

The Study on Eco-Tourism on the Sharavathi River Basin

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Abstract: *This study explores the intricate relationship between ecotourism and environmental protection, with a focused study on the Sharavathi River Valley in Karnataka's Shivamogga district. Nestled within the biodiverse Western Ghats, the Sharavathi Valley is a prominent ecological zone known for its waterfalls, forests, and endemic wildlife. As ecotourism gains momentum, the region presents both opportunities and challenges in achieving sustainable development.*

The study focused on how ecotourism initiatives in the valley—such as regulated adventure tourism, eco-friendly accommodations, and community-based conservation—contribute to preserving natural ecosystems while supporting local livelihoods. It also highlights pressing concerns, including eco-tourism, waste mismanagement, deforestation, and the environmental impact of hydroelectric projects, and it also emphasizes the importance of balancing tourism and conservation to protect the Sharavathi River Valley's ecological integrity for future generations..

Keywords: Ecotourism, Environmental Protection, Sharavathi River Valley, Western Ghats, Sustainable Tourism, Biodiversity Conservation, Community Participation, Green Infrastructure, Responsible Travel, Karnataka

I. INTRODUCTION

Ecotourism is nature-oriented tourism aimed at conserving the environment with minimal impact, promoting environmental education, and benefiting local communities. Despite its intentions, criticisms exist regarding its effectiveness and reliance on traditional tourism infrastructures, often contributing to climate change. Responsible ecotourism enhances environmental appreciation and local culture.

Eco Tourism

The word "eco" in "ecotourism" comes from the Greek word "oikos" (οἶκος), which means "house" or "environment." In modern usage, "eco" is a common prefix that relates to the environment, ecology, or ecosystems. Ecotourism in India reflects a gradual evolution from colonial-era wildlife sanctuaries to a modern, community-centred, and conservation-driven tourism sector. Key milestones include the establishment of protected areas, pioneering community-based projects in Kerala, formation of national institutions like ESOI, and the adoption of sustainable tourism standards, all contributing to India's emergence as a leader in ecotourism in South Asia.

Eco-Tourism in India

Eco-tourism in India is important for sustainable travel, environmental protection, and community growth, especially in sensitive areas like the Sharavathi River Valley. This region has diverse plants and animals and attractions like Jog Falls. Ecotourism has raised awareness about biodiversity and helped local communities earn a living through tourism. However, challenges include hydroelectric projects affecting the river, tourist-related pollution, and inadequate planning. Sustainable development in ecotourism should consider community involvement, eco-friendly infrastructure, and strict visitor regulations to maintain the ecological balance of the area.



Sharavathi River Valley

The Sharavathi River Valley in Karnataka's Shivamogga district is a beautiful and important ecological area in the Western Ghats. The river starts at Ambutheertha and flows 128 kilometers to the Arabian Sea, creating the impressive Jog Falls, India's second-highest waterfall. The valley houses the Sharavathi Wildlife Sanctuary, which includes diverse forests and rare wildlife. The river also assists in power generation through the Sharavathi Hydroelectric Project. However, deforestation and unregulated tourism pose environmental risks, highlighting the need for sustainable tourism development.

