



Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/16184

DOI URL: <http://dx.doi.org/10.21474/IJAR01/16184>



RESEARCH ARTICLE

THE MARGINALIZATION OF PASTORAL COMMUNITIES COHABITING WITH THE ASIATIC LIONS: A CASE OF MALDHARIS LIVING IN THE PROTECTED AREAS OF GIR FOREST, INDIA

Dr. Mayur Trivedi¹ and Dr. Bharati Sharma²

1. Professor, Indian Institute of Public Health Gandhinagar, Opp. Airforce HQ, Lekawada, Gandhinagar.
2. Associate Professor, Indian Institute of Public Health Gandhinagar, Opp. Airforce HQ, Lekawada, Gandhinagar.

Manuscript Info

Manuscript History

Received: 29 November 2022

Final Accepted: 30 December 2022

Published: January 2023

Key words

Displacement, Ethnography, Gir National Park, Maldharis, Marginalization, Situational Analysis

Abstract

The wildlife conservation approach that insists on making forests free from human activity brings a drastic change for communities residing inside the forest risking their very existence. This ethnographic study of pastoralists, cohabitating with Asiatic lions inside the wildlife-protected area, explored the influence of restrictions imposed on their lives. Data was collected through participant observations, informal discussions, and in-depth interviews. Ordered and social arena maps as described in the situational analysis approach by Adele Clarke, were used for analysis. The social arenas of State, Temporary migration, and Market were found to shape the lives of the Maldharis. Their life after the declaration of the protected area was characterized by economic insecurity, lost identities, loss of networks, dignity, and honor. The multiple and multifold vulnerabilities of the marginalized Maldharis, who made forests their homes for generations, warrant an integrated approach towards conservation.

Copy Right, IJAR, 2023, All rights reserved.

Introduction:-

Marginality is “an involuntary position and condition of an individual or group at the margins of social, political, economic, ecological, and biophysical systems, that prevent their access to resources, assets, services, restraining freedom of choice, preventing the development of capabilities, and eventually causing poverty” (Gatzweiler, Baumüller et al. 2011). It encompasses two dimensions; “where people are” i.e. physical locations and “what they have” referring to societal positions (Braun and Gatzweiler 2014). Spatial marginality focuses on physical locations and takes into account the distance or connectivity to centers of economic activity at different geographical scales (T Cullen and Pretes 2000). Social marginality, on the other hand, is concerned with human dimensions and social structures, such as age, gender, religion, caste, class, and ethnicity, in connection with access to resources by individuals and groups (Gurung and Kollmair 2005).

The vulnerabilities of the marginalized population are multiplied by intersecting vulnerabilities such as social, spatial, and ecological marginalization (Kirkby, O’Keefe et al. 2001, Gwatkin and Ergo 2011, Srivatsan and Shatrugna 2012), making it difficult for them to fully anticipate, resist, cope with and recover from hurdles of daily life. The communities that are dependent on once free but now government-regulated natural resources like forests, face multi-dimensional marginality, restricting their capability and functioning (Sen 1999, Brodwin 2003).

Corresponding Author:- Dr. Mayur Trivedi

Address:- Professor, Indian Institute of Public Health Gandhinagar, Opp. Airforce HQ, Lekawada, Gandhinagar.

One such pastoral community is the Maldharis living inside the government-protected Gir wildlife sanctuary, the last abode of Asiatic lions i.e. *Panthera Leo persica* (Andrade and Rhodes 2012). The Maldhari-lion coexistence has been central in the debate of livelihood and from an ecological perspective for decades with the negative attitude of the state towards cohabitation in the sanctuary (Choudhary 2000, Pati 2000, Mukherjee and Borad 2004, Banerjee, Jhala et al. 2013, Ramaiah 2015, GoI 2016). The Gir Wildlife Sanctuary is the largest compact tract of natural dry deciduous forest supporting rich biological diversity that constitutes more than 450 plants, 38 species of mammals, 35 species of reptiles, about 300 species of birds, 6 species of amphibians and innumerable species of smaller flora and fauna (GoI 2000).

The conservation of lions was initiated by the Nawab of the princely state of Junagadh in the early 20th century, which was described as a participatory effort involving the Maldharis (Divyabhanusinh 2006). The wildlife conservation in Gir forest began in 1965 when it was formally declared a Lion Sanctuary, and further consolidated in 1974 when it was declared a national park and nature reserve through the Gir lion conservation project (1972-78). The project remained an important landmark in the history of the Gir forest and the lives of Maldharis who have been an important part of the Gir ecosystem, as many of them were rehabilitated as part of the 'Gir Maldhari rehabilitation project 1972' in resettlement colonies (Ganguly 2005).

The exercise of resettlement was inadequate as not all Maldharis could be resettled because of administrative and financial constraints. Many continued to stay inside the forest in absence of resettlement offers. An estimated 4,802 persons from 845 families were residing in approximately 129 nesses (a settlement of 3-20 families scattered inside the forest), before resettlements (Choudhary 2000). Certain resettlement colonies in nearby areas were vacated as the families faced socio-economic difficulties, and consequently, many Maldharis returned to occupy the Gir forest (Ganguly 2005). There are 45 nesses with 326 families and 2189 individuals living inside the forest according to the latest management plan of the protected area (Meena and Kumar 2012).

