

# Wings of ecology

Cultural tolerance and better understanding can reduce human-wildlife conflicts

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**BIRDS, WILD ANIMALS AND AGRICULTURE**

Tara Gandhi  
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**F**ARMERS OFTEN prepare seed beds for paddy seedlings by sprinkling the paddy seeds in the moist soil and then cover the seed bed with old paddy or wheat straw, locally called *purali*. This is done to protect the seeds from the birds. Orchard owners use visits by birds as an indicator that the fruit is ripe.

For ages, farmers in India have lived in harmony with nature. They also found ways of keeping their crops safe. If we visit an agricultural field, the first thing we would notice would be a scarecrow. Often, the health of a farm is evaluated by the number of birds and small animals visiting them. Several examples can be cited of how farmers have exhibited cultural tolerance not only towards birds but also wildlife. Such cultural tolerance has helped humans coexist with even large animals like elephants. However, economic development and urbanisation along with the country's burgeoning human population have put pressure on natural resources and subsequently increased the conflict, primarily in and

around the reserves, national parks and conservation sites.

Tara Gandhi's *Birds, Wild Animals and Agriculture* is a collection of stories of traditional agricultural practices and direct accounts of farmers. She also sheds light on some of the conflict areas, including Karnataka, discussing the ill-effects of agriculture on wildlife and vice versa. Divided into four parts, Gandhi's book deals with various aspects of the human-wildlife conflict as well as coexistence. Though cases of conflict with humans involving large herbivores like the elephant and large predators such as the leopard and tiger are grabbing attention, the book focuses on the conflicts between humans and birds or smaller mammals like wild pigs that cause extensive damage to a variety of crops. Birds often get poisoned due to retaliation by farmers. Peacock deaths in Haryana in 2010 hit the headlines for this reason. The national bird was subjected to electrocution and poisoned by the locals. Similarly, the story of Amur falcons has not yet faded from our memories. But the role of public participation in conserving the falcons has reaped benefits.

Gandhi's book lays emphasis on conducting detailed and in-depth biogeographic and socio-economic surveys of the conflict area, a multi-pronged locale-specific strategy

## EXCERPT

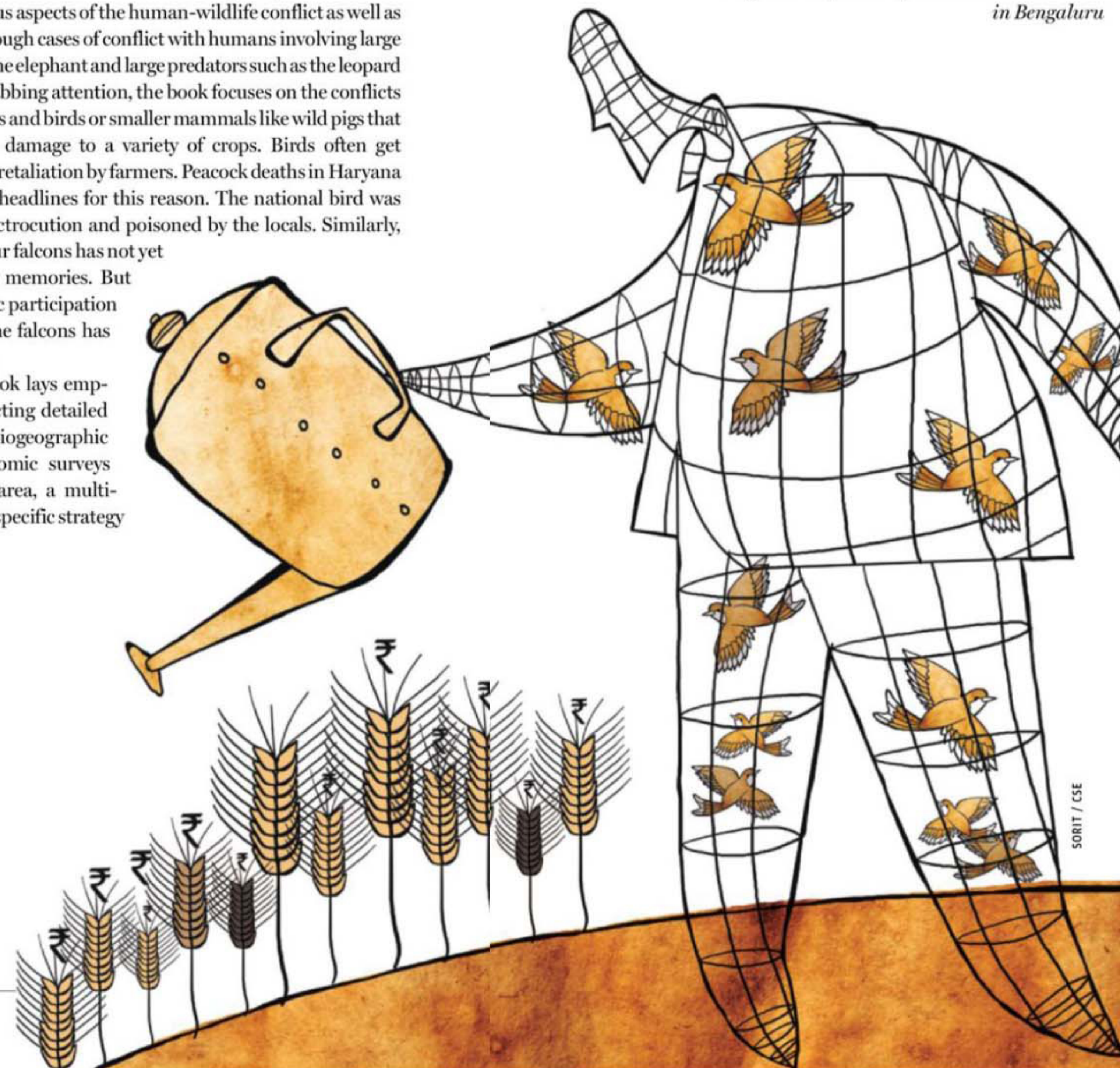
**NATURAL HABITATS** of birds are under the great threat of inappropriate land-use and misuse of ecosystems. Urbanization of rural areas, incessant construction of buildings, bigger airports, wider roads (or which ancient trees are ruthlessly cut down), along with replacement of natural vegetation with cultivated crops, particularly those that offer no resting or roosting sites for birds, and extensive use of chemical

