Original Research Article

Livelihood Challenges and Transitions: Evaluating the Effects of Land Acquisition in Azamgarh, Uttar Pradesh.

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ABSTRACT

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| Land acquisition for national development projects, such as road infrastructure building, urban expansion, and industrialization, is often positioned as a necessary step for economic growth. The purpose of this paper to identify the challenges faced by marginalized groups (e.g., women and indigenous people) during and after land acquisition and to measure the shift in livelihood practices, especially in agriculture and non-agriculture sectors. A case study of the livelihood conditions of a sample of 330 farmers having different land-holding sizes, residing in the selected of nearest village to the connected to Purvanchal Expressway in Azamgarh District. The study showed that there have been considerable change in occupation structure, income, land cultivated, number of households owning livestock, and total livestock numbers of various affected household. The government should amend the policy because most people will not be satisfied with compensated money. In particular, its impacts on agriculture-dependent families, landless labourers, and those engaged in traditional occupations are analysed. The research found that after the acquisition, many families faced unemployment, income instability, and breakdown of social structure. Although in some cases compensation and the possibility of urbanisation offered new economic options, they were not sufficient for the wider community. Land acquisition has disrupted the traditional agriculture-based livelihoods of the affected families. The degradation of cultivable land has not only reduced production capacity but also forced villagers to look for alternative livelihoods. Some migrated to urban areas, while others started working in construction, the unorganised sector or small businesses. |

*Keywords: Land Acquisition, Livelihood, Socio-economic Impacts, Livestock, Rural Communities.*

1. INTRODUCTION

Land acquisition is an important process for the development of any country and building of physical infrastructure including, road construction, industrialization, urbanization, and expansion of warehouses, and building of large-scale restaurants all require land both in rural and urban areas for development. Although land acquisition is essential for development, its socio-economic impacts on the affected communities cannot be ignored. Land acquisition often leads to displacement of people and livelihood crisis, especially in communities that depend on land for their livelihoods (Cernea ,2000). There is a clear contradiction between land acquisition and displacement in the name of development projects. Development-induce displacement has long a controversial problem in India, with large-scale projects often resulting in large-scale population movements and disproportionately impacting disadvantaged groups, particularly women, elder members and children (Bisht, 2009). The authors explain how capitalist economic policies and global food trade have undermined rural livelihoods and local agricultural systems. Its impact on land acquisition and agriculture is particularly profound in developing countries, where small farmers are deprived of their livelihood resources McMichael, (2023). In the process of displacement, the social structures of the affected people break down, and their traditional means of livelihood are lost. Additionally, they are resettled to new places, where it is difficult for them to establish new means of livelihood and adapt socially and culturally. The value of compensation is much lower than the actual social and cultural value of the land. Moreover, for communities whose main source of livelihood is based on land, deprivation of land is not only an economic loss but also a loss of social and cultural identity Fladvad, Klepp, & Dunckmann, (2020). In the process of displacement, the social structures of the affected people break down and their traditional means of livelihood are lost. Additionally, they are resettled to new locations, where it is difficult for them to establish new means of livelihood and adapt socially and culturally (Colson, 2003). The impact of land acquisition is particularly severe on rural communities, tribals and farmers, whose lives and livelihoods depend on land (Sikor, Auld, Bebbington, Benjaminsen, Gentry, Hunsberger, and Upton; 2013). Furthermore, due to increasing pressure of urbanization and industrialization, rural and agricultural land is being acquired on a large scale. This is not only creating a livelihood crisis for those communities, but is also impacting food security Coulibaly, & Shixiang, (2020). Acquisition of agricultural land may reduce the country's overall agricultural production capacity, which may be detrimental to national economic stability in the long run Lambin, & Meyfroidt, (2011). Many rural and tribal communities depend not only on agriculture but also on forests, rivers and other natural resources for their livelihood. Due to land acquisition, when these communities are displaced, they are deprived not only of land but also of natural resources, which are the main source of their traditional livelihood (Negi, & Azeez; 2022 and Mohanty, 2005). The biggest issue after land acquisition is that the affected people lose their traditional livelihood. For example, if a farmer's land is acquired, he cannot do farming, thereby eliminating his main source of income. Moreover, the affected communities do not get employment opportunities in the nearest places or surrounding areas, making their economic condition even worse (Lindsay, 2012; & Cernea, 2000). Land is not only an economic resource, but also the cultural and traditional heritage of the people is associated with it. After land acquisition, people's traditional heritage, religious sites, and cultural identity are lost. This also affects their community identity and cultural values (Escobar, 2001; and Colchester, 2004). The study clearly shows that a fair amount of compensation, transparency, and provision of alternative livelihoods influence farmers' decisions. Land acquisition has a negative impact on the livelihoods of farmers, putting their social and economic security at risk (Amera, & Habtamu, 2021). Studies have shown that due to land acquisition, the income and employment sources of the villagers were affected, leading to decline in their standard of living. The lack of transparency and fair value in the compensation process further compounded the problems. (Nguyen, Hegedus & Nguyen; 2019). Farmers' livelihoods have been affected by land acquisition, as most have lost their farming land. The provision of compensation through land pooling proved beneficial to some extent, but this solution was not able to completely improve the economic condition of the villagers (Shailaja, 2016). In Hyderabad, India, the construction of an outer ring road resulted in decreased vegetable cultivation and economic insecurity for rural farmers (Ramachandraiah, 2014). The land acquisition process has been uncomfortable and challenging for villagers, while the lack of proper compensation and concrete plans for rehabilitation has plunged the displaced communities into economic and social crisis (Ramachandraiah, & Venkateswarlu, 2014.) The study makes it clear that large infrastructure projects, such as road and railway corridor development, complicate the process of land acquisition. Land acquisition profoundly impacts the social and economic conditions of affected rural communities, as they lack awareness of their rights to compensation and rehabilitation (Yadav & Kalambe, 2022).

