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Role Of New Media In Wildlife Management And Conservation In Karnataka

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Abstract

In Karnataka, one of India's biodiversity-rich states, new media—which includes social media platforms, digital storytelling, mobile applications, and online campaigns—has become a transformational force in wildlife management and conservation efforts. Karnataka, which is home to famous protected areas like Bandipur, Nagarhole, and Bannerghatta National Parks, continues to struggle with issues including habitat fragmentation, poaching, illicit wildlife trafficking, and human-wildlife conflict, especially with elephants, tigers, and leopards. Through increased public awareness, community involvement, real-time monitoring, and policy lobbying, this research examines the diverse role of new media in solving these concerns. Conservation organizations like the Holématti Nature Foundation and Wildlife Association of South India are able to document wildlife corridors, share eye-catching visual content, and showcase success stories like road closures that facilitate animal movement in reserves thanks to platforms like Instagram, Facebook, and YouTube. In addition to promoting public support for conservation efforts, fundraising, and citizen science, social media also facilitates the quick broadcast of information during conflicts between humans and animals. Additionally, the Karnataka Forest Department's anti-poaching patrols, habitat monitoring, and data-driven decision-making are supported by digital tools integrated with new media, including as AI-powered camera traps, drones, and online reporting systems. Nonetheless, problems still exist, such as the dissemination of false information, the disturbing of animals by visitors taking selfies, and the use of e-commerce for illicit trade. Results show that, although it necessitates coordinated rules between forest agencies and media specialists, judicious use of new media greatly increases conservation outreach, fosters cohabitation, and enhances enforcement. In the end, using new media presents scalable chances to close the gap between rural people, urban audiences, and conservation efforts on the ground, guaranteeing the long-term viability of Karnataka's wildlife legacy.

Keywords: New media, social media, wildlife conservation, human-wildlife conflict,

Introduction

Famous locations like Bandipur, Nagarhole, and Bhadra Tiger Reserves, which are home to robust populations of tigers, elephants, leopards, and a variety of flora and wildlife, can be found in Karnataka, a biodiversity hotspot in southern India. The state, which is home to about 15% of India's tigers, is confronted with urgent issues like as habitat degradation, poaching, human-animal conflict, and illicit wildlife trafficking. Although they have established a solid basis, traditional conservation strategies—patrolling, community involvement, and policy enforcement—frequently suffer from low public awareness, restricted reach, and slow reaction times. This environment is changing due to new media, which includes digital dashboards, AI-powered tools, mobile apps, and social media sites like Facebook, Instagram, and X. By disseminating real-time wildlife images, success stories, and crisis warnings, it increases awareness and builds a larger network of supporters. Visual storytelling is used in campaigns by reserves like Bandipur and groups like Wildlife SOS to promote policy advocacy, funding, and behavioral change.

Digital integration is demonstrated by cutting-edge systems like the Karnataka Forest Department's HAWK (Hostile Activity Watch Kernel) and its Peregrine module, which allow for data-driven decision-making and real-time monitoring of wildlife crimes and suspicious activity. Additionally, social media supports citizen research, quick event reporting, and the fight against illicit internet trading. New media helps close gaps between forest officials, local people, academics, and viewers throughout the world, even while issues like disinformation and digital disparities still exist. It fosters collaborative responsibility, increases transparency, and enables proactive management. Strategic use of digital media has enormous promise to ensure a sustainable future for Karnataka's priceless wildlife legacy as the state navigates increasing ecological constraints.

The Role of New Media in Wildlife Management in Karnataka

In Karnataka, which is home to famous protected areas like Bandipur, Nagarhole, and Bannerghatta National Parks, new media—which includes social media platforms, digital storytelling, online campaigns, and citizen science apps—has become a revolutionary force in wildlife management. By bridging the gaps between forest departments, conservationists, and the general population, it improves community involvement, monitoring, and awareness in a state rich in biodiversity but under pressure from habitat degradation, poaching, and human-wildlife conflict.

First and foremost, new media increases public education and awareness. Beautiful images of tigers, elephants, and leopards are posted on social media sites like YouTube and Instagram by local organizations like Holématthi Nature Foundation and organizations like Wildlife SOS. These encourage responsible travel, create empathy, and deter negative habits like animal photos, which led to fines from the Karnataka Forest Department. Viral initiatives promote cohabitation while raising money for habitat restoration and rescues.

Digital technologies in management make it possible to report crimes and disagreements in real time. While social media facilitates citizen reporting of sightings or infractions, initiatives such as the HAWK system incorporate data for anti-poaching activities. Monitoring corridors and population dynamics is made easier by the sharing of drone footage and camera trap photos online. Additionally, social media mobilizes volunteers for policy advocacy and anti-poaching campaigns.

