

Preserving India's Less Known Private Forests

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Introduction

Natural forest resources are fundamental for human survival since they protect watersheds and provide numerous essential products for humans. They also harbor various species of endangered fauna, flora and fungi. Over 80% of the global terrestrial biodiversity depends on forests for their survival. Even for those who live their entire lives in cosmopolitan cities, they still incline towards wilderness hence visiting nature reserves and national parks in a quest to reclaim humanity's historic roots to nature. The WWF estimates that 300 million people live exclusively in forest wilderness across the world and nearly 1.6 billion people largely depend on various types of forest resources to sustain their livelihood [1]. In spite of this, would it be possible to own a piece of montane rainforest in Asia? This editorial explores this rather eccentric query with a materialist perspective.

India's Private Forests

During a field visits organized by the Applied Environmental Research Foundation (a non-government agency based in Pune) to the North Western Ghats forest region in Maharashtra state of India, we came across several patches of privately-owned forests. So there are forests with private ownership in India and their existence goes back to centuries. For those who are interested in forest conservation can definitely visit these patches of natural habitats to explore further into owning one of them. There is nothing wrong to own a forest. If the owner is conservation-minded, it would certainly help in future biodiversity conservation. There are some non-government organizations that buy large tracks of rainforests to preserve them from logging and land development.

Champion and Sheth had defined the northern Western Ghats forest as moist deciduous [2]. But the WWF's Conservation Science Program has classified them broadly as tropical and subtropical moist broadleaf forest with two distinct eco-regions— moist deciduous forest and montane rainforests [3]. The forest patches that we saw in villages such as Ujgaon, Hativ, Kasarkolvan, Kosumb, Borsut, Sonavade, Sadavali, Rajewadi and Marleshwar are located in Ratnagiri District of Maharashtra. The scenic Ratnagiri district harbors splendid natural combination of stunning slopes along coastline.

Sacred Groves

Some of the villages where we saw private forests also harbor sacred groves and local communities protect them due to religious and cultural reasons. The sacred groves are locally known as devrai or deorai in Marathi language. In general, sacred groves in India harbor forests that can range from few trees to large patches of vegetation. They are often protected by communities due to strong spiritual and

cultural believes. Most of the sacred groves have temples dedicated to gods and goddesses. India's sacred groves can be broadly classified into traditional groves, temple groves and cremation or burial ground groves. The sacred groves hold various species of rare, endangered and endemic fauna and flora [4]. The scientific importance of sacred groves has been pioneered and promoted since the 1970s by India's renowned ecologist, Madhav Gadgil [5]. One of the sacred groves at Rajewadi village has an ancient Shiva temple with a natural hot spring (Figure 1). The Konkan region has its own geological wonder of hot springs that run through the Deccan Basalts of west coast stretching for a few hundred kilometers. Thus region has been recognized as an important geothermal expanse by the Geological Survey of India [6].

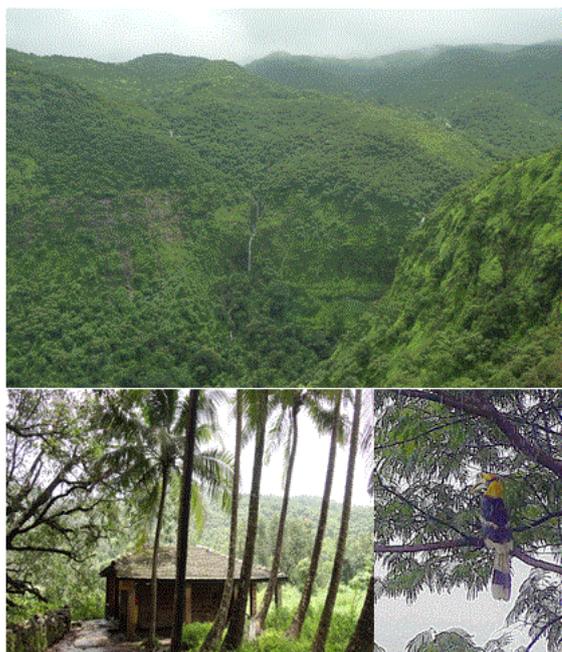


Figure 1: A view of the Northern Western Ghats forest (above) in Maharashtra State, India with one of the sacred groves with hot spring and Great hornbill (*Buceros bicornis*) that occur in the area (below).

Threats Facing Private Forests

The private forests that we observed in Maharashtra support large number of wildlife species, ranging from numerous species of insects to even large mammals. We were thrilled to observe several Great

hornbills (*Buceros bicornis*, Figure 1) and Malabar pied hornbills (*Anthracoceros coronatus*) in the private forests. The shy birds were seen nesting in close proximity to human settlements. Regardless of the natural wealth, mono-cultures of cash crops and exotic plants such as *Acaia auriculiformis*, *Anacardium occidentale* and *Gliricidia sepium* are rapidly replacing native flora, which is undeniably a threat to local biodiversity in these unique private forests of India. Although the natural landscape looks pristine in some remote parts of northern Western Ghats (Figure 1), ongoing developmental activities may destabilize the diverse species inhabiting the forests if appropriate protection measures are not taken quickly. A scientific report supports this notion evidently by showing the rapidly decreasing forest cover from the region [7]. Due to lack of conservation priorities from the government towards private forests, owners often log trees periodically so private logging operations are active in this region.

Conservation Agreements

As the forest patches are owned by individuals and families whilst sacred groves are communally-managed, the legal forest biodiversity protection mandates may go well beyond the reach of any state and central government agencies. Therefore some local non-government agencies such as the Applied Environmental Research Foundation have started incentive-based conservation agreements with people to preserve local biodiversity. Besides, communities are encouraged by the government and supported by NGOs to grow endemic tree saplings so that deforested areas can be revived. Furthermore, the private forests may have ecotourism potential since cities such Pune and Mumbai are accessible by road. If community-based ecotourism can be promoted with strict guidelines to protect biodiversity, peoples' livelihoods can be enhanced through supplemental income while popularizing the importance to preserve India's private forests. Although, the Ratnagiri District receives high average rainfall that range from 2657.8 to 3973.4 mm annually, water shortage is chronic during dry season [8]. If people can set up roof-water harvesting

systems and manage nearby watersheds efficiently, future shortages for water can be tackled.

Conclusion

India's Western Ghats region is globally known as an important biodiversity hotspot [9]. The southern part has certainly received prominent biodiversity conservation priority so far and adding up the on hand glamorous tiger reserves and popular wildlife sanctuaries have further expanded the conservation values. Nonetheless, the neglected northern Western Ghats privately-owned forest patches may also deserve conservation recognition hence more scientific studies are needed to fully realize their conservation potential before it's too late.

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