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Provocative and Unsettling

An Ecologist's Journey Through 80 Years Of Transformation

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India's foremost ecologist weaves a personal love letter to India's biodiversity, through an eyewitness account of 80 years of ecological change. It explores the intricate connections between humans and their environment, taking a perceptive look at the country's landscape transformations.

In 1942, the year that ecologist Madhav Gadgil was born, the population of India was just under 400 million. Today, the country's population has quadrupled to 1.3 billion. Much has changed in the intervening 82 years, largely coinciding with the development journey of independent India.

Despite the massive transformations in land cover and the growth in infrastructure, industrial growth and urbanisation, India continues to be one of the most mega-diverse countries in the world—with stunning natural landscapes that range from the deserts in Kutch to the high Himalayas in the north, the coasts and mountains of the Eastern and Western Ghats, and the jungles of central India. Yet the country's biodiversity is under threat, and with the climate crisis looming on the horizon, the need for introspection about pathways to growth that enable people to coexist with nature has perhaps never been so acute.

One of India's finest ecologists, Gadgil has spent a lifetime in these landscapes, walking through and working on most of the ecosystems in the country. His autobiography, *A Walk up the Hill: Living with People and Nature*, arrives at an opportune time. The book provides readers (most of whom will have been born well after 1942) with a rare opportunity to time travel, back to an era where the impact of the human footprint on biodiversity was much less destructive—and to derive seeds of hope for pathways to a better future.

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Madhav Gadgil was born in Pune, the youngest child of Dhananjaya Gadgil, one of India's best-known economists who served as the vice chancellor of the Planning Commission and worked to establish the farmer's cooperative movement in his home state of Maharashtra. Although he grew up in a city, Madhav spent time at his grandfather's farm in Nagpur, as well as in the hills of Sinhagad, where Lokmanya Tilak used to live. When he was nine, he spent a month roaming around the villages of Kodagu, along with one of India's leading anthropologists, Iravati Karve. He also struck up a long correspondence with renowned ornithologist Salim Ali, writing a number of articles on bird behaviour for a popular Marathi science magazine.

These early encounters and exposures, both to forested and rural environments rich in biodiversity and indigenous culture, and to some of India's finest scholars working on uniquely Indian problems, using innovative, low-cost field-based approaches, were fundamental in shaping Gadgil's approach to science and to the role of research in Indian society.

After completing a BSc in Biology from Pune University, and an MSc in Marine Biology from the Institute of Science in Mumbai, Gadgil moved to Harvard University for a PhD. There, as he writes in the book, “None of us students of ecology/evolutionary biology were assigned a thesis topic; instead, we were encouraged to think on our own and come up with a research project.” Struck by the importance of such an approach, so different from how much of Indian academia functioned at that time, Madhav later applied it to all his PhD students. I can especially attest to this vision, having completed my own PhD with him, from 1993 to 1997. This was a period when he encouraged me to move from molecular biology to landscape ecology using satellite remote sensing, an area about which neither of us knew much at the time. But we dived in, and learnt!

This approach—getting one's hands dirty, working on new problems, and innovating constantly—is at the heart of innovation. Given the hierarchical approach that tends to dominate Indian academia, though, Gadgil's iconoclastic approach created a stir on several occasions after he returned to India, taking up a faculty position at the Indian Institute of Science in Bangalore in 1971. He describes a number

of these incidents, narrating encounters with obstreperous fellow academics, bureaucrats, foresters, and conservationists with his characteristic gleeful irreverence, labelling urban conservationists elitist, deriding their “upper-class culture”.

It is of course his access to the corridors of power—in part because of his family’s reputation and also because of his academic standing—that enables him to critique the disregard for indigenous communities and the contempt and disrespect shown to oppressed castes and tribes by powerful conservation actors across the country. Though one wishes that such stories of standing up to power could be written by those at the bottom of the social hierarchy, they are nevertheless fascinating to read.

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Speaking of the motivation behind much of his work, Gadgil says, “Baba (his father) had taught me that the purpose of scholarship is not merely to understand, but to deploy that understanding towards action. That is what I have been pursuing in many ways.” The work he describes—from jointly running eco-development programmes with farmers in the district of Uttara Kannada to creating a network of botany and zoology college teachers in the Western Ghats for the decentralised monitoring of biodiversity (which grew into the influential Western Ghats Biodiversity Network, and spawned the guidelines for the People’s Biodiversity Register programme)—is an inspiration for young conservationists and it emphasises that the linking of research with action is paramount.

