

## **Effects on Community and Local Ecosystem: A Study in the Context of Expansion of Gaggal Airport in Kangra District Of Himachal Pradesh**

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### **Abstract**

In this paper, we will focus on the topic of Gaggal Airport Expansion; also we will assess the impact of airport expansion on the ecosystem or biodiversity according to its unique geographic condition. At the same time, we will try to know the reaction of the people affected by this airport expansion. To achieve this objective, out of the 14 villages affected by the expansion of Gaggal Airport; five villages namely Jugehar, Sahoura, Gaggal Khas, Bhedi, Balla were sampled. Out of these villages, 44 heads of families were interviewed through questionnaire. It was found through the interview that due to this expansion, there will be a negative impact on the ecosystem, local residents who will have to leave their house, farm, barn, business and everything be displaced to other places. This displacement will be painful for the humans as well as the wild animals that will have to leave their place and move to another place. For expansion, the land will be leveled on a large scale, in which even small animals and mammals will die, which will have an adverse effect on the ecosystem. Airport expansion will cause potential damage to environment. It can vary according to the area and backdrop.

**Keyword:** Gaggal Airport Expansion, Ecosystem, Rehabilitation, Biodiversity, Displacement, Kangra

### **Introduction**

Change is a continuous process, as human civilization developed; various inventions were made according to the needs. Civilization also changed due to inventions in different periods. This is also true and it has also been the nature of human that along with the fulfillment of the basic needs, new needs also arise, that elevates the standard of living and sustains change in civilization. In the perspective of these changes, we see how much change has taken place in the society. If seen in the development of the rise of civilization, the invention of the fire and the invention of the wheel have been most advanced which paved the way for a developed civilization from the wild and barbaric side of men. Gradually inventions took place and a civilization emerged.

One of the fundamental inventions of all these were the convenience of transport. Therefore various types of facilities are available for traffic. In the same series, the Himachal Pradesh Government has chosen to enlarge Kangra Airport over the land of 14 villages of

Kangra and Shahpur tehsil of Kangra district. If seen from the perspective of development, it is one of the ambitious projects of Himachal Pradesh.

The subject of Gaggal Airport Expansion is really a matter of concern for those people who are coming under the grip of this expansion or who have a little sympathy towards nature. This airport expansion will especially strengthen Kangra in terms of tourism and a new chapter will be added in the development of Himachal Pradesh. Because Kangra has been a land of historical heroes, there are many historical places worth seeing in Kangra and its surrounding area. Due to national and international flights, movements of many tourists from outside countries will be convenient which will definitely boost tourism. Along with the tourism side, the possibility of employment among the local people will also increase, because tourism and employment are related to each other. Due to tourism, new employment opportunities will be created like hotels, home stays, local outlets, food outlets, tourist guide, travel agency etc. But this expansion is not only limited to employment only, it has other aspects.

10 villages in the Kangra tehsil and 4 villages in the Shahpur tehsil, each have a proposed acquisition of land of 108.4707 acres and 39.2880 acres respectively. The overall 147.7587 acres of land is scheduled to be taken from both tehsils. Out of the above 147.7587 acres of land, 25.1064 acres belong to the Government of Himachal Pradesh, the rest 122.6623 acres belong to the local residents of Kangra and Shahpur. Out of 14 villages, 1446 families are getting affected by this expansion. There are different types of land to be acquired for expansion. Out of which agricultural, non-agricultural land, commercial land, residential land and river drains are there (SIA Final Report, 2-May-2023).

The investigation contributes to determining the extent to which ecological implications (plane sound), financial consequences (employment generation), participative fairness factors (interaction possibilities), and distribute justice factors (noise dispersal) influence social acceptability. The empirical findings reveal that ecological and participative fairness factors have far greater influence than financial and social fairness factors. More study reveals that disparities in societal tolerance can be explained by factors such as ages, ecological issue, personal usage of air journey and assessed justice of the regional aviation sound dispersal (RLiebe, U., Preisendörfer, P., &Enzler, H. B. 2020). Acoustics and air pollution are two major ecological issues related to the expansion of airports (Sahrir, S., Bachok, S., & Osman, M. M. 2014). Because the majority of the present settlement programs are insufficient since they cannot adequately pay landlords or tenants for the losses brought on by increased sound pollution (Espey, M., & Lopez, H. 2000).