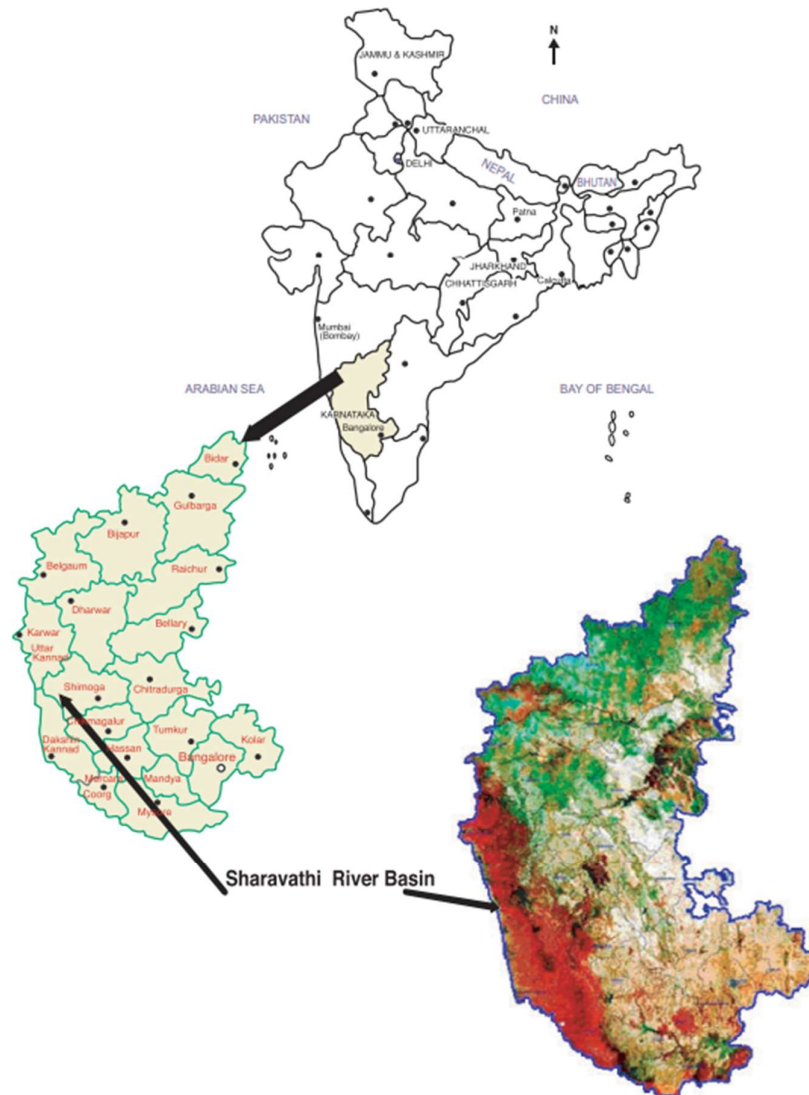


Figure1: Location of the study area.



II. LITERATURE REVIEW

Ravi Shankar Kumar Singh (1995) in his book ‘Ecotourism and Sustainable Development’ remarks that ecotourism activities have been increasing rapidly worldwide over the past two decades and further growth is expected in the years ahead.

David and Fennell (2000) in their book ‘Ecotourism: An Introduction’ highlight the need to promote the right kind of tourism, that is quality and eco-friendly tourism so that maximum benefit can be harnessed without affecting and altering physical and social quality.

According to Ralf Buckley (2000), “ecotourism, like tourism in general, is an industry as well as a social phenomenon and for private sector ecotourism operators, ecotourism is a business enterprise”. He also emphasized the marketing of ecotourism and environmental education.

Raghavan (2005) opines: ecotourism is ecologically sustainable with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation. It is therefore necessary to bring together conservation and development in the activities yearning economic progress.

According to Kirti Shiva Kumar (2007), “ecotourism is the management of tourism and conservation of nature in a way, so as to maintain a fine balance between the requirements of tourism and ecology on the one hand and the needs of local communities for new job skills, income generating employment and a better status for women on the other”.

Objective of the Study

The main objective of the study is to

- To study the conceptual background of eco- tourism in Karnataka
- To understand eco-tourism activities in sharavathi river vally.

III. RESEARCH OF METHODOLOGY

Data Collection

Secondary Data

Secondary data refers to information that has already been collected, processed, and published by someone other than the current researcher or research team. This data was originally gathered for purposes other than the current study, and is typically obtained from external sources such as government reports, censuses, scientific journals, organizational records, online databases, and previous research studies.

Scope of the Study

The scope of the study on the Sharavathi River Valley is comprehensive, focusing on understanding the cumulative impacts of developmental activities-especially large-scale hydroelectric projects-on the region’s aquatic and terrestrial ecosystems, biodiversity, and local communities.

IV. CONCEPTUAL BACKGROUND OF ECO- TOURISM IN KARNATAKA

Karnataka is a state known for its biodiversity, diverse landscapes, and sustainable tourism. Its ecotourism resources include national parks, wildlife sanctuaries, rainforests, hill stations, and coastal areas. Major ecotourism destinations include Agumbe, Coorg, BR Hills, Gokarna, Bandipur & Nagarhole, Kudremukh, Dandeli & Anshi, Sharavathi Valley, Bannerghatta, Bhadra, and Ranganathittu. Activities include wildlife safaris, trekking, hiking, birdwatching, nature walks, camping, guided tours, plantation tours, and water-based activities. The Karnataka Ecotourism Development Board regulates ecotourism, while Jungle Lodges and Resorts offer eco-friendly accommodations. Benefits of ecotourism include biodiversity conservation, economic development, environmental education, local culture preservation, and sustainable travel.



Back Water and river Valley

The Sharavathi River Valley, around Jog Falls and Linganamakki Dam, is a rich area with scenic backwaters and lush river valleys. Nearby areas include Honnemaradu, Talaguppa, Gerusoppa, Aghanashini River Valley, Varahi River, and the Sharavathi Wildlife Sanctuary Region. Honnemaradu is a serene eco-tourism destination, known for its serene waters and wildlife. Talaguppa offers calm, densely populated backwaters with stunning views. Gerusoppa, downstream, is a peaceful area with ancient Jain temples. Other nearby rivers include the Aghanashini River Valley, which is rich in biodiversity.