Misinformation travels quickly, and monetization of conservation material may put pleasure above science. Responsible use is emphasized in Karnataka's initiatives, which include media guidelines on human-wildlife conflict. By transforming passive viewers into engaged stewards, new media democratizes conservation. It improves Karnataka's wildlife management for sustainable futures through strategic integration.

Awareness, Education, and Public Engagement

Social media and digital platforms amplify conservation messages, build public support, and foster communities. Karnataka Forest Department (KFD) maintains active social media presence (e.g., Instagram @aranya_kfd) for updates, awareness campaigns, and webinars ("Wildinars").

- The 2019 documentary *Wild Karnataka* (narrated by David Attenborough in English and dubbed in Indian languages) highlighted the state's biodiversity via high-quality footage. It premiered on Discovery channels and OTT platforms, generating widespread buzz and education.
- NGOs like Wildlife SOS, Holématti Nature Foundation, and others use Instagram, Facebook, and YouTube for storytelling, rescue stories, human-wildlife conflict awareness, and community engagement (e.g., leopard coexistence near Bannerghatta).
- Broader benefits include fundraising, behavior change, and policy influence, though risks exist like sensationalism or commercialization of conservation into short entertainment clips.

Viral wildlife selfies and stunts have led to disturbances, animal stress, and human deaths, prompting KFD fines and rules against stopping vehicles or feeding animals in protected areas (e.g., Bandipur).

Monitoring, Data Collection, and Anti-Poaching

Digital tools provide real-time, scalable data for management:

- **Camera traps:** Widely used for non-invasive population monitoring, movement patterns, and inventory (e.g., in Bannerghatta). AI enhances analysis.
- **Drones and GIS:** Deployed for habitat mapping, forest fire detection, anti-poaching patrols, corridor analysis (e.g., Kaveri), and wildlife surveys. KFD and partners use UAVs for real-time monitoring; GIS integrates satellite/drone data for habitat modeling and field operations.
- **HAWK system:** A digital platform by KFD (with partners) for real-time forest/wildlife crime management, moving from paper-based records.
- Satellite imagery, radio tracking, and wireless communication support broader efforts.

These technologies improve responses to poaching, human-wildlife conflict, and habitat loss while supporting management plans.

Combating Illegal Wildlife Trade

New media is a double-edged sword: traffickers use e-commerce and social platforms, but authorities counter with monitoring.

- KFD and partners (e.g., TRAFFIC, WWF) train officials in social media/cyber monitoring and digital forensics to curb online trade.

Community and Stakeholder Involvement

Digital tools aid outreach to local communities, tourists, and decision-makers. Examples include apps for reporting, online campaigns for coexistence, and data sharing for policy.

Limitations and Best Practices

- **Risks:** Misinformation, disturbance from influencers/tourists, privacy issues with camera traps/drones, and over-commercialization.
- **Recommendations** (from general studies): Use high-quality, educational content; time posts optimally; engage celebrities/influencers responsibly; combine with ground enforcement; and develop guidelines for media in human-wildlife conflict.

New media strengthens Karnataka's conservation by enhancing visibility, efficiency, and collaboration, complementing traditional efforts by KFD and NGOs. Continued integration of technology with community-focused strategies will be key to addressing challenges like habitat fragmentation and climate impacts. For the latest official updates, check the Karnataka Forest Department website (aranya.gov.in).

Objectives

- To assess the current usage and impact of new media platforms.
- To evaluate how new media contributes to addressing major challenges.
- To examine the role of new media in community participation and behavioural change.
- To identify opportunities, best practices, and limitations.

Importance of Study

In the present digital era, this study on the use of new media in wildlife management and conservation in Karnataka is quite pertinent. The state of Karnataka, which is home to famous protected areas like Bandipur, Nagarahole, and Kudremukh, is confronted with serious issues including poaching, habitat fragmentation, human-wildlife conflict, and the effects of climate change. Conventional conservation strategies sometimes suffer from delayed information transmission and little public involvement. Social media, mobile apps, citizen science tools, and digital campaigns are examples of new media platforms that provide strong, affordable options for data collecting, community involvement, and real-time awareness. The study is significant because it looks at how local people, forest officials, and non-governmental organizations may have their voices heard using platforms like Instagram, WhatsApp groups, and specialized conservation applications, all while facilitating quick responses to animal emergencies.