The wildlife-focused policy of resettlement and corresponding displacement has affected the Maldharis negatively. While existing literature examined the impact of rehabilitation on the life of the marginalized Maldharis living in the resettlement colonies (Gupta 2002, Ganguly 2005, Rangarajan and Shahabuddin 2006), this study unveils the complex factors which have influenced and shaped the lives of the Maldharis who currently live in the Gir forest.

Methods:-

Design

This ethnographic study was conducted using unstructured in-depth interviews with participants from in and out of the protected areas, participant observation, informal discussions with community members, and several stakeholders such as tourist guides, the staff of government health mobile medical units, forest department officials, and shopkeepers. Ethnography was found appropriate as the methodology allowed for field immersion and prolonged engagement with the community, giving an opportunity to participate and experience their day-to-day life.

Approvals and permissions

Administrative approval for the study was given by the Principal Chief Conservation of Forest (PCCF) (Wildlife), Gujarat. Ethical clearance was obtained from the Institutional Ethical Committee of the Indian Institute of Public Health Gandhinagar vide TRC/IEC No. 33/2014. Informal oral consent from the community at large was obtained for the study through meetings with the community leaders/elders. The researcher oriented them to the study to gain their approval. Consent was also taken each time for participant observations, interviews, and discussions with respective participants.

Data collection

The selection of sites was in consultation with local authorities and also depended on the researcher's physical access, logistic feasibility, and linguistic skills. Data were collected in two phases of 6 weeks each. The first phase was in August – September 2016, i.e., during monsoon when the Maldharis stay inside the forest in their nesses. The second i.e., January-February 2017 i.e., in winter when most Maldharis were away from their nesses. Since the researcher was not permitted to stay inside the PAs, he was stationed at Sasan village and visited selected families inside the protected areas during the day in both phases.

In the first phase, the visits were guided trips in Gypsy jeeps and Motor Bikes as the researcher had limited exposure to the terrain. As cattle grazing is the core activity of Maldharis, many of these trips involved participant

observations of daylong buffalo grazing trips deep inside the forest with Maldhari men. Ten such participant observations of buffalo grazing happened inside the Gir forest and outside when Maldhari families out-migrated. These trips provided an insider's perspective, on the routines of Maldharis, and their hardships and challenges in cattle grazing. This also allowed for long leisurely conversations with the men, thus gaining their trust and making further contact with the families easier during subsequent visits. While a local guide helped during the monsoon months, the researcher managed visits to the nesses as well as homes of Maldharis on his own during subsequent winter months. The researcher visited the temporary settlements of Maldharis on the outskirts of Gir during the winter, on a motorbike, which could be as far as 40 km a day.

Initially, a broad view was taken; a) general observations to familiarize the area and the communities, b) prolonged engagement with the community and immersion in activities as a participant-observer such as cattle grazing trips, to get an emic perspective as well as adequate time for reflexivity, and c) in-depth interviews and focused discussions with community members to confirm and saturate emerging themes, patterns, similarities, and differences. The insights gained from this zooming in were triangulated by visiting a few more nesses more than once and some nesses deep inside the forest at least once

The discussions with the community and stakeholders helped to gain an understanding of the difficulties arising from living in the protected area and the multidimensional effects on their economy, social life, and social networks. One big advantage was that the researcher knew the local language.

Analysis

Detailed notes were taken in the form of descriptive content, reflective logs, field diaries, including insights into emerging patterns and themes needing focus during further data gathering. To supplement the data collection, we took pictures, and recorded videos, as found appropriate. The in-depth interviews were audio-recorded and transcribed verbatim.

All the field notes, and interview transcripts, were read several times with a reflective mind for understanding the data. Situational analysis as described by Adele Clarke was used for data analysis (Clarke 2005). The situational analysis approach treats the situation itself as a unit of analysis. The approach involves mapping and analyzing various elements in the situation; in this case the current context of the life of the Maldharis living inside Gir within their overall historical relationship and interdependence with the forest, and how the declaration of PA has changed their economy, and the very fabric of their social life. Clarke's approach is successfully used in similar analyses elsewhere (Vasconcelos, Sen et al. 2012, Pérez and Cannella 2013).

As described by Clarke (2005), messy and ordered maps were constructed which included elements in the situation such as the individual and collective actors, non-human actants, absent and implicated actors, economic and political elements, discourses, and temporal and spatial elements affecting the lives of the Maldharis. To start with all these elements were placed randomly in the series of messy maps without any order. The researchers then discussed each item on the messy maps and created memos describing each element, and their relationships. Thereafter, a series of ordered maps were created, which helped the researchers to conceptualize and get insights into the different social worlds or arenas, which influence the lives of Maldharis. These visualizations were described as social arena maps. While the ordered map shows the multiple kinds of actors and discourses, the social arena maps are visual depictions of different overlapping arenas and social processes influencing the lives of marginalized populations.