## **Objectives of the Study**

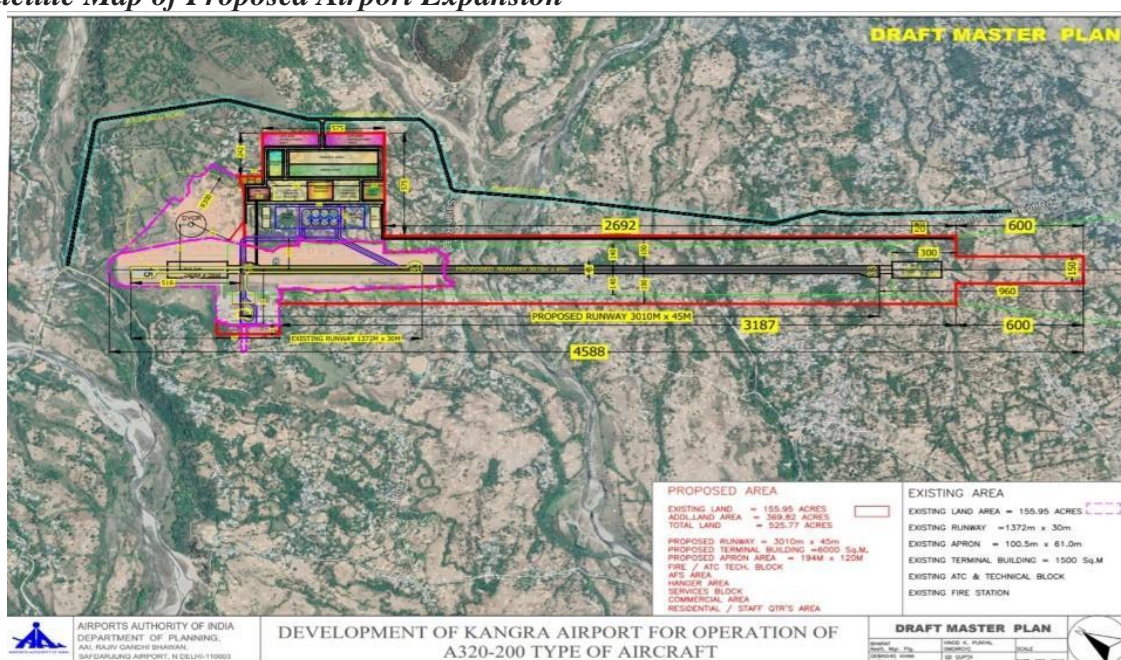
- To know the purpose of expansion of the airport.
- To know the impact of airport expansion on ecosystem, humans and wildlife.
- To know the perception of the people of the affected villages regarding the airport expansion.

### ***Need Behind Gaggal Airport Expansion***

Kangra Airport has its own importance because Dharamshala is a very rich tourist destination from the point of view of tourism, here is the residence and monastery of Tibetan Guru Dalai Lama, its surrounding areas are also endowed with many historical heritage sites, which make Himachal from tourism point of view make it prosperous. There is a also a cricket stadium here in which many international cricket matches and IPL matches take place and a

lot of spectators come from outside to watch those matches, apart from this, a large number of tourists come for sightseeing, for holidays and for celebrating festivals. Due to this there is an increasing demand for air travel because of short runway, only small aircrafts can land. Due to being a small aircraft, the seats of passengers are also limited in it and the traveling fare is high. It is having a negative impact on the state government and tourism to high payment fees. And if the Gaggal airport is expanded, then a bigger runway will be constructed, which will save the time of tourists due to takeoff and landing of big aircrafts and the fee paid to rich the destination of tourists will also be reduced, this proposed airport expansion will work in the interest of the state government of Himachal Pradesh and the people of Himachal Pradesh. The Airport Authority of India conducted an obstruction boundaries ground survey at Gaggal Airport and according to their findings, the area had been chosen for Airport expansion and the strongest point is that in future Airport it will serve as a base camp to support the defense needs of the Air Force.

