

Understanding Human-Environment Relationship of Local Communities: A Case Study of Nijgadh International Airport

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Abstract

The human-environment relationship is changing with expansion of infrastructure over the years. While infrastructure expansion is integral to the national development, the associated consequences such as environmental degradation, social injustice and economic marginalization of local communities are often overlooked. This research seeks to understand the relationship between local communities and their surrounding environment; along with the socio-economic consequences due to infrastructure expansion. The research focuses on three settlements in and near the Nijgadh forest of Nepal: Tangiya Basti, Kathgaon, and Matiyani Tole which lie in the project area of Nijgadh International Airport. The research uses both qualitative methods such as Key Informant Interviews (KII), Focus Group Discussions, and Observations and quantitative methods such as Household interview to understand the complex relationship between the communities and development. The findings reveal how infrastructure projects can hinder development, depriving communities of access to basic infrastructure services for years. The expansion also raises issues such as economic marginalization including economic disparities; loss of existing way of income, unemployment and social disintegration such as loss of identity; rituals and cultural heritage, decline in social standing; loss of dependence of forest ecosystem which affects their living standard pushing them further into poverty. The findings shows the dissatisfaction of Kathgaon in regards to the cash compensation and raises concern about the compensation and resettlement process involving these communities. The study addresses the need of active participation and consultation with the affected communities to combat the socio-economic impacts of the expansion.

Keywords

local communities, nijgadh, development, infrastructure, resettlement

1. Introduction

At this fast-changing world, deforestation and many human driven activities cause rise in global temperatures and loss of biodiversity; affecting the relationship between humans and environment. Human Environment relationship refers to the interaction of humans with their natural and built environment. One of the important factors of development especially in developing and underdeveloped countries is infrastructure expansion which undermines this relationship. In the course of development and economic growth, the factors such as the environment and the community are intertwined with the consequences of the unregulated expansion and environment degradation.

There are many such projects from Kenya's Railway line [1] to Nijgadh International Airport. However, during the planning of such projects, matters of environmental conflict, lack of community participation and social injustice come into the picture. Despite the undeniable gravity of these issues in the development and planning process, often these factors are overlooked or given very less consideration in such projects. In light of the pressures of climate change and population growth, there has never been a more urgent time to develop a sustainable relationship with our landscapes and ecosystems, in terms of development and infrastructure [2]. The terms of Nijgadh International Airport go way back to 1995 when the government-initiated discussions to construct an international airport of 80 square kilometer in Nijgadh, in the

Bara District in southeastern Nepal [3]. The project remained in discussion but it regained its priority in March 2015. The debate surfaced after government was compelled to an Environmental Impact Assessment (EIA) report which showed that the project required cutting of 2 million trees [4]. In the wake of numerous protests and debate in May 26, 2022; Supreme court ordered the government to halt the construction of Nijgadh International Airport. Surprisingly, despite this ruling, a year later, on May 20, 2023; the government decided to move ahead with the construction process [5].

While most of the studies center around the Environment ethics there is also an anthropocentric aspect that needs to be considered together. The area has three communities: Kathgaon, Tangiya Basti and Matiyani Tol living around. Kathgaon is an old settlement of Tharu Indigenous community of Madhesh origin while Matiyani is a newly established settlement of 39 families of Dalits [6]. Tangiya Basti is a compact settlement of 1476 households which was brought in the area with the concept of Tanguya, a type of shifting cultivation in agroforestry. The dearth of environmental ethics, and social injustices endured by the residents of the local communities asserts the need for research for careful consideration in future development projects. This research aims to address the research gaps pertaining to lack of consideration given to human-environment relationship and the indigenous perspectives of these communities within the context of

infrastructure expansion project.

1.1 Research Questions

The research question for the study is:

What is the human environment relationship that the local communities share and how will it be impacted due to the construction of Nijgadh International Airport?

Some of the sub-questions that this research tries to explore are:

1. What kind of relationship do local communities at Nijgadh have with their natural and built environment?
2. How do the socio-economic conditions and environmental relationships of these communities change with the construction of the airport?
3. What are the key parameters for resettlement of these local communities?