A Walk up the Hill covers a range of themes, posing provocative questions to the reader, overturning many paradigms that are widely accepted, and exposing the often shaky ground on which they rest. For instance, Gadgil raises questions about the criminalisation of traditional practices of forest extraction and hunting, first initiated by the British colonial regime. Why did independent India choose to persist with such fundamentally unjust laws despite mounting evidence that community conservation of forest resources was better?

He also describes the problems with the implementation of strict forest conservation approaches. Not only do they impact poor rural and forest-dwelling communities, they also destroy the very forest they aim to protect by leaving it devoid of its traditional protectors, leaving the door open for widespread poaching and tree felling by commercial interests.

The book describes, in great detail, Gadgil’s experiences with environmental impact assessments, and his involvement with the controversial Western Ghats Ecology Expert Panel, which produced what was popularly termed the “Gadgil report”. Many readers may be familiar with this report, which recommended that the entire Western Ghats hill chain, one of the world’s most famous biodiversity hotspots, be formally labelled an ecologically sensitive region, with limitations on infrastructure and industrial development in fragile zones subject to landslides and flooding.

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The report, whose recommendations never made their way into policy, generated intense interest across the country. Even several years after it was made public in 2012, when the Kerala floods occurred in 2019, WhatsApp messages went viral, sharing the report and demanding its implementation. Of course, all this discussion was quickly forgotten in a few weeks. Yet, the insider account that the book provides is fascinating for those interested in understanding the history of environmental governance in India. Gadgil’s experiences with environmental impact assessments of mining in Goa alone make for fascinating reading.

Poignant interludes depict the grim situation of environmental activists who routinely experience violence. Indeed, the book opens with a dedication to Gadgil’s friend, environmental campaigner Bismarch Dias, who was found dead in Goa under circumstances that many termed suspicious. Similarly, the pitiful conditions experienced by forest dwellers forcibly relocated from interior areas to meet supposed conservation objectives are also described in unflinching detail. These narratives are interspersed with stories of hope, offering alternative paths forward—such as the promotion of cooperative mining by communities for Goa and other mineral-rich parts of the country.

In this, Gadgil’s experiences with a training programme that built the capacity of young people from community forest management villages in Maharashtra are especially illuminating, demonstrating the importance of linking research with capacity building. He describes how, through a collaborative training programme with the Maharashtra Tribal Development Department and Mumbai University, young people were trained in the use of GPS-enabled smartphones to map the boundaries of their forest and develop sustainable working plans. Such training helped participants understand how to access information about their rights under the Right to

Information Act. This enabled them to negotiate with bamboo traders who had been exploiting them and force them to revise unfair contracts.

In this, the power of research-driven capacity building to achieve real change on the ground is apparent. Such incidents, described in chapter after chapter, render the book invaluable for teaching environmental history and conservation realities in India in classrooms. They are also very illuminating material for readers who want to know more about India’s biodiversity, conservation, and environmental future.

Despite his many environmental successes, like the capacity building programme described above, there have been as many, or more, failures. Gadgil appears undeterred by these, encouraging others to continue the work. The book ends on a sombre note, warning of the challenges ahead for India, an area that is “ground zero” for climate change. However, he also describes his hope for the future—that the country’s young people, the generations born in independent India, will take on the task of prudent natural resource management following the Dalai Lama’s path of “universal responsibility”.

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It is important for books like these to offer hope and a concrete path ahead with examples of interventions that have succeeded. For, if all we have is an overwhelming narrative of doom and gloom, how can we ever hope to proceed?

Few environmental scholars of Gadgil’s equivalent are to be found, whose knowledge of India’s biodiversity not only spans the length and breadth of the country, but also its people, from urban to rural, privileged to oppressed. Having engaged with everyone, from bureaucrats and scholars to miners and grazers, he has a deep respect for the intellectual and lived experiences of each.

Describing 80 years of fundamental transformations in India, *A Walk up the Hill* is, as Gadgil says, a rare “love story” of one man’s deep obsession with India’s rich biological heritage. It is also a deeply important chronicle of ecological change and the complex web of human-nature relationships that have driven environmental transformation in independent India.

Written by one of India’s finest scholars, shaped by his unique academic trajectory as well as his lifelong engagement with the field, this book is at once provocative and deeply unsettling. Definitely a book that must be read, not just at one sitting, but dipped into again and again for the richness of its material and its textured, chequered accounts of environment, place, and time.