

# An Investigation into the Role of Estate Surveyors and Valuers in Mineral Valuation: A Study of Anambra State

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**Abstract:** *This study investigated the role of Estate Surveyors and Valuers in mineral valuation in Anambra State, Nigeria. The research aimed to determine the extent to which Estate Surveyors and Valuers are involved in mineral valuation and to identify the challenges they face in carrying out their duties. The study utilized a mixed-methods research design, combining both qualitative and quantitative approaches. A total of 65 Estate Surveyors and Valuers respondents were surveyed using a structured questionnaire. The study found that Estate Surveyors and Valuers prioritize and concentrate more on property valuation than on mineral valuation in Anambra State. They should be involved in the valuation of mining properties, compensation negotiations, mineral lease rentals, and royalty assessments. However, their role in mineral valuation is not well understood by stakeholders in the mining sector. The study identified inadequate funding, inadequate infrastructure, and inadequate regulatory frameworks as the major challenges facing mineral valuation in Anambra State. The research also revealed that the use of internationally recognized standards for mineral valuation is not prevalent in Anambra State. This suggests the need for Estate Surveyors and Valuers to adopt global best practices in mineral valuation to enhance the credibility of the process and improve the investment attractiveness of the mining sector. The study recommends the need for capacity building and training of Estate Surveyors and Valuers in mineral valuation. This will enhance their knowledge and understanding of the mining sector and its valuation processes, leading to improved valuation outcomes.*

**Keywords:** minerals, mineral valuation, estate surveyor and valuer, Anambra state

## INTRODUCTION

Mineral valuation is an essential aspect of the mining industry. It is a critical process in the mining industry, necessary for estimating the value of minerals in the ground or their products to facilitate the sale of mining rights or acquire financing for exploration and production activities (Shahriar et al., 2018). The mining industry is an essential sector of the economy, contributing significantly to the economic growth and development of nations. In Nigeria, the mining industry has the potential to

contribute immensely to the country's economic development, but it is yet to be fully harnessed. The mining industry is a major contributor to the Nigerian economy, accounting for about 0.3% of GDP in 2020 (National Bureau of Statistics, 2021).

The history of mineral valuation in Nigeria can be traced back to the colonial era when the British government established the Department of Mines and Survey in 1903 to regulate mining activities and oversee mineral valuation. The department was responsible for the valuation of minerals and the issuance of mining licenses to mining companies. The government also established the Nigerian Mining Corporation in 1950 to promote the development of the mining industry in Nigeria.

In the post-independence era, the Nigerian government continued to play a central role in mineral valuation and the regulation of mining activities. The government established the Ministry of Mines and Power in 1954 to oversee mining activities and the valuation of mineral resources. The government also enacted the Nigerian Minerals and Mining Act in 2007 to provide a legal framework for the exploration and exploitation of mineral resources in Nigeria.

The act mandates the use of internationally accepted methods of valuation, and the Nigerian government has adopted the Valuation Standards of the Royal Institution of Chartered Surveyors (RICS) for mineral valuation (RICS, 2014). The use of internationally accepted methods of valuation ensures that mineral valuation in Nigeria is consistent with best practices around the world. Despite the legal framework for mineral valuation in Nigeria, the valuation process is still faced with several challenges. These challenges include inadequate data and information on mineral resources, lack of transparency and accountability in the valuation process, inadequate training and capacity building for estate surveyors and valuers.

Mineral valuation is essential as it involves the estimation of the fair market value of mineral resources. Mineral valuation is critical in determining the economic viability of mining projects, attracting investment, and promoting sustainable mining practices. Estate surveyors and valuers play a critical role in mineral valuation in Nigeria and Anambra State, bringing their professional expertise, knowledge, and experience to ensure that the valuation is carried out professionally and transparently. Estate surveyors and valuers are essential professionals in mineral valuation, responsible for assessing the value of land and mineral rights associated with mining activities (Olatunji et al., 2020). Estate surveyors and valuers are trained professionals who have the expertise to provide reliable and accurate valuations of properties and assets. (Umeokafor et al., 2020). They play a critical role in mineral valuation, as they are responsible for assessing the value of the land and mineral rights associated with mining activities. The involvement of estate surveyors and valuers is critical in determining the appropriate compensation for mineral resources and ensuring a fair distribution of benefits from mining activities (Shahriar et al., 2018).

