Exploring the Psychological and Emotional Burden of Compulsory Acquisition: A Case Study of New Akrade-Mpakadan, Ghana.

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Abstract

Purpose

To explore the psychological, emotional, and equity implications of compulsory acquisition, evaluate the adequacy of compensation in mitigating those consequences, and assess the sustainability of cash compensation for future generations.

Research Design/Methodology/Approach

A case study approach was operationalised to investigate the experiences of 40 Project Affected Persons (PAPs) four years after a compulsory acquisition project in Ghana's New Akrade-Mpakadan region to construct a railway line. These perspectives were analysed through descriptive statistics and thematic analyses using the NVivo software. Figures and a holistic framework were adopted to report the identified issues.

Findings

Only 25% of PAPs received formal communication before the acquisition, and only 10.3% have been fully compensated four years on. Despite the acquiring body initiating the marking of properties and compensation assessment in 2019, no payments were made until 2021. This induced emotional responses of distress, loss, uncertainty, stress, and sadness, further exacerbated by feelings of hopelessness because there was no platform to voice concerns or pursue arbitration. Although PAPs were only offered compensation in the form of single monetary payments, a third would have preferred re-settlement.

Research Limitations/Implication

By exploring the emotional and psychological effects of compulsory land acquisition, the study adds a new dimension to understanding its consequences. This may spark more interest, debate, and discourse among researchers and policymakers and lead to the creation or enhancement of existing policy and legal measures to address the needs of PAPs in compulsory acquisition projects in developing countries.

Originality/value

The financial consequences of eminent domain are well-documented, but this study explored the practice's psychological, emotional, and equity implications under weak regulatory frameworks. The adequacy of single lump-sum compensations was also explored to highlight preferred alternatives to ensure fairness for generations unborn.

Keywords: compulsory acquisition; compulsory purchase; eminent domain; compensation; consequences; financial; emotional; case study

1. Introduction

Compulsory acquisition is the inherent power of the state to acquire private land rights for public use without the willing consent of its owner or occupant (Keith et al., 2008; Yacim et al., 2022). Without this inherent right of the state, the availability of land and its adequacy for socio-economic and infrastructure development to meet the needs of the growing population will be problematic (Yacim et al., 2022). In Ghana, the situation is no different, with the state owning about 20% of lands in Ghana and jointly owning 2% with customary owners, the remaining 78% is solely owned by stools, skins, clans, and families and is transferred from one generation to the other (Adu-Gyamfi, 2012). Article 20 (2) of the 1992 constitution of the Republic of Ghana and the Contemporary Land Act 2020 (Act 1036), which consolidates all previous acts on land into one codified document, gives the state and identified statutory bodies the right to compulsorily acquire lands that fall within the 78% privately owned for infrastructural development and promptly pay compensation that is fair and adequate to the affected landowners (Constitution of the Republic of Ghana, 1992). Several studies suggest that while the state often exercises the constitutional right to acquire these lands compulsorily, it does not fully honour the constitutional responsibility of fair, prompt and adequate compensation (Adu-Gyamfi, 2012; Akrofi & Whittal, 2013; Asiama, 2015; Ayitey et al., 2011).

According to Kotey (2002) and Larbi (2008), there are controversies about compulsory acquisitions of lands in the developing world because governments in these parts of the world often exercise this right in manners that lead to little or no compensation, thus undermining the tenure security to the private owners. While compulsory acquisition ensures a balance between private property rights while upholding the need for land for public reasons (Adu-Gyamfi, 2012), the processes and proceedings leading to the land acquisition do not make the landowners any better (Chazireni & Chigonda, 2018; Mavhura, 2020; Vengesai & Schmidt, 2018). It is worth mentioning that, at the centre of every compulsory land acquisition between the state and private individuals lies the payment of compensation for the loss of land (Alemu, 2015; Ambaye, 2012; Nikiema, 2013). It is a form of settlement in the form of pecuniary consideration, resettlement or other palliative forms by the state to restore private landowners to the state they were before the compulsory acquisition (Yacim et al., 2022). While compulsory acquisitions often result in the loss of both economic and non-economic resources, most statutory compensations have often focused on economic resources, and even that is often inadequate (Vengesai & Schmidt, 2018). In general terms, there is a body of literature which suggests that existing compensatory arrangements in most parts of the world are inadequate and unfavourable to the landowners (Alemu, 2015; Ambaye, 2012; Appau et al., 2020; Chimbetete, 2016; Nikiema, 2013; Rao, 2019). Literature on compensation for compulsory land acquisition is extensive. However, the psychological and emotional impact on the project-affected persons (PAPs) is less explored. The inherent effect of compulsory acquisition is forced displacement. Meanwhile, the paucity of knowledge on the psychological impact of forced displacement is often overlooked by scholars, policymakers, and statutory bodies with the authority to carry out eminent domain, although this can be more detrimental than the actual relocation. A study by Hwang et al. (2007) suggests that forced relocation is a stressful process that begins in mind before the physical relocation, as people anticipate the loss of their home, community, and identity and adaptation to new environments. Safe to say, involuntary relocation can potentially tear up a close-knit social network. Steinglass et al. (1985) found that psychological distress and dysfunction can result from a simple notification of relocation (cited in O'Sullivan and Handal, 1988).