There is a legal framework available for land acquisition in India and many other developing countries. In India, land acquisition is mainly done under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. This Act ensures that affected people receive adequate compensation and their rehabilitation process is effective. The objective of this Act is to make land acquisition more transparent and equitable and to improve the condition of the affected communities. Despite legal provisions, the process of land acquisition is often fraught with uncertainties and disputes. Displacement resulting from land acquisition for development projects often adversely affects the social and economic structures of local communities. This leads to deterioration in the quality of life of displaced communities, economic instability, and loss of cultural identity.

The concept of livelihood approach by land acquistion: The livelihoods approach through land acquisition is a concept that looks at how land acquisition impacts the livelihoods of affected individuals and communities and how their economic, social and cultural lives can be protected. Land acquisition usually involves the government or companies acquiring land from farmers, tribals, or other communities for development projects such as industrial parks, road construction, or other infrastructure. This acquisition affects their means of livelihood, as land is their main resource. Under this approach an attempt is made to ensure that people's livelihoods are not destroyed as a result of land acquisition. It involves rehabilitation and resettlement plans to provide affected people with alternative livelihoods, such as employment, training, or new land for agriculture.

**1.2 Research objective:** This research study is an attempt to look deeper into the process of land acquisition and its socio-economic impacts, particularly in areas where infrastructure projects such as highways or expressways are constructed.

* To study the specific challenges faced by vulnerable groups during the land acquisition process.
* To measure the shifts in livelihood practices, especially in agriculture and non-agricultural sectors.

2. material and methods

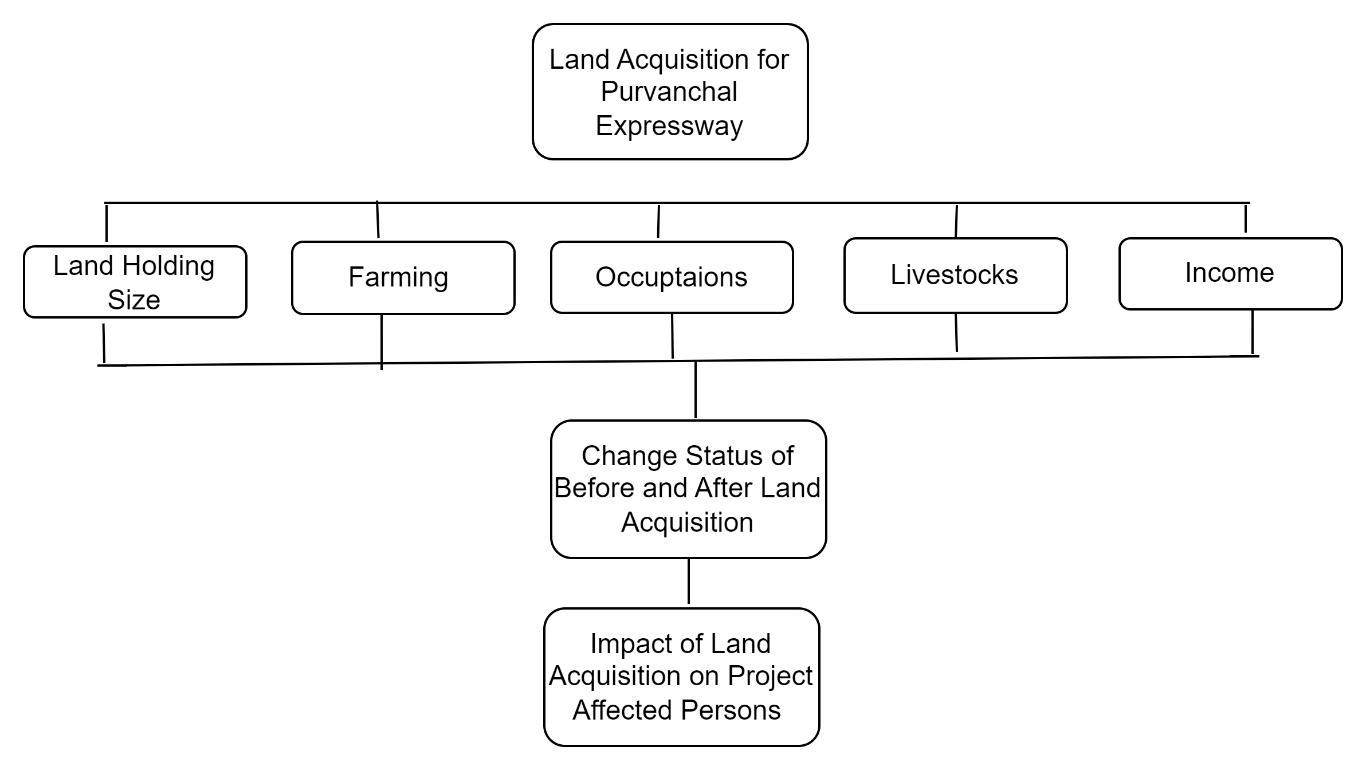
This research was conducted using descriptive analysis with a qualitative approach to assess the livelihood status of affected persons by land acquisition. The study focused on people who were directly affected by land acquisition in the nearest 5 villages of connecting points on the Purvanchal Expressway, which had a project affected-persons of 330 Households. The respondent were selected from each villages were randomly selected according to different land ownership categories, such as 0.5 Acres, 0.5-1 Acres, 1-1.5 Acres, and more than 1.5 Acres. Because the affected household is 330, the sample can be taken from 10-15% (Arikunto 2010) and in this study the number of 50 households (15%) out of 330 households spread out in Miria Rerha, Sehda, Tandwa, Madya and Gaddopur . The describe of the population is presented in table 1.