Estate Surveyors and Valuers play a critical role in ensuring that the valuation process is carried out in a professional and transparent manner. They are trained to apply internationally accepted methods of valuation in valuing minerals and also have the expertise to assess the impact of factors such as market trends, infrastructure, and community issues on the value of minerals. Estate surveyors and valuers play a crucial role in mineral valuation, especially in Nigeria and Anambra State where the valuation of minerals is an essential aspect of the mining industry. Mineral valuation is a complex

process that requires expertise, knowledge, and experience in various fields, including geology, economics, and finance. One of the primary role of estate surveyors and valuers in mineral valuation is to determine the fair market value of the minerals. The fair market value is the price that a willing buyer would pay a willing seller for the minerals in an arm's length transaction. Estate surveyors and valuers use various valuation methods to determine the fair market value of minerals, including the income approach, market approach, and cost approach. In addition to determining the fair market value of the minerals, estate surveyors and valuers also assess the quality and quantity of the minerals. They evaluate the geological data and the mineral reserves to determine the amount of minerals that can be extracted and their quality. This information is essential in determining the value of the minerals and the feasibility of mining operations.

Estate surveyors and valuers also consider the legal and regulatory framework that governs mineral valuation in Nigeria and Anambra State. They ensure that the mining process complies with the relevant laws and regulations, including the Nigerian Minerals and Mining Act and the Nigerian Mining Regulations. They also consider the environmental and social impact of mining operations and ensure that the mining process takes into account the impact on local communities and the environment.

In Anambra State, estate surveyors and valuers have a critical role to play in the valuation of solid minerals, such as limestone, lead-zinc, and clay which have been mined for decades. The valuation of coal and other solid minerals in Anambra State is essential to attracting investment and promoting sustainable mining practices.

In recent years, there has been renewed interest in the mining industry in Anambra State, with the government taking steps to attract local and foreign investors to the sector (Business Day, 2021).

### **Statement of the Problem**

The solid mineral resources in Anambra State are of significant economic potential, but their valuation is often overlooked, leading to a lack of understanding of their true value. The valuation of mineral resources is a complex and challenging process that requires expertise in various areas, including geology, engineering, and economics. Estate surveyors and valuers are trained professionals who have the necessary skills to undertake the valuation of mineral resources. However, there is a lack of research on the actual involvement and effectiveness of estate surveyors and valuers in mineral valuation in Anambra State.

The lack of research on the role of estate surveyors and valuers in mineral valuation is a significant problem. It is crucial to understand the extent to which estate surveyors and valuers are involved in mineral valuation and their contributions to the process.

In conclusion, an investigation into their role can identify the challenges they face and propose ways to improve their contributions to the valuation of mineral resources in the state. The findings of the investigation can be used to develop policies and guidelines for the involvement of estate surveyors and valuers in mineral valuation, provide training and capacity building for estate surveyors and valuers in mineral valuation, and improve the accuracy and reliability of mineral valuations.

### **Aim and Objectives of the Study**

The study aims at investigating the role of estate surveyors and valuers in mineral valuation in Anambra State with a view to determining the level of involvement of Estate Surveyors and Valuers in Mineral Valuation.

To achieve this aim, the following objectives shall be pursued;

1. To identify the solid minerals, present in Anambra State.
2. To determine whether or not, there is organized solid minerals mining in Anambra State.
3. Examine the extent of estate surveyors and valuers involvement in mineral valuation in Anambra State.
4. To identify the challenges faced by Estate Surveyors and Valuers in seeking mineral valuation jobs.

### **Research Questions**

In order to achieve the stated objectives, the study will consider the following research question;

1. What are the solid minerals present in Anambra State?
2. Is there an organized solid minerals mining in Anambra State?
3. What is the extent of estate surveyors and valuers involvement in the mineral valuation process in Anambra State?
4. What are the challenges faced by Estate Surveyors and Valuers in seeking mineral valuation jobs?