The study sought to explore psychological, emotional and equity implications as a consequence of compulsory land acquisition on project-affected persons, evaluate the adequacy of compensation in

mitigating those consequences, and assess the sustainability of cash compensation for future generations, using a recent acquisition in Ghana's New Akrade Mpadakan area for the construction of the Ghana-Burkina-Faso railway line as a case study.

2. Literature Review

2.1. Overview of Compulsory Land Acquisition in Developing Countries

Compulsory land acquisition processes are ubiquitous in developing countries (Ding, 2007; W. O. Larbi et al., 2004; Le & Nguyen, 2020). Unlike in most developed countries where compulsory acquisition as a method of land acquisition for development by governments is used as the last resort (Holtslag-Broekhof et al., 2018; Šumrada et al., 2013), in most developing countries the appropriation of land by government has been established as the first option for consideration (Adigeh & Abebe, 2023; King & Sumbo, 2015; Kuma et al., 2019; W. O. Larbi et al., 2004; Olayiwola, 2023; Shukla & Tiwari, 2022). Across the literature, the compulsory acquisition of land is recognised as a means for governments to make land available for public use, address economic and social inefficiencies in land use, and further the broader objectives of social justice and equity in the land sector through the redistribution of land (Akrofi & Whittal, 2013; Chan, 2003; Ding, 2007; Huang, 2019; W. O. Larbi et al., 2004; Lindsay, 2012; Olaniyi & Ademola, 2020; Van Straalen & Korthals Altes, 2014). However, this has generated a great deal of contention as it often gives rise to conflicts and injustices in society that have the potential to engender long-term threats to stability and sustainable development (Dheressa, 2013; Ding, 2007; Edaku et al., 2023; Jackson, 2011; Kombe, 2010; Lindsay, 2012; Olaniyi & Ademola, 2020; Van Straalen & Korthals Altes, 2014).

Despite the development motivations for the compulsory acquisition of land, the practice has been riddled with complaints, especially in African countries (Ablo & Asamoah, 2018; Akrofi & Whittal, 2013; Makupa & Alananga, 2018). Although land acquisition regulations have undergone significant improvement due to persistent criticisms by researchers (Akrofi & Whittal, 2013; Cernea, 2008; Kombe, 2010; W. O. Larbi et al., 2004) and experts in the international development sector (Keith et al., 2008), ineffective implementation strategies frequently fail to prevent or significantly lessen the adverse effects on displaced people (Amponsah et al., 2023; Dankani & Halidu, 2017; De Maria et al., 2023; Edaku et al., 2023; Shukla & Tiwari, 2022; Ty et al., 2013). De Maria et al. (2023) explicate that in spite of the existence of a legal framework that outlines the right to fair compensation and the extensive literature on domestic and international land deals, no theory has yet been developed to allow for a specific analysis of the economics of fair compensation in large-scale land acquisitions (LSLAs), limiting an understanding of the underlying factors that determine the success or failure of this crucial legal protection mechanism. Further, De Maria et al. (2023) reveal that the right to consent to compulsory acquisition is indistinguishably connected to the right to reject large-scale land acquisitions. This is because local populations will be offered and be willing to accept inadequate compensation unless opposition to the deal can be done at no cost; creating room for strategic behaviours that take advantage of power disparities and discretionary processes to operate, and thereby weakening the fair compensation right of dispossessed groups (De Maria et al., 2023). Talema and Nigusie (2023) also foreground that the right of citizens to land as part of the right to developed property is not recognised by the law that addresses land property of the state and the people, and this constitutes most of the issues concerning the fair and just payment of compensation.

Another argument presented in the literature is the inaptness for which land is appropriated. Expropriation has become a less transparent process that is subject to the wishes of municipal officials because of the expanded definition of "public purpose," which goes against the international

expropriation principle that recognises expropriation to be for public purposes only and to be carried out in a non-discriminatory manner (Akrofi & Whittal, 2013; Mangioni, 2010; Talema & Nigusie, 2023). For instance, Mangioni's (2010) inquiry into the emerging public uses for which land is acquired revealed a perception of abuse of government land acquisition authorities for site assembly and land sales for purposes other than the supply of conventional public infrastructure. Compulsory land acquisition is, therefore, viewed as a threat to property rights and land ownership (Mangioni, 2010).

Thus, from the literature, the general outlook of compulsory land acquisition is controversial, illustrated by the conflicting arguments put forward by researchers on the phenomenon and its use as an instrument for development.

2.2. Socio-Economic Impact of Compulsory Acquisitions on Project-Affected Persons

The review of the literature indicates that compulsory land acquisitions have a considerable impact on dispossessed persons. The deleterious impacts of compulsory land acquisitions on the livelihoods of people in project-affected areas have been underscored in the literature (Abdallah et al., 2023; Ablo & Asamoah, 2018; Edaku et al., 2023; Ghatak et al., 2013; Kusiluka et al., 2011; W. O. Larbi et al., 2004; Syagga & Olima, 1996). The most at risk are the poor rural populations with customary tenure systems, such as indigenous ethnic minority groups, pastoralists, and peasants, who have the greatest need for land (Moreda, 2017). Regarding workers in the affected area, an inconsequential impact on average was revealed in the case of Singur, West Bengal; however, agricultural workers were found to be the most impacted group by land acquisition (Ghatak et al., 2013). Talema and Nigusie (2023) also evinced a significant decline in the income level of both partially and fully affected persons after expropriation, albeit fully expropriated and relocated PAPs bear the brunt of the impact. Land acquisition considerably lowered the income of owner-cultivator and tenant households even though efforts were made to boost income through other livelihoods (Ghatak et al., 2013). Ghatak et al. (2013) expound that under-compensation's negative wealth consequences significantly reduced household accumulation of consumer durables but had no discernible effects on other assets.

