

low-carbon future. "Moving to a high-energy planet is a moral imperative." Or, to put it another way, bring on the Inga dams and ditch the solar panels.

This is a critical debate right now, with the United Nations making a global push to deliver electricity to the billion people who still lack it. Governments in many poor countries are handing out cheap Chinese solar panels to millions of homes. I have seen them in recent months in Mali and Guyana, for instance.

The trouble is that neither side is wholly convincing. The Breakthrough report has little to say about the implications of its strategy for the climate. The small-is-beautiful crowd, meanwhile, have yet to explain where their endless expanses of solar panels will take the poor.

Large hydroelectric projects are not the answer either. Earlier this year Bent Flyvbjerg at the University of Oxford's Saïd Business School published an analysis of 245 such schemes built between 1934 and 2007. It concluded that dams are mostly financial millstones: completed years late, almost 100 per cent over budget, and delivering less economic return than they cost to build. Recent dams are no better than older ones, and the bigger they are the worse they perform (*Energy Policy*, vol 69, p 43). This doesn't augur well for Inga.

There are no easy answers. We need more than rhetoric to be sure that low-carbon technologies are not developed at the expense of the poor. We need more voices from the people of Africa about what they want.

What must be avoided at all costs is that Africa stumbles into future of cheap coal to power its cities and cheap solar panels for rural areas. With ever more people leaving the countryside for the cities, that does not sound like a good solution. ■

Fred Pearce is a consultant for *New Scientist*

## ONE MINUTE INTERVIEW

# Big cats in the city

Humans and leopards really can coexist around big cities. We just need to understand their ways, says **Vidya Athreya**



### PROFILE

Vidya Athreya is an ecologist with the Wildlife Conservation Society-India. She studies human-leopard interactions in heavily populated areas. Her research formed the plot of the Bollywood movie *Ajoba*, released in Mumbai this summer

### What happened with *Ajoba* - the leopard whose story is the basis of a new film?

In 2009, a leopard in Maharashtra in western India fell into a village well while chasing a dog. My team captured him, named him *Ajoba* (grandfather in Marathi), fitted him with a GPS collar, then released him in a forest 60 kilometres away. Without harming a single human, in the next month he did a 120 km trek - crossing the Mumbai-Agra highway and passing through two other protected areas before he settled in the Sanjay Gandhi National Park (SGNP), Mumbai.

### Are leopards moving to urban areas now?

Leopards have lived in SGNP for a long time. But today, the city has crept north and is besieging this park. Around most buildings near the park where leopards have been seen on CCTV or photographed, we've noticed an abundance of dogs - known prey for these nocturnal hunters. Residential areas with piles of garbage attract stray dogs and pigs, which, in turn, attract the leopards.

### Just last week a leopard was on the Indian Institute of Technology campus in Mumbai. What happens when a sighting is reported?

Thanks to the Wildlife Protection Act of India leopards cannot be killed. If a leopard is sighted but hasn't attacked anyone, most often it used to be captured and released elsewhere - usually in the SGNP. But we found that this practice could lead to attacks on humans near the release sites, so are trying to discourage this approach.

### Why does translocation cause problems?

Wild animals generally fear humans so much that their first reaction is to freeze or slink away. But leopards are highly territorial - they know their areas well. If you take such a cat and go dump it in a new place, it gets stressed. There are other local leopards, and it does not know where it can get food or water. Meanwhile, humans are abundant near these areas - so chances of conflict increase. Yet since capture-and-release has decreased, there have been only a few attacks on humans.

### Can people and leopards coexist in Mumbai?

They already do. Wildlife living among people, even a potentially dangerous species like leopard, is not a new phenomenon in India. Big cats survive because the rural populace tends to be tolerant. Even around SGNP in Mumbai, where people live in open houses without concrete walls, for example, they seem more willing to share their space. But this isn't always the case in high-rises. Informing apartment dwellers about the ways of these big cats is invaluable so they don't pressure parks to set traps. Whether leopards visit their buildings or not is largely in their hands.

### And what became of our hero, *Ajoba*?

In 2011, he was killed on a highway on a jaunt out of SGNP. Things are changing fast in India in terms of vehicular traffic. Protected areas are important but leopards have very large ranges. As India expands its roads and railways, we need to build wildlife bridges and underpasses to ensure that *Ajoba*'s kin don't end up as road kill.

**Interview by Vijaysree Venkatraman**