



Assessing the Challenges and Effectiveness of Land Acquisition process – A case study of Coimbatore airport expansion

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Abstract: One of the most challenging aspects of urban infrastructure development and expansion is the acquisition of land, which requires support from communities, government, and the political will to ensure a sustainable, equitable and efficient acquisition of land. People's desire to give the land up, the quantity of compensation offered, and a practical effective rehabilitation approach all delay the land purchase process for authorities. The research focuses on the delay in land acquisition for Coimbatore's airport expansion project. By examining three aspects of the land acquisition: qualities that cause problems, factors used to gauge effectiveness, and aspects that affect people's well-being from the standpoints of both claimants and the government. The satisfaction index, an empirical value, will be used to further examine the aspects of contentment. Researchers rely on information provided by people who live in the area they are studying. To further explore the issues and efficacy, a socioeconomic questionnaire survey is used. Since Factor analysis identifies three main areas of concern: challenges faced by the general public, challenges faced by the government, and difficulties in determining and allocating compensation. Using Likert scale analysis, the results and discussion offer suggestions for reducing process delays as well as assessing the current legal situation in light of potential improvisation methods in the future.

Keywords: land acquisition, effectiveness, satisfaction, challenges, factor analysis, satisfaction index, likert scale

1 Introduction

Globally, urban regions are the epicenter of economic, social, and political activity. They are essentially administrative hubs and frequently offer a quality of life that is not available in other non-urban locations. These metropolitan zones also offer considerably greater prospects and a viable economic option by luring rural residents into urban areas, hence sing the population. Consequently, the provision of public goods and services must be expanded. The government acquires land to meet the urban space requirements for growth and expansion. Thus, in this context, land acquisition refers to the government's ability to purchase private property rights in land owned by people (FAO, 08). Individual landowners in urban regions or communities within urban areas may not be prepared to give up their rights, not even in exchange for monetary compensation. Therefore, land acquisition entails seizing private lands or estates and property interests for public use (Umeh, 2007; Ndjovu, 2010). Land acquisition powers are frequently contested, and their application generates several controversies. In developing nations, corrupt governments are liable for abusing their authority. Evans (2004) opined that even though the powers of acquisition are uncommon in some developed nations, they are generally acceptable in some democratic societies, particularly those in which the government has deemed it a matter of policy that the social benefit of its implementation and use outweighs its social cost. Plimmer (2007) noted that the use of compulsory purchase powers in England and Wales is unpopular. Even though the legal acceptability of the powers has remained expansive, the social acceptability has continued to raise controversy, regardless of the public purpose's good intentions. This is out of apprehension that their land would be expropriated without proper procedure and payment of compensation; occasionally, this occurs even when recompense is paid (Martin, 2010; Ndjovu, 2016). Whenever there is or would be a compulsory purchase in Nigeria, mistrust, and uncertainty stemming from the government's past actions can lead to conflict (Kakulu, 2007; Thomas et al., 2010). Other variables such as the migrating population's economic and social significance become obvious, necessitating greater room. In such situations, the government is compelled to acquire suitable land in suitable locations. Therefore, the availability of land is a prerequisite for plan implementation. Various sizes of land are required for various projects. Some modest-scale projects may necessitate a small portion of developed or undeveloped land for plan implementation. This land is readily available via private or leasing agreements with the registered owner. If the implementer does not already own the land in question. Large-scale projects, such as dams require huge expanses of land. Here, the land is typically owned by several diverse

individuals with whom it would be impossible for the developer/implementer to establish a consensus. In such instances, if the project is intended for the public good, the government may be required to acquire the land by constitutional and statutory requirements. One of the primary pillars of a democratic society is the right to acquire, retain, and enjoy landed property. Not only is real estate an economic asset, but it also has emotional and sentimental significance. The capacity of the government to acquire private land rights without the agreement of the land's owner or occupant in exchange for monetary compensation is known as compulsory acquisition. It emerged due to the inestimable value of land and its crucial role in a nation's socio-economic development. The acquisition is governed by statute law, and the act of acquiring is undertaken for the benefit of the entire community. This study analyses the Land Use Act's provisions on forcible acquisition and compensation in Nigeria in light of international standards and best practices in the field. This is done to draw attention to areas of unfairness in the legislation, particularly instances of acquisitions without compensation under the Act. Even though the power of forced acquisition is deeply anchored in practically all legal systems, the construction of effective and fair legal, institutional frameworks for using this power remains unfinished in many nations. The acquisition of urban properties for infrastructure projects, such as airport expansion, should be subjected to a public review to ensure that the balance between the public need for land and the protection of property rights is appropriately considered. That compensation reflects the profit potential of the land to be acquired. (Christopher, Deeyah, 2016) To determine if the present practice of land acquisition and value in road infrastructure provision conforms to global best practices, this study will assess the efficacy of the existing practice of land acquisition and valuation. The expansion of the airport in Coimbatore serves as the case study for this study.

2 Methodology

Stage 1

Step one of Methodology entails defining the objectives, which include the final product and the scope of the investigation. The second step is to research the literature and case studies pertaining to land acquisition, as well as the legal act and policies that govern land purchase at both the Central and state levels. It also entails discovering a statistical mechanism for quantifying land acquisition failure. Step three involves analyzing all relevant literature and studies and determining the optimal price for land acquisition. Step four is the classification of the case study and literature review parameters for our analysis in Coimbatore.