**Table 1. List of villages involved in the study**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Village name** | **Affceted Household** | **Sample Size** |
| 1. | Tandwa | 110 | 17 |
| 2. | Madya | 100 | 15 |
| 3. | Miria Rerha | 50 | 7 |
| 4. | Gaddopur | 30 | 6 |
| 5. | Sehda | 40 | 5 |
| **Total** | | **330** | **50** |

Primary data was based on field survey of the study area. The data has been collected on the basis of structure questionnaire. To analyse the data statistical tools including tabulation, percentage method were used. Some secondary data was collected from newspapers, books, journals, government reports and Uttar Pradesh Expressways Industrial Development Authority (UPEIDA) reports. In the study, Considerable changes were recorded before and after land acquisition based on five economic indicators such as occupation structure, income, cultivation on land, number of households owning livestock, and total livestock numbers of various affected households. The figure flow diagram is presented in Figure 1.

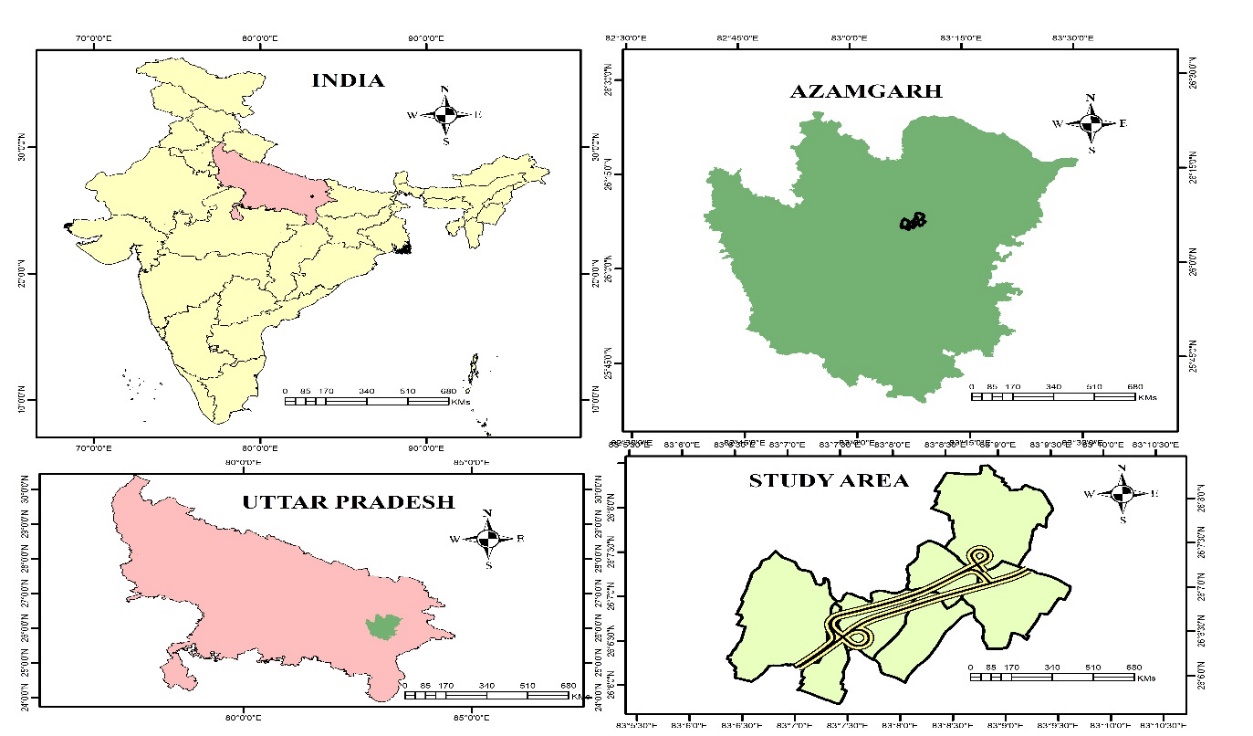
**Figure 1 Flow chart showing land acquisition for Purvanchal expressway**



