## Because, trees don't run away



**Dr. Nivedita L. Rao**Professor, Dept. of Biochemistry
Yenepoya Medical College
nlrdr@yahoo.com

When I see the trees by the road sides, at home gardens and other places around, I see the struggles they have gone through. Struggle to stay safe, struggle to remain alive after being cut in many places by people, struggle to recover after being burnt, struggle to adjust to the concrete ground close to their trunks, like that many struggles...



**a-f.** Tree struggle: Mutilated tree (a), choked (b), beheaded (c), burnt alive (d), poisoned? (e) and timber trade!!! (f).

Still, trees stay where they are, as if in wait of good days, days when people realize that they need trees more than trees needing them. People need trees for the shade, coolness, fruit, for survival. Trees just need some rain, sun and soil, which nature provides to them. Nature nourishes these trees, man abolishes that.

## Wishful thinking:





Tree running for its safety

*Tree chasing man with axe (Role reversal)* 

What makes people feel trees should not be there? Despite being so benevolent, trees have to bear many attacks on them. Is it not because trees bear the attacks and don't complain? Is it not because, **trees don't run away?** I wonder.

How I wish trees learned to run away from harming people. A wonderful sight it would be for tree lovers like me! Even better would be for the trees to run after the people to attack them, for a change!

Such wishes don't come true. So for now, what tree-loving people need to do is to run after tree-destroying people and stop them.





Jackfruit tree now (a), then (b)

Giant old mango tree preserved (c) in my Daiva Gudi (shrine) (d).





## Why do people destroy trees so much? The main reasons:

## **Development work**

Any kind of development work comes with treecuttings and other destructions of nature. Here are two recent instances.

2141 trees were reportedly cut off in Mumbai Aarey forest for a metro rail to come up, in October 2019. The felling of trees was opposed by green activists and local residents. After that the Supreme Court restrained authorities from cutting anymore trees there.

### Neighbour attacks!

Yes, this too, is a reason. Tree-loving people are sometimes forced to cut trees. How? When there are trees in our gardens and neighbours who attack for that. With heavy heart, I cut my five big coconut trees, huge branches of Alphonso mango tree and jackfruit tree to stop such neighbour attacks. Then, the jackfruit tree started to die. Red sticky substance started oozing out from trunk and most leaves fell off. Gardener said some treehating people bore holes secretly in tree trunks to put asafoetida, copper sulphate solution, chemicals to kill trees! Determined to save the tree from the possibly poisoning attack, I used tree trunk goop treatment (learnt online). A mixture of ash, compost and soil (available in my garden) mixed in equal proportion with little water to make thick slurry and slathered it myself onto injuries on trunk. The tree gave dozens of juicy jackfruits next season, as if to reward me. The Alphonso tree too, recovered after the big cuts and gave its special mangoes, like a warrior, I thought. Sometimes, trees are cut as precautions against cyclones and storms due to the potential threats to people safety.

#### Livelihood

Worldwide, it is estimated that more than 1.6 billion people rely on forests products for their livelihoods. Almost half of world's timber and up to 70% of paper is consumed by Europe, United States and Japan alone.

#### Accidents and arsons

Apart from these reasons, accidents too happen to trees like, the forest fires. The recent massive Australian forest fire is an example. Some forest fires are caused by lightning and others by human actions, including arson. Some people choose to burn rubbish heaps at live tree trunks! It's like being burnt alive. How cruel and ignorant people can be. I can't understand why.

In some places, trees are protected as they come under Government and Acts. They include reserve forests, protected forests, wildlife sanctuaries (Wayanad in Kerala), National parks (Nagahole, Bandipur in Karnataka). Deemed forests are those lands which have 50 naturally grown trees per hectare, over and above the height of 30 cm, or lands that have 100 trees planted per hectare, above the height of 30 cm. In Tulu Nadu regions of coastal Karnataka (Mangalore, Udupi) where shrines which are often referred as sacred grooves such as Nagabana (snake deity) and Daiva Gudi (supernatural spirit) thrive, their trees get respect, protection due to faith and fear of displeasing the deities. The big banyan tree in the Nagabana at Thokkottu highway (Mangalore) that remained safe during road-widening work and the old big mango tree at my own Daiva Gudi in Udupi, are good examples. At Yenepoya campus too, many lush green trees thrive and visitors have appreciated the refreshing green environment.

### Why is tree destruction so alarming?

For that we need to review the benefits obtained from trees.