2. Research Design

The research underlies in the pragmatic paradigm as it recognizes the need of understanding the social experiences and perspectives of the local communities in such large infrastructure projects. The research is an exploratory case study research as it seeks to answer how and what questions wherein researcher has limited understanding of the social problem. The research uses mixed methods as in quantitative methods such as Household Survey and qualitative methods such as Key Informant Interviews (KII), Focus Group Discussions, Observations to understand the problem with more emphasis on later. The research included semi structured in-depth interviews with the individuals of local communities of Tangiya Basti, Kathgaon and Matiyani Tole to understand their stand and challenges. There was a total of 43 household interviews taken in which 18 belonged to Tangiya Basti, 10 to Kathgaon and 15 to Matiyani Tole. A total of 13 Key Informant Interviews were done in Kolhabi, Nijgadh and Jitpur Simara. The Focus Group Discussion (FGD) was done in Matiyani tole. Secondary data was also collected through review of existing literatures, government reports, print media, newspaper articles and the internet.

3. Literature Review

Large-scale infrastructure projects play a pivotal role in a country's economic progress; nevertheless, such projects come with a non-trivial cost that impact a specific segment of the population and have profound socioeconomic implications upon the local people [7]. Local and indigenous communities face the harshest repercussions by most of the major large infrastructure projects.

3.1 Local Communities and Environment

Indigenous people and local communities are an integral stakeholder of the ecosystem, and they have continued to struggle to preserve their wellbeing and identity [8]. They

differ from the dominant societies in which they reside in terms of their social, cultural, economic, and political traits, but they also face the same issues when it comes to defending their rights as unique peoples and, consequently, the environment [9]. A rising amount of data suggests that forests and people have evolved together over thousands of years [10]. For the local communities to achieve their fundamental necessities, forest resources are essential. These include offering, supporting, and administering services related to the cultural ecosystem [11]. While the local communities also do have a part in using the forest ecosystem for their short-term benefits, they also implement sustainable strategies which help in conserving the ecosystem in long term. For example, a group living in forests on Colombia Venezuela border reserve upper watersheds due to their spiritual beliefs which is in a way similar to classified protected areas by government to conserve the area [10]. Despite their role in management of natural resources, and protecting forest ecosystems, they lack power and face challenges in participation in decision making processes about their lives and livelihoods. The indigenous and local communities have an attachment to the forest ecosystems wherein they develop sustainable practices for their daily lives. The utilization of local communities can play a key role in conserving and maintaining the sustainability of forest ecosystems.

3.2 Infrastructure Expansion and Development

Infrastructure is the foundation of any industrialized economy's foundation which is essential for daily operations and for constructing society's backbone [12]. A key requirement for the achievement of development policies has been referred to as infrastructure capital, which comprises services that involve transportation, water and wastewater treatment facilities, telecommunications, and energy generation, transmission, and distribution. Infrastructure is crucial because it can have an impact on a variety of economic activities, directly affecting both the production potential of businesses and the consumption choice of consumers. Infrastructure can facilitate productive differences above all else and encourage intraregional trade and investment, especially through trade facilitation, in addition to these microlevel effects on households [13].

Nepal as a developing country has been lagging behind in terms of infrastructure development and low GDP. The necessary infrastructure to support Nepal's rapid economic growth has not yet been fully created [14]. In the global scale when we look at Nepal, it ranks 112 among 141 countries on a scale of Global Competitiveness Index in terms of infrastructure development [15]. According to a report of [16], Nepal aimed to graduate from low-income country to a middle-income country by 2022 but most of the citizens do not have access to adequate infrastructure provisions. By closing infrastructure gaps, the development can play significant role in economic growth, employment generation, and efficient movement of goods and services [14]. There are strong evidences that suggest there are beneficial impacts of infrastructure on development such as production and productivity, reduction in poverty and inequality, labor market results, human capital accumulation, and trade [17]. A key aspect of reducing poverty is infrastructure. Both the social

and economic domains are affected by it. It has been demonstrated that roads in India alone are responsible for 7% of the rise in total rural output [18].

3.3 Infrastructure Expansion and Environment

With industrialisation and increasing exploitation of resources, built infrastructure has been one of the major drivers of global environmental change and biodiversity loss. Bad infrastructure can be as simple as choosing the wrong location. The examples could include the untouched natural habitats like Bristol Bay in Alaska or the world's last remaining free-flowing rivers; unique, biodiversity-rich areas like the Amazon, Borneo, or the Congo Basin; or areas already experiencing the impacts of a rapidly warming planet like the Arctic or coastal communities [19].