Sharavathi River Valley

The Sharavathi River Valley in Karnataka, India, is a stunning region with rich biodiversity and natural beauty. It is home to the Sharavathi Wildlife Sanctuary, which protects the region's biodiversity. The valley is also home to the Linganamakki Dam, a major source of hydroelectric power for Karnataka. The backwaters of the dam offer eco-tourism activities, including kayaking, boating, trekking, birdwatching, and camping. The region is a paradise for nature lovers, adventure seekers, and researchers, but faces environmental threats from deforestation, unregulated tourism, and hydroelectric developments. Sustainable tourism and conservation efforts are crucial to preserve this natural treasure.

Geographical Feature of Sharavathi River Valley

The Sharavathi River Valley in the Western Ghats of Karnataka is a region known for its rich biodiversity, rugged terrain, and ecological importance. Originating at Ambutheertha in Thirthahalli Taluk, the valley is approximately 128 km long and drains into the Arabian Sea near Honnavar. The valley is situated within the Sahyadri Hill Range and features steep slopes, deep gorges, and narrow valleys. The valley is home to the Jog Falls, one of India's highest plunge waterfalls, and is part of the Sharavathi Wildlife Sanctuary. The valley has lateritic and red loamy soils and Precambrian rock formations. The region experiences a tropical monsoon climate, with heavy rainfall during the Southwest Monsoon. The region is a key biodiversity hotspot, supporting a wide range of endemic and critically endangered species.

Near by Attractions of Sharavathi River Valley

The Sharavathi River Valley in the Western Ghats of Karnataka is home to numerous natural, cultural, and historical attractions. Major attractions include the Jog Falls, one of India's highest plunge waterfalls, the serene backwaters of Honnemaradu,

The Linganamakki Dam,

The Sharavathi Wildlife Sanctuary,

The Gerusoppa, Kodachadri Hills,

The Sigandur Chowdeshwari Temple,

The Ikkeri and Keladi Temples.

These attractions offer a variety of activities, from kayaking and boating to bird watching and eco-tourism. The valley is also home to the Linganamakki Dam, a reservoir for hydroelectric power generation, and the Sharavathi Wildlife Sanctuary, which is home to a rich biodiversity of lion-tailed macaques, Indian giant squirrels, and hornbills. The region offers a peaceful and spiritual atmosphere for travellers.

Sharavathi Hydro Electric Project

The Sharavathi Hydroelectric Project, located in the Shivamogga and Uttara Kannada districts of Karnataka, is one of the state's oldest and most significant power projects. Commissioned in 1964 and operated by Karnataka Power Corporation Limited (KPCL), it has an installed capacity of 1,035 MW. The project includes key components like the Linganamakki Dam, Talakalale Balancing Reservoir, and an underground powerhouse near Jog Falls using Pelton turbines. Water stored in the dam is channelled to generate electricity and then released back into the river. The project



provides clean, renewable energy, supports Karnataka's electricity demand, and has also contributed to employment and tourism. However, it has raised some ecological concerns due to the impact on local ecosystems.

Sharavathi Trail Race Project

While there are prominent trail races in Karnataka (such as the Bengaluru Mountain Festival in Avati, Devanahalli, featuring 5K, 10K, and 21K trail runs), there is no mention of a dedicated "Sharavathi Trail Race Project" scheduled or reported for 2025 in the Sharavathi Valley itself.

Sharavathi Valley Trek

The Sharavathi Valley is well-known for organized trekking experiences, particularly to Jog Falls (India's second tallest plunge waterfall) and through the lush landscapes of the Sharavathi backwaters and surrounding forests. These treks are typically offered by adventure travel organizers and highlight the region's biodiversity, scenic beauty, and monsoon charm.

Cycling and Adventure

The area is also popular among cyclists, with scenic routes such as riding on bridges over the Sharavathi backwaters, offering picturesque views and a unique experience for adventure enthusiasts.

V. ECO TOURISM ACTIVITIES IN SHARAVATHI RIVER VALLEY

Trekking and Nature Trails

The valley is renowned for its scenic trekking routes, including the Sharavathi Valley Trek, Kanoor Kote Trek, and trails to Jog Falls and Dabbe Falls. These treks take you through dense rainforests, hidden waterfalls, and offer opportunities to observe rich flora and fauna. Guided nature walks and birdwatching expeditions are also popular, making the region a paradise for adventure seekers and wildlife enthusiasts.