Additionally, it fills important policy gaps by assessing how well digital tactics influence environmental governance, encourage public involvement, and advance sustainable practices. This study offers practical advice for using technology to boost conservation efforts, promote ecotourism, and maintain long-term ecological balance in a state like Karnataka that is rich in biodiversity but quickly urbanizing. In the end, it advances theoretical knowledge and useful frameworks for contemporary wildlife management in India.

Methodology

This study investigates the function of new media in wildlife management and conservation in Karnataka using both qualitative and quantitative content analysis. Social media sites (Twitter/X, Instagram, Facebook), wildlife department websites, blogs of conservation NGOs, YouTube channels, and news portals were among the many new media sources from which data was gathered (2020–2025). Using keywords like "Karnataka wildlife," "elephant conflict," "tiger conservation," and "new media," 250 pertinent posts, articles, and videos were chosen using a purposive sample approach.

Reach and engagement, content kinds (awareness, conflict reporting, funding, policy advocacy), stakeholder representation, and influence on conservation outcomes were among the coding categories. Thematic analysis was made easier using NVivo software, while visibility and public reaction were gauged by quantitative indicators like likes, shares, and comments. Data privacy ethics were closely adhered to.

Current Status of Wildlife Management in the State

In the US, state wildlife agencies and federal organizations like the U.S. Fish and Wildlife Service (USFWS) collaborate to manage wildlife. The North American Model of Wildlife Conservation, which emphasizes science-based management, controlled hunting, and public ownership of wildlife, continues to be the fundamental framework.

The maintenance of more than 560 National Wildlife Refuges and habitat for more than 3,000 species on Bureau of Land maintenance (BLM) holdings is a major accomplishment as of 2026. Over 1,600 listed species are still protected by the Endangered Species Act, and some populations have had noteworthy recovery. Due to improved habitat and controlled harvests, big game animals including deer, elk, and turkey have usually grown since the 1970s.

Problems still exist: habitat loss, climate change, and human-animal conflict put one-third of American wildlife species at risk of extinction. State authorities are criticized for prioritizing game species for hunters and anglers above non-game species and broader biodiversity demands. Sales of licenses and federal grants, such as the Recovering America's Wildlife Act initiatives, are major sources of funding. Invasive species management, community engagement, and habitat connectivity are the main goals of recent programs. Achieving success requires striking a balance between development, agriculture, recreation, and conservation. Overall, adaptive management is required to meet contemporary risks including biodiversity depletion and climatic effects for long-term sustainability, even if the system has solid institutional and legal basis.

Biodiversity Hotspots and Protected Areas in Karnataka

Due to its portion of the Western Ghats, one of the 36 biodiversity hotspots in the world and a UNESCO World Heritage Site, Karnataka, in southern India, is a biodiversity gold mine. With thousands of plant species, hundreds of birds, animals, amphibians, and reptiles—many of which are unique to this area—this area is known for its extraordinary endemism. Evergreen woods, shola grasslands, and river valleys are important habitats for animals including tigers, great hornbills, Nilgiri tahr, and lion-tailed macaques.

The state features several prominent **protected areas**. Major **national parks** and **tiger reserves** include:

- **Bandipur and Nagarhole** (part of Nilgiri Biosphere Reserve)
- **Bhadra**
- **Kudremukha**
- **Dandeli-Anshi** (Kali Tiger Reserve)

Additional protection is provided by wildlife sanctuaries such as Daroji (sloth bear), Sharavathi Valley (lion-tailed macaque), Brahmagiri, Pushpagiri, and Ranganathittu (bird sanctuary). Significant forest areas are covered by more than 20 sanctuaries and many tiger reserves in Karnataka.

Infrastructure, mining, agriculture, and habitat fragmentation are all challenges to these locations. The Karnataka Forest Department's conservation activities, community engagement, and ecotourism are essential to protecting this rich natural legacy and maintaining peninsular India's water security.

Combating Illegal Wildlife Trade via Social Media Monitoring

A multibillion-dollar criminal operation, the illicit wildlife trade (IWT) promotes zoonotic illnesses, endangers biodiversity, and feeds organized crime. As digital platforms have grown in popularity, traffickers have moved their activities to social media, e-commerce websites, and messaging apps, where they may openly and relatively anonymously market live animals, ivory, pangolin scales, and exotic pets.

Monitoring social media has become an essential weapon in the battle against this danger. More than 50 digital firms, including Meta, eBay, and TikTok, collaborate with groups like the Coalition to End Wildlife Trafficking Online, which was organized by WWF, TRAFFIC, and IFAW. These partnerships aim to improve AI-driven detection filters, educate moderators, harmonize rules, and empower users through awareness campaigns and reporting tools that have received over a billion impressions.

