



It's all about us!

Text and Photographs: **Rushikesh Chavan**

Forests are not only magnets to rainfall, they have a very high aesthetic value in our lives and we are hard-wired to enjoy them

“*Tum exactly kya karte ho?*” What exactly do you do for living? ... is a question I have been consistently asked at family gatherings in the 15 years of my career as a nature conservationist. In fact, even friends genuinely want to know what I do. I very diligently try to explain to them what conservation of nature entails, till there comes a point in the conversation when I begin to believe that they understand what I am doing. But most often, if not always, out pops the question “Oh, like National Geographic and Animal Planet. Do you also make documentaries?” That’s my cue that they have not understood a thing and I start all over again. The conversation ends in “... *oh accha accha*”, and most often both parties give up. Initially, I would conveniently tell myself, it’s a stupid world, they have lost their connect with nature. Then there was self doubt ... am I unable to explain to people what conservation means? And now I try not to react if I hear “Oh, like Animal Planet ...”. I have realised that I speak a different language.

I have understood that people, especially in megacities like Mumbai where I live, are so caught up with the rat race of life that it seems unreasonable to expect them to understand a set of reference points that are not a part of the race, the 7:07 am local would be their priority for the day, helping them reach their destination on time, while protecting termites would be the last on the list, that is if it ever was on the list. The rules are different!

When one looks at conservation from this conventional viewpoint, it becomes evident why conserving nature is a neglected subject. Even those who care, mostly believe that Earth is in trouble and needs saving! However, the truth is that Earth can take care of itself. It does not really matter to Earth if the current environment changes completely and its current inhabitants go extinct. Environment on Earth has always been changing and species have gone extinct and will continue to, species that are surviving today including us humans need the environment as it is today, rather what is supposed to be ideal. Let us not personify Earth, but understand that “It’s all about us people!” Our solutions have to be focused on us and not on nature.

Having said that, if conservation of nature is the solution to human survival, then these solutions have to be human-centric, and based on a robust understanding of how nature works. Mere compassion cannot be the solution. People go about planting trees, honestly, one can feel good about it and there are benefits, but it is not going to work. We need functioning ecosystems, gardens won’t be much of a help. The solutions have to be based on science and in-depth understanding of natural systems. Do not get me wrong; I do not disregard compassion, but there is no substitute to professional training. E.g. I feel strongly for people suffering



Climate regulation relates to the maintenance of a favourable climate, both on local and global scales, which has important implications for health, crop productivity and other human activities. Forest ecosystems trap moisture and cool the earth’s surface, regulate rainfall and temperature, and act as water catchments



Mountains cover c. 27% of the world’s land surface, and directly support the 22% of the world’s population who live within mountain regions. Mountains’ are in fact the water towers of the world



The carbon stored in a standing forest has huge economic value, much of which would be lost if the forest is burned or logged. It is unwise to just value trees as forest or carbon stores, yet it is a good starting point

from brain haemorrhage, but does that mean that I perform the surgery myself, or do I take the patient to a qualified doctor? This is what is happening in conservation of nature. Passion alone cannot maintain nature as it suits us. Primarily what we need to do is to re-align human behaviour, as people can no longer relate to nature, let alone prioritise it. This can only be done with robust scientific understanding.

There can never be one solution that sorts out a conservation issue. What worked at one time or at one place need not be the solution in

perpetuity. Conservation actions need constant review and a gaze at the horizon. The Wildlife (Protection) Act, 1972, (WPA) a monumental milestone in the conservation history of India, is a classic example. Undoubtedly, many species and habitats are secure as long as this law is implemented and not diluted. But what has happened over the past four decades is that we have been mostly left with islands of protected areas. These are good for protecting a number of species, but for protecting ecosystems and their functionality we need to protect large landscapes.



Unfortunately, most large landscapes in our country are a mosaic of multiple-use areas with large human populations. This is where WPA's scope becomes limited. The challenge is to maintain the integrity of the landscape. We have to ensure that ecosystems continue functioning and interactions with other ecosystems are maintained. This is the challenge. We are not like Africa where population densities are lower, we will have to work around the fact that wherever we go in this country we have people who are dependent on ecosystems for their subsistence. Thus,

the solution has to focus on ensuring that local communities conserve the ecosystems without jeopardising their sustenance, influence public policies, and, as I mentioned earlier, align human behaviour. Conservation of ecosystems and landscapes is a global issue and India covers less than 1% of land. So, it is difficult to maintain the world's ecosystem; yet, I believe that this is possible, and this brings us to conservation economics.