In this study, field observation and interviews were conducted to determine the condition of the affected persons of Purvanchal Expressway. Interviews were conducted with heads of households of Village Madya, Tandwa, Sehda, Miria Rerha, and Gaddopur.

**2.1** Study area: Azamgarh is an important district of Uttar Pradesh state, known for its historical and cultural importance. Its geographical location is situated in eastern Uttar Pradesh and is spread in the Ganga-Ghaghra Doab. The total population of five villages 8990 persons of according to 2011 census, and the average population density of the five villages is 1287.65 per square kilometre, making it one of the densely populated areas of the district. Talking about literacy rate, according to 2011 census, the total literacy rate of five villages is 60.01%, of which male literacy rate is 34.06% and female literacy rate is only 25.95%. This gap shows that gender inequality remains a major challenge in the rural education system. The total population of five villages is 8990, which includes 4540 males and 4450 females. The total number of workers is 2213, of which 1813 are males and 400 are females. Here working people are classified into three categories—main workers, marginal workers and other workers. The total number of main workers is 1475, of which 1339 are males and 136 are females. This shows that the proportion of men is higher among the main workers, while women are more found in the category of marginal workers. The number of marginal workers is 848, of which 538 are males and 310 are females. The other workers category consists of 151 men and 102 women, who may have workplace instability or temporary employment. The main occupation of the people here is agriculture, in which paddy, wheat, and sugarcane are the major crops. Apart from agriculture, people are also involved in small business, animal husbandry, and labor activities. Recent years have also seen a migration trend, with large numbers of people moving to metropolitan cities in search of employment, leading to changes in the local employment structure.

**Map 1 : Study Area Map: Azamgarh**



3. results and discussion

To analyse the livelihood status of affected persons of economic indicators such as a occupation structure, cultivation on land (own land, own and rented land, own and barter land), income, number and types of livestock in households, and total livestock’s. there are 4 table, table 2, table 3. table 4, and table 5 discussed the livelihood conditions of those who farmer who had land holding size less than 0.5 acres, 0.5 to 1 acre, 1 to 1.5 acres, and more than to 1.5 acres respectively in Azamgarh district.

**Table 2 Livelihood Conditions of Project Affected Persons who had land Holding size (Less than 0.5) Acres Before and After Land Acquisition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Economic Factors** | | **Before Land Acquisition** | | **After Land Acquisition** | |
|  | | **No. of Farmer** | **Percentage** | **No. of Farmer** | **Percentage** |
| **Occupation** | Farmer | 5 | 10 | 2 | 4 |
| Labour | 10 | 20 | 13 | 26 |
| Private Job | 0 | 0 | 0 | 0 |
| Government Job | 0 | 0 | 0 | 0 |
| **Income** | 10 K | 8 | 16 | 2 | 4 |
|  | 10 -20 k | 6 | 12 | 12 | 24 |
|  | 20-30 k | 1 | 2 | 1 | 2 |
|  | > 30 K | 0 | 0 | 0 | 0 |
| **Cultivation on land** | Own Land | 10 | 20 | 14 | 28 |
| Own and rented land | 4 | 8 | 0 | 0 |
| Own and barter land | 1 | 2 | 1 | 2 |
| **Livestock’s** | Cow | 1 | 2 | 0 | 0 |
| Buffalo | 13 | 26 | 8 | 16 |
| Goat | 15 | 30 | 13 | 26 |
| **Total no. of Livestock’s** | Cow | 2 | 4 | 0 | 0 |
|  | Buffalo | 11 | 22 | 6 | 12 |
|  | Goat | 25 | 50 | 40 | 80 |