Results:-

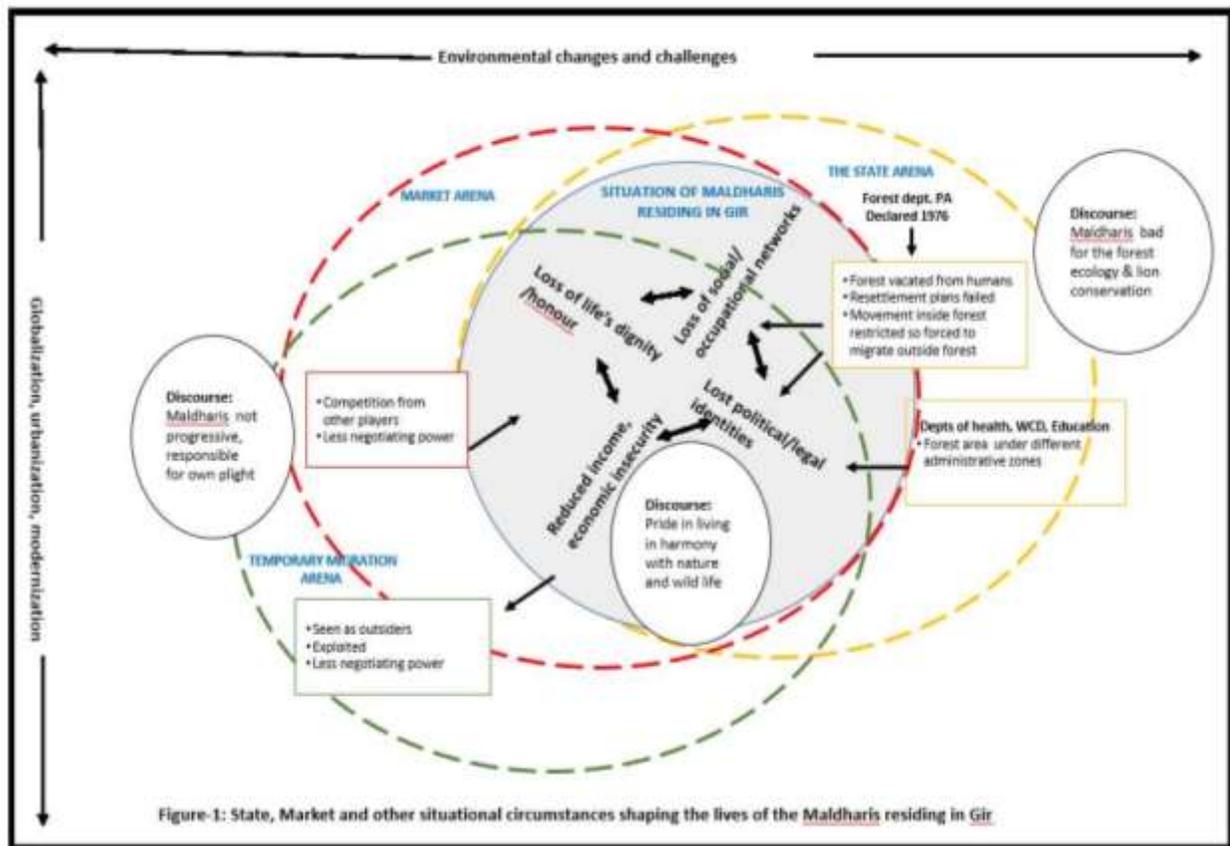
Before presenting the findings, we give a brief description of the social characteristics and culture of the Maldharis as described in the literature and also confirmed by our study.

The Maldharis have multiple political, socio-religious, and caste-based identities. For instance, the Muslim Maldharis consist of Balochs, Makranis, and Saiyyads castes, and Charans, Bharvads, and Rabaris, among Hindus (Joshi 2008). Almost all Maldharis have been categorized as either Scheduled Tribes, Scheduled Castes, or Socially and Educationally Backward Castes (Ganguly 2005). Each caste has its distinct social identity and cultural practices. Physically robust and amiable, Maldharis are predominantly vegetarian not competing for food with the carnivores. The main source of livelihood is cattle rearing (mainly buffaloes and a few cows) and trading of their produce. Having mastered the art of forest-based husbandry through mixed grazing and corralling the livestock at night, Maldharis live harmoniously with the wildlife inside the forest (Banerjee, Jhala et al. 2013). Completely

dependent on forest resources, the Maldharis have strong ethics and sentiments towards nature and natural resources. This fact is not only documented by researchers (Raval 1991, Casimir 2008) but has been described and hailed in literature through popular books and theatre as well (Shashtri 2013).

From our interactions with the Maldharis, we understood that, as the forest has been their home for generations, they have in-depth and rich knowledge of its geography, herbal medicinal plants, and all flora and fauna of the forest. They have played the role of guides to new staff of the forest department and other government staff regularly.

The current situation of the Maldharis has been conceptualized in the form of organized maps (Tables-1a-c, 2, 3) as suggested by Clarke (2005). The use of social arena maps (Clarke, 2005) made it possible for ecological, meso-level analysis of their situation (Figure-1). Three social arenas seemed to have influenced the lives of the Maldharis; a) the State arena consisting of various government departments and bureaucracies, b) the Temporary migration arena consisting of other communities outside the forest, with whom the Maldharis interact when they migrate outside, and c) Market arena, consisting of various actors, changing market conditions, changing business practices. Social worlds/arena maps were specifically helpful as it is difficult to determine the directionality, boundaries, and degrees by which each of the social arenas and the various elements in the arenas contributed to or can explain exclusively, the current situation of Maldharis.



In Figure-1, the current situation of Maldharis is shown as the innermost circle, at the intersections of the three arenas showing their collective, inseparable effects. The three social arenas are shown with different coloured boundaries. The social arenas have overlapping and permeable boundaries indicating their dynamic nature, shaping as well as being shaped by each other. These social arenas and the actions, and interactions taking place within and between social arenas exist within the larger transformations occurring at the National/Global levels in the environment and as part of modernity brought in through industrialization, urbanization, and the open market system (Shown as arrows on the extreme left and top of the Figure-1).

