ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

COMMUNITY-LED CONSERVATION AND ITS ROLE IN PROTECTING MIGRATORY BIRDS

Dr. Shumpenthung Ezung[1], Mr. Sanihe Ariijii[2], Dr. Abel Kavahru[3]
[1]*Assistant Professor, Department of Sociology, Don Bosco College, Kohima, Nagaland*
ORCID ID: https://orcid.org/0009-0006-3975-2543
[2]*Assistant Professor & Head, Department of Sociology, Don Bosco College, Kohima, Nagaland*
[3]*Assistant Professor, Department of Sociology, Don Bosco College, Kohima, Nagaland*
Orchid ID- https://orcid.org/0009-0002-0341-8579

***Corresponding Author**: **Dr. Shumpenthung Ezung.** Assistant Professor, Department of Sociology, Don Bosco College, Kohima, Nagaland*

Article DOI: https://doi.org/10.36713/epra23564
DOI No: 10.36713/epra23564

ABSTRACT

The focus of this research is the evolution of Pangti Village in Nagaland, India which changed from an epicenter of mass hunting to a center of community-led conservation for the Amur Falcon. The Amur Falcon, a long-range migratory bird, is an integral ecological element that helps in curbing breeding of pests but was however undermined by huge hunting. After the ban on hunting was declared in 2012, the local population went through immense socioeconomics problems because quite a number were engaged in hunting for a living. In this line, this paper waters the roots of the Center for Ecotourism Research and Development in Pangti village through the conservation and ecotourism strategies which include the local communities, the state authorities and the non-governmental organizations. Forthcoming initiatives such as campaigns and training oriented towards the younger population and the establishment of the Union of Amur Falcon Roosting Areas have assisted the community to which came out the civil engagement. The environmental programs, however, were only possible to develop and maintain because of training, infrastructure, and policy that were comprehensive in scope, and supported by the government. Countries like India, they argued, where there had been noticeable success, there were still limitations to that success such as lack of adequate infrastructure and even some socioeconomic conditions which might risk some of the people reverting to hunting. The case of Pangti Village provides a comprehensible solution to the problem of biodiversity conservation against the background of the community development – when there are food and resource incentives for the locals, they are able to manage the resource effectively.

KEYWORDS: *Amur Falcon, Community-Led Conservation, Nagaland, Ecotourism, Biodiversity, Socioeconomic Challenges*

1.1. INTRODUCTION

Nagaland also known as 'The Switzerland of the East', it suggests that Nagaland is famous for its gorgeous places, nature, and beautiful culture. Nestled among this natural splendour, the Amur Falcon (Falco amurensis) finds a captivating ecological and cultural niche. This migratory bird of prey travels a phenomenal 22,000 km per year and stops on route from Siberia to Africa through Nagaland's Pangti village. Still, the fate of these falcons hung in the balance under large-scale hunting pressures until comprehensive conservation efforts came about.

1.2. THE PROBLEM: OVEREXPLOITATION OF AMUR FALCONS

Nagaland had traditionally gained notoriety over the years for killing tens of thousands of Amur Falcons, during this period when they congregated to roost overnight on their migratory stopover route, especially at Pangti village. The hunting itself was exciting both due to the bush meat tradition of the area and connected to villagers needing money, problems compounded by a change in local economic systems with establishment of Doyang Reservoir that changed how people can earn their daily bread. Fishermen, the main act of hunters, modified their nets to encapsulate these birds which brings fishermen a lot of income—₹25,000 to ₹30,000 per hunter annually.

In 2012, the scale of the slaughter drew global attention after it was reported that up to 1,20,000 birds were shot every day during peak migration. The dire over exploitation of a nationally and internationally protected species finally demanded action.

1.3. CONSERVATION INITIATIVES AND COMMUNITY ENGAGEMENT

In protecting Amur Falcons, the real breakthrough came when a combination of government action, community engagement and awareness programs. First, government bans on hunting were difficult to enforce, but second, the pressure from conservation organisations and international appearances pushed for significant action.

Key initiatives included: Strict action was also taken against hunting by issuing orders from the district, and bans were

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

enforced with cooperation of panchayats and police. It was a massive change in how communities behaved.

Promoting awareness: Conservation India initiated a campaign for the Amur Falcon explaining its ecological significance, the services they perform in controlling insect populations and their amazing migration journey. Name of activity: Started Eco-clubs in local schools to create conservation values among the younger generations.

Awards and Recognitions: Pangti village has been known to the world as the "Amur Falcon Capital of the World." Perhaps its greatest achievement has been the boost in pride and conservation efforts for the community, *Credit: Royal Bank of Scotland Earth Heroes Award.