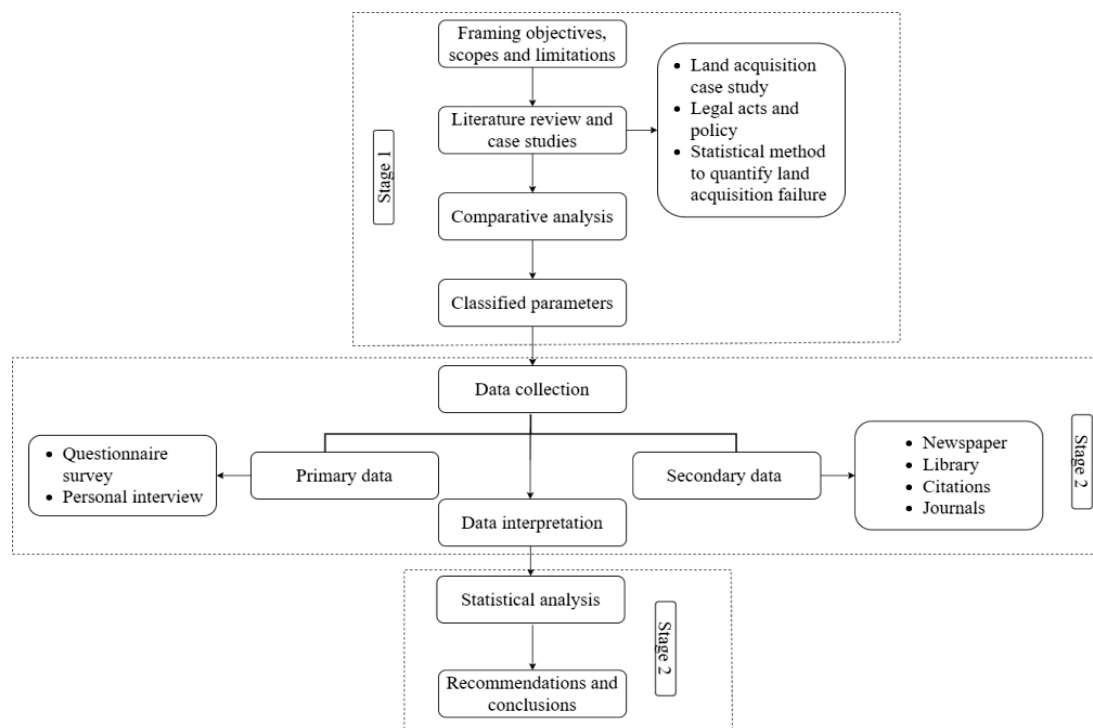


Fig. 1 Methodology chart

Stage 2

Stage 2 is done in two steps, for the data collection process permission is approved from the Dean of the institution and for the interview from the common people was approved by the Collector of Coimbatore. The existing details of land acquisition is obtained from The Special District Revenue Officer for Land acquisition. Step five is the collecting of data required to examine Coimbatore's existing infrastructure and land acquisition information. Also included is the collection of both primary and secondary data. It requires data collection via questionnaire and personal interview that is conducted with full informed consent of the respondents. Secondary data collection entails gathering a newspaper story from a library edition and citations from periodicals Acquisition of land in Coimbatore. Step six is Data interpretation of obtained evidence and formation of a foundation.

Stage 3

Step seven is the statistical analysis portion of the process specified in the literature and case studies. In this step, likert scale analysis and factor analysis approaches are utilized to reduce the size of the found parameters and group them together. After comparing the current land acquisition process with the ideal method, the research identifies the eighth step, which is a final conclusion and recommendation.

3 Review of Related Research

Okolo (2000) stated that the problem of inadequate compensation that characterizes our settlement practice in Nigeria stems from the many laws that control compulsory acquisition and compensation in our nation. He determined that these laws must be revised to reflect the present situation. Kakulu (2007) indicates that ambiguity, lack of clarity, and inconsistency in the wording and application of enabling statutes (Land Use Act Cap L5 LFN, 2004) contribute to inadequate compensation. The research also reveals that applying diverse standards, procedures, and valuation methods leads to disturbingly significant disparities in compensation values for the same land interest. The article believes that the assessment process in Nigeria might be vastly improved by establishing a compensation valuation code. It also argues that such a rule should adhere to worldwide compensation valuation norms. Udoekanem (2013) In his study, he analyzed data from incidents in which gas flares badly harmed environmental assets, as well as the estimation of compensation based on the provisions of Nigeria's Land Use Act, the country's Land Policy law. The results indicate that the compensation estimated by the primary valuation methodologies was significantly higher than that established under the Land Use Act Cap L5 LFN 2004. The article contends that Section 29 of the Land Use Act's compensation for compulsory acquisition is inadequate. Nuhu (2008) Existing provisions of the legislation cannot adequately repay evicted property owners, excluding the possibility of a delayed payment of compensation. The report recommends the implementation of legislation applicable to the incidence of landholding in the FCT, Abuja, and developing a Lands Tribunal system to address compensation valuation concerns in all Federation states, including Abuja. Ajoku (2000) Notes that the evaluation of compensation for payment purposes in line with the provisions of the enabling legislation will always result in inadequate compensation due to the glaring gaps in these provisions. He concentrated on compensation under the Land Use Act in general, with no particular interest in the Niger Delta. Otubu (2012) According to the argument, the Land Use Act procedure has altered the balance between private property rights and compulsory acquisition, producing an asymmetrical and unfavorable outcome that harms private property rights and the national economy. It eventually presented a new equitable solution to the impasse. The report suggests legislative reform in unified

legislation and Policy on the subject. Akujuru and Ogbonda (2016) remarked that the existing statutory provisions of the Land Use Act raise several contemporary issues, including conflicts between statutory provisions and constitutional requirements, the proper definition of property rights, and the use of statutorily mandated valuation methods, which results in the payment of inadequate compensation that fails to restore the beneficiaries to their status.

4 Inference from the studies

The literature review led to the discovery of 28 criteria, categorized into three categories. The first parameter demonstrates the efficacy of the land acquisition process, the second identifies the level of satisfaction among citizens and government officials during and after the land acquisition process, and the third demonstrates the difficulties that arose during the land acquisition process.

4.1 Parameters To Identify Challenges During Land Acquisition

1. Attitude of the people involved in the process

The first parameter is to identify the attitude of the people involved in the land acquisition process. It is determined by taking responsibility for the land acquisition when it was first established and by taking the reaction during the distribution of compensation and whether it is satisfactory for them. It also involves the response while giving the resettlement site.

2. Accepting compensation

The second parameter is to identify the People's ideas while accepting compensation. It involves assessing the willingness of the claimants to receive and decide the compensation amount.

3. Payment process of compensation

The payment process of compensation is assessed in every step. The first is to identify the challenges during certificate verification next is to remember during the payment of delayed interest and whether the amount of compensation is paid in installments.

4. Willingness to pay compensation

The fourth parameter is to identify the challenges from the government side, whether the government officials are giving the compensation amount that the local people demand

5. Availability of land records

The next challenge is to identify whether the land records of the processed lands are to be acquired or perfect. The first is to check for the encumbrance certificate, the patta, and the availability of the site map.