***Sources: Field Survey 2024***

The data in the above table 2 indicate changes in the livelihood status of project affected persons who had land holdings less than 0.5 acres of Azamgarh district. The tabular data shows the occupation structure, income, farming on land, household number of livestock and total livestock's number. In **farming occupation,** before land acquisition there were 10% farmers, but later this percentage reduced to 4% and total reduction of 16%. This shows that many farmers have started turning to other occupations after losing their land. Before land acquisition, 20% people were working as labourers, but post land acquisition this number increased to 26%. This shows that farmers have shifted to labor after losing their land. This has increased by 14%. Private and Government Jobs is no significant change, no farmers were involved in these areas before and after land acquisition. **Income less than Rs 10,000:** Before land acquisition, 16% of farmers had an income of less than Rs 10,000, while later it came down to 4%. This means that most of the farmers have fallen out of this income group, mainly due to their lack of land and farming opportunities. **10-20 K Income:** There has been no decline in this income group but has increased from 12% to 24%, which indicates that the income of some farmers has increased**. 20-30 K Income:** This category has decreased by only 2%, which shows that there has not been much change here. The main reason for the increase in income of farmers after land acquisition is the compensation money given to them, which they invested in alternative businesses. Many affected farmers started small businesses, rented properties or started non-agricultural work with the compensation money, which created a source of regular income.

**Own land:** Before land acquisition, 20% of farmers cultivated their own land, which later increased to 28%. This shows that the farmers who could save their land have started farming more than before. Before land acquisition 8% of farmers were cultivating rented land along with their own land. A total of 4 farmers had adopted this system. After land acquisition this number and percentage completely ended, now no farmer is farming on his own and rented land. It has registered a decline of 16%. Farming on rented land ended completely because due to limited land, the owner took back his land. Before land acquisition 2% farmers were farming along with their land by taking land from other people through barter. A total of 1 farmer was involved in this system. After land acquisition this number and percentage remained the same. A total of 1 farmer is still cultivating his land and bartered land. Before land acquisition, 2% of farmers had cows, which were later eliminated. There has been a decrease of 4%, which shows that cow rearing has reduced. After land acquisition the total number of cows decreased by 8%. Before land acquisition, 26% of the farmers reared buffalo, but later this number reached 16%. There has been a decline of 36 percent, which shows that farmers have reduced buffalo rearing. The total number of buffaloes decreased by 32% after land acquisition. Before land acquisition, 30% of households had goats, and after land acquisition, this reduced to 26% of households. However, the total number of goats increased from the earlier 25 (50%) to 40 (80%). It takes less fodder to raise goats and less space for their living. There has been a clear change in the livestock structure after land acquisition. The number of large animals like cows and buffaloes has decreased, indicating that farmers' dependence on traditional milk production has decreased. It has become difficult to raise large animals due to less fodder and space for keeping cattle. In contrast, the number of goats has increased because it is relatively easy and less expensive to raise them. This change reflects that the affected people are now showing greater inclination towards smaller and low-cost livestock, which is in keeping with their changed economic and material resources.

**Table 3 Livelihood Conditions of Project Affected Persons who had land Holding size (0.5- 1.0) Acres Before and After Land Acquisition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Farmer Status** | | **Before Land Acquisition** | | **After Land Acquisition** | |
| **No. of Farmer** | **Percentage** | **No. of Farmer** | **Percentage** |
| **Occupation** | Farmer | 9 | 18 | 5 | 10 |
| Labour | 0 | 0 | 5 | 10 |
| Private Job | 6 | 12 | 10 | 20 |
| Government Job | 0 | 0 | 0 | 0 |
| **Income** | 10 K | 1 | 2 | 0 | 0 |
|  | 10 -20 k | 4 | 8 | 6 | 12 |
|  | 20-30 k | 7 | 14 | 2 | 4 |
|  | > 30 K | 3 | 6 | 7 | 14 |
| **Farming on land** | Own Land | 13 | 26 | 15 | 30 |
| Own & rented land | 2 | 4 | 0 | 0 |
| Own & barter land | 0 | 0 | 0 | 0 |
| **Livestock’s** | Cow | 5 | 10 | 1 | 2 |
| Buffalo | 9 | 18 | 6 | 12 |
| Goat | 9 | 18 | 15 | 30 |
| **Total no. of Livestock’s** | Cow | 4 | 8 | 0 | 0 |
|  | Buffalo | 9 | 18 | 14 | 28 |
|  | Goat | 16 | 32 | 37 | 74 |

