate between the more nuanced demands of the subject and broad strokes of the different denizens living in the wild, touching their interesting & unexpected ways lightly, till they are interwoven inseparably, exhibiting his subtler skills.

Simultaneously, Rajeev's dealing their habits & characters a melodramatic hand, as the wildlife is confronted with extreme situations and offered drastic choices, their demands & requirements are wrung out and their appetites are stroked reflexively —— this relentless pattern can rather be fatiguing, and it is here that one looks for finer discrimination from the author. After going through the book, one knows the context of the torment one has caused, and thus one gets a chance to make amends to preserve wildlife. One must examine one's personal choices to see how far they are complicit with the quagmire one has created,

and in which the remnant wildlife must continue to live.

The wildlife preservation scenario in the whole of the world in general & in India in particular has undergone dramatic changes in the past few decades. With the steep fall in the numbers, and shrinking of habitats additionally, the average denizen in the wild is at a loss: how to survive & multiply is any wild animal's worry. New avenues in the form of sanctuaries & National Parks have opened up but most of the wild animals are not acclimatized or familiar with a number of them, and not sure of them, perhaps, with their reliability, scope & prospects. The super power status that India is aiming at in the field of Conservation is to be seen from different angles. Exhaustive reviews of the Indian wild life, and the role of the Indian Diaspora are included, along with the study of the world wildlife. The reverberations are felt every day of loss of wildlife of some form or the other. India after declaration of several of its species as endangered is the topic frequently attracting attention of wildlife enthusiasts: it is followed by a detailed discussion of all other vexing issues of the past—— Indian & international, in this treatise by Rajeev. One's impression after going through this voluminous book is that Science has received thorough treatment.

One of the fifteen chapters in the book deals with Wildlife Legislation, and I wonder whether all the readers & the author agree to the statement that 'Law' is a jealous mistress who, unfortunately, happens to be fickle & lacks the constancy of absolute sciences like Botany, Mathematics & Natural Sciences, and hence one has to be alert to keep abreast of 'her' changing stances. A writer always wears glasses & never combs his hair, while half the time he feels angry about everything and the other half depressed, spending most of his time arguing with other disheveled & bespectacled writers: saying very 'deep' things, always having amazing ideas for the plot of his next book, and Rajeev might be no exception!

Among other chapters which require to be gone through with special attention are those dealing with 'Causes for the depletion of wildlife', 'Basics of wildlife management', 'Special projects launched for Conservation', 'Monitoring and evaluation', and 'Riddles in wildlife management', since Rajeev has taken great pains to refer several treatises which he could lay his hands on, and discerningly chose to include relevant passages which are sure to educate wildlife enthusiasts, while other chapters are bound to satiate the thirst of beginners & doubting Thomases who question the very need to have wild animals roaming about the forests!

The book provides material for a wholesome reading even otherwise, and Rajeev appears to have done a splendid job as its author. We've seen this all before, primordial nature corrupted by want greed & big business and that's

disappointing since Rajeev says 'Wildlife conservation & its management is becoming complicated & a worrying issue for the Government & wildlife enthusiasts due to enhanced biotic interference of man in its habitats & in hunting valuable wild animals for trading their different organs in the international market for lucrative money in oriental medicine industry'. And so the book suggests as our sins visit upon our next generations to come, we suffer with them and for them, collectively as a society. And so Glimpses of Indian Wildlife succeeds in its ambition & for its scope, for the possibilities Rajeev finds open to him to revisits, as idea that the apparently is open to exploring. May the likes of his breed increase vastly!

2. ART OF INDIAN WILDLIFE MANAGEMENT

(in Kannada)

('Bharateeya Vanyajeevi Nirvaahana Kale') By BMT Rajeev

Sri Krishna Prasaarana; pp366

Rs. 590/-

This beautifully crafted and memorable 'Magnum Opus', by BMT Rajeev is indeed heartwarming. The author portrays with tender empathy how good intentions can result in warped and terrible outcomes. Cruelty, intended and unintended, to one species of wildlife or the other, can cause a chain of unforeseen and apparently unconnected disasters. 'Kindness can also come from unexpected places to usher in rays of hope'. The significance of impersonal news reports of

unbridled slaughtering of wild animals, upheavals and machinations of traders of various organs & parts of wild animals, finally reaches the Wild Life Board(formed in 'fifties') and 'through it to the Lawmakers' at the Centre, who enact 'Wild Life Protection Act and Rules', decades later. The author portrays vividly the terrible effects of large-scale poaching on innocent denizens of forests, *who were in no way coming into conflict with humanity on their own* — as the narration builds up, readers are shown how violence had taken over a peaceful-countryside which was home to beautiful forests, and fauna dwelling therein, and spilling into the very existence of certain magnificent rare species.

As a whole, 'Art of Indian Wildlife Management' is a *compilation of diverse themes and differing storylines, each with the author's take* on the concept of *Wildlife Conservation*. The suggestions presented in the book aren't necessarily exceptional, nor are they all examples of exemplary measures. And yet, *most of them have as idea or revelation that sets them apart* from each other, while providing for useful and erudite presentation, with sincerity and personal observation.

'Art of Indian Wildlife Management' is actually Rajeev's second book, the earlier one being 'Glimpses of Indian Wildlife' which he brought out in 2010, the language he chose to express then having been English. *Both books are lean, painstakingly-sustained- performances and are chroniclers of his length and breadth purposeful peregrinations in the world of wildlife.* I congratulate him!

3. LIFE IN THE JUNGLE: Memoirs of a Forester (in English)

By: M N Jayakumar, FRPS, IFS (Retd)

Krab Media & Marketing, 2013, pp240

Rs. 3,995/-

I believe that an artist's work comes out of an intense and unique involvement with his art itself — an artist's life, his world, indeed his whole being is focused on this act of creation. He is most at home with his own inner world of darkness & light from which emerge the strange forms — the photographs are a reflection of this all-absorbing life in the jungle. Here a waterhole or a salt-lick has a life of its own, and in combination with wildlife convey with poignance, the vulnerability and resurgence of the rare human spirit.