State arena

Life of Maldharis before PA

Seasonal, periodic migration is not a new phenomenon for the Maldharis, but the declaration of PA has changed nature and the consequences of voluntary seasonal migration. Therefore, the state became the most important arena influencing the lives of the Maldharis. The narratives of Maldharis describing their current situation reflect a nostalgia for their ancestors, whose lives qualified as “Jhahojalali”, meaning prosperity.

Maldharis have been living inside the Gir forest for generations before India’s independence. Cattle are their capital/asset. The forest has provided free fodder and water over generations. However, their life in the jungle even before the crisis brought in by the lion conservation policy was not without challenges. They have learned to cope with natural crises, floods and drought. The biggest challenge has been the uncontrolled growth of *Cassia tora*, a weed locally known as “Kuvadiyu” which overpowers all other vegetation including fresh fodder for the cattle. As they needed to change their nesses every few years in search of fresh fodder, the Maldharis lived a semi-nomadic life, periodically relying on their social networks inside the forest for migrating across nesses inside the forest.

Table-1a. Ordered Map of The State Arena: Nonhuman Elements/Actants.

- **Livestock** is the only asset of Maldharis; Buffaloes, cows, camel, etc.
- **Forest and its produce free** before the declaration of PA; Now they have to purchase fodder
- **Asiatic lion rare species** found only in this part of the World.
- **Natural calamities**
 - i. Natural calamities like Cyclone (1982) & Drought (1986-1988)
 - ii. Ecological changes & consequences; expansion of weed (Kuvadiyu), forcing annual, seasonal/cyclical migration (the 2000s onwards) inside the forest before the PA, now outside the forest to nearby villages

Since Maldharis migrated between nesses within the forest before the PA was declared, they did not depend on any other actors except the forest. Though they struggled with ecological changes like the invasion of *Kuvadiyu* and erratic monsoons, they expressed pride at their wisdom and acceptance of Interdependence with nature. For example, buffaloes survive on forest produce, and wild animals’ prey on buffaloes, as put by one Maldhari, "Jeeve Jeev Nabhe" which means one life form is dependent on another life form (Table 1c). The fact that the lion’s prey on their buffaloes enhance their sense of pride in being an inseparable part of the ecosystem. The semi-nomadic Maldharis remain caught in the cycle of interdependence on the forest and cattle breeding, decreasing the opportunity to evolve into other professions, develop new skills and achieve upward social mobility as mainstream societies prescribe.

Declaration of PA and Forest Department

The problems faced by Maldharis due to natural changes in the ecosystem multiplied once the government declared the Gir Forest as a protected area putting restrictions on movement inside the forest. The wildlife conservation approach positions human beings as harmful to the forests and animals, thus creating human-animal conflicts. This contradicts the ethos of human-animal cohabitation that Maldharis believe in. This position taken by the state is found to be absurd by the Maldharis as they saw themselves as proud conservators of forests and lions (Table-1b).

As seen in Table-1b, several state actors are governing various elements in the Gir forest and its residents. While the forest department is the major actor as Gir is a PA, the other actors include different departments of the state government. While ministries like Health and Education have the welfare of the populations as their mandate despite their illegal residence status, the forest department’s mandate is to vacate the forest to protect the endangered species.

Table-1b:- Organized Map of The State Arena: Human Elements/Actors (Individual and Collective).

- Forest department**
- Declaration of sanctuary and Rehabilitation of Maldharis (1972-76)
 - i. Ineffective rehabilitation of Maldharis causing their return to the forest
 - ii. Loss of rightful identity- State-given identities; Kayami- Permanent, Bin-Kayami-temporary and Ger Kaydesar-Illegal
 - Sixteen ranges across two divisions of forest department govern Gir forest. Sasan Wildlife division

- manages tourism activities around Sasan.
- Maldharis have to build relationships with officials at different levels; field staff (rebuild rapport with new staff), Eco-development committees at nesses level, to negotiate permission for
 - i. Residing in the forest
 - ii. Internal migration within nesses in search for better fodder and water availability
- Maldharis on government surveillance; need Maswadi pass for movement of families and their guests, Identity and entitlement cards, form a part of statistics and data
- All public utilities work stopped after PA; construction of houses, roads, electricity, piped water

Other government departments

- Gir sanctuary is flanked by three districts; Amreli, Junagadh, and Gir Somnath. Different nesses come across different blocks of these three districts.
- Depending on the location of nesses, government entitlements such as health care services, preschool education, primary education, etc. fall under different district administrative systems. Services from these multiple governance structures are not coordinated well.
 - i. **Health;** Irregularity and the limited role of Mobile medical Units and staff, adjoining Primary Health Centers, nearby Community Health Centre, and Taluka Health Officer /District Health Staff, private health providers in nearby villages, towns, and during camps
 - ii. **Women and children;** Not all Nesses have an Anganwadicenter, as a ness do not have a bounded 1000 population.
 - iii. **Rural development;** For BPL and ration cards, they would need to visit respective block headquarters, which could be different from towns to be visited for revenue or forest department-related work. Not all Maldharis have a BPL card.
 - iv. **Election commission;** For voter ID and related matters, they need to visit a town different from the one for revenue or forest department-related work.
 - v. **Social justice;** Different Maldharis belong to different social categories i.e., castes. Some have Scheduled tribe status; others are categorized as Other Backward Caste (OBC). These categories imply access to or lack of special entitlements.