1.4. LESSONS FROM PANGTI VILLAGE

Amur Falcon conservation in Pangti village, is more than just a bird. It shows how engaging communities, educating local people and providing sustainable incentives to save their surrounding landscape can provide solutions to conservation problems. So, it has protected biodiversity in a world-class example, by putting the needs of people and wildlife first.

As hunting was a source of food and money, it implied sacrifices for the local population who had to give up on an income-generating way of life to conserve as a conservation. Nonetheless, eco-tourism focused on the migration of falcons offered a possible means of earning money. This drew tourists to watch the spectacle, thereby giving a fresh economic lifeline to the villagers that allowed for human livelihoods and ecological preservation to walk together.

1.5. BROADER IMPLICATIONS

The Pangti village case study epitomizes the potential of community-led conservation initiatives across the globe:

- Involvement of Village Councils and Schools: Local groups such as village councils, school clubs, and other stakeholders made sure the conservation message got to all levels of the community.
- Consciousness Conservation: Through various educational campaigns, the villagers realized how important Amur Falcon is for the ecosystem and changed their mindsets towards conservation efforts.
- Motivating Success: Recognition and eco-tourism revenue created sustainable momentum.
- Pangti village has not only managed to save the Amur Falcons but it has also paved a way for effective conservation by local communities.

2.1. REVIEW OF LITERATURE

There has been immense academic interest in Amur Falcon conservation in Nagaland, with studies highlighting the roles of community action, ecological significance, and sustainable development.

Amur Falcons Migratory Stopover on Doyang Reservoir by Athungo Ovung (2014) During his study, he noted this site which is critical for falcon roosting could be the base for eco-tourism development. Ovung said that one such initiatives would be beneficial for conservation and give local communities dependent on natural resources different options to earn a livelihood.

The positive change brought about by community awareness by Bano Haralu and Ramki Sreenivasan (2013), Friends of the Amur Falcon. They emphasized that local populations should play an active role in ensuring a safe passage for migrant birds. According to their findings, the natural mix of educational awareness campaigns with efforts driven by community feedback can swing from taking advantage towards conservation.

Scares Amur Falcon Northeast Survey Summary – Hunting (Shashank Dalvi, 2013) In his survey and its summary paper on the threats facing Amur Falcons in parts of northeast India, Shashank Dalvi depicts what must have caused considerable ruckus among conservationists and wildlife enthusiasts alike. His research highlighted the hunting practices endangering these birds and called for greater regulation and community involvement in their conservation. Also, Dalvi patterned the migratory routes so that they could provide options for targeted conservation areas.

In her article Working Together to Face a Crisis, Neha Sinha (2014) analysed the economic and ecological conservation benefits of Amur Falcon. Sinha showed that protection of these migratory birds can provide sustainable livelihood opportunities through eco-tourism while also encouraging local environmental stewardship.

2.2. RESEARCH GAP

Although existing literature generally highlights the successes of community-led conservation efforts in Pangti Village, little attention has been paid to analysing changes over time and the longer-term socioeconomic consequences that arise. Second, Pangti's model is so far untested outside its immediate context and this limits the generalizability or long-term sustainability of results in other places experiencing similar environmental challenges.

3.1. RESEARCH METHODOLOGY

This is a secondary research paper to understand the concept of community-led conservation and its role in protecting migratory birds, particularly through the focus on Amur Falcon conservation efforts in Pangti village in Nagaland. This study is grounded in a literature review involving journal articles, reports, and news publications.

The data was analysed from reliable literature sources regarding the migration seasons of the Amur Falcon, as well as conservation and socio-economic studies. The paper refers to literature that emphasizes the ecological importance of the species and describes historical hunting and responsible behaviour, as well as previous efforts by stakeholders at community level in biodiversity conservation.

3.2. Method

Thematic analysis was used to derive key themes: community involvement, policy regulation and eco-tourism as viable

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

options. Reversing Pangti village from case study provided a greater understanding through qualitative approach in how these approaches within awareness campaigns, satellite tagging then to incentive-based programs protect biodiversity whilst addressing socio-economic discrepancies. It also depends on historical and sociocultural contexts, looking at the crossroads of tradition and contemporary conservation strategies.

Utilizing secondary data, this study provides a broader understanding of how local initiative can meet ecological as well economic needs and sustainable conservation.

3.3. Limitations of the Study

Since this study is secondary, it has some limitations. One is that, it depends on previous literatures which does not reflect recent happenings in the conservation works of Pangti village. Because the accuracy and completeness of these sources are important, it can lead to gaps or biases within the analysis. Also, secondary data may not contain context-specific subtleties like real-time perspectives of the community or undocumented socio-cultural dynamics which could provide deeper insights.