**Satellite Map of Proposed Airport Expansion**



*Photo source from SIA final report*

**Impact of Airport Expansion on Ecosystem, Humans, Wildlife  
Wildlife Devastation**

Building new airports frequently necessitates removing enormous tracts of the ground that may result in the damage of existing ecosystems like marshes, prairies, or woodlands. Plants or creature species that rely on those environments may be displaced or eliminated as a consequence of deforestation.

**Ecological Destruction**

The construction of airport runways, terminals and related infrastructure will damage the habitats of wild animals and may block the movement of wildlife will lead to a state of natural imbalance. By preventing animals from migrating, finding habitats, and reproducing, this dispersion may cause demographic decreases and a degradation of biodiversity.

**Sound Pollution**

Airlines produce a lot of sound as a result of airplane flight takeoff, aircraft landing, and ground-based activities. Expanding populations can result in more aviation

congestion, which can worsen the acoustic quality and harm animals by interfering with their ability to communicate, forage, and reproduce. A territory displacement due to anxiety and confusion create on by sounds is another possibility.

### ***Air Contamination***

As a result of growing airline activity and pollutants from airplanes, ground-based machinery, and automobiles, airlines are a major source of contaminants in the air. Pollutants like sulfur oxides, nitrogen oxides, organic compounds pollute the air quality and will adversely affect health of humans and wild animals.

### ***Water Contamination***

The expansion of the airport may lead to an increase in rainwater drainage. Due to which soil erosion will be faster. Various activities of runway, machinery, automobile activities and aircraft may contaminate the water of nearby lakes, rivers, and groundwater.

### ***Risks to Rare Species***

This airport expansion airline development plan may intrude on locations recognized as crucial homes for rare and vulnerable wildlife. Such kinds of animals are more likely to go lost if their natural environments are disturbed or destroyed, which may result in immediate damage.

### ***Global Warming***

Airlines play a crucial role in the release of atmospheric greenhouse gases through plane movements. The expansion boost in aviation may exacerbate global warming, which will have permanent negative effects on our ecosystem. Such as sea level will raise, harsh weather, colder winter, hotter summer, fire in forests, faster melting of glaciers and residential losses will be major.

## ***1.5 The perception of the people of the affected villages regarding the airport expansion***

### ***Description of Property to be Affected:***

According to local residents regarding the expansion of airport; business, house, livestock, community property, school, post office, fair price shop, road, pipeline, water resources, wells, ponds, fruit garden, shop, workshop, showroom, power line, anganwadi centers, parks, drainage management, panchayat buildings, temples, Gurdwara, sports Ground etc. will be affected. Not only humans but wild animals and their natural environment will also be affected by this.

### ***Social Adjustment Difficulties:***

It has been revealed in the interview conducted through questionnaire that due to the fear of displacement in the affected families, there are difficulties in social adjustment. People are trembling from within just by imagining the future in the shadow of fear. Local residents are horrified that when an airport employee or a representative of the state government comes to their house and tells them that you will have to leave your home, farm, business and migrate somewhere else because even when the airport was first constructed in 1986, many families had to be displaced from here, the local people have still not fully recovered from that displacement, that now the state government is vigorously campaigning to complete the issue of expansion of the airport, in such a situation, vigorous protests are being held from time to time by the people from affected families against this expansion.