M N Jayakumar was not a prolific wildlife photographer — he worked laboriously as he drew inspiration from the opportunities he got during his postings, by looking at Nature philosophically. To him Nature must have looked beautiful, while making him sad. He must have felt elevated simultaneously — not contradictingly, as it is like the crest and trough of a wave. His ability to create a private realm of time and space, and an internal universe in the field he had chosen, made him stand out amongst his peers. He appears to have come face-to-face with qualitative photography for the first time. When his young eyes chanced upon an encounter of a big cat or a flying peafowl at a close range, during his perambulations in the forests, while on duty. Doodling with a

black-and-white film in an affordable camera might have come as a magical experience for the young officer. On the film's surface might have appeared pictures of unparalleled beauty which would otherwise have remained as unseen in the interiors of deep jungles — some virgin confines of core areas sometimes reveal weird manifestations. These pastimes grew into a playhouse where imagination and reality co-exist.

On his part, Jayakumar would recall that wildlife enthusiasts of his generation photographed for the love of art. I feel one should have an unwavering affair with one's creativity. Otherwise you are swept away by the tide. True, I am saying this in retrospect. But one should always resist defeat in life.

Jayakumar's photographs that were in relatively small format were eagerly collected and made headlines in several exhibitions. Notwithstanding all the pride, glory and extraordinary achievements, Jayakumar will be essentially remembered as a reclusive artist in the field of wildlife photography, a soft-spoken person and a much disciplined player at the relevant world of photography. From an amateur and casual wildlife photographer to an internationally acclaimed artist, Jayakumar's was a long and remarkable journey in the world of wildlife photography. Scaling many peaks of creativity in a career that spanned more than two decades, he developed his own unique style and created an exceptional body of work. His photographs — be they close-ups or landscapes or portraits — bear the mark of meticulous approach and delicate handling of camera, which he ingeniously and painstakingly

employed to create a host of breathtaking images in the wild.

As much for his intense and evocative art, Jayakumar was also known for his painfully modest ways and perennial reluctance to come to limelight. Though life had acquired a feverish pace, he was a recluse by nature and was not happy with the rat race — of which he could not become a part, but preferring the lone road and sating away from the crowded world around, as he preferred to be himself. That did not prevent the devoted artist's work from attracting widespread attention and critical acclaim — his name became well ensconced amongst leading photographers in the field he had chosen, and his photographs were exhibited in major shows at the famed 'Chitrakala Parishat' at Bangalore.

"Life in the Jungle — Memoirs of a Forester" focuses on creating an awareness about wildlife and Nature and appreciating the same in its true form — the beautiful book certainly capable of creating a platform for avid wildlife photographers to showcase their work and features both veteran & budding photographer — each shot being a great one, showcasing some unseen rare shots of the creatures of the wild. Some of the moments captured are very rare — the pictures are amazing and each one is different and has a story to tell. It surely makes every person to ponder what it will be like to actually see the animals in the wild. If they look so majestic in the pictures, imagine how great they will look in the wild! The pictures showcase a variety of species like tiger, leopard, lion, elephant, wild-dog, eagle, and hawks, with the underlining message that *'these animals are best in the wild'*.

8 HEALTH BENEFITS OF TURNING VEGETARIAN

By

Shraddha Rupavate

Are you one of those who cannot imagine living without eating meat? Probably you need to give it another thought. While each type of food (including meat and fish) has its own benefits and risks, overall it has been found that being a vegetarian is the healthiest way to lead life. Before getting to the benefits of a vegetarian diet, let's understand what exactly defines a vegetarian and a non-vegetarian diet.

A vegetarian diet ideally means a diet that primarily includes vegetables, while non-vegetarian diet is inclusive of animal products. But depending on personal choices, vegetarians are broadly categorized into vegans, semi-vegetarians, lacto-vegetarians and lacto-ovo-vegetarians.

◆ Vegans: These individuals avoid eating all kinds of animal products including dairy products

◆ Semi-vegetarians: They eat fish and/or chicken

◆ Lacto-vegetarians: They eat all dairy products except eggs

◆ Lacto-ovo-vegetarians: They eat both dairy products and eggs

So, why do you need to try turning vegetarian?

1. Lowers your cholesterol levels: The fact that plant sources do not contain cholesterol is enough to highlight the advantage of eating a vegetarian diet for maintaining healthy

cholesterol levels. Your body produces cholesterol in some amounts and with daily intake of chicken or red meat your blood cholesterol levels will increase to level that it starts depositing on the walls of the blood vessels, giving rise to atherosclerosis.

2. Lowers your risk of heart disease: Animal products are rich sources of saturated fats which make them closely associated with coronary heart disease (CHD). A study analyzing the association between risk of heart disease and diet found that vegetarians had a 24% lower risk of developing heart disease compared to those who eat meat. The risk was the lowest in lacto-ovo vegetarians (34% lower risk).

3. Reduces your risk of hypertension: Both vegetarians and non-vegetarians have equal chances of suffering from hypertension. But, vegetarians naturally enjoy a low sodium and low fat diet making them less likely to suffer from hypertension.

4. Prevents and controls diabetes: Being a vegetarian or vegan cuts down several risk factors like obesity that are linked to diabetes. According to a study non vegetarians are twice likely to suffer from diabetes compared to vegetarians. If you're a diabetic, you can control your sugar levels better by switching to vegetarianism. A vegetarian diet makes your body more responsive to insulin.

5. Helps to control weight: Obviously, with low fat, cholesterol and triglycerides, a vegetarian diet will help you keep your weight under check. A low-fat vegetarian diet will also you lose weight if you're obese, according to a study.

6. Reduces the risk of colon cancer: Colon cancer is rampant in people who consume fewer amounts of legumes and fiber. Because vegetarian diet is rich in fiber and legumes, the risk of colon cancer is less among vegetarians compared to non-vegetarians. Not just colon cancer, vegetarians get natural protection against prostate, stomach, breast and lung cancer.