The foundation of global infrastructure, itself contributes 5% to global anthropogenic CO₂ emissions without even taking into account the significant environmental effects of the roads and dams built with human assistance [12]. The major driver of infrastructure expansion is the ever-expanding economy of overproduction and overconsumption, exacerbating historical injustices and discrimination. In other words, forest ecosystems are being degraded for rapid transport of goods. People are subjugated through exploitative labour as more and more communities are deprived of their livelihoods because of their dependence on the forest [20].

To bridge the existing infrastructure gap, it is essential to develop infrastructure that integrates sustainability, resilience, and inclusivity throughout the entire life cycle of the infrastructure systems, prioritizing people and the environment in the decision-making process [21].

3.4 Socio-Economic Impacts of Infrastructure Expansion

The inhabitants in rural or remote areas, including indigenous communities tend to bear the most brunt of the negative externalities stemming from large infrastructure projects essential for national development. Their livelihoods and living conditions are impacted, while their aspirations for an improved quality of life are not necessarily fulfilled. [22]. These local communities have a sense of identity and community linked with the nature which is overlooked in large scale infrastructure projects. Even though, they are one of the significant stakeholders in the process, there is little to no consideration of their position and perspective to such projects. Disappointingly, these communities are sometimes perceived as obstacles or threat to the development process rather than valued contributors. This disregard for their voices and exclusion from decision-making exacerbates their livelihood and leaves their lives in a limbo.

This can be seen in case of Istanbul city's gigantic aerotropolis project which constituted of 80% of forest as project area - part of an integrated package of infrastructure projects tearing up the city's northern forests. The project saw many protests but, in the end, construction was continued as planned which led to Turkish farmers losing their lands for the purposes of construction [23]. One of the main sources of income in the district of the villages was livestock. 236 hectares used for

livestock activities within the project area was taken out of qualifications, affecting the livelihood of the local residents [24].

Other example of infrastructure projects is that of Chincero Airport of Peru wherein airport was proposed in an indigenous town which led to socio-cultural and environmental consequences of large-scale intervention over their ancestral land. Two of the communities never received compensation for their land nor were these communities involved in the decision-making process. The area was one of the significant traditional places which had witnessed a profound transformation over the years. The communities had a cultural continuity in practices such as weaving, the language, the social organization, reciprocity mechanisms, traditional medicine, etc., which stood as their identity which was lost along the lands of these indigenous community [25]. This poses the necessity and validity of the research.

Increased social connections and cross-cultural exchanges might result from the influx of new residents into a community [26]. This can encourage cultural interaction and diversity, but it can also lead to tensions or disputes because of divergent norms, values, and expectations. The movement of population to different areas will lead to increase in population in the nearby areas. Unequal distribution of economic impacts on the new residents could lead to economic disparities and social inequality [27]. Due of this socioeconomic division, the community may be more susceptible to the cultural transformation. Dispersion of family and kinships as a result of displacement may lead to weakening of culture and social structure. Additionally, a community is more likely to oppose an infrastructure project that come at multiple costs which thereby affects the project's budget and schedule [28].

3.5 Case Study: Resettlement in Narmada River for Sardar Sarovar Project

The Sardar Sarovar Project was an inter-state project to provide irrigation, drinking water, and hydroelectric power to the states of Gujarat, Madhya Pradesh, and Maharashtra, it entails building a dam, canals, and reservoirs on this river basin. As per official reports, 22,000 families from 245 villages were displaced as a result of the project [27]. The project was termed as one of the best R&R policies yet also invited a great deal of criticism due to its effects on the environment, the resulting human displacement, and the insufficient resettlement and rehabilitation of the impacted community [29]. According to the [30], the resettlement policy proposed to provide each displaced family (man, wife, and dependents) with five acres of land, a housing site with temporary accommodation, a resettlement grant, and other basic amenities depending on the size of the settlement. Some of the best approaches of Gujarat R& R policy were: comprehensive impact assessment; consultation with affected people; strong political commitment.