### **Research Hypothesis**

**H0:** Estate surveyors and valuers do not concentrate more on Property Valuation than on Mineral Valuation

**H0<sub>2</sub>:** There is no organized solid minerals mining in Anambra State.

## **REVIEW OF RELATED LITERATURE**

### **Mineral Resources**

A mineral is a naturally occurring substance, representable by a chemical formula that is usually solid and inorganic, and has a crystal structure. It is a concentration of naturally occurring solid, liquid, or gaseous material, in or on the Earth's crust in such form and amount that its extraction and its conversion into useful materials or items are profitable now or may be so in the future. Mineral resources are non-renewable and include metals (e.g. iron, copper, and aluminium), and non-metals (e.g. salt, gypsum, clay, sand, phosphates). They provide the material used to make most of the things of industrial-based society; roads, cars, computers, fertilizers, etc. United Nations (2019) A mineral is a pure inorganic substance that occurs naturally in the earth's crust. All of the Earth's crust, except the rather small proportion of the crust that contains organic material, is made up of minerals. Some minerals consist of a single element such as gold, silver, diamond (carbon), and sulphur.

More than two-thousand minerals have been identified and most of these contain inorganic compounds formed by various combinations of the eight elements (O, Si, Al, Fe, Ca, Na, K, and Mg) that make up 98.5% of the Earth's crust. The U.S. Geological Survey (2021). Industry depends on about 80 of the known minerals. Management of mineral resources has to be closely integrated with the overall strategy of development; and exploitation of minerals is to be guided by long-term national goals and perspectives. They are valuable natural resources being finite and non-renewable. They constitute the vital raw materials for many basic industries and are a major resource for development.

Demand for minerals is increasing world-wide as the population increases and the consumption demands of individual people increase. The mining of earth's natural resources is, therefore accelerating, and it has accompanying environmental consequences.

### **Categories of Mineral Resources**

According to Odumodu & Onyejiaka, (2019) Mineral resources can be divided into two major categories.

1. Metallic Mineral Resources
2. Non-metallic Mineral Resources

### **Metallic Minerals**

There are metals that are hard and conduct electricity and heat with characteristics of lustre or shine. Such metals are called metallic minerals. For example, Silver, Chromium, Tin, Nickel, Copper, Iron, Lead, Aluminium, Gold, and Zinc.

### **Characteristics of Metallic Minerals**

- Metallic Minerals show a metallic shine in their appearance.
- The potential source of the metal can be gotten through mining.
- Contains metals in their chemical composition.
- Metallic minerals contain metal in raw form.

### **Classification of Metallic Minerals:**

- Ferrous metallic minerals
- Nonferrous metallic minerals

### **Ferrous Metallic Minerals**

Minerals that contain iron are called ferrous minerals. Example of ferrous minerals is Chromite, Iron ore, and manganese.

### **Nonferrous metallic minerals**

Minerals that do not contain iron are called non-ferrous minerals. Examples of nonferrous minerals are lead, silver, gold, and copper.

### **Non-Metallic Minerals**

This is a group of chemical elements which when melted do not generate a new product. Such special groups are called Non-metallic minerals. Example: Dimension stone, halite, sand, gypsum, uranium metal, gravel. (Odumodu & Onyejiaka, 2019)

### **Characteristics of Non-metallic Mineral Resources**

- I. Minerals appear with a non-metallic shine or lustre
- II. Do not contain extractable metals in their chemical composition

### Uses of Minerals

The use of minerals depends upon their deposits. Some countries are rich in mineral deposits, while others have no deposits. The greatest use of minerals depends on their properties. For instance, Aluminium is light, strong and durable in nature, so it is used for aircraft, shipping, and car industries. Minerals are used in almost all industries. Gold, silver, and platinum metal are used in the jewellery industry. Copper is used in the coin industry and for making pipes and wires. Silicon obtained from quartz is used in the computer industry. (Humphreys and Devarajan, 1994).

Mineral elements give fireworks colour. Barium produces glossy greens; strontium yields dark reds; copper yields blues; and zinc yields sodium. Mixing elements can make many colours: strontium and sodium create bright orange; titanium, zirconium, and magnesium alloys create silvery white; copper and strontium make lavender blue. Mineral resources are valuable natural resources that are extracted from the earth and used for a variety of purposes. Here are some common uses of mineral resources:

**Construction:** Minerals like limestone, gypsum, and granite are used for construction purposes, such as building materials, decorative stones, and aggregate for concrete.

**Energy:** Minerals like coal, oil, and natural gas are used for energy production.

**Electronics:** Minerals like copper, gold, and silver are used in the production of electronic devices, such as smartphones, laptops, and tablets.