3.4. Limitations of Using Secondary Research

In contrast, secondary research deliberately does not include collecting primary data through means such as conducting interviews or observing conservation efforts directly which could give insight on the role of communities taking lead. It too, falls victim to the limitations of its sources such as old or incomplete information. Additionally, the lack of ability to validate every secondary source exposes the findings to doubtful credibility. Consequently, the analysis might be more general than well contextualized.

4. RESULTS AND DISCUSSION

4.1. HISTORICAL AND SOCIOCULTURAL CONTEXT OF THE RESEARCH AREA

Nagaland is a hilly region in the northeastern part of India which is known for its biodiversity and 80.33% geographical area under forest cover. However, the state is still plagued with socio-economic issues particularly dependence on agriculture-based and forest-based livelihoods. Such pressures have historically driven unsustainable practices including large-volume hunting — even of migratory birds such as the Amur Falcon. Tackling these interconnected problems reveals the challenge of harmonizing conservation aspirations with livelihoods.

4.2. ECOLOGICAL SIGNIFICANCE OF AMUR FALCONS

The Amur falcon (Falco amurensis): Small raptor is a long-distance migrant that travels 22,000 kilometres each year from Siberia and China to Africa. These birds are strictly insectivorous, feeding mainly on termites and other beetles while providing critical ecological services in the form of pest control that enhances overall agricultural outputs, especially in South Africa. The significance of Pangti village, Nagaland is further enhanced by their huge roosting congregations which contribute to the area as being one of the international flyways for migratory birds.

4.3. HUNTING PRACTICES AND SOCIOECONOMIC CHALLENGES

In the past, Nagaland used to see extreme hunting of Amur Falcons when they came around Pangti village. After this, trapping found places large fishing nets around roosting trees. Hungry hunters who have lost their falcons to gun slides like none other but poverty and the sweet voices of the edge, majorly sold each bird for as less as ₹25, using bounty to gather all household expenses, education and celebrations during festive periods for festivals like Tokhü Emong.

Hunting dependency was, however, compounded by human-wildlife conflicts as communities needed to find alternative incomes to mitigate losses caused by elephant crop destruction. These socioeconomic pressures illustrated the challenge of prioritising conservation in the context of immediate livelihood needs, even given the ecological significance of Amur Falcons.

4.4. CONSERVATION EFFORTS BEFORE AND AFTER 2012

Amur Falcon conservation received a watershed moment in 2012 after instances of mass hunting drew both national and international attention, further fuelling anger and immediacy for action. That point highlights how conservation -- if well-implemented, that is -- can scale the transformative potential both of grassroots work and of institutions:

In response, local organizations including Nagaland Wildlife and Biodiversity Conservation Trust (NWBCT) carried out awareness campaigns. Mobilizing local community infrastructures and systems, such as churches, village councils, and schools to highlight the cultural importance of falcon's people used their power against capitalistic forces and threats to conservation objectives. These efforts helped to cultivate a sense of pride and responsibility among locals, moving the needle on community beliefs.

Policy and Response: The Forest Department reacted with hunting prohibitions and measures including fines and jail terms. This was followed by stricter measures including seizures net as well as releasing birds that were caught.

Illuminating understanding and friendship: Eco-clubs, workshops, and the Friends of the Amur Falcon programme catalysed engagement of youth and the wider community. Sticker books and falcon "passports" normalized conservation education, creating caretakers.

Satellite tracking: The first successful attempt to satellite track Amur Falcon in the state of Nagaland took place in 2013 and was a milestone for this bird's conservation story. For understanding these migratory routes, birds such as Naga, Wokha, and Pangti were tracked — emphasising that Nagaland is crucial for global biodiversity conservation. International publicity solidified the state's identity as "Falcon Capital of the World," illustrating how local conservation can be global.

Eco Tourism: Socioeconomics Alternatives Implemented with the dire need to challenge livelihood dilemma, eco-tourism as a sustainable option instead of hunting was identified. The Amur Falcons have attracted thousands of tourists during their migration, creating new sources of income for local communities. Guest houses and watchtowers have improved

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

the visitor experience while creating ownership of conservation successes amongst locals.

Further slashing hunting dependency even more was a variety of other programs, such as “Bird for Bird,” which supplied poultry to ex hunters, and “Grain for Grain,” through which farmers received payments for crop losses (Basak & Basak 2012). However, challenges remain with insufficient infrastructure and connecting roads, and issues of economic viability that have yet to unlock the full potential of eco-tourism as sustainable livelihood.