***Sources: Field survey 2024***

A comparative analysis before and after land acquisition shows significant changes in the condition of farmers with 0.5 to 1 acre land. The analysis looked at various categories such as occupation, income, type of farming and livestock, which shows the impact of land acquisition. Before land acquisition, 18% of people were farmers, but this percentage dropped to 10%, a decline of 26%. This means that after land acquisition many farmers moved into other occupations. Before land acquisition, there were no farmers included in this category, but later 10% of the farmers became labourers. This shows an increase of 10%, which indicates that people turned to labor after losing land. Before land acquisition, 12% of farmers were in private jobs, which later increased to 20%. Although there has been only a 4% decline in this category, it shows that some farmers have turned to jobs. Government Jobs is no change in this category before and after land acquisition. Before land acquisition, 2% of farmers earned less than Rs 10,000, but after land acquisition, this number completely disappeared. There were 8% of farmers in the income group of Rs 10,000 – 20,000, which later increased to 12%. This means that some farmers' income has fallen into this category, but there has been an overall decline of 4%. Income of Rs 20,000 – 30,000 in a category before the land acquisition, 14% of the farmers were in this income category, but later it came down to 4% a huge decline of 24%. This shows that land acquisition has had a negative impact on farmers' income. Earlier there were 6% of farmers in the income category above Rs 30,000, which increased to 14% after land acquisition. It has increased by 2%, which indicates that the income of some farmers has increased. On own land before land acquisition, 26% of farmers cultivated their land, which later increased to 30%. Although it has registered a decline of 22%, some farmers have become more dependent on their land. Before the land acquisition, 4% farmers used to cultivate on their own and rented land, but after land acquisition it completely ended. Before land acquisition Cultivation on own and barter land were no farmers in this category and this situation did not change even after land acquisition. Before land acquisition, 10% of the farmers owned cows, which later came down to 2%, a decline of 18%. This shows that the practice of cow rearing has reduced after land acquisition. The total number of cows has declined by 16% after land acquisition, which suggests that cow rearing has been negatively impacted. Before land acquisition, 18% of the farmers owned buffaloes, but later this number dropped to 12%, a decline of 24%. This shows the decline in buffalo rearing. Before land acquisition, 18% farmers had buffaloes, which later increased to 28%, that is, the total number of buffaloes has increased. However there has been a decline among individual farmers. Before land acquisition, 18% of farmers had goats, which later increased to 30%. It increased by 6%, which shows that the trend of goat rearing has increased. After land acquisition, the number of goats has increased by 10%, which shows that goat rearing has increased. Land acquisition has significantly impacted farmers' income, farming and livestock. Many farmers lost their land and turned to labor or private jobs. The decline in income is evident, especially in the middle-income group (20-30k). In terms of livestock, cow and buffalo rearing has declined, but goat rearing has increased. Overall, land acquisition has negatively impacted the traditional livelihoods of farmers, forcing them to look for new alternatives. After land acquisition, significant changes were observed in the income and livestock of farmers owning 0.5–1.0 acres of land. In terms of income, the number of farmers in the 10K and 20–30K income groups has decreased, while those in the 10–20K and >30K income groups have increased, which makes it clear that some of the farmers invested the compensation amount in profitable areas. Particularly, the number of farmers in the >30K income group doubled, indicating economic restructuring. The number of cows in the livestock fell to zero, possibly due to lack of land and fodder, which made rearing them impossible. In contrast, the number of buffaloes and goats has increased, particularly the number of goats has increased significantly as they can be raised in less space and cost. This change reflects that affected farmers are now relying on smaller, less resource-requiring livestock, which is better suited to the changed livelihood conditions.

**Table 4: Livelihood Conditions of Project Affected Persons who had land Holding size (1.0-1.5) Acres Before and After Land Acquisition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Farmer Status** | | **Before Land acquisition** | | **After Land Acquisition** | |
| **No. of Farmer** | **Percentage** | **No. of Farmer** | **Percentage** |
| **Occupation** | Farmer | 3 | 6 | 3 | 6 |
| Labour | 0 | 0 | 0 | 0 |
| Private Job | 2 | 4 | 0 | 0 |
| Government Job | 3 | 6 | 5 | 10 |
| **Income** | 10 K | 2 | 4 | 0 | 0 |
|  | 10 -20 k | 0 | 0 | 4 | 8 |
|  | 20-30 k | 6 | 12 | 3 | 6 |
|  | > 30 K | 0 | 0 | 1 | 2 |
| **Farming on land** | Own land | 5 | 10 | 8 | 16 |
| Own & rented land | 2 | 4 | 0 | 0 |
| Own & Barter land | 1 | 2 | 0 | 0 |
| **Livestock’s** | Cow | 1 | 2 | 0 | 0 |
| Buffalo | 4 | 8 | 5 | 10 |
| Goat | 6 | 12 | 8 | 16 |
| **Total no. of Livestock’s** | Cow | 1 | 2 | 0 | 0 |
|  | Buffalo | 3 | 6 | 5 | 10 |
|  | Goat | 21 | 42 | 23 | 46 |