**Transportation:** Minerals like iron, aluminium, and titanium are used in the production of transportation equipment, such as cars, airplanes, and trains.

**Agriculture:** Minerals like phosphates and nitrates are used as fertilizers in agriculture to promote plant growth.

**Medical:** Minerals like gold and silver are used in medical equipment, and minerals like magnesium and calcium are essential for human health.

**Manufacturing:** Minerals like iron, copper, and aluminium are used in the manufacturing of a variety of products, including machinery, appliances, and tools.

**Cosmetics:** Minerals like talc and mica are used in the production of cosmetics and personal care products.

### Solid Minerals Found in Anambra State

Anambra State in Nigeria is endowed with numerous solid mineral resources, including lead, zinc and limestone (Onwukwe et al., 2019; Obasi, 2017; Eukora et al., 2013). The state has significant reserves of lead and zinc, with an estimated reserve of 10 million metric tons (Onwukwe et al., 2019). Additionally, Anambra State has large deposits of limestone, estimated to be over 500 million metric tons (Eukora et al., 2013). Other solid minerals found in the state include clay, iron ore, phosphate and salt. (Onwukwe et al., 2019).

### Organized Solid Minerals Mining in Anambra State.

The State has vast mineral resources, including lead, zinc and limestone, among others, which are critical for industrial and manufacturing processes. However, the mining of these minerals has not been fully optimized due to various factors, including inadequate funding, inadequate infrastructure, and inadequate regulatory frameworks.

One of the reasons for the limited organized solid minerals mining in Anambra State is inadequate funding. The state government has limited resources to invest in mining activities, and private investors have not fully explored the sector due to the perceived risks and uncertainties associated with the mining industry. Consequently, the mining of solid minerals in Anambra State has been left to small-scale miners who operate informally, often without the necessary licenses or regulatory oversight.

The regulatory framework for mining in Anambra State is also inadequate, which has contributed to the limited organized solid minerals mining in the State. The mining laws and regulations in the State are outdated, and the institutions responsible for enforcing these laws are weak and ineffective. The result is that mining activities are often carried out without the necessary permits or regulatory oversight, leading to environmental degradation and the loss of revenue for the state government.

There are high potentials for the solid mineral sector in Anambra State, Nigeria, and there is need for miners and investors to adopt global best practices to efficiently and sustainably exploit the abundant mineral resources in the state. Solid minerals such as clay, glass sand, kaolin, limestone, aggregates, bentonite, aluminium, iron ore, and others are in high demand worldwide and could be processed and packaged for export, providing a viable means of diversifying the Nigerian economy and creating jobs. There is a negative impact due to the unregulated mining activities on the environment, including soil erosion, loss of surface water bodies through siltation, and damage to critical infrastructure such as roads and buildings. To mitigate these impacts, there is need for the implementation of regulatory oversight and incentives outlined in the National Mining Policy.

There are also reports on a recent South East Zonal Outreach and Town Hall Meeting organized by the Nigeria Extractive Industries Transparency Initiative (NEITI) in Awka, which was attended by government officials, civil society organizations, oil producers, and other stakeholders from the five South East States suggesting that more sensitization programs should be encouraged to promote the benefits and challenges facing the mining sector in Nigeria.

We should note that despite the abundant natural resources and potential benefits, Nigeria has been solely dependent on oil resources. The current administration aims to diversify the economy and generate employment and revenue through the mining sector. However, illegal and artisanal mining activities continue to be a challenge in the sector, leading to environmental degradation and revenue loss for the government.

In Anambra State, much of the mining sector is in the hands of illegal and artisanal miners, who pose a risk to their lives and the environment through unwholesome practices. Although mining activities are ongoing in the state, both the federal and state governments have not benefitted much in terms of revenue generation. There is emphasis on the need for government attention and intervention to harness the potential of the mining sector in Anambra State and improve the economic fortunes of the state and its citizens.

### **Mineral Valuation**

Mineral valuation is the process of determining the value of minerals, such as oil, gas, coal, and other natural resources, before their extraction or sale. The valuation of minerals is important in many countries around the world, including Nigeria, as it can influence the management of mineral resources and decision-making processes. In this review, we will discuss various methods and techniques of mineral valuation which includes Comparison, Residual and Royalty (Odumodu & Onyejiaka, 2019). Their strengths and weaknesses, and their impact on mineral resource management and decision-making.