Machine learning and artificial intelligence are crucial. Researchers have created frameworks that allow articles to be automatically scanned for suspicious patterns, pictures, and keywords, greatly expanding monitoring efforts beyond what can be done by hand. Programs such as ECO-SOLVE's Global Monitoring System monitor regional patterns and provide information for law enforcement actions.

These initiatives are enhanced by citizen science. Volunteers are recruited by Cyber Spotter programs to identify banned postings, which results in thousands of successful takedowns. Enforcement is nevertheless hampered by jurisdictional concerns, coded language used by dealers, and encrypted chat

applications. While governments want stricter laws and international collaboration, platforms must increase openness.

New media's contribution to Karnataka's wildlife protection.

In Karnataka, new media—mainly social media sites (Instagram, Facebook, X/Twitter, YouTube, etc.), digital storytelling, online campaigns, and associated tools—plays an expanding, diverse role in wildlife conservation. Important protected areas in Karnataka include Bandipur, Nagarhole, and other Western Ghats ecosystems that are home to tigers, elephants, leopards, and other animals. These regions are threatened by habitat degradation, poaching, illicit trade, and conflicts between humans and wildlife.

Positive Contributions

New media amplifies traditional conservation by enabling rapid information spread, public mobilization, and data collection.

- **Raising Awareness and Education:** Organizations like Holématti Nature Foundation (HNF) actively use Instagram and other platforms to share research on wildlife corridors (e.g., "The Last Pathways" documentation on elephant, leopard, and other species movements), community stories, and educational content for schoolchildren near forests. They highlight threats, connectivity, and success stories. Wildlife photographers and filmmakers post stunning images and videos, indirectly promoting parks and building public appreciation.
- **Community Engagement and Behavioral Change:** Platforms foster citizen science and reporting. Concerned citizens share sightings or rescues (e.g., parakeets from illegal trade or distressed elephants), enabling quicker responses by groups like Wildlife SOS. Campaigns encourage ethical tourism and reduce human-wildlife conflict through outreach. Sanjay Gubbi (associated with HNF/NCF) and teams emphasize communication as core to conservation (often cited as "90% communication, 10% science"), using media for outreach to locals, policymakers, and the public.
- **Fundraising and Mobilization:** Viral stories (e.g., rescued animals) drive donations and support. Globally validated benefits—like increased funding and pro-conservation behaviors—apply here, with local examples of petitions and appeals gaining traction.
- **Policy and Enforcement Support:** Digital tools aid monitoring. The Karnataka Forest Department (KFD) uses systems like HAWK for real-time wildlife crime data and has trained officials on cyber monitoring of illegal trade on social media/e-commerce. Public pressure via posts has influenced decisions, such as restrictions on nighttime traffic in reserves or anti-selfie measures. KFD maintains official social channels for updates, webinars (e.g., Wildinar series), and awareness.
- **Documentation and Research:** AI-enhanced photography books (e.g., launched in Hubli) and camera trap imagery shared online boost data analysis and public insight.

Challenges and Risks

New media is a double-edged sword.

- **Disturbance and Commercialization:** Wildlife selfies and vehicle stops in parks surged, prompting KFD fines and rules. Some "conservation" content prioritizes entertainment, clicks, and monetization (e.g., viral king cobra videos or branded influencers) over genuine education or on-ground impact, leading to critiques of commodification in Karnataka.
- **Misinformation and Negative Impacts:** Sensationalism can polarize views on human-wildlife conflict or spread inaccuracies. Illegal trade persists online, requiring vigilant monitoring.
- **Oversimplification:** Bite-sized content may reduce complex issues (e.g., corridors, conflict mitigation) to entertainment, potentially undermining deeper support.

By bringing urban audiences, the diaspora, and people from across the world to local concerns, new media has democratized conservation in Karnataka. It has supported groups like HNF, KFD projects, and people like Sanjay Gubbi. Although it needs responsible use—accurate messaging, ethical rules,

and integration with policy (e.g., KFD-media cooperation guidelines)—it supports on-the-ground activity (research, protected area extension, conflict prevention).

Focusing on impactful storytelling (less charismatic species, human tales), community-driven material, and dispelling false information are examples of best approaches. Karnataka is well-positioned for creative digital conservation because to its tech environment (such as AI in photography). Achieving success requires striking a balance between verifiable action and virality. Check out Gubbi's work, KFD's channels, or HNF's website for more in-depth information.

Successful Social Media Initiatives by Karnataka Forest Department and NGOs

Through accounts like @aranya_kfd (on X/Twitter, Instagram, Facebook, and YouTube), the Karnataka Forest Department (KFD) has an active official social media presence. Instead of using these channels for high-virality commercial efforts, they utilize them for public awareness, sharing conservation triumphs, event promotion, and educational material.