***Sources: Field Survey 2024***

Before and after land acquisition, 6% of the farmers were cultivating their land, and there was no change in this. This shows that farmers of this land size group remained consistent in their agricultural activities. Earlier 4% of the farmers were in private jobs, but after land acquisition, this number became zero. This shows that farmers working in private jobs either left their jobs and took up other jobs or became completely dependent on agriculture. Before land acquisition, 6% farmers were in government jobs, which later increased to 10%. This means that some farmers turned to government jobs, thereby maintaining their economic stability. Income less than Rs 10,000 in 4% of farmers were in this income group before land acquisition, but after land acquisition this number dropped to zero, indicating that farmers have moved out of this income group. Income of Rs 10,000-20,000 8% farmers joined this income group after land acquisition, whereas earlier there were no farmers in it. This means that the income of some farmers increased to this category. Income of Rs 20,000-30,000 earlier there were 12% farmers in this category, which reduced to 6% after land acquisition. This represents a decline of 6%, indicating that the income of some farmers has declined. Income above Rs 30,000 after land acquisition, 2% of farmers came into this high-income category, whereas earlier no farmer was in this category. This means that the economic condition of some farmers has improved. Cultivation of own land before land acquisition, 10% farmers, which after land acquisition increased to 16%. This represents an increase of 6%, which shows that farmers are now becoming more dependent on their land. Before land acquisition, 4% of farmers were farming on their own and rented land, but later this stopped completely. Before land acquisition, there were 2% of farmers used for cultivation on their own and barter land, but later this category was completely eliminated. Before land acquisition, 2% of the farmers reared cows, but after land acquisition, this number became zero, which shows a 100% decline in cow rearing. Before land acquisition, 8% farmers reared buffalo, which increased to 10% after land acquisition. This shows an increase of 2%, which shows that some farmers have turned to buffalo rearing. Before land acquisition, the total number of buffaloes was 6%, which later increased to 10%. This represents an increase of 4%. Before land acquisition, 12% of farmers had goats, which increased to 16% after land acquisition. This shows an increase of 4%, which indicates the increasing trend of goat rearing. Before land acquisition, the total number of goats was 42%, which later increased to 46%. This is an increase of 4%, which shows that the trend of goat rearing is increasing. After land acquisition, there have been mixed changes in the property and economic condition of farmers holding 1 to 1.5 acres of land. Some farmers switched to government papers, while others are keeping farming on their land. Most games suffered from previews in revenue, especially in the middle-income segment (20-30k). In terms of livestock, cow rearing has ended, while buffalo and goat rearing has seen an increase. A partial change in income was observed for 1.0–1.5 acres land holders after land acquisition, where some farmers used the compensation to take up higher income sources, like government jobs or gainful activities, thereby also including farmers in the >30K income group. In the livestock structure, the number of cows has declined, probably due to shortage of land and unavailability of fodder, while the number of goats and buffaloes has increased marginally as these can be reared even with limited resources. The pattern of farming has also changed, with more farmers now cultivating their own land, which means the use of shared or rented land has declined.

**Table 5**  **Livelihood Conditions of Project Affected Persons who had land Holding size (More Than 1.5) Acres Before and After Land Acquisition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Status of Affected Person** | | **Before Land Acquisition** | | **After Land Acquisition** | |
| **No. of Farmer** | **Percentage** | **No. of Farmer** | **Percentage** |
| **Occupation** | Farmer | 7 | 14 | 5 | 10 |
| Labour | 0 | 0 | 0 | 0 |
| Private Job | 1 | 2 | 3 | 6 |
| Government Job | 4 | 8 | 4 | 8 |
| **Income** | 10 K | 1 | 2 | 4 | 8 |
| 10 -20 k | 3 | 6 | 3 | 6 |
| 20-30 k | 5 | 10 | 4 | 8 |
| > 30 K | 0 | 0 | 0 | 0 |
| **Farming on land** | Own Land | 6 | 12 | 10 | 20 |
| Own & rented Land | 3 | 6 | 0 | 0 |
| Own & barter Land | 3 | 6 | 2 | 4 |
| **Livestock’s** | Cow | 3 | 6 | 0 | 0 |
| Buffalo | 9 | 18 | 8 | 16 |
| Goat | 10 | 20 | 10 | 20 |
| **Total no. of Livestock’s** | Cow | 4 | 8 | 0 | 0 |
| Buffalo | 10 | 20 | 9 | 18 |
| Goat | 33 | 66 | 36 | 72 |