Also, in a study analysing the impact of compulsory acquisition of farmlands on Vietnam's rural households, Le and Nguyen (2020) discovered that a 10% rise in the proportion of land expropriated caused a 2.2% decline in household welfare represented by food expenditure. Le and Nguyen (2020) elucidate that the drop in agricultural revenue and the incapacity to participate in the non-agricultural labour market are responsible for decreased household welfare. Le and Nguyen (2020) further revealed that families belonging to racial and ethnic minorities are particularly susceptible, and it could take up to 10 years for the negative welfare effect to diminish (Le & Nguyen, 2020). Olaniyi and Ademola (2020) confirm that there is an adverse impact on the well-being of the dispossessed community as they were negatively affected by land acquisitions. Abdallah et al. (2023) further posit that large-scale land acquisitions by domestic and international organisations, even with a high perception of tenure stability, discourage investment in all levels of land- and yield-improving measures.

Overall, the socio-economic impact of compulsory land acquisitions has received much attention from researchers, and there is consensus in the literature concerning the negative impact on the source of livelihood of project-affected persons. Most legal frameworks governing compulsory acquisition provide for compensation in two forms: monetary, usually in the form of lump sum payments (Lindsay, 2012) or non-monetary, such as resettlement or housing (Ghatak et al., 2013; Patil et al., 2020), though the review indicates monetary compensation is predominant. The extant literature suggests that compensation payment represents a recurring issue for affected persons, although legal provisions

are present to guide the process. These recurring issues include the inadequacy of compensation (Keith et al., 2008; Nikiema, 2013), delays in the payment of compensation (Ahmad et al., 2022), and the absence of a proper framework (Amponsah et al., 2023; Olanrele et al., 2017; Rao et al., 2017; Shukla & Tiwari, 2022). These arguments showing the long-term socio-economic impact of eminent domain on vulnerable rural populations reinforce the need for a more nuanced approach to recognise their interests and adequately compensate affected persons, both in the short- and long-term.

2.3. Psychological and Emotional Impact of Compulsory Acquisitions on Project-Affected Persons

In addition to these financial effects associated with eminent domain, there are indications of deeper psychological and emotional issues facing affected persons. Botchwey (2021) noted a high level of distrust among affected persons and tension associated with compulsory acquisition and fair compensation payment. Ahmad et al. (2022) demonstrated that psychological effects, such as tension and anxiety, mainly resulted from uncertainty surrounding fair compensation and resettlement post-displacement. Hwang et al. (2007) illustrated that psychological impacts are significant among displaced people and resettlement communities, and this is not subsided by the resources available to displaced persons. Displacement, food insecurity and the breakdown of social and cultural bonds also represent significant areas of concern (Davis & Thornley, 2010; Ogwang & Vanclay, 2019). Although these impacts are not directly factored into compensation packages, the evidence of their effect on PAPs is obvious, forming the core of deep-seated dissatisfaction towards compulsory acquisitions and the inevitable displacement that follows (Botchwey, 2021; Hwang et al., 2007).

The infamous inadequate payment of compensation for expropriated lands engenders dissatisfaction among project-affected persons (PAPs); consequently, the dissatisfaction of dispossessed persons has received attention globally (Ndjovu, 2016). Dissatisfaction indicates the degree to which projectaffected persons experienced uncompensated losses (Rowan-Robinson & Hutchison, 1995). Ndjovu (2016) highlights that the most significant sources of unhappiness were insufficient compensations, noncompliance with the law, unfavourable resettlement practises, use of force and undue pressure by acquiring authorities to displace PAPs and lack of PAPs' involvement in the acquisition processes. Olayiwola (2023), in an examination of claimants' satisfaction with the land acquisition process, brought to light issues that caused dissatisfaction with the land acquisition process, including difficulty in locating claimants, delays in compensation payments, inaccurate asset counts, sentimental value attached to land, government policies, a refusal to pay claimants, a lack of government transparency, official corruption, a lack of cooperation on the part of the claimants, a low assessment rate for crops and trees, the introduction of fictitious claimants, and claimants' refusal to accept compensation. Rao (2019) reiterated that ineffective representation of objectors due to the high personal cost associated with representation in a public enquiry, time delays, information asymmetries, and ineffective grievance management are among the fifteen identified significant procedural flaws in the compulsory land acquisition process. Land-related issues are also exacerbated by the low level of education and ignorance of the law regarding compulsory land acquisition among project-affected persons (Kusiluka et al., 2011). King and Sumbo (2015) point out that PAPs often lacked comprehension of the issues of compulsory acquisition and compensation payment requirements, which obliged them to submit claims for compensation payment. Also, Ty et al. (2013) expound that the leading cause of the lack of awareness of the benefits of displaced people during compulsory land acquisition is the close relationship between the local government and the investor, which is regarded as an "interest group".