The discourse of international recognition and tourism for revenue generation make the lion and the forest an important non-human actant, and the Gir forest a complex, power-laden, dynamic, visible, and contested arena for all these multiple actors to play their respective roles, act, interact and compete (Table-1c, Figure-1). The various government departments seem to be at cross-purposes. As a part of the Gir Maldhari rehabilitation project, a census of Maldharis was carried out in the 1970s. The legitimacy for permanent residence in the forests was defined as those living in the forest since 1956 who were issued the “Maswadi” pass for a token fee, by the Nawab in the 20th century. Under the rehabilitation plan, the government offered each permanent or “Kayami” family a Maswadi pass, compensation for moving out of the forest. If the sons separated from the main household, they lost this Kayami identity. They became ‘Bin-Kayami’ or temporary residents. Those who did not have Maswadi passes were identified as ‘Ger-Kaydesar’ i.e., illegal and were asked to leave the forest without compensation. All three categories exist in the forest in the present time, with a considerable dispute about their identities.

Table-1c Discursive Constructions.

ABOUT MALDHARIS

- Lions are the pride of Gujarat and are of international interest being an endangered specie
- Maldharis & lions have coexisted for centuries.
- Maldharis are detrimental to forest conservation.
- Grazing of Buffaloes responsible for the expansion of weed (Kuvadiyu)
- Buffalo hooves harden surface soil, interfering with the natural regeneration of flora & fauna.
- Forest topsoil mixed with dung sold as manure by Maldharis for income affects the quality of soil around nesses.

BY MALDHARIS

- Proud of co-existence with lions
- Living in harmony with nature; taking free resources and returning cattle as food for the lions

This change in legal rights has further restricted their free movement inside and outside the forest. The Maldharis have to build relationships with officials and keep the field staff happy to gain informal support. Each time the field staff changes they have to rebuild relationships. Formal and informal negotiations are needed for; a) daily grazing which is authorized within specific boundaries, b) movement of guests and visitors, and c) relocating outside temporarily after the monsoon season.

Other government departments

The geographic isolation of the Maldharis makes it difficult for the health, education, and other welfare programmes of the government to reach them. All development-related government policies are designed for “mainstream” binary settings of rural or urban. The Maldharis do not fall into either of these, thus ending up being governed by multiple government bodies in different locations for different services, and yet deprived of many welfare entitlements as they slip through the bureaucracies, which lack coordination and communication.

Temporary Migration Arena

Due to movement restrictions inside the forest, when the Maldharis migrate outside the forest during winter for better pastures and water, they either settle at locations near the embankment of dams, or peripheries of privately-owned agricultural farms outside the Gir forest.

While Maldharis who stay on the farm periphery pay for their stay and water, they also have to give free manure generated for animal waste to the farm owners. The Maldharis have to cultivate relationships with the farmers to ensure they can use the same site next year. The villagers perceive them as outsiders who crowd their villages and use existing resources. The Maldharis are at the mercy of the farm owners and under constant fear of the locals.

If the Maldharis live near the dams, they are saved from negotiations with the farmers and villagers. However, their isolation is worse as the camps are away from village settlements and roads making access to daily supplies like ration and firewood difficult. The only source of water for human and livestock consumption for these families was the trough near the bank of the dam.

During such stays outside the forest, Maldharis have few options for cattle grazing such as a) empty farms after harvesting, b) nearby forest areas, and c) grassland (Vidi) managed by the forest department. This again requires negotiating with farmers, forest officials, and keepers of the vidis, and additional expenses of transportation as well. This form of dependence on multiple actors has affected the self-esteem of many Maldharis as they have lost their independence, sense of belonging, and dignity. As shared by one of the Maldharis;

“We live with dignity and self-respect at our forest. Here, we are obliged to the farmer. We do not like this” – Maldhari man who temporarily camped near Jamka village

This forced migration separates the Maldharis from their social networks within the forest. In absence of social support, they lose confidence and opportunities for collective actions. Some women who camped near Pavti village indicated safety concerns too. “We are not afraid of animals inside the forest but here, we are afraid of humans passing by on the road next to our huts. We know the instincts and habits of animals but humans cannot be judged”

While outside the forest, they lose social networks with the tourist guides, vehicle drivers, and railway staff, and while inside, they lose networks outside such as village dwellers, milk traders, and shopkeepers, private and government healthcare providers. Losing the networks means that they lose negotiation power and become vulnerable to market forces.

The few government welfare services they get while inside the forest get discontinued during their eight months of stay outside the forest, as they do not belong to any designated area for services. The nature of their occupation does not leave them with time for their children to attend school thus closing opportunities for the next generation to develop knowledge, skills, and motivation to move to alternate occupations. This is especially true for interior forest areas that are away from villages.