Yes, economics – the universal language, a language that every human understands. Economics and

Top: The road to economic prosperity lies in protecting forests

Bottom: Nymphs of species such as dragonflies play an important role in the balance of nature. Nymphs feed on other larvae such as those of mosquitoes



Most landscapes in India are used for multiple purposes and have a high density of population



Deer are critical for the flow of energy as they pass on the energy locked in vegetation to the predators

conservation have never been perceived as partners; in fact many believe that economics has ruined nature. But economics is not the villain; it is the short-term goals, or rather greed fulfilment, for which the fundamentals of economics are exploited. Economics and ecology are actually two branches of the same subject. Ecology and economics originate from Greek words *oikos* (eco) meaning house; *nomos* means management and *ology* means study.

So, ecology is the study of a house and economics is the management of a house, the very same house. Conservation, therefore, is all about managing our house! The question remains, how does one do this?

Economics depends a lot on measurement and monitoring. Every buck is counted, measured, and indices are made. Over the years, economists have, with a little help from statisticians, developed models that can be adapted to

measure and monitor the effectiveness of conservation initiatives made over the past few decades, i.e. they will assess conservation efforts and tell us what works and how much. This will push conservationists out of their comfort zone and will help to channelise our limited resources. It might burst a few bubbles, so what! That is what we need, robust conservation models. I am optimistic that these models will throw up some very interesting facts about conservation efforts worldwide.

Conservation economists have worked out ways and methods to put a price tag on ecosystem services. This is a little debatable and economists have received a lot of flak for it, yet no one can refute the immense potential it holds. Ecosystem services are divided broadly into provisional services such as food, water, raw materials, and medical resources; regulating services such as climate control, carbon sequestration, moderation of extreme events, wastewater control, erosion control, and pollination; supporting services such as habitats for species and maintenance of genetic diversity; and cultural services such as recreational services, tourism, aesthetic and inspiration for art and culture, and spiritual experience. Let us speak the ‘universal language’ to the point of speaking the language that people understand. Economists have been looking for ways to estimate the cost of these services, how much you would have to pay for these if they were chargeable. Hopefully, economists will soon be able to price tag these in such a way that the public appreciates their value and the urgency of conservation, and acts upon it.

In a world where development goals are short-term and large “developmental” projects are critical for “growth”, it is getting increasingly difficult to protect fragile ecosystems. Unfortunately, some developmental

projects are not just ecological disasters but also economic disasters – the proposed Hooman dam, Maharashtra to name one of many. Several economic cost-benefit assessments (CBA) across the globe, especially in Peru, Bolivia, Ecuador, and many other Latin American and African countries, have proved that many developmental projects don't make any economic sense, and a significant proportion will never live up to the promises they make. CBAs have also helped to understand the negative externalities of these projects, that is the negative impacts they will have on nature, archaeological monuments, and people, and possible ways by which these can be internalised, meaning that negative impacts can be quantified at the planning stage and mitigation measures can be put in place to negate them. Implying, how do you cater for negative impacts of a project and make a project not just economically but ecologically viable as well. A country like India really needs to get these assessments done and find a smarter way to “develop”, after all development and growth are two different things. Development by definition is improvement in overall human welfare, and not just increase in the economic bottom-line.

Conservation economics has another fascinating branch which can help avert the “tragedy of commons”. This is a term introduced by Garrett Hardin in 1965 to describe a situation where individuals act independently and rationally to fulfill only their self-interest and behave contrary to the best interests of the whole, resulting in depletion of common pool resources. A classic example of one such depletion is over-fishing in our oceans; another is over-grazing which destroys pastures. Elinor Ostrom, through her work in economics, has documented that the tragedy of commons can be averted.



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This is done by users of common pool resources (resources that are rival in nature and non-excludable, meaning a resource that is accessible to all, but if one gets it, others won't) working to overcome incentives to destroy, by developing rules-in-use that enable them to utilise these resources more effectively and develop policies to safeguard them.

Conservation economics is a relatively new stream and has its challenges, but surely is one of the most promising fields for conservation of nature. Conservation economics, backed with conventional conservation methods, can give conservation a much needed impetus. It will provide conservation practitioners, like me, a tool to assess our effectiveness and negotiate with communities and policy makers, but most importantly, will help conserve ecosystems for posterity.

I am an eternal optimist and believe that the human race can overcome challenges. True, the road is not going to be easy. Conservation economics is not straightforward and since it is data hungry, garbage in will be garbage out. Also, conservation economics can only

be relevant if ecologists strengthen it. Economists will provide tools, but to make it relevant to nature will remain the job of ecologists. So, if ecologists and economists work together, there will, no doubt, be a magical outcome. With this new found armoury in my bag, I should be able to answer the question “*Tum karte kya ho*”. Not just that, I should be able to get conservation to dining table discussions. Conservation economics, along with Conservation psychology, what I collectively call Conservation behaviour, will give me a language to talk to you all. As for you guys, find some time to look outside, outside your race, maybe right now. Go out in the wild, read more books, more articles. We are hard-wired to have a good time with nature. My monologues need to be dialogues; for a dialogue to happen you must open the windows and realise that it's all about people ... about us ! ■



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