The overall picture emerging from a review of the extant literature suggests that in addition to financial effects, the expropriation of land can induce often-ignored psychological and emotional

responses in affected persons. Notwithstanding the pervasiveness of compulsory land acquisition processes, especially in Africa, there is limited research on its reverberations on affected persons and communities. Likewise, in Ghana, Larbi et al. (2004) note that compulsory land acquisition as the means of state access to land for development dates back to colonial times, with recent years witnessing an upsurge in large-scale land acquisition (Ahmed et al., 2018). Nonetheless, the ramifications of compulsory acquisition have been under-studied. Most of the existing studies focus on analysing the adequacy of compensation payments and the procedure for compensation assessment, with precious little research considering the consequences of compulsory acquisition on the lives of project-affected persons and the intergenerational implications on affected people/groups. Additionally, the psychological impacts of compulsory land acquisitions are rarely studied; in particular, the review found no extant studies assessing the psychological effect of compulsory land acquisition on dispossessed persons in the African context. Thus, this study will attempt to fill these gaps in the literature by exploring the experiences of affected persons through a case study.

3. Project Description and Case Study Area

This section provides an overview of the case study area and a detailed description of the compulsory acquisition project. The project description is essential for understanding the study's scope, objectives, and methodology, as well as contextualising the discussion on the effects of the acquisition on previous owners.

3.1 Project Description

The Tema Port-Mpakadan (Akosombo) railway project is part of the broader Ghana-Burkina Railway interconnectivity project, established in December 2017 to enhance connectivity between the two countries. By facilitating the efficient transportation of goods and people between Ghana and Burkina Faso, this project seeks to promote regional trade and economic development. The Tema Port-Mpakadan (Akosombo) railway project is a crucial component of this initiative and represents a significant step forward in achieving its objectives. The interconnectivity railway line is approximately 97.6 kilometres long and stretches from Tema to Mpakadan in the Volta region. The railway project covers 133ft (40.5 metres) wide, and the affected person's properties are within this range. Upon completion, the railway line will link the Volta Lake as part of a multi-modal transport system to facilitate the movement of people and containerised cargo to and from the Tema Port (Ghana Ministry of Railways, 2019).

The Executive Instrument (E.I. 23) granting the State's powers of compulsory purchase to the acquiring authority came into force on the 16th of January 2019 (Daily Graphic, 2019). The process resulted in approximately 148.21 hectares (366.23 acres) of land acquisition between Asuogyaman and North Tongo District. Though the executive instrument was established in 2019 (actual acquisition), the affected properties were marked in 2018.

3.2. Case Study Area

The interconnectivity railway (Site for Single Standard Gauge Railway Line) project affects the land mass between Ghana and Burkina. The project spans from Tema to Mpakadan in the Volta Region. The railway project is 97.6 kilometres long and 133 feet wide (40.5 metres). The State compulsorily acquired approximately 148.21 hectares (366.23 acres) of land to facilitate the project. Affected communities include Akrade, Senchi, Asuuoaboaba, Abortia-Dafor, Konta, Adome, Juapong, Apeguso, Anyansu, and Mpakadan in the Eastern and Volta regions. The affected area is sparsely populated, with a recent uptick of new development due to the proposed railway project. Prevailing land uses

include residential and agricultural. The communities are peri-urban with considerably low land values to receive urban dwellers who want to live at the periphery. The communities have access to electricity, water and telephone infrastructure. The study extensively covers the Akrade and Senchi communities affected by the compulsory acquisition exercise. These two communities were purposively selected because they have the most project-affected persons or properties within the corridor.

4. Research Design and Methodology

This study adopted a case study research design to investigate the psychological, emotional and equity implications as consequences of compulsory acquisition in the affected communities of Senchi and New Akrade following a typically drawn-out acquisition process in Ghana, characterised by delays, uncertainty, and inconsistent payment structures (Akrofi & Whittal, 2013). Marczyk et al. (2005) argue that the case study approach offers a unique opportunity to comprehensively investigate a specific group or population, which is ideal for exploring complex and ongoing issues with significant sociocultural implications. By employing this approach, researchers can delve deeply into the underlying factors and dynamics that shape the group's behaviour, attitudes, and experiences, providing a more nuanced understanding of the issue. Yin (2009) affirms that a case study research design allows the researcher to investigate a past or ongoing issue in a real-world context. Although case studies lack the experimental control of other research approaches, they offer naturalistic and fluid methods to describe rare events that may contradict existing beliefs (Marczyk et al., 2005). This research approach was operationalised in three stages to answer the research questions: the prefieldwork stage, the fieldwork stage, and the post-fieldwork stage. Details of these stages are presented in Figure 2.