6. Land belongs to forefathers and inheritance

The following challenges when the land belongs to the forefathers or other returns it creates a sentimental value for the land and inhibits the clients from giving it to the government. This also passes disputes among the siblings because of improper inheritance and land partition.

7. Transparency

The overall transparency in the land acquisition process is quantified, and the lag is identified to identify whether the meetings are conducted regularly.

8. Compensation requirement

The amount of compensation requirement from the claimants, whether more or less compensation requirement is quantified

9. Coordination among government bodies

The following parameter is to identify the Coordination among government bodies in response to their queries and during the certificate verification process.

10. Inclusivity

This parameter talks about people's level of involvement in the entire land acquisition process. During the land

acquisition decision, during deciding the compensation amount, while deciding the resettlement site for the claimants.

11. Quality of houses/ land provided for resettlement

This is to identify the infrastructure provision in the resettlement area, whether the land given for resettlement is the same as acquired land, and how far the resettlement site is from the ground developed.

12. Assessment of rate of properties

This is to identify whether the type of land is agriculture, barren, residential, commercial connectivity, and the assets in the ground like the trees, plants, and crops are considered during the land acquisition process.

13. Increased construction/land price

The challenge caused by land acquisition is due to increased land price, building price, and increased cost of crops, trees, and any other standing crops considered during valuation.

4.2 Parameters To Measure Satisfaction In The Land Acquisition Process

1. Mode of distribution of notice

This is to identify the level of satisfaction in the distribution of notice to land acquisition.

2. Timing between each step of la was satisfactory

Parameter to identify the satisfaction with the time given for land survey, time allocated for relocation and resettlement, time allotted for the ownership transfer, and the time gap for receiving compensation

3. Level of involvement in decisions

This parameter is to identify people's satisfaction with the level of participation in land acquisition decisions. This involved input during the land acquisition decision, during the process of deciding compensation, and during choosing the resettlement site areas.

4. Satisfaction with the compensation money

This parameter identifies the satisfaction of people with the compensation money. This also involves the time duration of the composition payment, the mode of payment the easiness of receiving the compensation from the government.

5. Favorable resettlement sites

This parameter was to identify the satisfaction in resettlement sites. The pleasure with the infrastructure of the reset by calculator and also of the resettlement site from the acquired land, the ability of people to create a livelihood in the resettlement side the time taken for making their life in the area.

4.3 Parameters Of Effectiveness Of Land Acquisition

1. Initial land survey

The first parameter is to identify the effectiveness of land acquisition during the initial land survey. This process involves setting boundaries marking level lines, and area calculation.

2. Notice given for the Land Acquisition

This parameter is to identify the effectiveness of notice given during land acquisition. It involves considering whether the information is provided in the local language, local News Paper is updated on the local government website, and whether it will reach the hands of the people before the preliminary survey of the land.

3. Payment of compensation done properly

The effectiveness of the payment of compensation is calculated. It involves answering the time taken for giving the compensation mode of payment. The reason is the transfer of ownership from the climates to the government.

4. Valuation of lands

The effectiveness of land acquisition during the valuation of the land is calculated by considering the type of land used. Considering the kind of land, whether it is Barren agricultural, residential or commercial. It also involves the connectivity of the land acquired. The value of the land is calculated based on the cross trees and any other standing cultivation during valuation.

5. Easiness in procedure to change ownership

These parameters identify the effectiveness of the change in ownership during land acquisition. It involves considering the token availability during request,

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transferring the document verification process, and responding to the terms of the claimant's payment of the registration fee.

6. Assessing the fairness of compensation given.

This parameter is to assess the fairness of the compensation given. The satisfaction is calculated based on whether the compensation is given based on the guideline or market value.

7. Time is given for relocation

This parameter analyses the satisfaction of time given for relocation and resettlement after relocation.

8. Claims from land owners satisfied

Satisfaction of people based on the response of the government officials to the claims of the local people is calculated. It is based on the time of response and the step of actions taken for their claims.

5 Methodology adopted from the literature studies

Airport land acquisition in Coimbatore is the subject of this research paper, which evaluates the efficiency of satisfaction and the difficulties of the land acquisition process. Using the Likert scale to ask individuals questions allows one to determine the efficacy parameters, while the Likert scale and the satisfaction index are used to assess satisfaction. Using the factor system, the parameters for recognizing challenges are revealed, and then the Likert scale is analyzed. The sample size is determined by multiplying the number of parameters by 10. In this case, the number of parameters is 28; hence the overall sample size is 280. The collected sample size is 300.

Sample size calculation (Factor Analysis)

$$\begin{aligned} \text{Number of parameters} * 10 &= 28 * 10 = 280 \\ &= 300 \text{ samples (approx)} \end{aligned}$$

Calculating the range of the like scale involves subtracting the highest value from the lowest value and dividing the difference by the number of available scaling possibilities. This will result in an interval number that can be computed by adding the factors. For example, the result of adding 0.8 to 1 is 1.8. the first range would be from 1 to 1.8. Additionally, the second option is selected, and the disagree to a low degree is calculated between 1.8 and 2.6, and the moderately agree and high range is chosen between 2.61 and 3.4. The consent and high content are selected

between 3.41 and 4.2, and they strongly agree. A very high degree is preferred from between 4.21 and 5.

$$\text{Range} = 5 - 1 = 4$$

$$= 4 / 5 = 0.8$$

The verbal interpretations are rated as extremely high, high, moderately high, low, and extremely low. Extremely high range interval would be 4.21 to 5, high range interval would be 3.41 to 4.2, relatively high range interval would be 2.61 to 3.4, and shallow character range interval would be 1 to 1.8. agree and high range selected between 2.61 and 3.4, agree, the land chosen high ranged between 3.41 and 4.2, and strongly agree and very high degree selected between 4.21 and 5.

Table 1. Scale range representation

Scale	Range	Verbal interpretation
5	4.21-5	Very high
4	3.41-4.2	High
3	2.61-3.4	Moderately high
2	1.81-2.6	Low
1	1-1.8	Very low

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Excessively high or the strongly agree percentage is shown in green. The following level, representing agreement and high standards, is light green. They somewhat agree, and the color yellow indicates moderately high options. Not disagree, and no alternative is offered in brown. The strongly disagree and shallow options are displayed in dark red. These hues are depicted in line and bar graphs for a simple visual representation of the specified data.