7. Reduces the risk of kidney stones and gall stones: Non-vegetarian diet is undoubtedly rich in protein. But sometimes this excess amount of protein can cause the body to excrete more amounts of calcium, oxalate and uric acid. These

substances form the main component of kidney stones and gall stones.

8. Reduces your risk of death: Although debatable, being a vegetarian is thought to be associated with reduced risk of death (excluding other factors like smoking and alcohol consumption).

Although a vegetarian diet is beneficial for staying healthy, often due to lack of balanced diet vegetarians suffer from deficiencies of micronutrients. You need to understand that shifting to vegetarianism is not enough to lead a healthy life; a balanced diet plays an equally important role. It's not the restriction of meat that makes vegetarian healthy. It's the variety of foods (fruits, vegetables, nuts and whole grains) you choose to include in your diet that keeps you healthy.

INVITATION

The Association of Retired Forest Officers, Andhra Pradesh, Congratulates the following Forest Officers, who are retiring from service on attaining the age of super-annuation **on 30-06 2014** and cordially invites them to join the Association of Retired Forest Officers to keep in touch with their old colleagues and to keep themselves occupied.

Name of Officer

- | | |
|-------------------|------------------|
| 1 C.S.Rama Laxmi | 2 D.Sudhakar |
| 3 Dr.E.Narsimhulu | 4 Bh.Basvi Reddy |

For further details they may contact the following –

Sri. B.M.Swami Dass, Secretary	Mobile Number	9000817781
Sri.A.V.Govindarajulu , Jt.Secretary	Mobile Number	9440764611

Crossed Cheque for Rs.2000/= drawn in favor of "The Association of Retired Forest Officers" may be sent to the Joint Secretary towards Life Membership of Association

Secretary

ENDANGERED LEOPARD IMAGES ARE PROOF OF CONSERVATION PROGRESS IN CAUCASUS

New images of the endangered Caucasian leopard emerged this week proving ten years of conservation efforts are working.

Camera trap images taken over the last eight months in Southern Armenia and the Nakhchyvan Autonomy region of Azerbaijan show that at least one male and two females have been living in the area for the last year with hopes the females will deliver cubs.

Images of more Caucasian leopards from Azerbaijan this month have given conservationists indications that up to seven individuals are living in the Southern Caucasus region.

“Such increasing evidence can be interpreted as positive trends in the leopard population particularly in the southern part of the Caucasus, which must be closely connected with our 10 years of leopard conservation activities here”, said Nugzar Zazanshveli, Conservation Director at WWF-Caucasus.

According to the camera trapped photos and field monitoring data the number of prey species for the leopard has also significantly increased.

WWF together with the IUCN/SCC Cat Specialist Group developed a Regional Strategy on Leopard Conservation with involvement from various organizations of the Caucasus Ecoregion. The strategy was adopted by the governments of Armenia, Azerbaijan and Georgia as part of National Action Plans.

It included elements such as increased monitoring of the species, combating poaching and increasing the number of protected areas. Since 2002 four new protected areas were established in southern Armenia, which include leopard habitats, and cover 2.9% of the country. Caucasian leopard numbers are estimated to be fewer than 1300 individuals, and range from Iran to the North Caucasus region in Russia.

Also known as the Persian leopard, its population was once widespread throughout the mountainous region between the Black and Caspian Seas, but declined drastically throughout the 20th century due to poaching and habitat loss.

Last summer two Caucasian leopard cubs were born in Russia, the first for 50 years. (From WWF with thanks)

Birth Day Greetings

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

S.No.	Name of the member	D.O.B.			
	Sarva Sri		22.	T.Narasimhulu	01-07-1959
1.	J.V.Sharma	20-06-1932	23.	Munindra	06-06-1960
2.	V.Janakiram Naidu	08-06-1936	24.	C.Venugopal Rao	20-06-1960
3.	K.Rameshwar	14-06-1936	25.	K.Khader Basha	03-07-1960
4.	B.Malla Reddy	20-06-1937	26.	N.Chandra Mohan Reddy	10-06-1961
5.	N.Linganna	01-07-1941	27.	Dr.Mohd.Iliyas Rizvi	29-06-1961
6.	Masood Ali Khan	06-06-1941	28.	M.Srinivasa Rao	10-06-1961
7.	S.Nauratan Singh	22-06-1942	29.	A.Srinivasa Rao	01-07-1961
8.	Dr.N.R.K.Rao	15-06-1943	30.	S.Mustafa	01-07-1961
9.	T.Hanmanth Reddy	10-06-1943	31.	B.Venkateshwar Rao	08-06-1962
10.	M.V.S.Prakash Rao	15-06-1944	32.	Y.Sanyasi Rao	01-07-1962
11.	Md.Rahamatullah	13-06-1946	33.	P.Sivashankar Reddy	01-07-1963
12.	V.Devachary	09-06-1946	34.	G.Dharma Raju	01-07-1963
13.	D.Ramnarayan	25-06-1950	35.	G.Laxman	28-06-1963
14.	M.Bullaiah	01-07-1952	36.	Mohan Chandra Pargaian	12-06-1964
15.	Sitaram Gupta	01-07-1952	37.	M.Janakiram	19-06-1964
16.	Badusha Saheb	01-07-1953	38.	K.Mohan	26-06-1964
17.	P.Ashok Kumar	18-06-1953	39.	K.Somasekaram	01-07-1964
18.	M.A.Mabood Hazari	09-06-1955	40.	Ashok Kumar Sinha	01-07-1965
19.	Qudrath Mohiuddin Ahmed	15-06-1955	41.	A.Chandrasekhar	10-06-1965
WORKING OFFICERS		DOB	42.	N.V.Sivaram Prasad	18-06-1966
1.	Bh.Basivi Reddy	01-07-1954	43.	Dr.C.Suvarna	24-06-1966
2.	Smt.C.S.Rama Laxmi	01-07-1954	44.	J.Venkateswar Rao	24-06-1967
3.	Dr.E.Narasimhulu	01-07-1954	45.	B.V.A.Krishna Murthy	01-07-1967
4.	D.Sudhakar	14-06-1954	46.	G.P.Anand	13-06-1967
5.	A.Kishan	20-06-1955	47.	M.V.Prasada Rao	20-06-1967
6.	V.venkataramaiah	03-07-1956	48.	M.Raja Ramana Reddy	19-06-1968
7.	D.K.Pandey	03-07-1956	49.	P.V.Chalapathi Rao	19-06-1968
8.	Dr.K.P.Srivasuki	01-07-1956	50.	G.Srinivasulu	10-06-1968
9.	P.K.Sharma	01-07-1956	51.	V.Satish Kumar	13-06-1968
10.	B.Anand Mohan	01-07-1957	52.	S.Madhava Rao	16-06-1968
11.	P.Madhusudhan Rao	15-06-1957	53.	N.Rajendra Kumar	12-06-1969
12.	Dr.B.V.Prasada Reddy	15-06-1957	54.	R.Srinivasa Reddy	05-07-1971
13.	Surendra Pandey	30-06-1957	55.	S.Sri Sarvanan	25-06-1973
14.	TV Subba Reddy	01-07-1957	56.	Smt.T.Nagamaneswari	22-06-1974
15.	P.V.Ramana Reddy	01-07-1957	57.	Smt.Ch.Balamani	26-06-1974
16.	M.Ravikumar	04-07-1957	58.	Smt.B.Praveena	25-06-1980
17.	G.Rama Krishna Rao	06-06-1957	59.	Smt.P.Srilakshimi	27-06-1981
18.	J.S.N.Murthy	01-07-1958	60.	Smt. G.Mangamma	10-06-1983
19.	Y.Babu Rao	30-06-1958	61.	R.Srinivas	01-07-1986
20.	K.Suryanarayana	01-07 -1958			
21.	P.Jacob Benerjee	24-06-1958			