Pre-Fieldwork Stage

Identification of research problem
Defining research objectives
Development of assessment framework
Selection of study areas
Design of data collection instruments

Fieldwork Stage

Primary Data Collection

Preliminary field surveys Semi-structured interviews (PAPs)

Secondary Data Collection

Spatial imagery (Google Earth)
Statutes and laws
Project data (Executive Instrument 23)
Compensation valuation records

Post-Fieldwork Stage

Transcription and Coding
Data Analysis (SPSS, NVivo, MS Excel)
Assessment of Consequences (Dimensions)
Developing Framework
Assessment of Compensation Sufficiency

Source(s): Figure by Authors (2022)

Figure 1: Flowchart of Research Approach

4.1. Data Description

Kumar (2011) recommends adopting multiple data sources to present comprehensive results in a case study. As such, we examined both secondary and primary data sources. Our secondary data sources included spatial imagery, statutes, project data, and compensation valuation records. Meanwhile, we gathered primary data through field surveys and semi-structured interviews with the affected community members. Through this comprehensive approach, we aimed to investigate the impact of compulsory acquisition on affected communities in Ghana and identify the existing limitations of the current compensation strategy. Although the compulsory acquisition project affected many communities in the Eastern and Volta Regions, our preliminary field surveys indicated that New Akrade and Senchi represented a significant proportion of PAPs. Therefore, these two communities were adopted as case studies for the study.

The primary respondents, PAPs, were chosen through non-probability purposive sampling following initial enquiries regarding their willingness to participate in the research. The records of the acquiring body indicated that the project impacted 106 homeowners, farm proprietors and other landowners in New Akrade and Senchi. Due to the sensitive nature of the psychological and emotional issues caused by the compulsory acquisitions of their property (Ahmad et al., 2022; Hwang et al., 2007), some PAPs understandably declined to participate. Saunders et al. (2007) noted significant difficulties in attempts to access respondents for studies on sensitive topics, suggesting that participants are less likely to cooperate if the topic of interest evokes emotions of distress. Given the strained relations between affected individuals and authorities during the study period, marked by unresolved compensation issues and perceived inequitable treatment, only 40 PAPs consented to share their experiences. This final sample reflects a 38% response rate and is reasonably representative of the affected community in terms of age, gender, and property types. Table 1 presents a profile of the final sample.

Table 1: Profile of Respondents

Item	Number	Percentage
	(n = 40)	(%)
Gender		
Male	14	35.0%
Female	26	65.0%
Age		
21 - 30	1	2.5%
31 - 40	2	5.0%
41 - 50	10	25.0%
51 - 60	19	47.5%
Above 60	8	20.0%
Community		
New Akrade	17	42.5%
Senchi	23	57.5%
Property affected		
Bare Land	10	25.0%
Residential	25	62.5%
Commercial	3	7.5%
Farmland	2	5.0%

Source(s): Table by Authors (2022)

With the understanding that the issues of property loss, displacement, and delayed payments could potentially discomfort our respondents, several ethical considerations were made to maintain the dignity of PAPs. According to Saunders et al. (2007), ethical considerations are a crucial component of research to limit the potential of material disadvantage and physical and emotional harm to prospective respondents. Among these considerations, respondents were assured of the anonymity and confidentiality of their responses. Additionally, we sought consent before any discussions began, and respondents were always accessible to end the interview without justification.

4.2 Analysis Techniques

A range of analysis techniques was adopted to present comprehensive insights on the consequences of compulsory acquisition in the specific case of the New Akrade-Senchi acquisition in 2019. Responses were transcribed and coded for analysis following semi-structured interviews with the PAPs of both communities.

Kumar (2011) proposed a 4-step process to identify recurring themes in a qualitative study – *identification of the main themes, assigning codes, classifying responses under the main themes,* and *integrating these themes*. We used the NVivo software for thematic analyses to identify the consequences of compulsory acquisition and highlight all relevant dimensions of this issue. These results were then presented in a framework for a more holistic appraisal of compulsory acquisition's financial and non-monetary impacts. Thematic analysis is particularly appropriate in this study because it minimises researcher bias associated with case studies, facilitates assessment of the interconnection between themes, and produces easily interpretable results (Vaismoradi et al., 2013; Walters, 2016). Thematic analyses were then conducted to identify respondents' thought patterns and themes regarding the emotional implications of the acquisition process. Using the NVivo software, all responses were analysed by making nodes for all keywords reflecting the respondents' emotional reactions to the loss of property and lands. These initial themes were then extensively reviewed and assembled to establish discrete themes.

We conducted rigorous coding in our study, creating nodes for all references within the final dataset. Our research objectives and conceptual framework guided these initial nodes, representing essential ideas, concepts, and experiences. Subsequently, we thoroughly searched the transcribed text to identify prominent and recurring codes. This process allowed us to refine and validate our initial coding, ensuring our analysis was comprehensive and accurate. The nodes were then reviewed and refined to establish a thorough understanding of all the consequences of compulsory acquisition in the project area. The information was presented in charts and graphs for easy assimilation to make differences more straightforward.

5. Results and Discussion

5.1 The Experiences of PAPs during the Acquisition Process

The initial part of the interviews aimed to gain insights into the overall experience of the PAPs in both communities regarding the compulsory acquisition process. Respondents were asked to describe their experiences with no interruption from the researcher to limit bias. Following their recollections, we presented the following prompts to better capture their experiences for further analysis – notice of earmarking, the timing of assessment, and disturbances associated with the overall acquisition process.