6 Ideal Process For Land Acquisition From The Case Studies

The land acquisition process is divided into three significant steps. The first is the land acquisition process itself. The next step is the resettlement action plan and the implementation of the resident Action Plan. The third step would be monitoring the first two steps.

6.1 Land acquisition process

The first step in the land acquisition procedure is for the asking body to submit a request to acquire the land to the acquiring body. Step 2 entails analyzing the social effect assessment, disseminating the notice for the social impact assessment, conducting the actual household survey for the social impact assessment, and determining the final results. The third step is issuing the notice for land acquisition. The notification informs the clients that the level and parcel have been selected for the land purchase development. The announcement also includes the date for acquiring the land and the allotted period to acquire undeveloped land. The household survey is the fourth step. This phase occurs following the social impact assessment. The household survey includes determining the size of the household, the number of people in the home, the type of dwelling, the type kind and to be bought, the job status of the persons, and their economic state. In addition to the total revenue of the home, the land ownership is also verified. The fifth step is a cadastral survey of land records. Included in this is providing the site region, the site where the method of measuring the surveying land was recognized. The land records are also examined, and a complaint certificate is issued if the ownership is verified. The sixth step is community consultation. It comprises developing a community-involving group that is inclusive and includes all client-side, common-side, and stakeholder individuals. The meeting is held at regular intervals to comprehend the needs. People are permitted to provide feedback about the compensation calculation, rehabilitation settlement sites, and even the property purchase procedure. The seventh phase is the creation of a resettlement action plan. The plan is developed and implemented during the preceding steps. The area of the place is also computed based on a region with similar characteristics to the part from which the current living climate is derived. The eighth step is the verification and approval of the location. The paperwork is validated, the people are screened, and the land is approved for the collector's land acquisition process. Step 9 is the forming committee to determine land compensation and appraisal. Composition is typically determined by a specialized group based on their background. It varies depending on the population, the market, and the recommended value. The land's value is also determined by the crop type or the presence of trees.

6.2 Resettlement plan implementation

Step 10 is formulating a committee for the grievance redress. It includes a group of people for the local people so that they can clear their doubts about the land acquisition process and understand the process without any

misunderstanding. Step 11 is the process of distributing the compensation. It must involve the stage-wise distribution. The area allocated for land acquisition should be divided into specific parts, and the people living in These areas should be contributed with their proper compensation. Step12 is the transfer of ownership from the claims to the govern- ment. The government of the people should pay the fee required for ownership transfer are already using land on their side.

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6.3 Monitoring

Step 13 Is reporting the land acquisition process and the current action plan. Step14 is to monitor the effectiveness of the land acquisition process. The after- effects land acquisition process that the significant difficulties in the current situa- tion in the committee has to be formed on the monitoring process and should be a proper group

7 Case Study – Coimbatore Airport Expansion Details

Coimbatore Airport is located 15 kilometers from the city center on Avinashi Road sitra. It serves as a link between the neighboring districts of Erode, Tirupur, Nilgiris, and Coimbatore. The airport is located around kilometers from the city's central Peelamedu. Regarding passenger traffic, Coimbatore International Airport is the second busiest airport in Tamilnadu, after Chennai airport. The Coimbatore Airport is directly connected to nine domestic and three international destinations. It is operated by five Indian carriers and three international carriers. The Prime Minister of India launched the Coimbatore Airport as an international airport on June 6, 2012.

7.1 Existing infrastructure

The existing airport is 420 acres in size and has a single runway. It has a passenger capacity of 2 million, a very high handling capacity, and a cargo handling capacity of 73,00 mtpa. The following are the dimensions of the existing language: The runway has dimensions of 2990 meters by 45 meters and is designated for coded aircraft. It has a 15633 m cube for the integrated passenger terminal building. It features parking aprons for aircraft. The Airside corridor provides a connection to the early known as the and is linked to four aerobridges. The airport can accommodate three million passengers per year and fourteen flights per week. The airport's arrival capacity is 6. The airport's departure capacity is 7. All of these classes can be taken and landed simultaneously, and the runways are structured sothat all tasks can be completed concurrently. The international airport in Coimbatore has direct flights to Singapore, Colombo, and Sharjah. The runway is 9,500 feet in length.