3.5.1 Drawbacks of the resettlement policy

According to [30], some of the major socio-economic impacts on the displaced populations due to resettlement included:

1. Madhya Pradesh did not show where all the displaced people would be relocated to which backed up for inadequate resettlement planning.
2. Environmental issues were not addressed adequately.
3. Lack of transparency in the resettlement process and discrepancies in land allocations.
4. Unequal distribution of economic impacts on the displaced families.
5. Communal resources such as grazing lands were not adequately compensated.

Tribal "adivasi" people were relocated from the hills to the plains to live among villagers who have long been exposed to the market economy and engage in livelihood practices typical of mainstream rural Indian culture rather than the adivasis domestic subsistence economy. Based on early developmental models, infrastructure project had a top-down, trickle-down, blueprint-planning approach, where subsistence and traditional sectors (i.e., production and social support) were often neglected leading to inadequate compensation, insufficient rehabilitation, and concerns about the overall well-being of the displaced populations. The policy does focus on social justice but fails to address gender equity.

4. Case Area

Nijgadh Forest, located in northern part of Bara district in Madhesh Province is the last remaining patch of Charkose Jhadi in the Eastern Nepal. The district consists of 2 sub-metropolitans, 5 urban municipalities and 9 rural municipalities. Among these, our study area lies in Kolhabhi Municipality and Jitpur Simara Sub Metropolitan. On the North of the forest lies the East-West Highway, Pasaha River on the West and Lal Bakaiya River on the East.



Figure 1: Map of Nepal showing study area

4.0.1 Kathgaon

Kath Gaon lies under Ward no. 8 of Kolhabhi Municipality. It is a settlement with 150 households. The settlement is a tribe of indigenous Tharu community who started living in the area since the period of Jung Shamsheer Rana.

4.0.2 Tangiya Basti

Tangiya Basti lies under Ward no. 16 of Jitpur Simara Municipality. It is a compact settlement with 1476 households.

The settlement was brought in the area under the concept of taungya that describes a type of shifting cultivation in agroforestry [31]. Tangiya system was introduced around 1970s in Nepal among which Tangiya basti were among the first to follow this system. But the abolition of taungya in 1990s left these farmers landless, yet the government didn't take proper measures to look into the management of the settlement. After which, due to lack of government's interference, they settled permanently living in huts in the area [32]. These 1476 households do not possess the land ownership of the area.

4.0.3 Matiyani Tole

Matiyani is a newly established settlement of 39 families of Dalits who have migrated from different places in 2061 BS mostly for the land availability. Most of the people in the settlement have migrated from places within the Bara district such as Sajhauri, Kohalpur, Sukhi Patra, Dumariya, Kalaiya, Gadhimai etc.



Figure 2: Study area showing the three settlements

5. Findings and Analysis

5.1 Demography

Gender and Age: In Kathgaon, 10 respondents were interviewed; 2 female and 8 males. Tangiya Basti has a total 1439 households with a population of 7047. Amongst them, 18 respondents were interviewed; 7 female and 11 males. Matiyani Tole has a total population of 532. Amongst them, 15 respondents were interviewed; 6 female and 9 males. Total 43 interviews were conducted in which 15 were female (35%) and 28 were male (65%). In all the three settlements; most of the residents interviewed were in the age group of 16-60.

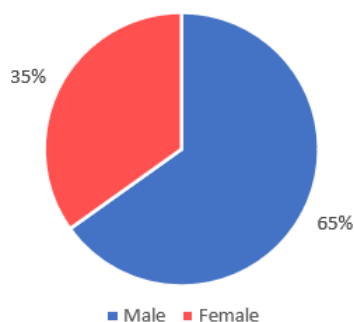


Figure 3: Gender of the respondents

More of male population was interviewed than female. In all the three settlements; more of the population lied in working population. In Tangiya, women seem more empowered and gender quality is prevalent but so was not the case in other two settlements.

Religion and Ethnicity: In Kathgaon, majority of population is Chaudhary; along with small population of Magar, Chettri, Tamang and Dalits. In Matiyani tole, majority are Dalits along with Kusuwa; Yadav and Chettri. In Tangiya, majority of population is Tamang (61%) followed by Magar, Chettri and others.