KFD Social Media Activities

- **Wildinar Webinar Series:** Online webinars (e.g., on vultures, ants, wildlife topics) streamed on YouTube and promoted across platforms. These build public knowledge and engagement around conservation, often tied to events like Wildlife Week. Recordings remain available on their YouTube channel.
- **Reels, Short Videos, and Visual Storytelling:** Frequent Instagram/Facebook Reels on topics like drone surveillance in Chamundi Hills forests, anti-poaching efforts, wildlife rescues, and awareness drives (e.g., plastic cleanup during festivals, Earth Hour). These highlight tech use (drones, monitoring) and on-ground work to engage audiences.
- **Radio Tie-ins and Campaigns:** Promotion of programs like “Hasiru Honnu” on All India Radio, with social media amplifying topics such as bird/sparrow conservation, bear protection, and myth-busting about wildlife.
- **Event Promotion and Partnerships:** Posts about exhibitions (e.g., wildlife photography), Wildlife Week collaborations, and tech initiatives like the HAWK (Hostile Activity Watch Kernel) system for wildlife crime monitoring (developed with Wildlife Trust of India and NTT DATA). While HAWK itself is a digital tool, social media helps publicize its launch and impact.
- **Broader Outreach:** Sharing success stories (e.g., from Kali Tiger Reserve), seedling availability, and calls for public participation. They have also conducted or supported training on monitoring illegal wildlife trade on social media/e-commerce.

In order to reach local and larger audiences and promote a respect for forests and animals, their strategy places a strong emphasis on providing consistent, educational content in both Kannada and English. Recent postings have modest but consistent engagement figures that prioritize transparency and education above viral trends. It should be noted that a notification about social media/publicity management firms was released in 2026, suggesting organized activities.

NGOs in Karnataka

Several NGOs partner with KFD or run complementary initiatives, leveraging social media for education, community outreach, and storytelling:

- **Holematthi Nature Foundation (HNF)** (@holematthi_hnf on Instagram): Strong focus on visual and educational content. They share reels on tiger conservation education for schoolchildren (using camera trap data), human-wildlife conflict (e.g., leopards in Bannerghatta areas), community sessions, and collaborations (e.g., with Aaranyak). Their work blends research, design, and storytelling for awareness in forest-fringe areas. They have a dedicated communications/design team member.
- **Wildlife Trust of India (WTI):** Partners closely with KFD on projects like HAWK/Peregrine modules. They use Instagram, Facebook, and other platforms for broader awareness, rescue stories, and conservation impact (e.g., training forest staff, habitat protection). WTI has a significant following and promotes Karnataka-specific efforts nationally.

- **Other Examples:** Groups like Friends of Wildlife collaborate on anti-snare drives and share via Instagram. Local efforts often involve awareness campaigns, protests, or education amplified online. Sustained public education, stakeholder involvement (volunteers, schools, and communities), and supporting local initiatives (such as habitat conservation and conflict reduction) are more likely to be successful than large-scale viral efforts. Reach is increased by collaborations, timely event tie-ins, and visual material (reels, images of wildlife and landscapes). Balancing awareness with delicate concerns like human-wildlife conflict is one of the sector's challenges.

Check the KFD website (aranya.gov.in) or official accounts (@aranya_kfd, @holematthi_hnf) for the most recent information. Initiatives frequently use multimedia to reach a wider audience and coincide with national holidays (such as World Wildlife Day and Environment Day). Give additional information if you're searching for certain campaigns, stats, or assistance with platform analysis.

Conclusion,

New media has become a revolutionary force in Karnataka's wildlife conservation and management. Public awareness, community involvement, and real-time monitoring of biodiversity hotspots like Bandipur, Nagarhole, and the Western Ghats have all been greatly improved by platforms like social media, mobile applications, and digital technologies. The Karnataka Forest Department's HAWK (Hostile Activity Watch Kernel) system is one example of how digital technology helps track wildlife crimes, habitat connectivity, and conflicts between humans and animals. While visual storytelling on Instagram and YouTube cultivates an appreciation for species and ecosystems, social media campaigns enhance citizen research, encourage responsible tourism, and organize support against poaching and habitat destruction. challenges persist, including misinformation, increased visitor pressure from viral content, and risks from wildlife selfies. Strategic use—coupled with accurate messaging, data analytics, and collaboration between authorities, NGOs, and the public—is essential. New media not only strengthens conservation efforts but also builds a more informed and participatory society, ensuring Karnataka's rich wildlife heritage thrives for future generations.

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