Market Arena

Several market forces changed the traditional business of selling the produce from their livestock. Since Maldharis had large livestock holding, they had a large quantity of milk, which was converted daily into clarified butter i.e.,

Ghee. The remaining buttermilk was an important feed for the Buffaloes, for them to produce better and more milk. One of the important reasons for such a practice was less shelf life of milk, the absence of cold storage, and poor connectivity to a dairy. Ghee has a long shelf life which gave them the flexibility of visiting local traders in nearby villages to exchange ghee for cattle feed oil cakes at their convenience. The Maldhari women had an important economically productive role of making ghee everyday which is a labour-intensive process, while their men folks went for cattle grazing.

Table 2:- Ordered Map of The Market Arena.

<ul style="list-style-type: none"> • Changes brought about through modern amenities; <ul style="list-style-type: none"> i. Vehicles like Motorbikes, Gypsy (tourist vehicle), Milk collection vans, Rail facilities improved access to marketplaces ii. Mobile phones improved communications iii. Business practices changed. <ul style="list-style-type: none"> a) Traditionally ghee was exchanged for oilcake as feed for livestock b) Maldharis shifted from selling ghee to selling milk for money c) They purchase oilcake for high cost • Entry of Competitors <ul style="list-style-type: none"> iv. The dairy market expanded with the entry of many players with cheaper milk and ghee v. Dairy cooperatives
--

The Maldharis have now switched to selling milk instead of ghee as; there is improved physical access to the market through motorbikes and roads inside the forest, and with smaller families, there are fewer hands available for the labour-intensive process of Ghee-making. Moreover, milk production has reduced owing to the reduced average livestock holding, and poor output per animal in general, owing to lower quality and quantity of fodder. The earlier practice of exchanging ghee for cattle feed oilcake has stopped as the oilcake sellers do not buy ghee from Maldharis. The buffaloes are deprived of buttermilk and oilcake feed which are necessary for obtaining good quality milk in sufficient quantity.

The demand for expensive Maldhari Ghee has also reduced as the big private players and milk cooperatives offer packaged ghee at much lesser rates than Maldharis. The shift from being a ghee seller to a milk pourer has created a scenario in which Maldharis deal with separate players for their inputs (cattle feed) and outputs (milk), with reduced negotiating power at both ends. Unlike rural milk cooperatives, Maldharis are not united. Owing to difficult terrain and sparsely populated habitats, it is difficult to unite them through community action.

Reinforced marginalization as a consequence of complex social processes

The declaration of PA has multiplied the marginalization of Maldharis who were already struggling with ecological and market-driven challenges. The current situation of the Maldharis is characterized by; reduced income and economic insecurity, lost political/legal identities, loss of social/occupational networks, and loss of life's dignity and honor (The inner circle in Figure-1). The conservation-induced displacement of the Maldharis has not only resulted in their impoverishment due to economic insecurity and reduced income, but also made them feel disempowered because of the loss of their social and occupational networks, loss of legal identity, and the right to the forest which has been their home for centuries, and loss of dignity and honour. The declaration of the Gir forest area has contributed mainly due to movement restrictions of Maldharis inside the forest. Economic insecurity and reduction in incomes of Maldharis inside the PA are due to the cumulative effects of having a smaller number of cattle, and the inability to provide good quality and adequate fodder to their cattle due to restrictions put on their movements inside the forest. This has led to a reduction in the quantity and quality of milk which is their main source of income. Further the Maldharis find it difficult to compete with the other players entering the dairy industry with dairy products that are better packaged and at a lower price.

In the current settings, they feel uprooted and helpless as they are losing not only their natural habitat but their social networks in which they feel healthy and happy. Many expressed a sense of rejection and hopelessness in strong words describing their life; "Our life is like an orchestra without music". They feel unheard and voiceless as shared by some Maldharis "Who pays attention to the plights of stray dogs? **In another similar expression some of them said,** "Who listens to the voice of orphans?".

Therefore, the Maldharis seem to have lost their confidence and feel excluded and orphaned, thus, reinforcing their marginalization.

Discussion:-

The current study describes the present situation of the Maldharis who chose to live in the Gir forest amidst a) reduced income and economic insecurity, b) lost political/legal identities, c) loss of social/occupational networks and d) loss of life's dignity and honor. These four consequences should be understood in constant flux, dynamic, changing, constantly shaping and being shaped by the different social arenas. This indicates that it is difficult to determine which of these four conditions are causes and which are consequences.

The examination of conservation-induced displacement has been central to work on the political ecology of conservation. These displacements occur from spaces that are believed to need protection,(Brockington 2002, Rangarajan and Shahabuddin 2006, Milgroom and Spierenburg 2008, West, Igoe et al. 2008)and socio-economic displacement including loss of access to land and resources and restrictions on or loss of livelihood activities(Witter 2013). Maldharis of Gir experienced both physical and socio-economic displacements.

Depending on the perspective, previous research illustrates that state wildlife conservation is exclusionary to the disadvantage of the human habitats of the forests(Adams and Hutton 2007, Goldman, Roque De Pinho et al. 2010, Lunstrum and Ybarra 2018). This is illustrated in a recent study of 22 relocation projects related to protected areas in India. The study demonstrated that the mismatch in the relocation promises and fulfilments leads to the impoverishment of the relocated(Fanari 2019). Though there have been far-reaching reforms in national conservation policies to make them inclusive, these have not translated into practice(Shahabuddin and Bhamidipati 2014).