Fig. 2 Existing airport – Coimbatore



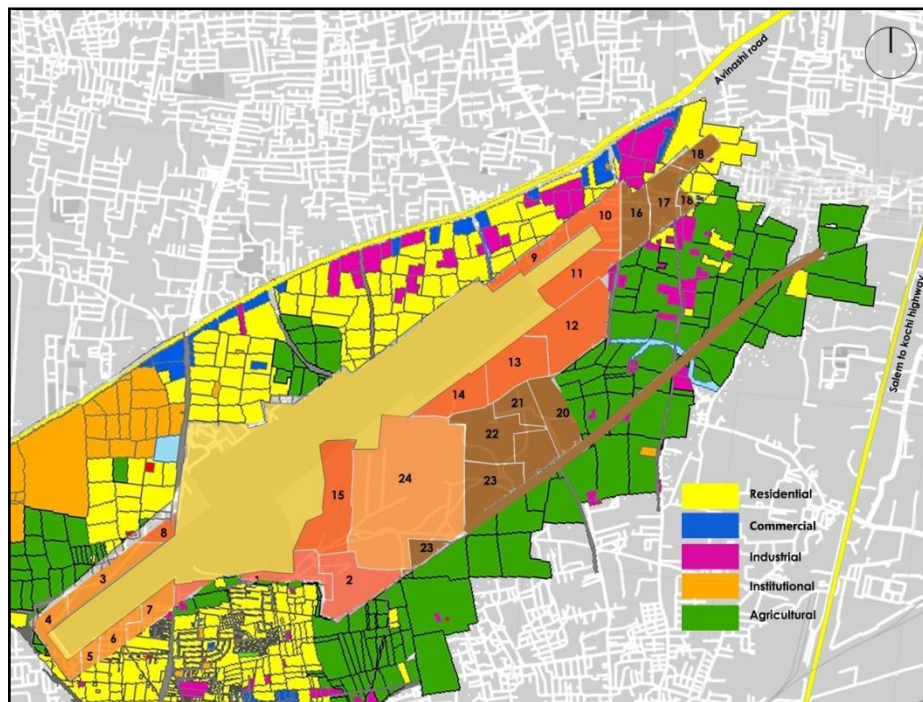


Fig. 3 Land use around the airport

7.2 Infrastructure After Expansion

The proposed infrastructure will include a domestic departure terminal that can accommodate over 600 passengers, an administrative building, and a tower with air traffic control. The present parking lot is increased to accommodate the construction of much for the departure terminal. The length of the proposed runway is stated to be 3,500 meters. The terminal building is 9550 square meters, the unity block is 1400 square meters, and the projected additional security holding space of 920 square meters would bring the overall area to 11870 square meters. The airport's total handling capacity will be 3 million tonnes per year, and the handling capacity for cargo will be 73 thousand tonnes per hour. After the whole enlargement, the built-up area would measure 35614.13 square meters. This court was founded in 1994 and reportedly had no environmental approval. This project proposal will be implemented only once a committee produces an environmental clearance notification. The airport authority of India accepts the requested funds along with the urban local bodies department and the purchasing body for the land acquisition in Coimbatore. The local government obtains land from the civil defense department, and the local populace removes all buildings and physical obstructions before transferring the area to the central government, the airport authority of India. The committee comprises government officials and other individuals for the south land purchase process. The collector special dro, tahsildars, surveyors, and other existing numbers are represented on this committee. The to-be-acquired land area is divided among intoocks in four communities. The parcel of land is located in the traffic department and comprises the four villages of signallerpalayamkalapatti. The village of Singanallur contains two blocks: 1 and 2. Uppilipalayam villages have blocks 3, 4, 5, 6, and 7. Kalapatti has blocks 8, 9, 10, 11, 12, 13, 14 and 15. Irugur village has blocks 16, 17, 18, 19, 20, 21, 22, and 23. The 24th block belongs to the Department of Defense.

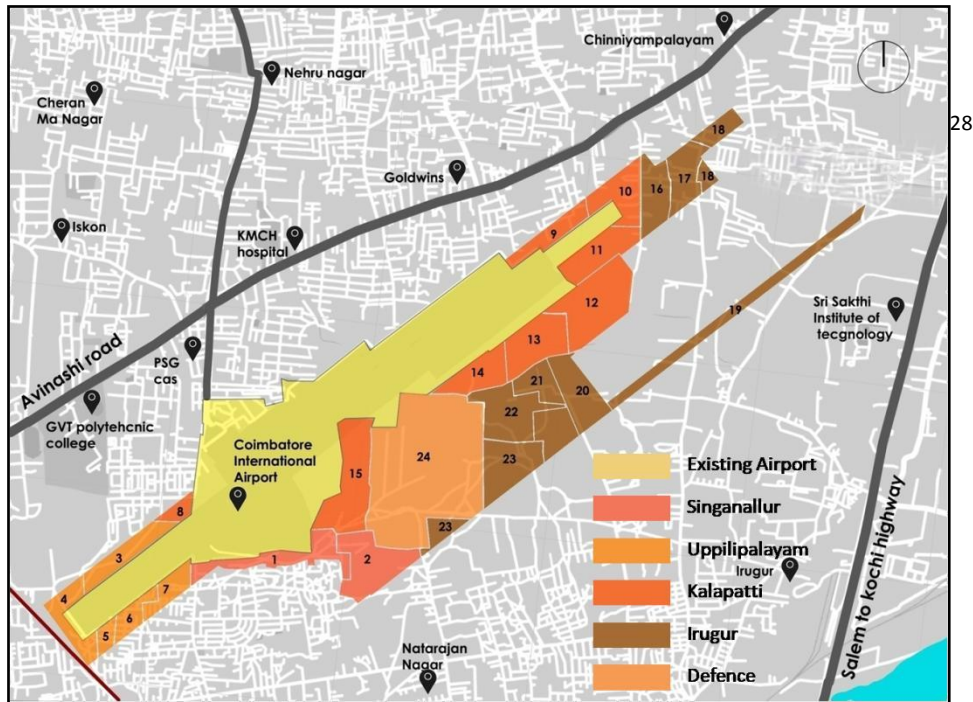


Fig. 4 Acquired land for airport expansion

Table 2. Block names

SI.NO	VILLAGE	BLOCK
1	Singanallur	1,2
2.	Uppilipalayam	3-7
3.	kalapatti	8-5
4.	Irugur	16-23
5.	defense	24

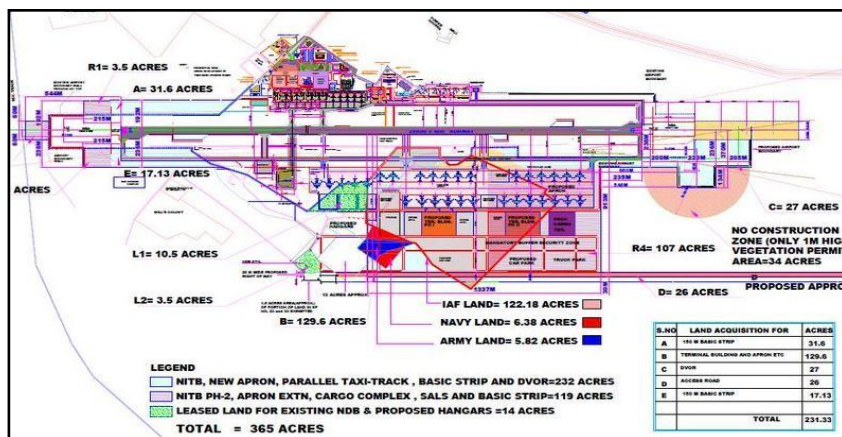


Fig. 5 Airport expansion plan for Coimbatore

8 Research Methodology

8.1 Effectiveness In Land Acquisition

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To understand the effectiveness of the land acquisition process, parameters identified have to be taken. The parameters are taken in the form of a questionnaire, and it is taken to the local people of the area, and the like a scale is analyzed later. From the analysis, the following results have been found. The tables calculated for the average mean and the weighted average for the answers from the 300 people.

