

ચંદ્રપ્રભ લાન્ડોર

ઇન્ડિયાન પુણ્ય કોલેજ

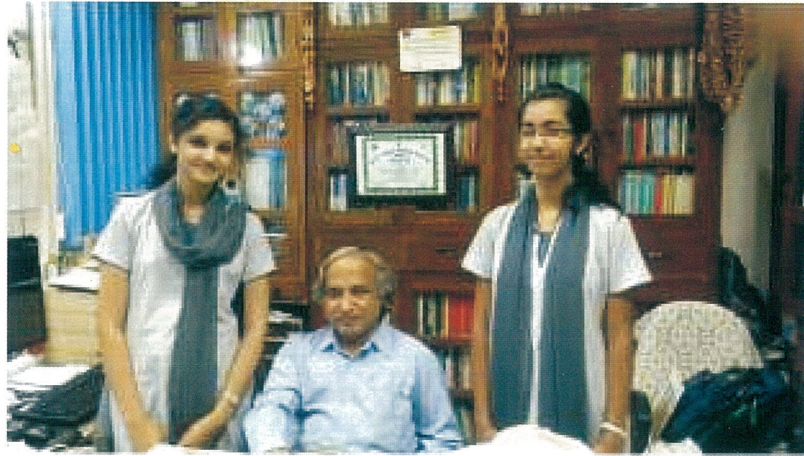
*The World is Darkness;
Knowledge is Light;
But knowledge,
without Truth is
a mere Shadow...*

VIDYOTHANA

2016 - 2017

AN INTERVIEW WITH AN ECOLOGIST

Dr. T.V. Ramachandra is an FIE, FIEE(UK) obtained Ph.D in Ecology Energy from Indian Institute of Science. At present, he is the coordinator of energy and wetlands research group(EWRG), Convenor of Environmental Information System(ENVIS) at the Centre For Ecological Sciences(CES). During the past twenty years he has established active school of research in the area of energy and environment. In a conversational encounter, he opens up about the various methods that can be employed for the conservation of our environment and also tells us about the various factors that is causing environmental degradation. Excerpts from the interview:



1. Are ecology and environmentalism two sides of the same coin? Or are they completely different?

Ecology is the study of ecosystem and environment is the study of the surrounding. When you are sitting here you are a part of the ecosystem, you are a part, surrounding you, there is light, there is air- that is the environment. There is definitely a link between the two.

2. How did you get associated with working with water bodies? What inspired you to work with environment and its conservation?

Since childhood, I have been playing with water.(laughs) Being born in the western ghats, nature is all that you can think about and it inspires you in the finest way possible.

3. One of the things that we as a society would want are answers. As an ecologist, could you please enlighten us as to what the consequences of climate change, invading new spaces or an oil spill might be?

These are global challenges. Even before that as a human being, one should know to minimize the waste. Its all about conservation. The moment

conservation is thought about there is environmental upgradation. I am not talking about conservation of biotic species but of water. One of the main reasons for climate change is attributed to the drastic change in your consumption pattern and in the process more and more green house gases are being emitted. Hence reducing the waste automatically reduces the emission of the green house gases.

4. A number of human activities are changing the flow of water and its interaction with hydrological cycle at many levels. To what factors would you attribute this sudden impending change to?

The way we are managing our land resources, crisis is bound to happen. If we take Bangalore, as an example, it has been concretized to such an extent that in the last four decades, there is 100% increase in the concrete area. We have lost 88% vegetation cover and 79% of water bodies. Today's children are not having adequate number of trees. For you to breathe, to take away the carbon di oxide that you give out, eight trees are required. According to my calculation for every 7 persons, there is one tree but the situation should change to truly account for a healthier environment.

5. As a scientist what are the major roadblocks that you face in your drive. Is it lack of support from the government or the indifference of the people?

I would definitely say that I don't face problems from the people. Most of my research happened because of people approaching me for a solution. They are the ones who took it forward. The stumbling block is the bureaucracy. Neither does it read the outcome of my research nor is it keen in implementing. They think that they know everything. That kind of colonial mindset leads to a one way approach in solving the issues with respect to ecology and its conservation.

"There is a huge difference between literacy and environmental literacy. One must implement the latter for the sustenance of our environment."

6. The obvious and pervasive problems that lakes are facing today is that of eutrophication. How could we minimise the effect of the latter to conserve our lakes?

This again is a sign of mismanagement of resources. Eutrophication is nothing but the enrichment of nutrients. If the lake was receiving only rain water, then there is no eutrophication. The day we pumped the pollutant - be it a point or a non point source then we paved way for the problem of

eutrophication. Point sources are those wastes that are released from our everyday household and industry whereas non point sources are the wastes from agriculture. The main cause for eutrophication in my perspective is sewage and industrial effluents.

7. If we take a look at the lake of Bellandur, with phosphates we find that something else might be brewing in there. Is it something more than what meets the eye?

Frothing happens because of phosphates getting into the water bodies which is the result of the use of a variety of detergents and also there is no treatment of sewage water before it is let into the water body. When the nitrogen and phosphorous get into the water body, some part of nitrogen is taken up by the plants and algae. The major portion gets trapped as a sediment. During the months of March to May there is high wind accompanied with high density rainfall. During this period, churning of the lake takes place and results in the formation of froth. After doing the sample analysis it was very evident that the major component found there was phosphorus.

8. How can we save our lakes from the froth formation?

The only way to make that possible is to decongest Bangalore.

9. How can we decongest Bangalore?

One has to start development in other regions of the state, improve the infrastructure in other districts and move the facilities to regions outside Bangalore. Hence by bringing about uniformity in development, every region of the state gets benefitted. We also need to ensure that 30% of Bangalore has a green cover. If the present scenario continues by the year 2020, 95% of the city will be transformed into nothing but a concrete land.

10. Lastly, what is the message you would like to give the youth with regard to ecology and its conservation?

Every youth who understands the need of conserving our environment will be tomorrow's leader. They have to strive towards creating environmental awareness amongst various sections of people.

Pannaghashree II B I

Deeksha I A