4.5. CHALLENGES AND FUTURE DIRECTIONS

Though it represents an impressive conservation success story for Nagaland, there are ongoing challenges for sustaining this effort:
Low Infrastructure: Shortage of tourist infrastructure and road connectivity limits the potential for eco-tourism.
Economic Pressures: Many villagers are still struggling financially, which makes hunting an attractive fallback for them.
Greater Awareness Needed: Conservation does not yet feature in school curricula or be widely discussed at community level.
Bridging these divides requires investments in eco-tourism infrastructure, expansion of livelihood programs and the implementation of conservation education deeper into on-the-ground communities. Increased enforcement and collaboration with government agencies, NGOs, and local communities can further position Nagaland as a global leader in conservation.

4.6. A MODEL OF GRASSROOTS ECOLOGICAL STEWARDSHIP

Pangti Village evokes the narrative of community conservation with its roosting grounds situated in Wokha District, Nagaland. That has changed the village from a place where thousands of birds are killed every day to a shining example of best practice biodiversity management, on the world stage. But thanks to community efforts, partnerships with governmental and non-governmental organizations, and the active participation of those living here in Pangti village, there is now a home for these falcons: one that boosts conservation as well as economic development.

4.6.1. The Role of Community and Awareness in Conservation

The village of Pangti has taken the initiative for protecting Amur Falcons since 2012. Hunting for food and commercial purposes, widespread bird trapping was commonly observed. Prohibition of alternative livelihoods, apart from hunting, with the schedule of the past had caused the same. A movement initiated by organizations like the Nagaland Wildlife and Biodiversity Conservation Trust (NWBCT) succeeded in forming new attitudes due to the support by the Forest Department and NGOs like Wildlife Trust of India (WTI).

Some of the vital community-led activities included:
Awareness Campaign: There were workshops and educational activities in church services, educating the villagers on the ecological and economic benefits of the Amur Falcons.
Amur Falcon Roosting Areas Union (AFRAU): The local body governed anti-poaching activities. There was a patrolling system 24/7 enacted during the migration seasons.

Local Institutions: Local churches were involved in conservational activities by influencing people through their sermons. They espoused issues around conservation during various community gatherings.

These results led to an effective cultural change, as villagers started embracing the falcons as "esteemed guests" and advocated for their protection.

4.6.2. Ecotourism as a Sustainable Livelihood

Ecotourism not only has given some alternative sources of income to the members of Pangti village but has also involved considerable reductions in hunting dependencies as it is now a cornerstone of local development.

Job Opportunities: Out of hunting, people have changed their careers to guides, boat operators, and homestay owners. Guesthouses and watchtowers have been set up to host tourists while creating fresh economic activities.

Community-Initiated Programs: Programs like "Bird for Bird" that provide poultry to ex-hunters and "Grain for Grain" where the value of crop damage by wildlife is compensated enhance the incentives for conservations.

While ecotourism has been promising, it lacks infrastructure and road connectivity into the region. All these gaps need to be bridged in order to sustain the growth of tourism.

4.6.3. Conservation Milestones and Strategies

Not just has Ecotourism offered members of Pangti some alternative earnings options but at the same time, it has also led into long-throw reductions in hunting dependencies of it primarily via a local development cornerstone.

Job opportunities: The people that stop hunting found other jobs, those which are guides, boat operators and homestay owners. And so, guesthouses and watchtowers to host tourists has created new economic activities.

Community-Based Initiatives: initiatives such as “Bird for Bird” which gives away poultry for ex-hunters and “Grain for Grain” where the value of crop loss caused by wildlife is compensated increase the conservation incentive;

Ecotourism looks good on paper but the infrastructure and roads do not reach into the region. Now all such these gaps need get interspersed to ensure the continuity of growth in tourism.

4.6.4. Socioeconomic Challenges and Community Resilience

Even with the successes, there have been challenges in this evolution from hunting to conservation. The ban on hunting was instantaneous (2012) and it put a considerable strain on the economy of villages that relied on hunting to survive. The surveys it conducted in the village found that:
Economic Dependence: Some stated hunting was required for both consumption and income in the past.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

Education: Without widespread access to education, the local people were not as aware of conservation regulations or other job options.

In dealing with these challenges, efforts have been made in collaboration to compensating hunters and fishermen for the transitional period and providing vocational training to diversify income streams.

4.6.5. Recommendations for Sustainable Conservation

The Amur Falcon conservation project in Pangti Village: A success story that can be built on with community involvement and partnerships nevertheless, there are a number of longer-term solutions that should be considered:

Strengthening infrastructures: The growing of tourist amenities, road connectivity and communication facilities is vital for the development of ecotourism.