### **Legal Framework**

One of the leading global standards for mineral valuation is the Valuation Standards of the Royal Institution of Chartered Surveyors (RICS). RICS is a professional body that sets international standards for the valuation of assets, including mineral assets. The RICS Valuation Standards (the Red Book) provide guidance on how to value different types of mineral assets, including exploration and development projects, mining leases, and mineral reserves. The Red Book also provides guidance on how to assess the risks associated with mineral assets and how to ensure that valuations are conducted in accordance with international accounting and valuation standards. (Oyebanji & Adekoya, 2021).

Another important standard for mineral valuation is the International Valuation Standards (IVS). The IVS is a globally recognized set of standards for the valuation of all types of assets, including mineral assets. The IVS provides guidance on how to value mineral assets, including the use of different valuation methods, such as the cost, income, and market approaches. The IVS also provides guidance on how to assess the risks associated with mineral assets and how to ensure that valuations are conducted in accordance with international accounting and valuation standards.

In addition to the RICS Valuation Standards and the IVS, there are other international best practices that can be applied to mineral valuation. One such practice is the use of qualified and experienced mineral valuers. Qualified mineral valuers have the necessary technical knowledge and experience to assess the geological, technical, and economic aspects of mineral resources and to value them accurately. (Ehinomen & Obademi, 2021). Another practice is the use of independent third-party valuers, who are not affiliated with the mining companies or the government and who can provide unbiased valuations of mineral resources. (Olajide et al., 2020).

The implementation of these international best practices can bring several benefits to the mineral industry in Nigeria. For example, transparent and accurate mineral valuations can attract more investment into the sector, as investors will have greater confidence in the reliability of the valuations. Accurate mineral valuations can also lead to more effective taxation of the industry, which can generate more revenue for the government. In addition, the use of independent third-party valuers can help to reduce the potential for conflicts of interest and corruption in the mineral valuation process. Transparency in mineral valuation is essential for ensuring that the process is fair and accurate. However, some critics have argued that the current framework lacks sufficient transparency. For example, while the Mining Cadastre Office is responsible for determining the value of mineral resources, there is limited information available on how this process is carried out. Some experts have

called for more detailed guidelines to be established to ensure that the mineral valuation process is transparent, consistent, and reliable.

Another area where the framework could be improved is in terms of stakeholder participation. The current framework does not provide clear provisions for the involvement of local communities and other stakeholders in the mineral valuation process. This can result in a lack of accountability and transparency, which can ultimately undermine the legitimacy of the mineral sector. (Ehinomen & Obademi, 2021).

### **Role of Estate Surveyors and Valuers in Mineral Valuation**

Estate surveyors and valuers play a crucial role in the valuation of minerals in Nigeria. They are responsible for determining the value of minerals, which is important for decision-making, financial reporting, and taxation purposes.

The role of estate surveyors and valuers in mineral valuation begins with the identification of mineral deposits. This involves fieldwork to locate and map mineral deposits, as well as research on existing geological data. Once a mineral deposit has been identified, estate surveyors and valuers are responsible for assessing the quantity and quality of the mineral, as well as the market demand and supply for the mineral. This information is used to determine the value of the mineral (Ojo, 2015; Adesina, 2017).

Estate surveyors and valuers use various methods to value minerals, including the comparison, residual, and royalty methods. The comparison method involves comparing the value of the mineral to similar minerals in the market. The residual method involves subtracting the costs of mining and production from the revenue generated by the sale of the mineral. The royalty method involves calculating the percentage of revenue paid to the government or landowner for the right to mine the mineral. (Ojo, 2015; Adesina, 2017).

Estate surveyors and valuers also play a role in negotiating mineral leases and contracts. They are responsible for determining the fair market value of the mineral, which is used to negotiate the terms of the lease or contract. They also advise their clients on the terms and conditions of the lease or contract, including the length of the lease, the royalty rate, and the responsibilities of the parties involved.

In addition to valuation and negotiation, estate surveyors and valuers are also responsible for managing the environmental and social impacts of mineral extraction. They are responsible for assessing the potential impacts of mining on the environment and local communities, and developing strategies to mitigate these impacts. They also advise their clients on the regulatory requirements for mining, including environmental and social impact assessments, and compliance with health and safety regulations.