We investigated whether PAPs were adequately informed about the marking system before the public announcements made by the acquiring authority. To accomplish this, we asked the respondents

whether they had received any information before the announcement. The responses were analysed to determine the level of awareness among the PAPs regarding the marking system. Our findings suggest that only 25% of PAPs received prior notification of the marking before the acquiring authority went public. Considering the level of attachment Ghanaians have towards lands and landed property; this oversight only increases the distress of the affected communities (Tuan & Hegedus, 2022). Some respondents also highlighted other associated issues linked to the initial failure of acquiring authorities to inform them, such as the speculative activities of investors and the rapid decline of their asset values (Akrofi & Whittal, 2013).

Further, although the official gazette was published in February 2019, 75% of respondents knew their properties were marked for demolition in 2018. While this highlights the more significant issues of slow bureaucratic processes in Ghana, PAPs were left in limbo. During that time, their assets declined in value, and they could not pursue any meaningful and long-term interests in business projects (Dires et al., 2021). These events contrast the provisions of the Constitution, which stipulate fair and adequate compensation. The extent of these issues is depicted, when a Guest House in Senchi issued a letter to the Ghana Revenue Authority for a cessation of tax filing due to non-existent business turnover and payment delays.

5.2 The Consequences of Compulsory Acquisition

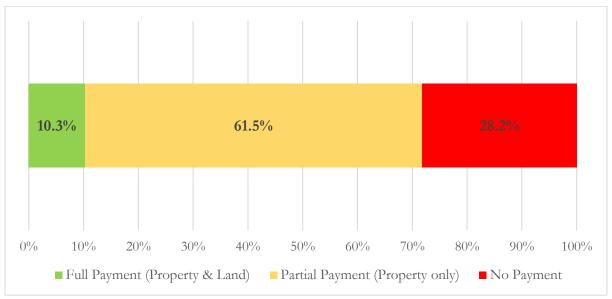
The extant literature provides evidence of the consequences of compulsory acquisition or eminent domain as it is known in other jurisdictions (Olanrele et al., 2017). Most respondents (96%) argue that the marking caused them some level of disturbance. The study shows that 17 PAPs, representing 42.5%, lost their homes due to the compulsory acquisition. Based on our findings, the most common impacts are financial (87.5%) and emotional distress (70%), loss of home (42.5%), disruption of investment intention (25%), relocation issues (22.5%), and loss of livelihood (10%), in descending order of occurrence. Financial implications appear to be the most immediate concern for those affected, with many struggling due to the undervaluation of their assets and delayed payments (Tuan & Hegedus, 2022). Furthermore, the process can cause significant emotional distress as people are uprooted from their homes and communities, often with little warning or preparation (Ambaye, 2012). Loss of home and disruption of investment plans also rank high on the list of impacts, while relocation issues and loss of livelihood can compound the situation, exacerbating the stress and hardship experienced by the affected individuals and communities (Akrofi & Whittal, 2013; Egbenta & Falana, 2018).

5.2.1 Financial Consequences

The statutes guiding compulsory acquisition in Ghana explicitly stipulate fair, adequate and prompt compensation to mitigate the irreplaceable losses suffered in the aftermath of such exercise (Akrofi & Whittal, 2013). If well-executed, PAPs *should* only suffer minimal losses, if any (Ambaye, 2012; Olanrele et al., 2017). To establish the validity of these legal provisions in our case study, we investigated the financial complications PAPs had to navigate in the aftermath of the compulsory acquisition. Our inquiry regarding whether respondents' properties were assessed revealed that 33 out of 40 participants were aware of value assessments for their properties. Representing 82.5%, this indicates that the acquiring bodies attempted to limit the losses of PAPs. However, further probes suggested that 60% were dissatisfied with the assessment process, primarily due to financial concerns and poor communication on the part of the assessment bodies. During our discussions, PAPs

expressed varying degree of dissatisfaction with the acquisition process, citing various reasons for their discontentment, including communication issues, payment delays, and unmet expectations. The common concerns are delayed payment (40%), non-disclosure of compensation amount (16%), incomplete assessment (16%), assessment done in my absence (12%), lack of understanding of assessment process (8%) and no financial talks yet (4%), in descending order of occurrence. Additionally, 78.8% of respondents were dissatisfied with the overall assessment due to these reasons.

Delayed payments were the most prevalent reason for dissatisfaction, a finding that aligns with the records retrieved from the acquiring body, and the existing literature (Akrofi & Whittal, 2013). These records indicate that the railway authority only started issuing cheques in March 2021, *three years* after the compulsory acquisition process began. This shows a significant departure from the prompt payment of compensation enshrined in the laws and statutes governing the State's eminent domain powers. At the time of our interviews, nearly four years after the commencement of the acquisition process, only 10.3% had received full payment for both land and property. As represented in Figure 6, almost 30% had received no compensation payment or relocation packages.



Source(s): Figure by Authors (2022)

Figure 2: Status of Compensation Payments (4 Years after Commencement)

5.2.2 Emotional Consequences

Our findings indicate that a significant proportion of the respondents, representing 70% (n=28), reported experiencing emotional instability following the compulsory land acquisition for the railway interconnectivity project. These results suggest that the compulsory land acquisition process has significant emotional impacts on the affected individuals, which should be taken into account by relevant authorities and stakeholders (Egbenta & Falana, 2018; Rao, 2019). Further prompts for more detail on the emotional toll of the acquisition process indicated that stress, trauma, and feelings of loss were the most prevalent concerns of the PAPs.