5.2 Human Environment Relationship

Dependence on Forest: All the three settlements are heavily dependent on the forest for their livelihood. Most of the people go in groups for cattle grazing to the forest; to chop firewoods and are also dependent on non-timber Forest products such as Jamun, Bel, Bayer, Neuro, Dundu Saag, Saranchi Saag, Poi Saag, Bethe, Lahare, Ban-kurilo, Vyakur, Jibre Sag, Sim Sag, Titepati, Rajbriksha, Sindhure, Kukurdaino etc. (GOECE, 2018). These are an important factor in income generation for these communities. People in the settlement and around also pick mushrooms found under the Sal trees during rainy season which are sold for Rs. 500 per kilo in the nearby markets.

Human Wildlife Conflict: There are wild animals in the vicinity of the area of all the three settlements. All the three settlements when asked about wild animals pointed towards the threat of elephants and tigers in the area. One of the respondents when asked regarding the matter said,

“There are wild animals here, elephants come to the area sometimes. This forest is their home, it is their place before us, in a way they are also gods, a form of Lord Ganesh.”

This also shows the connection farmers have with the wildlife. The priest of Katghat Shiva Mandir also showed similar belief expressing,

“Elephants come to the temple to pray to Lord Ganesh during the month of Shrawan. They even ring bells in the temple.”

Another respondent when asked regarding the matter said,

“Other animals such as deer, leopard, wild pig etc. also come to the settlement sometimes. Two people were attacked by tiger few months ago in Tangiya Basti. Elephants come here very often and destroy the crops which affects our livelihood.”

Rituals: In case of death, Tamangs bury their dead ones in sacred places in forest whereas Hindus in Tangiya Basti cremate the bodies on the banks of Bakaiya River, Kathgaon in Kath khola and Matiyani Tole in Pasaha River. Most weddings take place inside the community itself in their homes or temples. Kathgaon and Matiyani Tole also believe in forest spirits. A respondent mentioned that,

“Every year in Ashad, we collect capital of 50,000-70,000 from entire village to do Asari Puja for agriculture.”

These rituals will be affected or lost with the change in dynamics of the community.

5.3 Socio-Economic Condition of the Settlement

5.3.1 Physical Infrastructure

Roads: All the major roads in all the three settlements are gravel road. There is a main road that connects from East West Highway through forest to the Tangiya Basti and Kathgaon (Ganj Bhawanipur Road). The roads get waterlogged in rainy seasons and lead to minor accidents. Many of the internal roads are not in good condition. There is a main road in Matiyani Tole around which all the houses are dispersed in, there are no internal roads in the settlement.

Transportation: For Tangiya basti, the only form of public transportation is Auto and Vans which are run by the local people from the settlement. The residents who do not own private vehicles sometimes need to wait for the auto to fill up with 5-6 people which can also lead to a waiting time of an hour. For Kathgaon; there is a bus that comes to the settlement around 9-10 am which goes to Birgunj and returns around 3-4pm. Except for that are no other public transportation available in the settlement. There is an auto driver who resides in the settlement who is called in need of any transport. There is no public transportation available from Matiyani Tole. People need to walk almost a km to Sahajnath Temple to get a bus that travels to and from Kalaiya Birgunj or autos from the area. Inadequate access to transport in Kathgaon and Matiyani has limited economic linkage of community in comparison with Tangiya Basti; depriving them of access to nearby infrastructure provisions.

Waste: In all the three settlements, most of the people compost the biodegradable waste such as fruits, vegetables waste etc. and use as manure for the agriculture. Rest of the plastic waste is burnt in most of the houses.

Water Supply: The main source of water supply is Tube well and deep boring in Tangiya Basti and tube wells in other two settlement, both being ground water sources. The deep-water boring in Tangiya has been installed by the community members themselves by collecting money in groups.

Electricity and Communication: Most of the area in all the three settlements do not have access to network. But there is WiFi in most of the houses in the Tangiya Basti and some of the houses in Kath Gaon. Not having network is bothersome as in case of emergency, it is difficult to call hospitals, or any necessary services. Tangiya Basti has access to electricity since last Dashain, before that most of the houses had solar panels. Kathgaon has electricity while Matiyani Tole still does not have electricity. Only some of the houses in Matiyani Tole have solar panels while rest of the houses still live in darkness. Out of 15 respondents, 8 had solar panels while 7 of them still had no access to electricity. For major road, there are three solar panels in the Matiyani Tole.