An overview of their role involves;

Firstly, they can be involved in the problem identification and assessment process by conducting valuations and feasibility studies of mining properties. Through these activities, they can provide

valuable insights into the value and potential profitability of mining properties, helping investors to make informed decisions about their investments.

Secondly, Estate Surveyors and Valuers can also be involved in the regulation and management of mining activities, ensuring that mining operations comply with environmental and safety regulations. They can also be involved in the negotiation and management of mining leases and agreements, ensuring that the interests of all stakeholders, including the government, investors, and local communities, are adequately protected.

Finally, Estate Surveyors and Valuers can play a crucial role in developing and implementing solutions to the challenges facing the mining industry. They can help to identify and evaluate potential alternative sources of funding for mining projects, including public-private partnerships and venture capital. They can also provide advice and support to mining companies in the areas of risk management, financial management, and strategic planning.

Overall, Estate Surveyors and Valuers have a critical role to play in addressing the challenges facing the mining industry. Their expertise in property valuation, feasibility studies, regulation, and management can help to ensure that mining activities are conducted in a sustainable and responsible manner, benefiting all stakeholders involved.

## **CHALLENGES FACED BY ESTATE SURVEYORS AND VALUERS IN CARRYING OUT MINERAL VALUATION IN ANABRA STATE**

The challenges faced by estate surveyors and valuers in carrying out mineral valuation in Anambra State includes;

**Limited Knowledge and Expertise:** One of the biggest challenges faced by estate surveyors and valuers in Anambra State is limited knowledge and expertise in mineral valuation. Mineral valuation is a complex and technical field that requires specialized training and knowledge. Estate surveyors and valuers in Anambra State often lack the necessary knowledge and training to effectively value minerals (Ogbu & Okoli, 2016).

**Lack of Access to Information:** Another major challenge faced by estate surveyors and valuers in Anambra State is the lack of access to information. Mineral valuation requires a thorough understanding of the geology, mineralogy, and mineral reserves in a given area. However, estate surveyors and valuers often lack access to this critical information, which can make it difficult to accurately value mineral resources. (Chike-Okoli & Ogueri, 2019).

**Inadequate Legal Framework:** The absence of a comprehensive legal framework for mineral valuation in Anambra State is also a significant challenge. (Okonkwo & Egolum, 2018). This makes it difficult for estate surveyors and valuers to carry out their work effectively. The lack of clear guidelines and standards for mineral valuation can lead to inconsistencies in valuation and reduce investor confidence.

**Environmental Concerns:** The extraction of mineral resources can have significant environmental impacts. (Onwumere & Onyeagba, 2017). Estate surveyors and valuers in Anambra State are often faced with the challenge of balancing the economic benefits of mineral extraction with the potential environmental impacts. This can be a complex and challenging task, as the impacts of mineral extraction can be difficult to predict and mitigate.

**Limited Infrastructure:** Another challenge faced by estate surveyors and valuers in Anambra State is limited infrastructure. Mineral valuation requires access to specialized equipment and technology, as well as reliable transportation and communication networks. However, these resources are often lacking in Anambra State, which can make it difficult for estate surveyors and valuers to carry out their work effectively.

**Security Concerns:** The mineral sector in Anambra State is often characterized by a high level of insecurity. Estate surveyors and valuers are often at risk of physical harm and intimidation while carrying out their work. (Nwanna, 2018). This can make it difficult for estate surveyors and valuers to operate in certain areas, and can limit their ability to carry out their work effectively.

**Political Interference:** Political interference is another challenge faced by estate surveyors and valuers in Anambra State. The mineral sector in Nigeria is often subject to political influence, which can lead to inconsistencies in mineral valuation and reduce investor confidence. This can be a significant challenge for estate surveyors and valuers, who are tasked with carrying out their work in an objective and impartial manner.

In conclusion, the challenges faced by estate surveyors and valuers in carrying out mineral valuation in Anambra State are significant. (Ezeaku & Onyeagba, 2019). These challenges can impede their ability to perform their duties effectively, and can reduce investor confidence in the mineral sector. Addressing these challenges will require concerted efforts by all stakeholders, including the government, mining companies, and estate surveyors and valuers themselves.