Through thematic analyses, we generated ten initial nodes for further analysis based on the 28 respondents who reported an undesirable emotional response to the acquisition process. These initial themes were further categorised into 6 themes, each representing a distinct emotional response to the acquisition process, the shortcomings of the acquiring authority and the significant changes to the lives of PAPs. These core themes from our analyses are *feelings of loss, disappointment, uncertainty, stress and trauma, sadness, and helplessness.* All 11 initial codes, the six final themes and the number of entries is presented in Table 2.

Table 2: Overview of Emotional Responses and Initial Nodes

Emotional Response	Initial Nodes	Number of Entries
Feelings of loss	Loss of home	18
	Loss of community	10
	Loss of livelihood	7
Disappointment	Disappointment (payment)	14
Uncertainty	In limbo (no full payment)	8
	Uncertainty about the future	4
Stress and Trauma	Stress	5
	Trauma	2
Sadness	Upset and Anger	7
Helplessness	Helplessness	1

Source(s): Table by Authors (2022)

Feelings of loss are the most common emotional response of PAPs, further categorised into loss of home, loss of community, and loss of livelihood. The prevalence of these responses aligns with the literature on the consequences of compulsory acquisition, more so communities that attach more importance to property than merely economic (Rao, 2019). Regarding loss of home, PAPs spoke of the sudden displacement and the added complication of "having to find replacements in their old age". Given the profile of respondents (67.5% aged 51 or older), this is a perfectly viable response to losing their homes. Concerns about neighbours and relocation demands also represent the loss of community (Dires et al., 2021). Respondents also expressed concerns about losing their business and unfairly low or delayed compensation packages. The nuanced dimensions of losing one's home, community, and livelihood paint a comprehensive picture of the emotional landscape experienced by PAPs, particularly within the context of their age, social bonds, and economic dependencies (Dires et al., 2021).

Disappointment with payment mainly reflected discontentment with the amount, timing, and fairness of the assessed compensation packages. Uncertainty represents two-fold concerns about preacquisition events and post-acquisition distress over the future. PAPs cited uncertainty regarding delayed payments, suspense over the amounts assessed, and general doubt about the authenticity of the assessment process. A few respondents also expressed concerns over the future, including "I don't know where to go from here", a sentiment that is not aided by the limited interaction and communication from the acquiring authority (Tuan & Hegedus, 2022). Despite the legal provisions governing the exercise of eminent domain, affected persons were left disappointed with the

promptness and adequacy of compensation (Akrofi & Whittal, 2013). These experiences reaffirm previous findings that highlight the limitations of the existing legal framework, and the need for renewed efforts to ensure fair treatment of PAPs following compulsory acquisition of their lands and properties (Akrofi & Whittal, 2013; Larbi, 2008; Larbi et al., 2004).

The remaining emotional responses are not as strong as or prevalent, indications of *stress, sadness,* and *helplessness*. Stress, particularly, almost exclusively relates to the delays in the process, further hints at the inadequacy of current compulsory acquisition processes in Ghana. Finally, the feeling of helplessness emphasises the power imbalance that exists in favour of acquiring authorities and the government when exercising eminent domain. Especially in vulnerable communities like the aged and female-dominated land ownership communities in New Akrade-Mpakadan, this imbalance limits the fairness with which PAPs are treated in the event of a compulsory acquisition exercise (Shukla & Tiwari, 2022). According to Rao (2019), these emotional responses encapsulate the non-financial value placed on land as an asset, and the loss of future opportunities following the government's exercise of eminent domain.

5.3 Is Cash Compensation Sufficient: Exploring Alternatives?

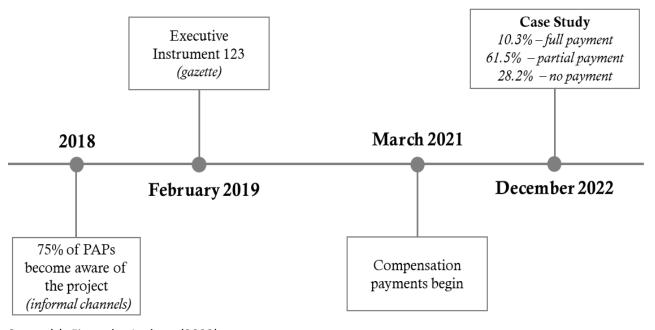
The legal requirement governing compensation payment after compulsory acquisition is prompt, fair, or adequate. Our findings show that 78.8% of PAPs deem the compensation inadequate considering the losses suffered. Among the reasons for the perceived inadequacy of compensation assessment and payment, the following were the most prevalent – exclusion of the business value, inadequate compensation, delayed payments, and the failure to consider the time value of money.

Most of the 40 respondents who participated in the study disclosed their dissatisfaction with cash compensation. More than half (57.5%) expressed dissatisfaction with cash compensation and would have preferred other alternatives. An even more significant percentage (81.8%) questioned the appropriateness of a single lump-sum payment to cover the loss of their life-long ownership of lands and properties. This finding is inconsistent with the extant literature, further indicating that compensation should aim beyond equivalence to improve the position of the affected persons (Lindsay, 2012).