Secretary

NEWS AND NOTES

Heart attacks could soon be history: -

Washington, Apr 23 (ANI): Johns Hopkins scientists have found a way to block abnormal cholesterol production, transport and breakdown, successfully preventing the development of atherosclerosis, the main cause of heart attacks and strokes and the number-one cause of death among humans.

The condition develops when fat builds inside blood vessels over time and renders them stiff, narrowed and hardened, greatly reducing their ability to feed oxygen-rich blood to the heart muscle and the brain.

In a series of experiments, the Johns Hopkins team said that it identified and halted the action of a single molecular culprit responsible for a range of biological glitches that affect the body's ability to properly use, transport and purge itself of cholesterol - the fatty substance that accumulates inside vessels and fuels heart disease.

The offender, the researchers say, is a fat-and-sugar molecule called glycosphingolipid, or GSL, which resides in the membranes of all cells, and is mostly known for regulating cell growth. Results of the experiments, the scientists say, reveal that this very same molecule also regulates the way the body handles cholesterol. The Johns Hopkins team used an existing man-made compound called D-PDMP to block the synthesis of the GSL molecule, and by doing so, prevented the development of heart disease in mice and rabbits fed a high-fat, cholesterol-laden diet.

The findings reveal that D-PDMP appears to work

by interfering with a constellation of genetic pathways that regulate fat metabolism on multiple fronts - from the way cells derive and absorb cholesterol from food, to the way cholesterol is transported to tissues and organs and is then broken down by the liver and excreted from the body.

Scientists hope 2,000-year-old ice holds clues to climate change: -

Polar scientists who retrieved ice samples from the Antarctic say they are on the verge of unlocking 2,000 years of climate records offering clues to how global warming will affect our future.

An international team traveled to Antarctica's Aurora Basin in a five-week project that began last December, to drill for ice samples needed to bridge a gap in knowledge of temperature changes over the last 20 centuries.

Using the latest technology to probe the secrets of the past, the scientists hope to gain information to improve climate models and give a sense of normal frequency and patterns now seen in extreme events such as droughts, cyclones and floods.

"The papers that will result from this project can inform and improve our climate models to improve our knowledge of what climate has done in the recent past," said Nick Gales, chief scientist of the Australian Antarctic Division in Tasmania.

"That will greatly assist our ability to project climate change," he told Reuters on Thursday. The main ice core retrieved by the scientists, which is 303 meters (994 feet) long, will provide annual climate records for the past 2,000 years.

Two smaller cores, of 116 m. (381 feet) and 103 m (338 feet) in length, spanning the past 800 to 1,000 years, will provide extra ice for large-volume analyses of chemicals. "Just to go out there and successfully drill down several hundred meters of Antarctic ice core within a season and bring it all back is a really major achievement in itself," Gales said.

Two tons of ice core sections have now been distributed to ice core laboratories around the world for analysis.

"This kind of thing is really big science," Gales added. "It requires a lot of collaboration to get a whole lot of people and a whole lot of equipment hundreds of kilometers inland on the Antarctic continent."

Scientists will perform measurements over the next year and begin publication of results over the next 18 to 24 months, Gales said.

"They'll continue for quite a few years and then each of those papers will provide another key piece of the jigsaw in the big picture," he said. The long time-series data from the ice cores, combined with other information, will improve understanding of extreme events, Gales said, by revealing how humans have influenced climate change through the burning of fossil fuels.

The Aurora Basin project involves 15 partner organizations from six nations: Australia, China, Denmark, France, Germany and the United States.

The effort paves the way for a more ambitious drilling expedition to collect a one-million-year-old ice core in the future, the project's lead scientist, Mark Curran, said in a statement.

New frog species found in troubled Indian habitat: - Scientists have discovered 14 new species of so-called dancing frogs in the Jungle Mountains, of southern India — just in time, they fear, to watch them fade away.

Indian biologists say they found the tiny acrobatic amphibians, which earned their name with the unusual kicks they use to attract mates, declining dramatically in number during the 12 years in which they chronicled the species through morphological descriptions and molecular DNA markers. They breed after the yearly monsoon in fast-rushing streams, but their habitat appears to be becoming increasingly dry.