***Protest against the airport expansion by affected villagers***



*Photo retrieve from Google*

***Social and Economic Aspect of Displacement:***

Among the people living in the acquired village for expansion, all the local residents are related to agriculture, some are business men, some are government employees and employees of private companies, and some are only farmers. They do agriculture by which they grow wheat, vegetables and fruits. Their main source of income is agriculture only. This expanding situation is more painful for those people who are dependent only on agricultural work, who have no other source of income other than agriculture and they do not have any other place to migrate. Because the soil of Dhauladhar valley is very fertile for agriculture so that main source of income will be snatched away from the families who depend only on agriculture for their livelihood. Therefore, local residents adopt an indifferent attitude towards displacement to another place.

***Suspicion Cultural Rehabilitation:***

Village is a backbone of the community, in any society, any village becomes such an environment where one person knows and recognizes the other person well, and the community helps each other on the following occasions like marriage, celebration, death, festival, fairs etc. so that the villages are harmonious. The village has its own identity, it has a history of hundreds of years, it has its own culture and civilization, every person of the villages feels connected to his village, due to mutual brotherhood, everyone gets support even in difficult times in life and if there is expansion, then due to displacement at other places, people express skepticism about cultural rehabilitation.

***Emotional Rehabilitation:***

Human is social animal by nature he experiences a social kind of attachment with the natural environment around him where we have to migrate as some other option that displacement acts as trauma, because he is unaware of the new environment. New environment, place, people, society, norms, different lifestyle, new institutions make him uncomfortable. It takes a lot of time to adapt himself to the displaced place; local people are living in the fear shadow of displacement due to their attachment to their village and emotional attachment among relatives.

**Research Methodology**

The present study focuses on the expansion of Gaggal Airport in Kangra. It is located in Kangra tehsil and Shahpur tehsil in Kangra district of Himachal Pradesh. In the grip of this

expansion, out of total 14 villages in Kangra district, five villages have been selected as a convenience sample. The villages from which the samples were taken are as follows: Sanour, Jugrherd, GaggalKhaas, Bheri and Sahoura. The nature of the study is qualitative. Primary data has been collected from the respondents of Sanour, Jugrherd, GaggalKhaas, Bheri, Sahoura, the heads of 44 families from 5 villages have been interviewed through a questionnaire. There were a total of 52 questions. In the questionnaire, which were related to the economic-social side of the affected people, their consent or disagreement with this extension, demands for rehabilitation, displacement, and compensation, the government's tendency towards this expansion details off their assets, assessment of damages assessment related questions were included. And secondary sources of data were used from research articles as well as news published from social media.

### *Interview with airport expansion affected villagers*



### *Photo Source by Researcher*

#### *Findings*

In the context of the above study it has been found that human is a social animal and he is influenced by the environment and surroundings. Being displaced to an unknown place, it is not a benevolent situation for any society. Sometimes displacement also becomes necessary in favor of the supreme interest of the country and the society like state of emergency, war, grave diseases, communal disparity, geological upheaval etc. But to devastate a village or community due to development is not right from the point of view of social perspective. It is neither fair for the society nor for the ecosystem.

It is well known through the above interview that due to the land to be acquired to Gaggal airport expansion that many people will be deprived of their homes, business, farms. Sahoura, DhungiariKhaas, Bhaadot, Rechheyalu, Keori, Balla, Sanour, Bheri, Jugeherd, JhikeliIchhi, Bhaagh, Mungeread, GaggalKhaas, Brasbaalkar are mainly affected villages. GaggalKhaas is the most affected area out of 14 villages because GaggalKhaas is a small town where most of the shops, showrooms, hotels, restaurant, parking, government offices, roads, residential building, hospitals and medical stores are under the grip of effective acquisition.

Agriculture is the main source of income for most of the families whose land is to be acquired. Most of their land is irrigated land. They believe that the expansion of the airport will have a negative effect on the water resources, which will completely affect our agriculture. Apart from this, the local market, hospital and school are also included in this expansion and due to their impact, there will be a negative impact on the local employment and education. Local residents are apprehensive that if their land is acquired, their family's main source of income will vanished.