After establishing the inadequacy of cash compensation to PAPs, we sought to explore a few alternatives proposed in other jurisdictions (Rao, 2019). Respondents were asked to rank their most preferred alternatives – re-settlement, land for land and annual monetary compensation. Our findings show that these are all viable alternatives to cash compensation, particularly for vulnerable and aged PAPs who are either unwilling or incapable of finding adequate replacement (Andri et al., 2016). As proposed by Akrofi and Whittal (2013), allowing PAPs to choose would reduce the discontentment and stress associated with single cash payments. These alternatives are weighed against the default cash payment, as outline in descending order re-settlement (33%), land for land (25%), one-time cash payment (25%) and cash-annual payment (17%). This corroborates the assertion of Andri et al., (2016), that re-evaluating what constitutes fairness is necessary because a greater proportion of PAPs preferred re-settlement rather than receiving lump-sum cash payments.

6. Conclusions and Recommendations

This study investigated the effects of compulsory acquisition, using the New Akrade-Mpakadan acquisition as a case study. Specifically, the objectives were to determine the immediate consequences of compulsory acquisition, evaluate the adequacy of compensation in mitigating those consequences, and assess the sustainability of cash compensation for future generations. The timeline of major events, as shown in Figure 8, shows that PAPs first became aware of the acquisition process in 2018, almost a year before the formal publication of the gazette. Despite the acquiring body initiating the marking of properties and compensation assessment in 2019, no payments were made until 2021. Four years on, almost 90% of PAPs have either received no compensation or only partial amounts of their legally entitled compensation packages.

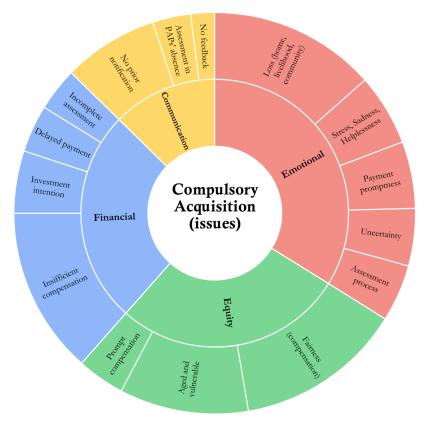


Source(s): Figure by Authors (2022)

Figure 3: Timeline of Compulsory Acquisition and Case Study

Our investigation focused on the consequences of the State's compulsory purchase of lands and properties along the Tema-Mpakadan stretch in Ghana for a proposed railway line connecting Ghana and Burkina Faso. Although several communities were affected by the proposed project, we purposively selected two communities (New Akrade and Senchi) for our case study because they represent a significant proportion of the PAPs. Following the extant literature and guided by our research objectives, we adopted a qualitative research design to explore all dimensions of the issues faced by PAPs following the compulsory acquisition. Our analysis incorporated both secondary and primary data sources. The secondary data sources included spatial imagery, statutes, project data, and compensation valuation records, while primary data sources comprised field surveys and semi-structured interviews with affected community members. Our final sample included 40 affected persons who previously owned homes, farmlands, and businesses in the area. Thematic analyses were then conducted with the NVivo software to identify the main issues arising from the acquisition process. Our results are presented in charts, figures, and a holistic framework of all the identified

issues as a guide for policy and practice. This framework, highlighting four dimensions of issues caused by the suboptimal acquisition process in Ghana, is presented in Figure 9.



Source(s): Figure by Authors (2022)

Figure 4: Holistic Framework of Issues Related to Compulsory Acquisition

As shown in the timeline of major events, landowners and settlers are often left confused and powerless when properties within an acquisition area are referenced without the publication of a gazetted Executive Instrument for the acquisition. This situation raises doubts about the legitimacy of the acquisition and precludes property owners from making a compensation claim. Marking of properties within an acquisition area without gazetting of Executive Instrument also leaves the landowners and settlers confused and incapable of making long-term business and investment plans. At the time of the study, only 10% of PAPs had received full compensation, a far cry from the legal provisions for fair, prompt, and adequate compensation. In addition to 78.8% of respondents being generally dissatisfied with the assessment process, the following were cited as significant issues: incomplete assessments, delayed payments, disruption of investment intention, and inadequate compensation packages.

We also explored the non-financial issues caused by the poor acquisition process and related issues. These enquiries suggested that PAPs had concerns with equitable treatment for the old and vulnerable, poor communication channels with the acquiring authority, and emotional responses. Stress, emotional trauma, and feelings of loss were all cited by respondents in response to the project. These implications are particularly significant due to the aged and vulnerable members of the affected communities. Considering the loss of their lifelong homes, businesses, farms, and communities, more needs to be done to restore their quality of life.

Recent scholars have called into question the efficacy of monetary compensation for expropriation. Our study similarly found that cash compensation may not be sustainable enough to benefit future

generations, as revealed through the responses of PAPs who favoured re-settlement and periodic monetary payments over one-time cash payments. Such an approach is ideal for ensuring intergenerational equity.

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Appendix 1: Executive Instrument 123