Improving Education and Awareness: Conservation education must be incorporated into local schools in order to install environment stewardship early on.

Support from Policy: Create a consistent plan for financing conservation projects at the community level, extended to such programs by the government and NGOs over time.

5.1. CONCLUSION

The Amur Falcon has been the focus of significant conservation initiatives, especially in Nagaland, including Pangti Village. It is a conspicuous yet supremely successful case study highlighting the convergence of ecology and community efforts to overcome socioeconomic challenges. Pangti used to be a center for mass hunting but has now become a globally-renowned inspiration in wildlife conservation, even being recognized as the "Amur Falcon Capital of the World. The nature of this transition underscores the importance of community engagement, awareness and sustainable incentives for conservation on a multitude of levels.

In this context, the introduction of eco-tourism as an alternative livelihood has been integral to its success, paying ex-hunters and bringing benefits to the local community. Programs like Bird for Bird & Grain for Grain, satellite tagging and awareness campaigns have ring-fenced the conservation message, making the Amur Falcon a source of pride as well as economic promise. The move from hunters to tourism demonstrates what a good education and sustainable development can do to change practices which have become customary in one form or other.

However, challenges remain such as, information gaps in land use, insufficient resources to give priority to conservation education more generally. Handling these issues will require collaboration between government and NGOs, a prerequisite to sustain this success. A scalable template for the conservation of biodiversity and Pangti's story gives a scalable template for balancing conservation of biodiversity and that of humanity — when communities are empowered and incentivised, they can be the best champions to fight for both.

5.2. SUGGESTIONS FOR FURTHERPR STUDY

Livelihood Transition Assessment: Field-based interviews and surveys with former hunters and local residents can provide insights into the socioeconomic changes and challenges they face after making the transition to conservation-oriented livelihoods.

Community Perception Study: Gauge the Pangti community attitude and perception on the conservation efforts, eco-tourism, and their long-term sustainability through direct engagement and focus group discussions.

Impact of Conservation Education: Assess the effectiveness of in-school and community-based conservation awareness programs in respect to changes in knowledge, attitudes, and practices, using primary methods of data collection.

Tourism-Driven Economic Impact Study. Conduct a case study on eco-tourism in Pangti Village, collecting data on income generation, employment, and infrastructure usage as part of measuring its impact toward local-level development.

Environmental Monitoring and Falcon Behaviour; Field observations and satellite tracking to follow the migration routes, habitat preferences, or signs of disruption due to human activity or environmental changes.

ACKNOWLEDGEMENT

I wish to thank Miss Mhondani Tongoe for permitting me to reference and use her research work as a pertinent resource for this article. Her insightful research work, has provided insight into community-led conservation efforts in Pangti village, which have greatly informed and enriched this study. The interpretations and analysis presented here are my own, based on the foundational work of hers.

REFERENCES

1. *Fehervari Peter, Szaboles Solt and Peter Palatitz (2013), Satellite Tracking of Amur Falcon- Nagaland, India. "Final Report". Raptors MOU and CMS. Retrieved on 26th October, 2017.*
2. *Haralu Bano and Ramki Sreenivasan (2013), Friends of the Amur Falcon- year 1 Report, "Friends of the Amur Falcon". Nagaland Wildlife and Biodiversity Conservation Trust. Retrieved on Sept 26th, 2017 at www.nagaland conservation.in*
3. *Kumar.R.Suresh(2014), Tracking the Incredible journey of a small raptor Amur Falcon from India. "MISTNET". Indian Bird Conservation Network. Retrieved on 25th October, 2017 at www.ibcn.in.*
4. *Ovung Athungo, Doyang Reservoir: The Amur "Falcon Capital of the World"*
5. *Odyuo Steve (2014), Amur Falcon Conservation in Nagaland. "MISTNET". Indian Bird Conservation Network. Retrieved on 25th October, 2017 at www.ibcn.in.*
6. *https://www.thebetterindia.com/68915/bano-haralu-doyang-nagaland-amur-falcon accessed on Sept 5th, 2017*
7. *https://www.theguardian.com/environment/terra-india/2013/nov/12/amur-falcon-saved-by-indian-villages accessed on Sept 10th, 2017*
8. *https://www.thenortheasttoday.com/tag/pangti-village accessed on Sept 10th, 2017*

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

9. *https://www.nelive.in/nagaland/news/journey-amur-falcon-nagaland accessed on Sept 14, 2017*
10. *https://www.medium.com/@NWBCT/amur-falcon-conservation-in-nagaland-india accessed on Sept 14, 2017*