Tree products are precious: Fruits and nuts are nature's marvellous gifts to the humankind. Packed with antioxidants, vitamins, minerals and many phytonutrients (plant-derived micronutrients), that have disease-fighting properties such as anticancer, antihypertensive, antiulcer, and antiaging properties. Flowers too, due to their natural color and fragrance, possess healing powers.



My garden fruits: Mangos (a), plums (b) gooseberry (Amla) (c), cashew (d) and custard apple (Ramphal) (e).



My garden flowers - Ordinary flowers with extraordinary effects: Hibiscus (a & b), Yellow Oleander (c), Gardenia (single) (d), Beach spider lily (e), Gardenia (many) (f), Bush clockvine (g), Croton (h) and Ixora (i).

Shade, cooling and energy conservation: Trees are natural air conditioners. When I cut my garden trees to escape neighbour attacks, two air conditioners had to be come into the otherwise naturally cool home (evidence-based). Trees help provide cooling in two ways: by providing shade, and through a process known as evapotranspiration. A tree's canopy acts like a parasol (umbrella), blocking out up to 90% of the sun's radiation.

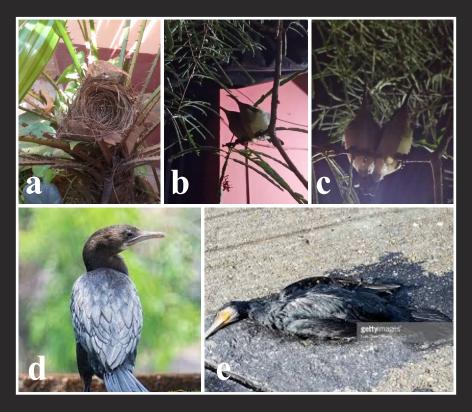
- Clean air: Trees produce oxygen, intercept airborne particulates, and reduce smog, enhancing a community's respiratory health.
- Climate change protection: Trees sequester carbon (CO<sub>2</sub>), reducing the overall concentration of greenhouse gases in the atmosphere.
- Water filtration, retention, preventing soil erosion: Urban forests promote beneficial water quality, reduce storm water management costs and prevent soil erosion.
- Wildlife habitat: Trees provide important habitats for numerous birds, insect, squirrel and other animal species.
- In November 2019, when road-widening work was going on in Manipal, the road side was strewn with several dead big black birds, many were injured and dying. Road workers had chopped the tree homes of cormorants (water crows) causing the problems to those birds. Bird club members pitched in to save some remaining birds.
- Health benefits to people: Scientists have discovered that living near trees is good for people's health. Psychological stress reduction occurs due to viewing of trees and the effect increases the more trees are visible. One study found that people living in proximity to trees had better "amygdala integrity"- meaning, a brain structure better able to handle stress. Walks through forests have been reported to decrease proinflammatory cytokines which improve immune system (attributed to certain aromatic compounds trees release); lowered blood pressure, cortisol levels, pulse rates, sympathetic nervous system activity (related to stress), while increasing

their parasympathetic nervous system activity (related to relaxation), which improve heart health. No wonder, the moment I walk through my gate into my tree garden every evening after office, I feel good. Humans and trees seem to have a natural inbuilt association meant for living together in harmony.

# Now, the most important question comes.... What can be done to save these trees?

### **Some suggestions:**

- 1. Simple but effective policies are needed for protection of trees.
- 2. Tree-cutting prohibition must be implemented, unless there is sure threat from trees to people. Even then, minimal damage to tree such as trimming can be done.
- 3. Instructions to preserve trees must be given to people to follow every day.
- 4. Tree clubs must be made in every place and members must constantly educate, sensitize, and create awareness about the perils of tree destruction.
- 5. Efficient tree officers ('tree policemen') must be appointed to take action against people who damage trees.
- 6. People need to be told they can't take shelter in shade or park their cars under trees, eat fruit or use any other tree product (such as paper) till they engage themselves actively in some kinds of tree protection activities.
- 7. Every person must be made in charge of at least one tree near his home, to protect and nurture.
- 8. Tree activists must increase in number and preservation of existing trees must be given top priority, as new plantations take years to grow.
- 9. Politicians and other administrators must find green ways to do development. Any other mode of development must not be regarded as development work by people and be rejected downright.
- 10. People must try to feel the trees, feel their positive effects, feel their struggles, feel the need to protect them, learn to live with the trees and enjoy the experience.



Bird nest (a), Resting birds on Alma tree (night view) (b & C), Cormorant (water crow) (d) alas! carcass on the road (e).

The images and good things written in this article are to create that feeling for trees. If that feeling arises in more and more people, the rest of good things will follow automatically and the bad things will fade away.