***Sources: Field Survey 2024***

Before land acquisition, 14% of farmers cultivated their land, which was reduced to 10% after land acquisition. This represents a decline of 4%, indicating that some farmers have abandoned their farming activities. Earlier only 2% farmers were in private jobs, but after land acquisition this number increased to 6%. This shows an increase of 4%, which indicates that some farmers have left agriculture and turned to private jobs. 8% of farmers were already employed in government jobs, and there was no change in this percentage. This shows that land acquisition did not have a direct impact on farmers in government jobs. Income below Rs 10,000 class before land acquisition, 2% of farmers were in this income group, which increased to 8% after land acquisition. This is an increase of 6%, which suggests that the income of some farmers has declined. There were 6% of farmers in the Rs 10,000-20,000 income, and there was no change in this number even after land acquisition. Earlier there were 10% of farmers in the income group of Rs 20,000-30,000, which dropped to 8% after land acquisition. This represents a decline of 2%, which has reduced the income of some farmers. There were no farmers with an income above Rs 30,000 before and after land acquisition. Before land acquisition, 12% of farmers cultivated their land, which increased to 20% after land acquisition. This represents an increase of 8%, indicating that more farmers have started farming on their land. Before land acquisition, 6% of farmers were cultivating on their own and rented land but after land acquisition this number became zero. This shows a decline of 100%, which indicates that no farmer is now farming on rented land. Before land acquisition, 6% of farmers were farming on their own and bartering land, which reduced to 4% after land acquisition. This represents a decline of 2%. Before land acquisition, 6% of farmers rear cows, but after land acquisition, this number became zero. This represents a decline of 100%, indicating the near extinction of cow farming. Before land acquisition, 18% farmers reared buffalo, which reduced to 16% after land acquisition. This shows a slight decline of 2%, which suggests that some farmers have stopped buffalo rearing. Before land acquisition, the total number of goats was 66%, which increased to 72% after land acquisition. This is an increase of 6%, which indicates a growing trend towards goat rearing. Land acquisition has led to some decline in income and employment of farmers holding more than 1.5 acres of land. While some farmers have turned to private jobs, cow rearing has almost ended and buffalo rearing has declined slightly. On the other hand, growth in goat rearing has been assessed, and more farmers are now cultivating their lands. It is clear from the document that land acquisition has had a significant impact on the economic structure and agricultural equipment of this class of farmers.

Farmers owning more than 1.5 acres of land witnessed a decline in their income after land acquisition, particularly in the Rs 10K income bracket indicating that farm-dependent income has declined and compensation has not translated into sustainable income. The cattle population was completely wiped out due to shortage of land and fodder, while the buffalo and goat population remained almost constant as these are considered more adaptable and useful animals. Also, farming is now limited to one's own land only, which shows that farming on rented or exchanged land has declined, and there has been a contraction in the agricultural sector.

4. Conclusion

The data shows significant changes in the livelihood and income levels of Project Affected Persons (PAPs) after land acquisition, stratified by land size (less than 0.5-acre, 0.5-1-acre, 1-1.5 acre and more than 1.5 acre) has been classified on the basis of. the number of farmers with less than 0.5 acres declined from 10% to 4%, while the number of laborers in this category increased from 20% to 26%, indicating a shift towards wage labour. For those with 0.5-1 acre, the percentage of farmers fell from 18% to 10%, while private and government jobs saw an increase, especially in private jobs, which increased from 12% to 20%. Among those with more than 1.5 acres, the percentage of farmers fell slightly, while private jobs and government jobs saw a slight increase. This suggests that many PAPs, especially in the small landholder categories, had to seek alternative employment after land acquisition. A steep decline has been observed among low-income people (<10,000) following land acquisition, especially in the smallest landholder group, where the percentage has fallen from 16% to 4%. Higher income groups (10,000–30,000) showed greater stability or improvement across the board, suggesting that some PAPs managed to stabilize or improve their incomes despite losing land. However, a slight decline was seen in the highest income group (>30,000) in the group of more than 1.5 acres. PAPs with small land holdings either stopped farming or shifted to rent or barter systems. Livestock ownership, especially of goats and buffaloes, became more prevalent after land acquisition, indicating partial dependence on livestock for income or livelihood. There has been a significant increase in goat ownership in all categories, indicating a compensatory strategy for income generation. In summary, the data highlights that small landholders were more adversely affected by land acquisition, many of whom have moved into labor jobs or are diversifying their livelihood strategies by relying on livestock. In contrast, larger landholders maintained greater stability in employment and income levels. The government should amend the policy because most people will not be satisfied with compensation money for losing land. They have complained of compensation amount received at different rates at the same time in rural and urban areas. People affected by land acquisition have an emotional attachment to the land, fear of livelihood, fear of spending money and increase in family disputes. There has been a significant change in the livelihood of the project affected persons after land acquisition. With reduced dependence on traditional agriculture, many people have turned to alternative employment such as government/private jobs or small businesses. Livestock too has seen a decline in the number of large animals such as cows, while smaller and less expensive animals such as goats have increased. These changes reflect the value of compensation, the reduction in the availability of land, and farmers' strategies to adapt to new circumstances.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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Details of the AI usage are given below:

1.

2.

3.

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