5.3.2 Social Infrastructure

Schools: There are 4 schools in Tangiya Basti, 2 of them are private and 2 are public schools. Private Schools: Shikshadip Eng. B. School and Saint Paul Academy up to Class 5. Public Schools: Shree Shanti Primary School up till class 5 and Shree Nepal Rastriya Primary School up till class 8. Most of the parents are forced to send their children to Nijgadh for further education. There is 1 public school in Kathgaon: Shree Nepal Primary School up till class 5 after which kids go to nearby town such as Ramnagar, Madhuwan etc. for further education. There is 1 public school in Kathgaon: Shree Nepal Primary School established in 2009 AD up till class 5 after which kids go to nearby towns like Jaitapur, Raghunathpur, Lamidada for further education. Laxmi, a school teacher also expressed her disappointment,

“The major issue is that the children have to cross forest and river to have access to education while being very young. I tried to increase the class standard at least up to 8th standard but all in vain.”

Another KII, Man Bahadur Thapa also expressed,

“The schools in the community lack proper infrastructure and are up till Class 8 only, due to which many of the children end up dropping their education. The rents in Nijgadh are high and everyday up down commute is difficult. Also, at 8th standard, children are still very young to live away from their parents which also leads them to being involved in wrong activities and not being able to concentrate much in their education. But due to poverty, many households are not able to afford education for their children.”

Health Post: There is one community health post in Tangiya Basti only. The health post provides first aid services, maternity services and regular checkups. Nijgadh is the nearest city for any major health issues for Tangiya Basti. There are no health centers in Kathgaon and Matiyani Tole. They go to Madhuwan to go for health checkups. Vikram, ward member of Kolhabi 8 mentioned,

“There is no health centre in Kathgaon, people have to reach Baluwa Bazaar or Madhuwan to have

access to hospitals or health centre. The lack of health centre has led to many deaths in the settlement.”

Cultural Heritage: Tangiya basti has a gumba called Shanti Buddha Bhumi Vihar and a church inside the basti. Along with that, there is an idol of shiva in the main chaur of the main school chowk. In Kathgaon, there is a Bhairav temple along the Gunj Bhawanipur Road and a very old shiva temple which was constructed by Banu Chaudary. The marriages in Kathgaon also take place in this temple. There is a shiva linga in Matiyani tole. The most important temple near all the three settlement is Sahajnath Temple (Katghat Shiva Temple). There is also a month-long fair in the month of Shrawan where devotees from all over Nepal as well as India visit the temple.

5.3.3 Economic Infrastructure

Tangiya Basti: The basti’s main livelihood depends on agriculture, but there are many essential shops and markets as well inside the basti itself. They have a major dependence on the forest for cattle rearing and chopping firewoods. Some of the residents of the Tangiya basti work as auto and van drivers who commute people to and from Tangiya Basti. Women are also involved here in weaving carpets that are sold to Kathmandu.

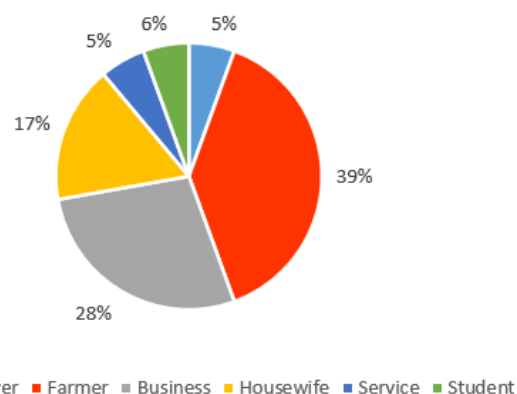


Figure 4: Occupation of respondents of Tangiya Basti

Kathgaon: Being an indigenous community, most of the people are involved in farming, cattle rearing, fishing etc. There are very few shops in the settlement so people need to commute to other areas for even basic needs, mostly Naya Basti or Madhuwan. Vikram, ward member also mentioned that,

“Some people do work in factories outside the settlement in Simara as labors, mechanics etc., and earn around 20 to 25 thousand in a month. 5% of the population is involved in foreign employment.”

Out of the ten respondents, only one family had a son abroad for employment. Another respondent remarked,

“Since this is an indigenous community, people tend to go abroad very less here.”