Along with this, the population in the fourteen villages to be acquired is quite dense, due to which there is a sense of social cooperation and unity among them. So this time the affected families

are apprehensive that if they have to face a lot of difficulties in social adjustment at a new place. There is a fear among the people that if they have to migrate to other places due to expansion, they will not be able to get such an atmosphere of brotherhood, due to which they will be isolated from the society and feel deprived in such a situation, they will have to face severe economic isolation.

It is concluded that the local residents do not want to be displaced and displaced in any situation. Most of the people have also expressed their anger that for the last so many years there is doubt on expansion due to which they are not able to further their house property. Now the local residents have also recommended to clear the situation of this doubt. If this expansion is to happen, then it should be done quickly and a permanent rehabilitation and displacement plan should be made for the affected people so that they can focus on their development in the future without any fear and doubt. Also it has been found in the study that the local residents are vehemently denying leaving their houses, farms and business and being displaced outside Himachal. Citing the example of the Pong Dam, all of them said that the people displaced by the dam are going to be displaced in Rajasthan.

On the question of being displaced outside Himachal, the answer was received in the majority that they want to be displaced only in Kangra district in Himachal as a resettlement. The respondents even said that this expansion has created so much fear in the minds of the people that till today people are not able to build their permanent house due to the fear of leaving the house, because of not being their house, their children are not getting married, and therefore the youth of the affected area will remain unmarried.

## **Conclusion**

Although change is an important part of the sustainable process of development and it directs the direction of development in every society. Desirable changes are easily accepted in the society because society automatically gets acceptance of the society. But there are some such changes which make a human feel that his, community and society's existence will end due to this change, in the face of such changes, the residents of Kangra are facing Gaggal's airport expansion, about which every Kangra resident is worried because the social, economic, cultural and political aspects of the affected residents will be greatly affected by this expansion, due to which the affected persons will definitely have to face many problems in social adjustment. The affected villagers are not all agreeable to this change, they do not want to leave their village. Talking about rehabilitation, majority of answer is that if the government forcibly completes this project, then displacement and rehabilitation should be according to the conditions of the local people and some such replies have been received in which people do not want to accept resettlement or displacement at any cost.

Most of the respondents want that if the expansion takes place, the expansion has been agreed upon with demands like proper compensation, job for one member of the family, rehabilitation within Kangra, displacement of the entire village at one place. But due to the expansion of this airport, people are getting worried because of the doubt that has been prevailing for many years, now the residents of the affected areas in Kangra are strongly opposing this Gaggal airport expansion and if the state government completes this project, they want that there should be no interference and partiality in the rehabilitation and displacement agreements.

## **Recommendation**

- If Gaggal Airport is expanded at the same location, the airport should be designed in such a way that a minimum number of people come under the influence area of this expansion.

- If an airport has to be built for big planes, then such an empty place should be selected where there is no population, such a barren place should be selected where there is less damage to wildlife.
- This study is especially pertinent relevant to new job possibilities or governmental investments that will benefit the communities in the long run while mitigating negative consequences.
- The amount of money that will be spent in giving compensation to the people and in rehabilitation, a new airport can built with that much money and the old airport can be used as a school or museum.
- The towns and surrounding regions could encounter water floods as a result of construction work if the airport extends. As a result, a comprehensive rainwater control strategy must be created for supplying drinking water and waste or rainwater draining in order to minimize potential flood issues in those regions
- The administration specifies that four times the prevailing market price of the agricultural land in rural regions and twice the market price of the land in urban regions should be given as compensation to the affected families in case the airport is to be extension.
- The affected villages and community should plan to resettle all the villagers and community together at the same distance and within the same environment or area.
- This proposed Gaggal airport expansion should be shifted to such a place from where these five districts including Chamba, Lahul&Spiti, Mandi, Hamirpur, Una can be connected through the connectivity of this airport. Due to which local people and tourists can easily move to other districts as well, because tourism has huge potential in all the districts of Himachal Pradesh.
- An international airport can be built at some other place where there is no population and habitat of plants and animals.

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