"It's like a Hollywood movie, both joyful and sad. On the one hand, we have brought these beautiful frogs into public knowledge. But about 80 percent are outside protected areas, and in some places, it was as if nature itself was crying," said the project's lead scientist, University of Delhi professor Sathya bhama Das Biju.

Biju said that, as researchers tracked frog populations, forest soils lost moisture and perennial streams ran inexplicably dry. He acknowledged his team's observations about forest conditions were only anecdotal; the scientists did not have time or resources to collect data demonstrating the declining habitat trends they believed they were witnessing.

The study listing the new species — published Thursday in the Ceylon Journal of Science — brings the number of known Indian dancing frog species to 24.

They're found exclusively in the Western Ghats, a lush mountain range that stretches 1,600 kilometers (990 miles) from the western state of Maharashtra down to the country's southern tip.

Only the males dance — it's actually a unique breeding behavior called foot-flagging. They stretch, extend and whip their legs out to the side to draw the attention of females who might have trouble hearing mating croaks over the sound of water flowing through perennial hill streams.

They bigger the frog, the more they dance. They also use those leg extensions to smack away other males — an important feature considering the sex ratio for the amphibians is usually around 100 males to one female.

"They need to perform and prove, 'Hey, I'm the best man for you,'" said Biju, a botanist-turned-herpetologist now celebrated as India's "Frogman" for discovering dozens of new species in his four-decade career.

There are other dancing frogs in Central America and Southeast Asia, but the Indian family, known by the scientific name Micrixalidae, evolved separately about 85 million years ago.

Biju and his team had long been baffled about the frogs' mating patterns, after searching years around the forest floor for egg clutches without success. But one late October day in 2011 they witnessed a rare tryst, and saw the female immediately bury her eggs once fertilized. This confirmed the frogs were indeed breeding only after stream levels had come down, and underlined how vulnerable they might be to changes in rainfall or water availability.

These are tiny, delicate frogs — no bigger than a walnut — and can easily be swept away in a gushing mountain stream. So breeding happens only once the level of a stream levels drops to the point where the water babbles over boulders and stones, he explained. If streams hold less water or dry out too early, the frogs get caught without the right conditions to breed.

"Compared with other frogs, these are so sensitive to this habitat that any change might be devastating for them," Biju said. "Back in 2006, we saw maybe 400 to 500 hopping around during the egg-laying season. But each year there were less, and in the end even if you worked very hard it was difficult to catch even 100."

The Western Ghats, older than the Himalayas, is among the world's most biologically exciting regions, holding at least a quarter of all Indian species. Yet in recent decades, the region has faced a constant assault by iron and bauxite mining, water pollution, unregulated farming and loss of habitat to human settlements.

A 2010 report by India's Environment Ministry also said the Ghats were likely to be hard-hit by changing rainfall patterns due to climate change, and more recent scientific studies have also suggested monsoon patterns will grow increasingly erratic.

India's government has been working to establish a vast environmental protection zone across the Ghats to limit polluting industrial activities and human encroachment, but it put the latest proposal on hold earlier this year.

Meanwhile, as India's population has grown to

a staggering 1.2 billion, at least 25 percent of the forests have vanished from the Ghats, which is now home to more than 325 of the world's threatened species of plants, birds, amphibians, reptiles and fish.

Many of these newly discovered frogs could soon be joining them, Biju said. Many of the 24 known Indian dancing frog species lives only in a single, small area. Seven were in what Biju described as highly degraded habitats where logging or new plantations were taking over, while another 12 species were in areas that appeared in ecological decline.

Biju's determination, or even obsession, with documenting as many new frog species as possible stems from his fear that many will vanish as "unnamed extinctions" before scientists ever learn they exist. Scientists believe Earth has about 8.7 million distinct plant and animal species, but they have documented only 1.5 million.

Amphibians are particularly vulnerable. At least one-third of the world's known 6,000 frog species are threatened with extinction from habitat loss, pollution, changing temperatures or exotic diseases spread by invasive animals and pests, according to Global Wildlife Conservation.

Sonali Garg one of the study's co-authors, said her family initially thought she was crazy for wanting to study frogs. "But slowly, they're becoming aware of how important and special frogs are," she said. "Slowly, I'm converting them."

Cougar Man: Living With A Mountain Lion: - MOST women would be horrified to find their husband asleep in the arms of a cougar. But when

you're married to the 'Cat Man' Mario Infanti you have to accept the other lady in his life - a 15-stone MOUNTAIN LION called Sasha. The 41-year-old adopted the powerful animal as a kitten and she now sees him as her 'mother'. Sasha has the power to tear his face off but he still let's her sit on his lap while he watches TV and has dinner. He and his wife Lenore, 53, chose not to have kids of their own to raise Sasha and have spent thousands on her upkeep. Mario, 63, who lives in Cape Coral, Florida, has been criticized for keeping Sasha as a pet but he says she would be worse off in the wild where he says she would be hunted and persecuted by humans. *(Please see last cover page for photo)*

Here's a good, quick education on Cork: - Have you ever wondered where that cork in your bottle of wine comes from? The answer is most likely to be Spain or Portugal, where over half of the world's cork is harvested.

In fact it is the National Tree of Portugal. However, unlike other forms of forestry, the production of cork never involves the death of a tree. Instead, they are gently stripped, leaving a strange but fascinating landscape of denuded trunks. All of this takes some time. Cork trees can live to over 200 hundred years but are not considered ready for their cork to be removed until they are at least 25 years old. Even then, the first two harvests do not produce cork of the highest quality. It isn't until the trees are in their forties that they produce premium cork. Once the trees have reached the maturity necessary to produce high quality cork then they will be harvested only every nine years.