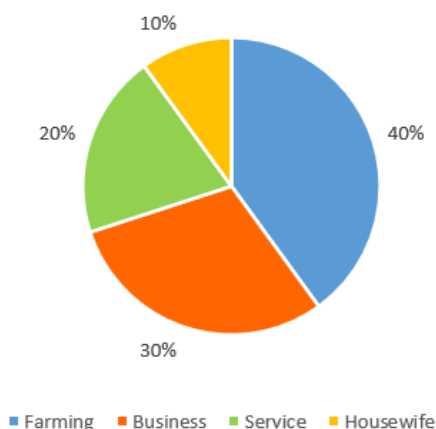


Figure 5: Occupation of respondents of Kathgaon

Matiyani Tole: Most of the people are involved in farming, there are no shops in the settlement so people need to commute to other areas such as Jaitapur, Madhuwan for even basic needs. Out of the 15 respondents, 3 families had their family members abroad for foreign employment. 4 of the respondent’s families had people working outside Matiyani Tole as electrician, plumber, carpenter.

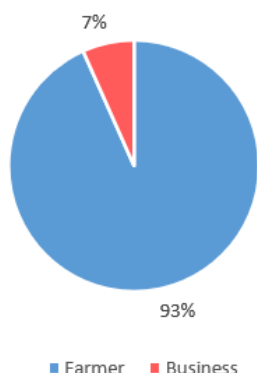


Figure 6: Occupation of respondents of Matiyani

5.3.4 Land Ownership and Transaction

Looking at the settlements; Tangiya Basti and Matiyani tole are settled on government land so they do not have land ownership certificate (lal purja) for their plot. 16 of the residents in Kathgaon are settled in Ailani Jagga while remaining households do have lal purja. Out of the 10 respondents in Kathgaon, only 1 of them did not have lal purja while 9 of the respondents had lal purja. Land transactions are prevalent in Tangiya basti, explaining regarding the matter, one of the respondents said,

“Selling or Buying land here is like buying vegetables in a market. They measure the land plot and write it in a paper that this is your land and the land is transferred to another owner. Five to six other people are present there during the process as a proof of the land being sold.”

5.4 Airport, Development and Local Communities

Even though the project was reinitiated in May, according to the official of Second International Project Office, the soil testing is being done again after which the decision of airport will be made. In regards to the construction of the airport itself, most of the community members agreed that the project is an important step to country’s national development. They saw it as a positive development, out of 43 respondents, 4 respondents did not like the idea of the airport. There is also a visible link between hindrance in development in communities in regards to the airport project. In terms of basic provision such as road, all the three settlements have gravel or earthen road; provision of electricity was made last year in Tangiya basti while Matiyani Tole still doesn’t have access to electricity. As per respondents, when the requests are made in regards to the provision of infrastructure, the project has been an excuse for holding off the development of the communities itself. One of the respondents said,

“We have been in a dilemma for far too long, maybe some people might benefit from but we would prefer if we could continue living here itself. Even the area has not been developed because of the project. Many people haven’t even repaired their houses because of the dilemma.”

Another respondent remarked,

“Many of us have voiced our need for basic infrastructure such as electricity, road, etc. multiple times but due to the dilemma of the construction of airport, development has been in hold as the state is reluctant to spend money due to construction of airport.”

In terms of development, Tangiya basti is more developed than other two communities because of the community’s role in development as well. The community collected money in groups of 10-15 people to get the works of boring done for their households as it plays a major role in farming as well. A respondent when asked about boring said,

“We have done all the boring with our own money. In every locality, people created a group of 15-20 households and each household raised 40000 -50000 and the boring work was completed which has been important for irrigation purpose.”

5.5 Resettlement of Local Communities

All the three settlements have been demanding the government to resettle them with infrastructure provisions to a new area before the construction of the airport. In terms of resettlement, since Tangiya Basti and Matiyani Tole are settlements living in government land, no decision has been made in regards to the compensation of the settlement. Meanwhile Kathgaon has already received compensation. The compensation has been distributed in as shown in Table 1.

