

Why victims turn killers



■ Mahesh Rangarajan ■

NEWS OF animal-human conflict in India easily makes headlines. Two young tigers, sub-adults both, poisoned to death in the Ranthambhore Tiger Reserve by irate Gujjar herders who were losing cattle. More unusually, a lion was killed by villagers near the Gir Forest, Gujarat, when it mauled a man.

It is easy to take sides and sometimes necessary to do so. Large mammals have little standing room or shelter in a sub-continent where they have been crowded out not only by the sheer weight of human numbers but also by the cumulative impact of our ways of living. Rice paddies and wheat fields, and now mined moonscapes and highways, obliterate or bisect habitats.

Conversely, those who grow crops in areas where large herbivores are in the vicinity often suffer serious loss of life, limb or livelihood. Elephants account for over 300 lives lost a year.

Crop losses are not all. The death of domestic livestock by predator attacks can be a major burden too. A study by two leading biologists, Dr M.D. Madhusudan and Dr Charudutt Mishra of the Nature Conservation Foundation, Mysore, put together a mosaic of carnivore-cattle conflicts. They reckon as much as a third of large carnivore diets in India consists of domestic livestock.

On both counts, whether of rare animals endangered by human retaliation or of people whose work and livelihood brings them into direct conflict, there is need for redress, mitigation and, where needed, recompense.

Nobody can possibly want an India bereft of its mega fauna, but fewer still would want those at the edge of the bread line to bear the cost of saving a natural heritage.

There have been not one but two kinds of responses to such conflict. One, widespread over the last two centuries, has been simply to rid the land of the animal. Few realise that lions were hunted in the grasslands of Haryana just 200 years ago. They were killed off for rewards to safeguard herds of milch and draught cattle.

The other response over the last century, especially towards its dying years, was to set aside refugia where large animals prey — predator, mega herbivore and all could live in relative seclusion. If at all India still has viable populations of tigers, rhinos or elephants, it is thanks to such reserves.

That is why a set of parks, including Bandipur and Mudumalai, has the world's largest populations of Asian elephants. Yesterday's tiger shooting blocks or princely hunting grounds are today's nature reserve. This is also why Kaziranga in Assam is still wet savannah grassland with rice paddy.

But animals do not recognise the boundaries of such protected zones. When newspapers report that a tiger has "strayed from a park" or that an elephant "wandered into the fields", they reflect a sad poverty of understanding. These animals do not have permanent abodes the way we humans do: Only in films and stories do tigers live in caves and elephants reside on a particular

hill.

Perhaps this belief is rooted in human portrayals of nature. The wolf or the lion were known in Sanskrit literature as *guhāsaya* or the ones that live in caves. They may use hollows to have and shelter young but this is not an address on their calling cards.

At times human impacts are not uniformly negative and may create new spaces for forage or predation. Wolves have preyed on sheep and goats for centuries, with shepherds evolving strategies to protect their herds. Elephants may find fields of ripening grain a better bet in calories and nutrition than grazing over vast swathes of forest.

Animals also move for a host of reasons. Sub-adult carnivores walk huge distances trying to carve out territories. Drought, if it lasts over a year in a monsoonal climate, may make elephants traverse into human-dominated zones in search of water. When floods inundate the Brahmaputra plains, rhinos and wild buffalo trek to the Karbi Aglong hills.

Reserves are, therefore, part of a larger mosaic of landscapes that cannot be left alone but still need their basic integrity to be kept intact. While in a nature park preservation is the key, in adjacent lands it cannot be a hands-off nature policy. It has to retain the routes for movement and avoid activity that can rip apart the land and waterscape.

Keeping the mosaic means a series of do's and don'ts. Mines, huge highways and infrastructure must be diverted or kept out, even as horticulture or agriculture, herding or forestry continues. This wider logic underlay the labelling of "tiger landscapes" after the Tiger Task Force Report of 2005. In a sense, this larger approach has to be equally sensitive to legitimate human aspirations. Cultivators need protection from crop raids, whether it is insurance or a more proactive preventive measure. Livestock compensation is

another must. People on the margins of wealth and power can only then be allies, not adversaries of conservation.

To do this requires a recasting of not just protection or conservation but the ways in which development now works. It seems a daunting task but India is a country with a host of approaches and models, some of which have worked well in specific settings.

Both Dr Madhusudan and Dr Mishra, mentioned above, have such working approaches in place. Each has separately won the coveted Whitely Award for pioneering new conservation methods. The former has worked with cultivators at the edge of Bandipur fencing fields to keep out elephants and boars. This in itself is not novel, but the cooperation and maintenance by the farmers is. The fenced-in fields are close to a well-protected national park. Fences guard the crop, the park and the wildlife.

Dr Mishra has been in a vastly different landscape, in Kibber valley, Himachal Pradesh, setting up insurance for those who lose stock to snow leopards and wolves. In Kibber, villagers were compensated for loss of grazing, following which they set aside some of their grazing land for wild sheep and goats.

In both cases, it is patient long-term work that looked at both the biology of the wildlife and the livelihood concerns of the residents. It then sought to transform a problem into an opportunity, to defuse a conflict of interests by mitigating loss. Both have ties to traditional conservation.

Whether such approaches can work will have much to do with whether or not India has a future for both humans and its rich array of wildlife. There can still be no substitute for parks. But living with nature is about much more than parks. It also calls for innovation that reduces risk and loss for those at the edge of conflict.

It is true that such working models are few and far between. Can their logic be extended? Will they work without such dedicated personnel? There are still miles to go. But there is that old Indian saying, that it is better to light a candle than to curse the darkness. Hope now lies in the day when a hundred, a thousand and more such candles glow. It would put an end to the day when victims turn killers.

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