The lion conservation project of Gir is considered a success story, with an increase in the lion population from 180 in 1974 to more than 500 animals in 2015(Singh and Gibson 2011, Jhala, Banerjee et al. 2019), one factor according to authors is the resettlement of Maldharis which has made the forest denser. However, research also shows that optimal numbers of Lions and Maldharis, their current lifestyles, and livestock holdings are beneficial to both lions and Maldharis maintaining an ecological balance(Banerjee, Jhala et al. 2013). Another research, based on the review of 28 relocation projects in India, concluded that decisions of relocation, their scale, and magnitude are taken on assumptions rather than systematic assessments(Lasgorceix and Kothari 2009). Information on the ecological and socio-economic (including cultural) impacts of relocation is scarce. An alternative discourse related to conservation-induced displacement is needed to work for human-wildlife coexistence and tolerance (Frank 2016), as that has been the historical model much before a need for conservation was felt(Meena, Johnson et al. 2020).

Ganguli (2005) studied the impact of displacement on the Maldhari families rehabilitated between 1972 and 1986, more than a decade after their displacement. These were families who did not return to the forest(Ganguly 2005). She found that the relocation was just a 'physical transfer' without the fulfilment of promises made at the time of relocation. Only one-fifth of those who relocated had a satisfactory standard of living. The situation of the Maldharis who were rehabilitated and living in villages(resettlement colonies) and those who returned (the participants of the current study) does not seem to be too different. Both groups face disintegration, disempowerment, and being left to fend for themselves. As found in this study, Ganguly also found that being displaced led to economic disruption, as well as social, cultural, and political exclusion. Therefore, Ganguly argues for "total rehabilitation" and many argue for participatory rehabilitation as part of conservation policies(Lasgorceix and Kothari 2009, Torri 2010).

The current study contributes to the existing knowledge in the area of the economic, cultural, social, and political impact of conservation-induced displacement on communities, examining these with ongoing, nature-driven, and market-driven challenges. The new approach to analysis compared to conventional grounded theory by Glazer and Strauss(Glaser 1967), and Strauss and Corbin(Strauss 1998), called situational analysis proved effective.

Conclusion:-

The geographic, social, economic, and political dimensions of the marginalized populations are poorly explored as they remain hidden in the averages of 'population coverage'. The finding of this research is an important contribution towards filling this gap in knowledge. The multiple and multifold vulnerabilities of the marginalized population living inside protected areas warrant an integrated approach towards wildlife conservation, in light of the

promotion, preservation, and rights of the marginalized population and their unique sociocultural identity. As India prepares for yet another lion conservation project with a focus on the relocation and rehabilitation of remaining Maldharis, a renewed participatory approach involving economics, anthropology, history, and sociology is essential, in addition to zoology and wildlife conservation.

References:-

1. Adams, W. M. and J. Hutton (2007). "People, Parks and Poverty Political Ecology and Biodiversity Conservation." *Conservation and Society*5(2): 147-183.
2. Andrade, G. S. and J. R. Rhodes (2012). "Protected areas and local communities: An inevitable partnership toward successful conservation strategies?" *Ecology and Society*17(4): 14.
3. Banerjee, K., Y. V. Jhala, K. S. Chauhan and C. V. Dave (2013). "Living with Lions: The Economics of Coexistence in the Gir Forests, India." *PloS one*8(1): e49457.
4. Braun, J. V. and F. W. Gatzweiler, Eds. (2014). *Marginality: Addressing the nexus of poverty, exclusion and ecology*. Heidelberg, Springer-Netherlands.
5. Brockington, D. (2002). *Fortress conservation: the preservation of the Mkomazi Game Reserve, Tanzania*. Oxford, International African Institute in association with James Currey.
6. Brodwin, P. (2003). "Marginality and subjectivity in the Haitian diaspora." *Anthropological Quarterly*76(3): 383-410.
7. Casimir, M. J. (2008). *The mutual dynamics of cultural and environmental change: an introductory essay. Culture and the changing environment: Uncertainty, cognition and risk management in cross-cultural perspective*. M. J. Casimir. New York, Berghahn Books: 1-62.
8. Choudhary, K. (2000). "Development dilemma: Resettlement of Gir Maldharis." *Economic and Political Weekly*35(30): 2662-2668.
9. Clarke, A. (2005). *Situational Analysis: Grounded Theory After the Postmodern Turn*, SAGE Publications.
10. Divyabhanusinh (2006). "Junagadh State and its Lions Conservation in Princely India, 1879–1947." *Conservation and Society*4(4): 522-540.
11. Fanari, E. (2019). "Relocation from protected areas as a violent process in the recent history of biodiversity conservation in India." *Ecology, Economy and Society—the INSEE Journal*2(1): 43–76–43–76.
12. Frank, B. (2016). "Human–Wildlife Conflicts and the Need to Include Tolerance and Coexistence: An Introductory Comment." *Society & Natural Resources*29(6): 738-743.
13. Ganguly, V. (2005). "Displacement, rehabilitation and resettlement: The case of Maldhari families of Gir forest." *Sociological bulletin*54(1): 3-17.
14. Gatzweiler, F. W., H. Baumüller, C. Husmann and J. von Braun (2011). *Marginality: addressing the root causes of extreme poverty*. Bonn, University of Bonn, Center for Development Research (ZEF)..
15. Glaser, B. G. S. A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago Aldine Publishing.
16. Government of India (2000). *Preservation of Gir Forests & Protection of Wild Life*. M. o. E. Forests. New Delhi Government of India.
17. Government of India(2016). *SAMPLE REGISTRATION SYSTEM STATISTICAL REPORT 2015*. New Delhi, Office of registrar general and census commissioner.
18. Goldman, M. J., J. Roque De Pinho and J. Perry (2010). "Maintaining Complex Relations with Large Cats: Maasai and Lions in Kenya and Tanzania." *Human Dimensions of Wildlife*15(5): 332-346.
19. Gupta, A. K. (2002). "Consumerism Versus Conservationism and Its Reflection on Human-Wildlife Relations: A Case of Gir Protected Area."
20. Gurung, G. S. and M. Kollmair (2005) "Marginality: concepts and their limitations." IP6 Working Paper No. 4.
21. Gwatkin, D. R. and A. Ergo (2011). "Universal health coverage: friend or foe of health equity?" *The Lancet*377(9784): 2160-2161.
22. Jhala, Y. V., K. Banerjee, S. Chakrabarti, P. Basu, K. Singh, C. Dave and K. Gogoi (2019). "Asiatic Lion: Ecology, Economics, and Politics of Conservation." *Frontiers in Ecology and Evolution*7(312).
23. Joshi, A. (2008). "A list of DNT-NTs from various states in India." *Mukt-Saad* (1).
24. Kirkby, J., P. O'Keefe and C. Howorth (2001). "Introduction: rethinking environment and development in Africa and Asia." *Land Degradation & Development*12(3): 195-203.
25. Lasgorceix, A. and A. Kothari (2009). "Displacement and Relocation of Protected Areas: A Synthesis and Analysis of Case Studies." *Economic and Political Weekly*44: 37-47.
26. Lunstrum, E. and M. Ybarra (2018). "Deploying Difference Security Threat Narratives and State Displacement from Protected Areas." *Conservation and Society*16(2): 114-124.