Table 3 Rating for effectiveness in land acquisition

Parameters	1	2	3	4	5	Sum	Weighted average	Mean
Initial land survey	8	50	186	44	12	300	60	3
Notice is given for the land acquisition	1	26	26	152	95	300	81	4.5
Valuation of lands	17	106	166	9	2	300	52	3
Assessing the fairness of compensation given	27	107	151	15	0	300	50	2.5
Claims from landowners satisfied	120	150	16	13	1	300	35	1.5
Payment of compensation done properly	7	86	183	16	8	300	55	3.5
Easiness in procedure to change ownership	19	204	59	12	6	300	45	3
Time is given for relocation	19	91	155	32	3	300	54	3

The above table represents the response from the people for different parameters. From the result, it is found that the most focused parameter should be assessing the fairness of the compensation given, which includes the sub-parameters of understanding the guideline value average sale price of the market value. The claims from the land owner should also be satisfied. It involves the sub-parameters like the time of response action taken to the allegations.

8.2 Satisfaction land acquisition

Two methods are used to determine the level of satisfaction with the land acquisition procedure: the Likert scale and the satisfaction index of the people. According to the lenses performed, the two elements that are regarded are favorable resettlement Saitama and poor satisfaction with money composition. The Sab factors include the fact that the Indian site's tree infrastructure is deplorable. The distance of the most recent actual rehabilitation area is unsatisfactory if these abilities to produce a lively resettlement place are insufficient. The money spent on the composition is also wrong, as is the way of payment.

Table 4. Rating for satisfaction in land acquisition

Parameters	1	2	3	4	5	Sum	Weighted average	Mean
Mode of distribution of notice	2	13	87	156	42	300	75	28 3.75
The timing between each step of la was satisfactory	17	119	156	8	0	300	50	3.2
Level of involvement in decisions	20	208	65	0	7	300	44	2.7
Satisfaction with the compensation money	45	220	29	4	2	300	40	2
Favorable resettlement sites	109	179	11	1	0	300	34	1.5

Satisfaction index

The customer satisfaction index is computed by summing the total number of responses in columns 4 and 5 and dividing by the total number of responses multiplied by 100. The satisfaction index of the elements contentment with the composition money and the favorable resettlement site is 12 percent and 4 percent, respectively, which is relatively low; yet, since these two factors have a fair value, they are seen as satisfactory among the population. Where has it been determined that the mode of lotus distribution is 95 percent fair, the timing between each step of land acquisition is 55 percent good, and the level of participation in decision- making is 24 percent satisfactory

Table 5. Satisfaction index in land acquisition

Parameters	Calculations	Satisfaction index
Mode of distribution of notice	$(285/300)*100$	95%
The timing between each step of la was satisfactory	$(164/300)*100$	55%
Level of involvement in decisions	$(72/300)*100$	24%
Satisfaction with the compensation money	$(35/300)*100$	12%
Favorable resettlement sites	$(12/300)*100$	4%

8.3 Challenges of land acquisition

Their link may be reflected in the observed variables. A latent variable is also known as dimension reduction because it reduces the total number of variables in a data collection. The variable into groups of those variables that are nearly co-related to each other variables into groups of those variables in the variable that are related to each other variables. Malicious factor and viewed as a variable impacting several seen variables and factors that influence this variable are observed. Their relationship is novel and a measurable variable. The Likert scale is often used to identify challenges in the land purchase process. Because these difficulties are caused by so many parameters from the literature review, a function must be implemented to account for these parameters. This method is known as factor analysis. This factor analysis simplifies the vast number of variables by employing the KMO test and Bartlett's sphericity test to assess their sphericity.

Keyser Since the result of the mayor skin test to determine the appropriateness of the number of samples gathered from this location is 0.641, which is more significant than 0.5, it is demonstrated that the sample size is highly acceptable. Bartlett's Test of sphericity is used to determine the adequacy of the parameters chosen for the factor analysis. This test is conducted to assess the capacity of these factors, for which not all characteristics or services can be utilized. This test yields a value of 0.000, which represents the significance value. This is less than 0.005; these variables are appropriate for factor analysis. The battle Alpha value determined here is 0.762, the standard value for this test should be between 0.6 and 0.7 as the acquired value is more significant than these two values, and factor analysis is appropriate for maintaining internal consistency. After the preliminary evaluation, 300 samples are utilized to conduct a factor analysis. The results indicate that from the 13 samples, the factor analysis in SPSS software was used to reduce and group the data into three factors. Based on the responses of 300 individuals, the software employs access analysis to minimize these variables. We have categorized these three issues as follows: (1) obstacles from the perspective of the people, (2) challenges from the perspective of the government, and (3) challenges in deciding the distribution of competition.

The table and graph values can be determined using the parameters with Ican values greater than 1.25. For each of the thirteen parameters, there will be thirteen eigenvalues, and the related components will be classified according to the eigenvalues that are bigger than 1.25. Problems from the People's perspective, obstacles from the government's perspective, and challenges in establishing the composition's distribution are categorized according to their respective perspectives and classified into three criteria. The first component has five parameters, the second has three, and the third has five. One of the parameters from the first component is repeated in the second. Therefore, the second parameter is considered for the inheritance of land belonging to the forefather because it has the highest human worth. In addition, a Likert scale analysis is conducted, and the factors with the smallest values are regarded as the most difficult in the land purchase process.

Table 6. Principal component from factor analysis

Principal components	Parameters	Component		
		1	2	3
PC 1 Challenges from people's perspectives	The attitude of the people involved in the process	0.659		
	The land belongs to forefathers and inheritance	0.656	0.422	
	Availability of land records	0.605		
	Inclusivity	0.573		
	Accepting compensation	0.519		
PC2 Challenges from the government's perspective	Transparency		-0.783	
	Coordination among government bodies		-0.718	
	The payment process of compensation		-0.483	
	Quality of houses/ land provided for resettlement			0.707

Principal components	Parameters	Component		
		1	2	3
PC3 Challenge in determining and distributing compensation	Increased construction/land price			0.61128
	Assessment of rate of properties			0.510
	Compensation requirement			0.438
	Willingness to pay compensation			0.406

Table 7. Rating for challenges in land acquisition

Parameters	1	2	3	4	5	Sum	Weighted average	Mean
The attitude of the people dealing with the process	10	118	157	13	2	300	52	3
The land belongs to forefathers and inheritance	210	74	8	6	2	300	28	1.5
Availability of land records	21	33	166	59	21	300	62	2.5
Inclusivity	5	24	98	145	28	300	71	1.5
Accepting compensation	10	120	150	13	7	300	52	2.5
Transparency	238	50	6	3	3	300	26	1.5
Coordination among government bodies	1	8	63	176	52	300	78	3.5
The payment process of compensation	31	211	39	13	6	300	43	3
Quality of houses/ land provided for resettlement	125	152	15	4	4	300	34	3
Increased construction/land price	8	96	181	8	7	300	54	3
Assessment of rate of properties	101	178	16	3	2	300	35	2
Compensation requirement	7	48	193	35	17	300	60	2.5
Willingness to pay compensation	21	33	166	59	21	300	62	1.5

The factors derived from the Likert scale are then assigned to fathers and inheritance. The utility of land records is the second element, followed by an acceptance of competition. From the government's vantage point, transparency is a difficulty. Property valuation is a compensation requirement, and the desire to pay compensation presents obstacles when establishing the distribution of dividends. There should be difficulties from the people's perspective, from the government's perspective, and in defining the distribution of composition.

