## **Dr.Jekyll & Mr Hyde:** The Strange Case of Human-Macaque Interactions in India

## They say: Pour, pour the milk! When they see a snake image in a stone But they cry: Kill, kill! When they meet a snake for real.

## - Basavanna, 12th AD

As we hurtle headlong into the twenty-first century creating technologies, breathing development, and grabbing land and resources, most of us will readily acknowledge that we may be harming the natural world by our actions and that we must do what we can to correct this. Judging from the enthusiastic response to most wildlife campaigns nowadays, it would also appear that the human population, or a goodly portion of it, genuinely sympathises with the fate of wild animals today and seeks to preserve them and their habitats. The more difficult choice to accept is that of physical coexistence, or sharing our living space with them. It is relatively easy to think of saving wildlife when it is a matter of conserving their space, infinitely more challenging when the issue is one of sharing our space with them.

Most primate species are constrained by their lifestyles to remain within the small forest fragments that we have earmarked for them; a handful is less decorous in their behaviour, and willfully enters our fields and homes to ravage and pillage them. Many of the Asian macaques fall squarely into the latter category-hardy and highly adaptable, they have lived in close contact with human beings for centuries. India boasts a high number of macaque species that are found in most parts of the country; the bonnet macaque and the lion-tailed macaque are found in southern India, the rhesus macaque in central, northern and northeastern India, the Assamese macaque, pig-tailed macaque, stump-tailed macaque and Arunachal macaque in northeastern India and the crab-eating macaque in the Andaman and Nicobar islands. All macaque species in India are threatened by anthropogenic pressures such as hunting, trapping and habitat loss, to greater or lesser degree. In turn, humans also face various disturbances due to macaques, such as crop- and kitchen-raiding, damage to household articles when they enter houses as well as occasional bites and injuries. The main causes responsible for the escalation in human-macaque conflict in the past few decades are: (i) loss of natural habitat due to encroachment of forest lands leading to macaque populations moving into and proliferating in human spaces, (ii) provisioning of macaques by tourists or people driven by religious fervour, leading to an increase of macaques in such areas,



and (iii) unplanned translocation of macaques from urban localities to rural areas, resulting in large populations of unwanted macaques in and around villages and cropfields.

The bonnet macaque, crab-eating macaque, Assamese macaque, pig-tailed macaque, stump-tailed macaque and the Arunachal macaque are known to raid cropfields in some areas and cause major economic losses to farmers. Also, where found in urban areas, the bonnet macaque is considered a nuisance due to its proclivity to enter houses and damage household objects. But the most feared and reviled of them all, in terms of causing hardship to humans, is the rhesus macaque. A sturdy, pugnacious species that inhabits towns, cities, villages and forests with equal ease, rhesus macaques not only cause financial losses to farmers and urban-dwellers due to their crop and kitchen-raiding habits but are also known to grievously injure people during such depredations. They have been labeled 'simian terrorists' in many towns and cities of northern India; Delhi, famously, has tried several measures to confine the monkeys to particular portions of the city, sometimes with monkey-proof fences (as in the Asola Bhatti Wildlife Sanctuary) or by chasing them away from residential areas (even using trained bands of langurs!).

Most prominent among areas badly affected by rhesus macaque-human conflict are the twin hill states of Uttarakhand and Himachal Pradesh in northern India. In Himachal Pradesh, approximately 53% of all crop damage in the state was attributed to rhesus macaques and financial losses to farmers over a three-year period estimated to be around INR 1,00,00,000 in agriculture and INR 75,00,00,000 in horticulture. In many instances, villages and agricultural lands have been completely abandoned by farmers, who see no resolution to their problems. The sheer number of rhesus macaques in these states makes it a management issue of gargantuan proportions. Of the approximately 276,000 rhesus macaques found in Himachal Pradesh, about 70,000 individuals abound in the rural and urban regions of the state . The degree of affliction caused by rhesus macaques is reflected in the recent decision of the Government of Uttarakhand to declare primates, along with other wildlife species such as wild boars and nilgai, as vermin so that they can be killed by farmers and ordinary citizens (Letter No. 1953/25-28, dated 15th January, 2007 from the Additional PCCF (Wildlife) cum Chief Wildlife Warden, Uttarakhand).

Mitigation measures proposed to control this major conflict include preventive management measures like surgical sterilisation or immunocontraception of macaques, garbage management and the prevention of provisioning in humanpopulated sites as well as reactive methods such as the capture of identified problem troops/individuals, development of monkey sanctuaries and the establishment of insurance schemes/compensation for macaque-caused damage and injuries. Sujoy Chaudhuri, an ecologist-geographer with Ecollage, Pune, has repeatedly campaigned against the often-practiced measure of translocating problem macaque troops to Protected Areas or to other sites of human habitation. Translocation of macaques is the first solution demanded by most people living in macaque-affected areas and yet, unless this is well planned, it merely ends up transferring the conflict to other areas.

Human-wildlife conflict is strongly impacted by people's attitudes towards the offending species and nowhere is this more clearly demonstrated than in the case of human-macaque conflict in India. Macaques hold a position of great religious and cultural significance among Indians and this strongly affects their attitudes towards macaques and, in turn, their tolerance for macaque-caused damage. Raghav Saraswat's study of people's attitudes towards macaques in Bilaspur in Himachal Pradesh showed that although farmers considered macaques to be an agricultural pest and blamed them for huge losses sustained in farming, they also considered them to be a representative of God and therefore exhibited great reluctance in causing any harm to them. Kalpavriksh' study of humanmacaque conflict in Garhwal revealed that farmers in Jardhargaon village believe that successful reforestation of the lands surrounding the village and the Forest Department's protection of rhesus macaque has led to an increase of macaques in their cropfields. Insufficient compensation for crop losses and seeming apathy on the part of the Forest Department has soured relations between the people of Jhardhargaon and their forest officials. A central issue of contention is that of responsibility ownership for damages caused by the macaques. The Forest Department has proposed a macaque-trapping program that will rid the village of its macaque troubles. However, the Department's insistence that the farmers pay for the costs of the trapping exercise has enraged the villagers.

These studies demonstrate that conflict mitigation measures can only succeed in our country with a much more nuanced understanding not only of the history of the conflict but also of the lives of the different parties involved in such conflict. The need of the day is thus not only education campaigns that inform people about macaque behaviour and appropriate ways of interacting with them but also research efforts towards a better understanding of the behavioural ecology of problem macaque troops and the sociocultural attitudes and economic realities of people affected by macaque depredations.

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