A tree, in its lifetime, can be harvested (the

process is known as extraction) about fifteen times. Little wonder then, that in Portugal and Spain the propagation of the trees and the production of cork has become an inter-generational industry, with farmers still producing a crop from trees planted by their great-great grandfathers. The cork must, however, be extracted from the trees without causing any lasting harm to them, otherwise, 9 years later they will be useless.

Extraction takes place in the summer when the tree is least susceptible to damage. The poor cork which is produced as a result of the first two harvests is known as male cork. Later extractions provide what is known as gentle cork which is what you will screw out of a wine bottle, the contents of which it helps to flavor.

The extractors must be skilled at their job. They make two cuts to the tree. The first is horizontal and is cut around the tree. This is known as the necklace and the incision is made at a height around three times the circumference of the tree. Then a series of vertical cuts are made which are called openings or rulers. This is the point at which the extractors must use the most strength but at the same time be at their most gentle. They push the handle of the axe in to the rulers and pry the cork away. If the cuts are too deep or impatiently done then there is a risk that the phellogen of the tree will be damaged. This is the cell layer which is responsible for the development and growth of the periderm of the tree, its bark in other words damage this and the tree will produce poor or no cork in the future. It may even die. So strength and gentleness must

be used in equal measure during the extraction. Once the cork is extracted it is stacked in layers and left to dry out. Once that has taken place it is taken to be processed.

The technique used leaves the trees alive and the environment intact. Cork production is said to one of the most eco-friendly and recyclable harvests on the planet.

Not only is cork easy to recycle. The trees prevent the local environment from becoming arid and so actively help to maintain rare ecosystems. Not only that, but the cork forests of the Iberian Peninsula are home to a number of endangered species which would find it much harder to thrive without the presence of the cork oak forests. Although 60% of the cork extracted is still used for bottle stoppers (despite the recent predilection for using alternatives) cork is an essential component of a number of other things too.

If you are a fan of badminton, then without cork you would no longer be able to play. It is a vital component in the manufacture of shuttlecocks. More sports rely on it too the centers of baseball and cricket balls are made of cork.

(Please see last cover page for photo)

Top 15 cleanest cities in India: - It's common knowledge that the standards of sanitation in India are abysmal. Almost 60% of India's population defecate in the open with no toilets add to that the lack of waste management leaves cities with garbage is spewed all over the place. Some cities in India, however, have managed to overcome challenges and

managed to keep street clean and green.

Chandigarh emerged as the cleanest Indian City according to the National City Rating published by Ministry of Urban Development. The rating was carried out by three agencies i.e. AC Nielsen-ORG Marg, Development and Research Services (DRS) and CEPT University. The process of data collection was carried out between December 2009 and March 2010

1. Chandigarh: -Chandigarh is the best-planned city in India. The city tops the list of Indian States and Union Territories by per capita income in the country. The city was reported to be the cleanest in India in 2010, based on a national government study, and the territory also headed the list of Indian states and territories according to Human Development Index.

2. Mysore: -Mysore is noted for its palaces, including the Mysore Palace, and for the festivities that take place during the Dasara festival when the city receives a large number of tourists. Tourism is the major industry, while information technology has emerged as a major employer alongside the traditional industries.

3. Surat: - Surat, previously known as Suryapur, is a city in the Indian state of Gujarat. Surat is also called as city of flyovers. The city registered an annualized GDP growth rate of 11.5 per cent over the seven fiscal years between 2001 and 2008. It ranks 4th in a global study of fastest developing cities conducted by The City Mayors Foundation, an international think tank on urban affairs. A moat divides the older parts of the city, with its narrow streets and handsome historical houses,

from the newer suburbs.

4. New Delhi: -Much of New Delhi, planned by the leading 20th-century British architect Edwin Lutyens, was laid out to be the central administrative area of the city as a testament to Britain's imperial pretensions. At the heart of the city is the magnificent Rashtrapati Bhavan (formerly known as Viceroy's House) which sits atop Raisina Hill. The Secretariat, which houses various ministries of the Government of India, flanks out of the Rashtrapati Bhavan. The Parliament House, designed by Herbert Baker, is located at the Sansad Marg, which runs parallel to the Raj path. Connaught Place is a large, circular commercial area in New Delhi, modeled after the Royal Crescent in England. Twelve separate roads lead out of the outer ring of Connaught Place, one of them being the Janpath.

5. Delhi Cantonment: - Cantonments in Delhi and Ahmedabad were originally established by the British Indian Army. Currently, the Delhi Cantonment houses the Indian Army Headquarters, Delhi Area; the Army Golf Course; the Defense Services Officers Institute; military housing; Army and Air Force Public Schools; and various other defense-related installations. The cantonment also houses the Army Research and Referral Hospital, a tertiary care medical center of the armed forces of India.

6. Tiruchirappalli: - Once a part of the Chola kingdom, Tiruchirappalli has a number of exquisitely sculpted temples and fortresses. The city is an important educational center in the state of Tamil Nadu, and houses nationally recognized institutions such as the Anna

University, Indian Institute of Management (IIM) and the National Institutes of Technology (NIT).

7. Jamshedpur: - Jamshedpur is the first planned industrial city of India, founded by Jamshedji Nusserwanji Tata. It is also known as Steel City, Tata Nagar or simply Tata. It was first known for its mahua trees and rassi/tarri drinkers who extracted juices from various trees and then fermented them into liquor. There is an old Indian saying "Piyo aur Jiyo"

8. Mangalore: -The city's landscape is characterized by rolling hills, coconut palms, freshwater streams, and hard red-clay tiled-roof buildings.

9. Rajkot: - Rajkot has not just rich heritage and history attached with its name but it is one of the fastest growing cities today in India and world over. The city also bagged the Best Law and Order city in 2013

10. Kanpur: -Kanpur is situated on the bank of the Ganges River and has been an important place in the history of modern India. Kanpur was one of the main centers of industrial revolution in India. It was known as Manchester of the East.

11. Navi Mumbai: - Navi Mumbai, located in the eastern Trans harbor of Mumbai, Maharashtra, is one of the world's largest planned townships.