9 Recommendations

9.1 Social Impact Assessment/ household survey

The factors picked from the Likert scale are then assigned to fathers and inheritance. The utility of land records is the second element, and accepting competition is the first factor. From the government's point of view, transparency poses obstacles. The assessment of property rate is a compensation requirement, and the desire to pay compensation presents obstacles when establishing compensation distribution. Should be problems from the people's standpoint, from the government's perspective, and in defining the composition's distribution.

9.2 Community consultation

As a technique, consultation with the community takes the shape of recommendations. People should be involved in regular checks to maintain the timing of the process so that government authorities can provide precise timings to all parties involved in the process that regulates the time of land acquisition—delineating the specifics of the land with complete information on all parties with interest. The details of the land required for the resettlement area, as well as a synopsis of the resettlement and rehabilitation plan, should be made public. There you are allotted should be shown to the people, and their approval should be obtained before governments sign off. The requesting body must deposit funds before the final notice. The compensation that has not yet been granted to the people should be given before the acquisition procedure so that the people know the exact amount the government is paying for them. The government will make the final decision, and the transparency of this procedure should be accessible to all parties involved.

9.3 Monitoring/reporting

The method of monitoring and reporting should contain the following suggestions. Before the final notice, the demanding body should be required to submit a deposit. Before purchasing land, the composition of Andromeda and the relief and rehabilitation area should be reviewed by the people, and their approval should be e-signed. Report on the claims made by landowners. Before the property acquisition, the grievance committee shall receive the landowners' lawsuit and take the necessary measures. The social effect assessment study should be presented, and the monitoring committee should take the required steps. The land acquisition procedure should be summarised in phases, and government officials must sign up regularly.

9.4 Preparation of resettlement action plan

The following suggestions should be included in the resettlement planning process. First, a preliminary land survey should be conducted to determine the characteristics of the area being bought. The Administration will undertake a door-to-door Census or study as the second phase. This is necessary to comprehend the features of the population and their means of subsistence among those interested in land acquisition. Step three entails preparing and validating the report for the relief and Rehabilitation scheme. Even though the area has changed, this is utilized to restore the people's way of life following the land acquisition. The fourth step is to draught a plan for relief and rehabilitation to be widely publicized. This is done for the sake of the integrity and transparency of the people and stakeholders. The fifth step is a public hearing on the relief and rehabilitation proposals and objections. Representatives of the people should be included in the stakeholders' meeting, and their complaints or opinions should be considered. The sixth phase is the examination and approval of the drought relief and Rehabilitation scheme by the collector and the commissioner.

9.5 Cadastral survey and land records

The following recommendations enhance cadastral surveys and land records. The land records are unavailable for two reasons: first, since the land is inherited and their ancestors have encroached upon it, and second because the land records have been lost. If erroneous land records exist, the government may acquire the land in question. If the land area is a legitimate property and the land records are missing, it is possible to take action. Step one is to file a report and obtain a copy at the local police station to assess the situation. The second step is to submit a copy of the stamp paper to the sub registrar's office. Consideration is given to the registered office where the transaction is required, and documents are presented in the region. Step three is the payment of the committee's fee. Step four involves obtaining duplicate documentation from the authorities. The land's value may decrease with the same paperwork if this is the only acceptable course of action.

9.6 Formulating a committee for grievance redress

The following suggestions might enhance the formulation committee for grievance redress. The first step is to learn the clients from the landowners, analyze the topics, and provide adequate solutions. A committee should be formed to grasp this, and progress should be appropriate. One member from each department involved in the land acquisition process should attend the group committee meeting so that all issues from all sides may be discussed at once and no time is wasted. Monitoring the response time for every inquiry. A person should be assigned to the Grievance Committee for each case to be recorded and reported to a higher official at the time of resolution. Therefore, there should be a time interval between answering each customer's question.

9.7 Attitude and sentimental values

Attitude and sentimental values, such as ancestral land or inheritance, are influenced by individual values. If a person acquired a piece of land from their father as a family heirloom, they might have sentimental attachments to it. However, there is no good recommendation to address this issue. The government's inclination to pay compensation is also an entirely personal value that requests cannot alter. The willingness of the people to accept government compensation is also wholly dependent on the mentality of the people living in the area; no adjustments can be made to fix this issue.

9.8 Time Interval Between the steps of land acquisition

The right to fair compensation for land acquisition relief and Rehabilitation act prescribes the following time intervals between each phase of land acquisition. Publication of the preliminary notification should occur within one year of completing the social impact assessment. The power of officials to conduct a land survey should be exercised within two months of amending land records. Any complaint from the People's side must be submitted within sixty days after the publication of the land acquisition notice. The declaration shall be published within one year following notification. Within two years following the publication of the information, the composition of the aid and rehabilitation should be provided to the populace. How to assume the role should be determined three months after receiving compensation. The relief and rehabilitation area should be delivered within six months of receiving payment, and infrastructure should be completed within eighteen months after receiving compensation.

9.9 Compensation determination and valuation

According to the Right to Fair Compensation Land Acquisition Relief and Rehabilitation Act guidelines, the composition calculator can be executed correctly. In metropolitan areas, the compensation should equal one time the market value plus the value of the assets plus the solatium. In rural areas, the combination is determined by multiplying the asset value by one to two times the asset's market value. The consequences can be valued by adding 100% of the solution plus 12% of the interest from the social impact assessment of the composition position. The interest rate should be 9 percent for the first year after possession is transferred and 15 percent for the subsequent year.