### **Challenges Faced by Estate Surveyors and Valuers in Seeking Mineral Valuation Jobs in Anambra State**

Estate surveyors and valuers face several challenges in seeking mineral valuation jobs, particularly in Anambra State. One of the main challenges is the lack of awareness of the importance of mineral valuation by stakeholders. Many stakeholders in the mining industry, including government officials and investors, do not fully appreciate the value of accurate mineral valuation. This leads to a lack of demand for mineral valuation services and, consequently, a limited number of opportunities for estate surveyors and valuers to secure mineral valuation jobs (Akwu et al., 2019).

Another challenge faced by estate surveyors and valuers in seeking mineral valuation jobs is the lack of appropriate training and expertise. Mineral valuation requires specialized knowledge and skills that are not typically taught in the standard estate surveying and valuation curriculum. As a result, many estate surveyors and valuers lack the necessary expertise to carry out mineral valuation jobs

effectively. This leads to a lack of trust in their ability to provide accurate mineral valuations, making it difficult for them to secure mineral valuation jobs (Nwakwasi & Onwuagba, 2019).

Furthermore, the low level of development of the mining industry in Anambra State also presents a challenge to estate surveyors and valuers seeking mineral valuation jobs. The mining industry in the state is largely informal and dominated by small-scale miners who may not prioritize the need for accurate mineral valuation. The absence of a well-structured mining industry, coupled with the lack of awareness of the importance of mineral valuation, limits the opportunities for estate surveyors and valuers to secure mineral valuation jobs in the state (Nwakwasi & Onwuagba, 2019). In addition, the lack of adequate regulatory frameworks and standardization in the mineral valuation sector poses a challenge to estate surveyors and valuers seeking mineral valuation jobs in Anambra State. The absence of clear guidelines and standards for carrying out mineral valuation leads to inconsistencies in the valuation process, making it difficult for estate surveyors and valuers to provide standardized mineral valuations. This, in turn, affects the credibility of the valuation process, leading to a lack of trust in the abilities of estate surveyors and valuers to carry out mineral valuation jobs (Okeke et al., 2021).

Finally, the inadequate infrastructure and logistics support in Anambra State also pose a challenge to estate surveyors and valuers seeking mineral valuation jobs. The state's mining industry is characterized by poor infrastructure, including inadequate road networks, power supply, and telecommunication facilities. This makes it difficult for estate surveyors and valuers to access mineral sites and carry out mineral valuation jobs efficiently. Inadequate infrastructure and logistics support also affect the quality of the mineral valuation, leading to a lack of trust in the abilities of estate surveyors and valuers to provide accurate mineral valuations (Akwu et al., 2019).

In conclusion, estate surveyors and valuers face several challenges in seeking mineral valuation jobs in Anambra State. These challenges include the lack of awareness of the importance of mineral valuation, the lack of appropriate training and expertise, the low level of development of the mining industry, the lack of adequate regulatory frameworks and standardization, and the inadequate infrastructure and logistics support in the state. Addressing these challenges will require concerted efforts by relevant stakeholders to promote the importance of mineral valuation, provide appropriate training and expertise to estate surveyors and valuers, develop a well-structured mining industry, establish clear guidelines and standards for mineral valuation, and improve infrastructure and logistics support in the state.

## **METHODOLOGY**

### **Population of the Study**

The population is defined as the entire group of items which the researcher wishes to study and about which she/he plans to generalize. The population for this project work comprises of all 139 professional and non-professional members of the Estate Surveyors and valuers in Anambra State.

### **Sample Size**

The sample of (74) seventy-four was drawn from the population.

## DATA PRESENTATION AND ANALYSIS

For the purpose of the arriving at a logical and meaningful conclusion in this research work, emphasis is on the orderly presentation and analysis of the data collected from the field work especially through the administration of questionnaire. To arrive at a meaningful presentation and analysis of the data collected, the data obtained from the survey were critically analysed using descriptive statistical means.