12. Bangalore: - India's garden city and IT hub Bangalore with its clean roads and greenery and plantations came in twelfth.

13. Chennai: - With its historic landmarks and buildings, long sandy beaches, cultural and art centers and parks, Chennai's offers tourists many interesting locations to visitors. One of the most important tourist attractions of Chennai is actually in the neighboring town of

Mahabalipuram with its ancient temples and rock carvings of the 7th century Pallava kingdom

14. Rourkela: - Rourkela is the industrial capital of Odisha. It has industries of all sizes. The city is known internationally for iron & steel trades. Recent up spurt in iron & steel pricing has seen a lot of industries of all sizes coming in and around Rourkela.

15. Mandya: - The land of sugar and rice, Mandya is a prominent agricultural district. A land of art, and culture; drama is a passion of most people of this district. Mythological dramas are staged in many villages on regular basis. Folk theatre, dance and songs are an integral part of the rural life.

Newly arrived virus gains foothold in

Caribbean: - A recently arrived mosquito-borne virus, that causes an abrupt onset, of high fever, and intense joint pains is rapidly gaining a foothold in many spots of the Caribbean, health experts said Thursday.

There are currently more than 4,000 confirmed cases of the fast-spreading chikungunya virus in the Caribbean, most of them in the French Caribbean islands of Martinique, Guadeloupe and St. Martin. Another 31,000 suspected cases have been reported across the region of scattered islands.

The often painful illness most commonly found in Asia and Africa was first detected in December in tiny St. Martin. It was the first time that local transmission of chikungunya had been reported in the Americas. Since then, it has spread to nearly a dozen other islands and French Guiana, an overseas department of France on the north shoulder of South America.

It is rarely fatal and most chikungunya patients rebound within a week, but some people experience joint pain for months to years. There is no vaccine and it is spread by the pervasive *Aedes aegypti* mosquito that transmits dengue fever, a similar but often more serious illness with a deadly hemorrhagic form.

The U.S. Centers for Disease Control and Prevention is closely monitoring the uncontrolled spread of the new vector-borne virus in the Caribbean and has been advising travelers about how best to protect themselves, such as applying mosquito repellent and sleeping in screened rooms. It is also closely watching for any signs of chikungunya in the U.S. "To help prepare the United States for possible introduction of the virus, CDC has been working with state health departments to increase awareness about chikungunya and to facilitate diagnostic testing and early detection of any U.S. cases," said Dr. Erin Staples, a medical epidemiologist with the CDC.

In the Caribbean, concern about chikungunya is growing as many countries enter their wettest months. The only way to stop the virus is to contain the population of mosquitoes — a task that commonly relies on individual efforts such as installing screened windows and making sure mosquitoes are not breeding in stagnant water. Experts say eradicating vector-borne diseases like chikungunya once they become entrenched is an extremely difficult task. Dr. James Hospedales, executive director of the Trinidad-based Caribbean Public Health Agency, recently described the virus as the "new kid on the block." In late April, St. Vincent & the Grenadines and

Antigua & Barbuda became the latest Caribbean countries to report confirmed cases. In the Dominican Republic, there are now 17 confirmed cases and over 3,000 suspected ones. This week, the virus was discussed by health authorities at a two-day conference in the Dominican Republic attended by representatives of Central American countries. Marie Guirlaine Raymond Charite, general director of Haiti's health ministry, said there are several suspected cases of chikungunya but nothing has been confirmed yet.

Why foreigners can't pronounce Sanskrit word 'Sri': - Ever wondered why most Britishers could not pronounce the Sanskrit word 'Sri' - a common Indian honorific for males - and instead settled for 'Shri', a combination of sounds found in English words like shriek and shred?

This is because the brain does not work like a computer when it comes to recognizing speech sounds, rather it decides whether or not a combination can be permitted based on words that are already known, a fascinating study has said.

Words that begin with the sounds "Sri" are not found in the English language.

"Our findings have implications for the idea that the brain acts as a computer, which would mean that it uses rules - the equivalent of software commands - to manipulate information," said David Gow, a clinical instructor in neurology at Harvard Medical School.

"Instead it looks like at least some of the processes that cognitive psychologists and linguists have historically attributed to the application of rules may instead emerge from

the association of speech sounds with words we already know," he explained.

Human beings speak more than 6,000 distinct language, and each language allows some ways to combine speech sounds into sequences but prohibits others.

Although individuals are not usually conscious of these restrictions, native speakers have a strong sense of whether or not a combination is acceptable.

"Most English speakers could accept 'doke' as a reasonable English word, but not 'lgef'," Gow noted.

When we hear a word that does not sound reasonable, we often mishear or repeat it in a way that makes it sound more acceptable, said the researcher.

For the investigation, the researcher applied a method that combined electroencephalography (EEG), which records electrical brain activity; magnetoencephalography (MEG), which measures subtle magnetic fields produced by brain activity, and magnetic resonance imaging (MRI), which reveals brain structure.

The study appeared in the journal PLOS One.

APPEAL

The Association of Retired Forest Officers, Andhra Pradesh will be 25 years old this year and it has been decided to celebrate the Silver Jubilee of its formation in a befitting manner. The Association also decided to bring out a 'SOUVENIR' to commemorate the occasion and constituted a SOUVENIR COMMITTEE with the undersigned as Convenor. In view of the decision by the Association to hold celebrations in September 2014 instead of June 2014, we request the foresters –retired and serving, nature lovers and well wishers to contribute articles for publication in the Souvenir so as to reach the undersigned on the address given below by 31st July 2014. Selected articles conforming to the following conditions will be included in the Souvenir to be brought out in September 2014:

1. The articles should mainly be in English language. Articles in Telugu and Urdu will also be considered.
2. Articles should generally not exceed 1500 words.
3. Topics chosen should preferably be relevant to forests and environment and issues connected therewith. Articles on issues of general public welfare will also be considered.
4. Educative and informative articles of durable value will be preferred.
5. The Souvenir Committee will have the exclusive discretion in selection of articles.

Date: 21.05.2014
IFS (Retd.)