10 Conclusion

This report has examined the existing procedure for land acquisition and its practice in airport extension projects worldwide. based on the findings of a survey, the existing practice of acquisition of Urban land suggests that there is inequity, inconsistency, and a lack of transparency, Lessened confidence among the affected landowners in the acquisition, and skepticism regarding the compensation. Quantity and deviation from worldwide best practices. To guarantee people are not when the government compulsorily seizes land from the poor and adequately protects their right to it, they will be impoverished and have their land rights adequately protected. To purchase urban land for airport development, appropriate practices must be followed. customized and efficiently implemented to place impacted individuals in the position. The report suggests a policy response from the relevant authorities in terms of developing a sustainable procedure for land acquisition exercises with proper stakeholder participation. Also, the government should enhance, significantly the transparency of criteria involved in the land purchase process as a result this will guarantee excellent practices that will increase community satisfaction This is possible by accurate inventory, evaluation, and determination of genuine values for crops and livestock economic trees.

Reference

1. Sihombing, L. B., Soepandji, B. S., Abidin, I. S., & Latief, Y. (2010). The Impact of Land Acquisition Delay in Toll Road Development. Available at SSRN 1653775.
2. Deeyah, C. L., & Akujuru, V. A. (2016). Assessing the effectiveness of the Nigerian Compulsory Acquisition Practice in road infrastructural provision in Rivers State. *Asian journal of social sciences & humanities*, 5(4), 77-88.
3. Deeyah Christopher, L., & Akujuru Victor, A. (2016). Assessing the effectiveness of the nigerian compulsory acquisition practice in road infrastructural provision in rivers state. *Asian Journal of Social Sciences & Humanities* Vol, 5, 4.
4. Quansah, C., Ansah, W. O., & Mensah, R. O. (2020). Effects of large-scale land acquisition on livelihood assets in the Pru East District of Ghana. *Journal of Environment and Earth Science*, 10(2), 72-83.
5. Kuma, S. S., Fabunmi, F. O., & Kemiki, O. A. (2019). Examining the effectiveness and challenges of compulsory land acquisition process in Abuja, Nigeria. *FUTY Journal of the Environment*, 13(2), 1-13.
6. K'akumu, A. O. (1996). The impacts of land acquisition problems on plan/project implementation (Doctoral dissertation, University of Nairobi).
7. Joseph, a. (2019, january 07). Compensation for compulsory land acquisition in nigeria- a case for intergenerational equity.doc
8. Hu, W., Zhang, X., Song, Y., Shen, L., Liu, J., & Zhang, A. (2014). Life satisfaction approach to farmers' compensation for land acquisition: Empirical study from the suburbs of Wuhan City. *Chinese Journal of Population Resources and Environment*, 12(4), 316-323.
9. Ram, A., & Paul, D. P. (2015). Study on construction sequence delay for road infrastructure projects. *IOSR Journal of Mechanical and Civil Engineering*, 12(2), 15- 21.
10. Wang, X. (2013). Measurement of peasants' satisfaction with the compensation for land acquisition in the Chinese Mainland in the last thirty years. *Chinese Studies*, 2(01), 68.
11. Kakulu, I. I. (2008). The assessment of compensation in compulsory acquisition of oil-and gas-bearing lands in the Niger Delta. *Land Reform*, 1, 57-65.
12. Kalu, I. U. (2001). Property valuation and appraisal. Owerri: Bon Publications, 24.
13. Babalola, K. H., & Hull, S. A. (2019). Examining the Land Use Act of 1978 and its effects on tenure security in Nigeria: A case study of Ekiti State, Nigeria. *Potchefstroom Electronic*
14. Nuhu, M. B. (2007). Compulsory acquisition and payment of compensation in Nigeria: A case study of the Federal Capital Territory (FCT) Abuja. In Being a paper presented at the FIG Commission workshop on compulsory purchase and compensation 6th-8th Sept.
15. Nuhu, M. B. (2008). Compulsory Purchase and Payment of Compensation in Nigeria: A Case Study of Federal Capital Territory (FCT) Abuja. *Nordic journal of surveying and real estate research*.
16. Nuhu, M. B., & Aliyu, A. U. (2009). Compulsory acquisition of communal land and compensation issues: the case of Minna metropolis.
17. Ubani, E., Ibeawuchi, E., & Ukwuoma, B. (2015). Development of Strategies for Effective Project Scope Management: A Study of National Integrated Power Projects (NIPP). *European Journal of Academic Essays*, 2(2), 11-20.
18. Deeyah Christopher, L., & Akujuru Victor, A. (2016). Assessing the effectiveness of the nigerian compulsory acquisition practice in road infrastructural provision in rivers state. *Asian Journal of Social Sciences & Humanities* Vol, 5, 4.
19. Akujuru, C. L. D. V. A. Investigating the Sufficiency of Paid Compensation for Compulsory Acquisition in Road Infrastructural Provision in Rivers State.
20. Udoekanem, N. B. (2013). Effect of land policy on compensation for environmental damage caused by Gas flare in the Niger Delta region of Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 6(2), 170-176.
21. Viitanen, K., & Kakulu, I. (2009). Global concerns in compulsory purchase and compensation processes. *International Federation of Surveyors*.
22. MacKay, F. (2005). The draft World Bank Operational Policy 4.10 on Indigenous peoples: progress or more of the same. *Ariz. J. Int'l & Comp. L.*, 22, 65.
23. Guerrero, D. (Ed.). (2003). *A Handbook on the Asian Development Bank: The ADB and Its Operations in Asia and the Pacific Region* (No. 16). Asienstiftung/Asienhaus.
24. Ajoku, C. V. (2000). Compensation assessment and payment. In seminar paper presented at Continuing Professional Development (CPD) workshop organized by Edo State Chapter of Nigeria Institution of Estate Surveyors and Valuers (NIESV).
25. Akujuru, V. A., & Ogbonda, U. J. (2016). Rationalising the Contemporary Issues in the Valuation of Land for Infrastructural Development in Nigeria. *Donnish Journal of Research in Environmental Studies*, 3(1), 1-7.
26. Akinlabi, A. J. (2009). A study of adequacy of compensation for land acquisition under the Land Use Act (Doctoral dissertation, Department of Estate Management, Faculty of Environmental Sciences, NnamdiAzikiwe University, Awka,).
27. Akukwe, T. I., & Ogbodo, C. (2015). Spatial analysis of vulnerability to flooding in Port Harcourt metropolis, Nigeria. *Sage Open*, 5(1), 2158244015575558.