pesticides are among the main reasons for bird population decline. Open scrub areas that are favoured habitat for ground nesting birds such as larks and lapwings are often dismissed as wastelands and are the first to be appropriated for conversion to construction sites, landfills or other uses. Air pollution, water contamination and high noise levels could be additional factors affecting bird populations.

combining traditional and modern techniques that can be effective in mitigating the human-animal conflict. The book also describes species of birds, primarily insectivores, which are helpful to farmers. In addition to useful birds, the book also discusses how unplanned urbanisation has affected bird populations and their habitats, especially the ones located on the outskirts of cities and towns. The book is supported with interesting case studies.

The solution to reduce human-animal conflicts is not relocating people but to understand the problem—availability of food, shrinking forest cover, restricted movement corridors, drying waterbodies and changing agricultural practices. There are several accounts wherein farmers made efforts to bring birds to their farms by keeping water, planting trees near the periphery and even sported bird houses. The reasons are simple—birds helped in pollination, pest management and their droppings act as natural fertilisers. However, in recent times, one of the main reasons of increased human-bird conflicts can be the mono crop culture and fragmented landholdings. ■

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SORIT / CSE

## AUTHOR SAYS

**Tara Gandhi is a wildlife conservationist and was the last student of the legendary ornithologist, Salim Ali. She speaks on the state of bird conservation in India**



### How did the book come about?

The content of the book is heavily based on my interactions with the farmers with whom I have had several opportunities to work while at the M S Swaminathan Research Foundation in Chennai. My curiosity made me ask questions—about birds and wildlife visiting their farms as I frequently heard about the problems these farmers faced from them. This has now been termed human-wildlife conflict. Interestingly, most didn't mind the birds visiting their farms. This book is aimed at managers and policymakers to look into this aspect and hopefully get ideas that can be implemented on field to mitigate such conflicts.

### What is the state of bird conservation in India?

Most of the funds are directed towards charismatic animals. But in the end, the conservation of the umbrella species or the charismatic animals like tigers and elephants will help birds as well. Conserving birds is easier—by preserving the ecosystems, like conservation of wetlands, coasts, dry scrubs, as a whole will automatically conserve a variety of bird species. The other way to conserve birds is to leave them alone. By not interfering in their natural habitat and hindering important stages of their life cycles like breeding and their roosting areas will help in their conservation. Take the Narcondam hornbill for example, which is endemic to the small island of Narcondam in Nicobar. Leave them alone and they will be fine.

### How can people contribute to nature conservation?

There is a need to make the public aware, especially of where the things that they use and consume come from and where they end up. People should be educated and made aware of the consequences. One cannot generate interest by just putting up a board that says 'please conserve nature'. People need to be guided as to how they can contribute to conserve nature. Bird festivals and citizen science projects such as Migrant Watch, the Sparrow Project and several other initiatives are welcome as they inspire people. However, what concerns me is the large number of people congregating in remote forested places who destroy the place as they camp out, have bonfires and dump waste. I think eco-tourism should follow strict guidelines.