27. Meena, R. L. and S. Kumar (2012). Management Plan for GIR Protected Areas Gandhinagar, Forest department, Government of Gujarat.
28. Meena, V., P. J. Johnson, A. Zimmermann, R. A. Montgomery and D. W. Macdonald (2020). "Evaluation of human attitudes and factors conducive to promoting human–lion coexistence in the Greater Gir landscape, India." *Oryx*55(4): 589-598.
29. Milgroom, J. and M. Spierenburg (2008). "Induced volition: Resettlement from the Limpopo National Park, Mozambique." *Journal of Contemporary African Studies*26(4): 435-448.
30. Mukherjee, A. and C. Borad (2004). "Integrated approach towards conservation of Gir National Park: the last refuge of Asiatic Lions, India." *Biodiversity & Conservation*13(11): 2165-2182.
31. Pati, B. (2000). "Impact of livelihood practices of Maldhari tribe on wildlife habitat of Gir protected area." *Indian Forester*126(10): 1120-1127.
32. Pérez, M. S. and G. S. Cannella (2013). "Situational analysis as an avenue for critical qualitative research: Mapping post-Katrina New Orleans." *Qualitative Inquiry*19(7): 505-517.
33. Ramaiah, A. (2015). "Health status of dalits in India." *Economic & Political Weekly*50(43): 71.
34. Rangarajan, M. and G. Shahabuddin (2006). "Displacement and Relocation from Protected Areas: Towards a Biological and Historical Synthesis." *Conservation and Society*4(3): 359-378.
35. Raval, S. R. (1991). *The Gir National Park and the Maldharis: Beyond 'Setting Aside'. Resident People and National Parks. Social Dilemmas and Strategies in International Conservation.* Patrick C. West and S. R. Brechin. Tucson, University of Arizona Press: 68-89.
36. Sen, A. (1999). "The Possibility of Social Choice." *American Economic Review*89(3): 349-378.
37. Shahabuddin, G. and P. L. Bhamidipati (2014). "Conservation-induced Displacement: Recent Perspectives from India." *Environmental Justice*7: 122-129.
38. Shashtri, P. (2013). *Starring soul of Gir.* Times of India. Ahmedabad.
39. Singh, H. and L. Gibson (2011). "A conservation success story in the otherwise dire megafauna extinction crisis: The Asiatic lion (*Panthera leo persica*) of Gir forest." *Biological Conservation*144: 1753-1757.
40. Srivatsan, R. and V. Shatrugna (2012). "Political Challenges to universal access to healthcare." *Economic and Political Weekly*47(8): 61-63.
41. Strauss, A. L. C. J. M. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory.* Thousand Oaks, Sage Publications.
42. T Cullen, B. and M. Pretes (2000). *The meaning of marginality: Interpretations and perceptions in social science.*
43. Torri, M. C. (2010). "Conservation of the Asiatic lion: integrating the vision of park authorities with the values of local communities." *International Journal of Biodiversity Science, Ecosystem Services & Management*6(3-4): 176-183.
44. Vasconcelos, A., B. Sen, A. Rosa and D. Ellis (2012). "Elaborations of Grounded Theory in Information Research: Arenas/Social Worlds Theory, Discourse and Situational Analysis." *Library and Information Research*36.
45. West, P., J. Igoe and D. Brockington (2008). "Parks and Peoples: The Social Impact of Protected Areas." *Annual Review of Anthropology*35.
46. Witter, R. (2013). "Elephant-induced Displacement and the Power of Choice Moral Narratives about Resettlement in Mozambique's Limpopo National Park." *Conservation and Society*11(4): 406-419.