Sharavathi Valley Wildlife Sanctuary

The tranquil backwaters of the Sharavathi River are perfect for boating, kayaking, and coracle rides. These water-based activities offer a peaceful way to explore the lush surroundings and spot wildlife along the riverbanks. The experience is especially rewarding post-monsoon, when the river and waterfalls are at their most spectacular.

Laughing Elephants

Camping in the Sharavathi Valley, whether at adventure camps or in the wild, provides an authentic jungle experience. Campers can enjoy bonfires, stargazing, and the soothing sounds of the forest, making for a memorable stay immersed in nature.

Sightseeing: Jog Falls, Linganamakki Dam, and Honnemaradu

No visit to the Sharavathi Valley is complete without witnessing the majestic Jog Falls—one of India's tallest waterfalls. Other scenic spots include the Linganamakki Dam and the Honnemaradu backwaters, both ideal for photography, sunset views, and relaxing amidst nature.

VI. FINDINGS

The Sharavathi River Valley forms part of the Western Ghats, a global biodiversity hotspot of high priority, rich in endemic and threatened plants and animals.

A number of new and uncommon species have been found within the valley, including freshwater fish *Batasio sharavathiensis* and *Schistura sharavathiensis* and new frog and diatom species, showcasing the uniqueness of the region ecologically.



At least 173 butterfly species belonging to five families thrive within the Sharavathi basin, suggesting high insect diversity and well-developed ecosystems.

Sixty-four species of freshwater fishes have been documented in the Linganamakki catchment alone, representing 6.88% of Indian freshwater fishes and 22.2% of Western Ghats fishes. A large majority are endemic and endangered.

Large-scale submergence of forests, fragmentation of habitat, and displacement of wildlife and people are a consequence of the construction of dams like Linganamakki, Talakalale, and Hirebhaskeri reservoirs.

The region is a significant ecotourism hotspot with places like Jog Falls, Honnemaradu backwaters, and Sigandur, but tourism development should be done thoughtfully to prevent ecological degradation.

In spite of its protected status, the Sharavathi Valley continues to be threatened by habitat destruction, invasive alien species, pollution, and unsustainable development, highlighting the importance of ongoing conservation and sustainable management.

VII. SUGGETIONS

Strengthen conservation and restoration of the Western Ghats' last remaining natural forests by imposing tight conservation controls, ending deforestation, and giving precedence to conserving old-growth, biodiversity-rich ecosystems.

Foster ecological restoration rather than cosmetic beautification by restoring wetlands, biodiversity corridors, and indigenous vegetation, as opposed to concrete embankments or ornamental schemes.

Establish real-time, transparent environmental monitoring networks through IoT-based sensors and public dashboards to monitor water quality, pollution, and ecosystem health, with accountability and prompt interventions.

Modernize and augment sewage treatment facilities in all riverine towns and villages to avoid untreated sewage discharge into the Sharavathi, backed by citizen compliance monitoring and government regulation.

Shift towards a circular economy framework of solid waste management by developing decentralized material recovery facilities, encouraging recycling, and mobilizing communities and corporates for cleanup and waste minimization.

Manage tourism and ecotourism operations with strict carrying capacity controls, eco-certification of operators, and community-based management to avoid habitat disruption and promote sustainable livelihoods.

Involve local communities in conservation through environmental education, green skill development, participatory planning, and benefit-sharing from ecotourism and restoration activities.

Adopt water conservation measures like rainwater harvesting, greywater reuse, and efficient irrigation to alleviate pressure on the river and promote sustainable agriculture.

Encourage cross-sectoral collaboration across government departments, NGOs, higher education institutions, and private sector partners to develop a common river health mission, dismantle administrative silos, and implement holistic, science-based river basin management.

VIII. CONCLUSION

The research on the Sharavathi River Valley discloses that the area is not only an essential component of the Western Ghats biodiversity hotspot but is also a landscape that comes under tremendous ecological and social stress. The valley is home to immense diversity of flora and fauna, with numerous endemic and threatened species, and offers necessary ecosystem services to community members. Yet decades of hydropower development, fragmentation of habitats, pollution, and lack of control over tourism have resulted in loss of habitat, dwindling quality of water, and hazards to wildlife as well as human health.

And yet, the research points out that with proper interventions-like increased protection of habitats, restoration of ecology, sound management of tourism, community participation, and better waste and water management-the Sharavathi River Valley can be restored and flourish. The research highlights the imperative for integrated, science-driven, and people-oriented conservation and development. Only by striking a balance between ecological health and human needs can the



Sharavathi River Valley remain a haven for biodiversity, a means of `livelihood, and a natural inheritance for generations yet to come.

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