Table 1: Compensation provided in Kathgaon

S.No.	Land Type	Compensation (per katha)
1.	Land untouched by Road	Rs. 2,41,500
2.	Land touched by main survey road	Rs. 4,60,000
3.	Land touched by internal roads	Rs. 3,39,250

In one of the interviews with ward chairperson of Kathgaon, he expressed,

“The compensation has been received by most of the people of Kath gaon except for the landless people in the settlement. The development in Kathgaon has not been structured. Most of the people are discontent about the cash compensation given and have raised concerns that government should have resettled them to another location. But people are still living in the area in hopes of getting resettled.”

Another respondent of Kathgaon when asked about resettlement said,

“Since Kathgaon is an indigenous community, we would have preferred, if we could continue living together and resettled by government to a new area. After the land compensation have been provided, the land prices have also significantly changed due to which buying land in nearby area has been a further challenge. People also had to pay 2.5% land tax as well which further reduced the amount. Now, the tax has increased to 5%.”

People of Kathgaon have been provided with land compensation, they have bought land in different areas such as Madhuwan, Lamidada, Bardibas etc. One of the KII interviewee, Ramesh Sapkota mentioned their demands and said,

“The government should provide land compensation and proper resettlement of the community should be done. Some of our demands are: 2 bigha 5 katha land for each household; proper houses; basic infrastructure provision need to be available; availability of food and grain for 1 year until people accommodate to new employment; a person from each household should receive employment as per their skill level in the airport.”

When asked if people prefer land compensation along with proper resettlement or cash compensation only 2 respondents preferred the later one. Explaining the reason for preferring land compensation, one of the respondents explained,

“We don’t know what kind of houses would they build for us. It wouldn’t be house like we build for

ourselves. So, I would prefer if we get compensated so that we can construct our houses on our own, instead land compensation would be better.”

When looked into EIA report and the modalities of resettlement mentioned, it is evident that the approach is more of a top-down, trickle-down, blueprint-planning approach, where subsistence and traditional sectors are often neglected as in case of Narmada River basin which could further reduce their living standard. As per the report, at least a member of each family of community will be employed during construction process of airport. After the airport is built, the report suggests that the businesses are requested to hire the people but the report fails to address any proper employment plan for the people in long term.

6. Conclusion and Recommendations

As resettlement is a complex dynamics, so, some of the major economic and social challenges that need to be considered are:

Economic Marginalisation:

1. Moving of residents to newer urban areas with land compensation can leave them grappling with the issue of finding new source of income.
2. Lack of technical skills could also reduce the possibility of the new employment.
3. Many economic activities specific to settlement such as cattle rearing, weaving carpets might also be lost.
4. Strain existing infrastructure and services of the new area they accommodate to, leading to inadequate living conditions.
5. Inadequate compensation as in case of Kathgaon.

Social Disintegration:

1. Loss of the identity of the people as community.
2. If provided with land compensation, people will move to different areas which could lead to loss of the cultural heritage and isolation in existing rituals.
3. The inflow of displaced people into new areas can burden on the existing relationships already in place, leading to tensions and confrontations between newcomers and locals.
4. Those who have been forcibly relocated can see a decline in their social standing and be required to pursue novel and unusual means of subsistence.
5. Loss of forest and the dependence of the communities on forest ecosystem.

It is very important to consider these socio-economic factors and integrate the participation of local communities to facilitate an inclusive planning process. When discussed with

the communities in terms of what can be done to improve their employment opportunities, some of the residents mentioned that trainings can be provided to men for driving, cattle rearing, etc. and women for beauty parlor, sewing, embroidery and both for working in different factories etc. For people who are more educated, technical training could be provided.

In conclusion, the research emphasizes the complex interactions that exist between communities and their ecosystem, particularly in the context of development projects. It has never been more important to build a sustainable relationship with the landscapes and ecosystems that are essential to infrastructure and development in the face of growing demands from climate change and population growth. In summary, this research explores the complex web that communities, the environment, and development weave together. It advocates for measures that protect ecological integrity, encourage inclusive community engagement, and guarantee equitable distribution of benefits, calling for a reevaluation of development paradigms.

This research is a stepping stone for understanding the local community's perspective and existing situation on the development projects; especially for Nijgadh Airport. The research can be a useful tool to reevaluate and plan the resettlement process for the three settlements by understanding their dynamics and outlook on the project. This can also help the future researchers and development projects to have an insight for community integrated planning process while also understanding the parameters of resettlement dynamics to have more of an inclusive process.

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