-J. V. SHARMA,

CONVENOR, SOUVENIR COMMITTEE

Email Address: jvsharma32@gmail.com

Contact No. Mobile: 0 9441319151, Postal Address: J. V. Sharma, IFS (Retd.)

C/o VANA PREMI, Room No. 514, ARANYA BHAVAN, HYDERABAD – 500 004.

అమ్మా! ధరిత్రీ! అలసిపోకమ్మా!

రచన : ఉష

అమ్మా! ధరిత్రీ! అలసిపోకమ్మా!

అంతులేని అనర్థాలు జరుగుతున్నా!!

తరిగి పోయే వన సంపద... కరిగిపోయే నదీ నదం...

ఇంకి పోయే భూగర్భ జలం ... ఇంకేదీ పచ్చ ధనం??

పశు పక్షుల ఉనికికే ప్రమాద సంకేతం..

కనుమరుగయ్యే ఓజును పొర .. ఏమి విధి విలాసం??

పెరిగెనంత కంతకు భూతాపం..

ఈ సమస్యలకు ఉండడా చరమ గీతం? ||అమ్మా||

పండు ఫలాలే, నిండు ధాన్య రాశులే మా జీవనాధారం... మా ఆరోగ్యం రహస్యం

మరి పండించే పైరులే ఎండితే.. ఏదిక అన్నం ??

పచ్చదనమే కరువై.. పరిశ్రమల నెలవై

ఉష్ణోగ్రత పెచ్చురిల్లి నీవే సొమ్మసిల్లితే

ఏదీ మాకిక మనుగడ? ఏదీ భవితకు బాసట? అయినా...

అమ్మా ! ధరిత్రీ! అలసిపోకమ్మా!

నీవు ఖగోళంలో ఎప్పటికీ జీవముతో కళ కళ లాడాలమ్మా!

నీ తాపం తగ్గించేలా, నీ బాధను పొగెట్టేలా .. చర్యలు చేపడతాం...

పచ్చని మొక్కలు నాటుతాం అని, నీటిని పొదుపుగా వాడుతాం అని,

వనాలు పెంచుతామని, నీ వొడిలో ఆడుకుంటున్న పశు పక్షులను ఆదరిస్తామని

జీవ కోటి నివసించే పర్యావరణాన్ని కాలుష్యపు కొరల నుండి

కాపాడేందుకు కృషి చేస్తామని.. నీ పుట్టిన రోజు కానుక గా

మేమంతా కలిసి “మాట” ఇస్తున్నాం అమ్మా ! ధరిత్రీ!

ఈ “జయ” ఉగాది లో నీకు సకల జయాలు కలుగ వలెనని

ఆకాంక్షిస్తున్నాము అమ్మా! చల్లని నీ చూపులే మాకు శ్రీరామ రక్ష యగునని..

పచ్చని మొక్కలు చేబట్టి ప్రతిన పూసుతాం అమ్మా!!

ఈ పచ్చని మొక్కలే రేపు భవితకు నీడనిచ్చు మహా వృక్షాలైనప్పుడు

నీ చల్లని దీవెనలే మాకు అందాయని మురిసి పోయే నీ బడ్డలమమ్మా!

అమ్మా! ధరిత్రీ ఆశీస్సులీయమ్మా!!

OBITUARY

Sri S.KONDAS

26.06.1930 – 30.04.2014



We record with deep sense of sorrow, the sad demise of our beloved Forester Thiru S.Kondas, (formerly the first

Principal Chief Conservator of Forests, Tamil Nadu) at his residence in Chennai on 30th April 2014. He was 83.

Thiru Kondas was born in Karapatti village of Madurai District. He graduated in B Sc. (Hons) with Biology as main from Presidency College, Chennai. He was selected for the post of Assistant Conservator of Forests by the Madras Public Service Commission in 1952. After successful completion of the officer's course in forestry at the Indian Forest College, Dehra Dun, he passed out in 1954. By his hard work and sincerity, he rose to the top position and laid down office as PCCF Tamil Nadu in 1988.

Forest Education and Research was his first love. This continued till his last days for more than half of his service. He was the Instructor in SFRC Coimbatour for seven years (1963-1970). During his 6 year's service on deputation to Tamil Nadu Agriculture University, Coimbatour as Professor of Forestry, he fought with the government and got allotment of 200 ha forest land for establishing a Forestry faculty comprising a Forest College and Research Institute in a campus at Mettupalayam. Presently, about a hundred students of this college are manning the Indian Forest Service all over the country.

Recently he has created two endowments investing one lac rupees on his wife's name and one lac rupees on his own name to award a gold medal for the topper in B.Sc & M.Sc (Forestry). As Managing Director of TN Plantation Corporation,

he prepared and implemented a scheme called Giant Cashew Clonal orchard for producing high yielding cashew layers for replacing poor yielder of seed origin.

He has implemented several new projects in selected ecologically critical areas of the Western Ghats, Eastern Ghats and low rain fall areas. His innovative schemes are eco-restoration of threatened shola forests and endangered species, sanctuary of rose wood and associated valuable timber species in their original habitat.

He participated in International seminars on Mycorrhiza at Atlanta GA 1977, work shop on tropical Mycorrhizal research, Ghana 1978, International forestry seminar Kaulalampur, Malaysia 1980, International Casuarina workshop, Australia 1981 and 1X World Forestry Congress, Mexico 1984.

He has many publications to his credit. A hand book on southern Forest types of India was like a bible for all students of Forest college, Coimbatour. He released a book on International Biodiversity year 2010 on Management of Biological Diversity of Indian Forests. Further the book covering an unusual range of subjects from vegetation to legislation is really awesome.

Thiru Kondas is survived by his wife, three sons and six grand kids. By appearance he looked tough but at heart he was soft, human and humane.

He is fondly remembered by thousands of admirers, many of whom feel indebted to him. Needless to say a host of his students mourn his irreplaceable loss. **.May his noble soul rest in peace.**

V.Sambasivam



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