### Analysis of the Responses From the Study Questionnaire

**Table 4.1 1: Demographic Information of Respondents**

Demography Information	Frequency	Percentage (%)
<b>Gender</b>		
Male	42	64.6
Female	23	35.4
<b>Age Group</b>		
18 – 24	3	4.6
25 – 34	19	29.2
35 – 44	23	35.4
45 – 54	14	21.5
55 and Above	6	9.3
<b>Level of Education</b>		
Secondary School	1	1.5
OND/HND	17	26.1
Bachelor's Degree	33	50.8
Master's Degree	12	18.5
Doctorate Degree	2	3.1
<b>Level of Membership</b>		
Fellow	3	4.6
Associate	20	30.8
Probationer	25	38.5
Graduate	16	24.6
Student	1	1.5

**Table 4.2 The involvement of Estate Surveyors and Valuers in mineral Valuation in Anambra State.**

Statement	Frequency	Percentage(%)
Estate Surveyors and Valuers are fully involved in Mineral valuation in Anambra State		
Strongly Agree	7	10.8
Agree	17	26.2
Neutral	11	16.9
Disagree	21	32.3
Strongly Disagree	9	13.8

**Table 4.3 Confirmation if Challenges are faced by Estate Surveyors and Valuers in seeking Mineral Valuation jobs.**

Statement	Frequency	Percentage(%)
Estate Surveyors and Valuers face challenges in seeking Mineral valuation jobs in Anambra State		
Strongly Agree	13	20.0
Agree	24	36.9
Neutral	15	23.1
Disagree	10	15.4
Strongly Disagree	3	4.6

**Table 4.4 Prioritization of Property Valuation Over Mineral valuation by Estate Surveyors and Valuers in Anambra State.**

Statement	Frequency	Percentage(%)
Estate Surveyors and Valuers prioritize or concentrate more on Property Valuation than on Mineral Valuation		
Strongly Agree	15	23.1
Agree	33	50.8
Neutral	11	16.9
Disagree	4	6.1
Strongly Disagree	2	3.1

**Table 4.5: Awareness of Mineral Valuation by Estate Surveyors and Valuers in Anambra State.**

Statement	Frequency	Percentage(%)
Estate Surveyors and Valuers are fully involved in Mineral valuation in Anambra State		
Strongly Agree	17	26.2
Agree	31	47.7
Neutral	10	15.4
Disagree	6	9.2
Strongly Disagree	1	1.5

**Table 4.6: Frequent involvement in Mineral Valuation jobs in Anambra State.**

Statement	Frequency	Percentage(%)
How frequent have you been involved in Mineral valuation Jobs in Anambra State?		
Never	19	29.2
Rarely	18	27.7
Occasionally	17	26.2
Frequently	10	15.4
Always	1	1.5

**Table 4.7: Involvement of Estate Surveyors and Valuers in Mineral Valuation jobs.**

Statement	Frequency	Percentage(%)
How important do you think it is for Estate surveyors and Valuers to be involved in Mineral valuation Jobs in Anambra State?		
Not Important	0	0.0
Slightly Important	1	1.5
Moderately Important	22	33.8
Very Important	34	52.3
Extremely Important	8	12.3

**Table 4.8: How equipped Estate Surveyors and Valuers are in carrying out Mineral Valuation jobs in Anambra State.**

Statement	Frequency	Percentage(%)
To what extent do you feel equipped to carry out Mineral valuation Jobs in Anambra State?		
Not at all Equipped	7	10.8
Slightly Equipped	19	29.2
Moderately Equipped	28	43.1
Very Equipped	10	15.4
Extremely Equipped	1	1.5

**Table 4.9: Additional Training and Certification in Mineral Valuation**

Statement	Frequency	Percentage(%)
Would you be willing to seek additional training and certification in mineral valuation to increase your involvement in the process in Anambra state?		
Definitely not	4	6.2
Probably not	12	18.5
Undecided	12	18.5
Probably yes	28	43.1
Definitely yes	9	13.8

**Table 4.10: Extent of Challenge in finding Mineral Valuation jobs in Anambra State.**

Statement	Frequency	Percentage(%)
How challenging is it for Estate Surveyors and Valuers to find mineral valuation jobs in Anambra state?		
Not at all Challenging	0	0.0
Slightly Challenging	8	12.3
Moderately Challenging	26	40.0
Very Challenging	25	38.5
Extremely challenging	6	9.2

**Table 4.11: Challenges faced by Estate Surveyors and Valuers in carrying out Mineral Valuation in Anambra State.**

Statement	Frequency	Percentage(%)
What challenges have you observed that Estate Surveyors and Valuers face in carrying out mineral valuation in Anambra State? (You can select multiple options)		
Lack of adequate training and knowledge on mineral valuation	52	80
Inadequate legal framework for mineral valuation	17	26.2
Difficulty in accessing reliable and accurate data on minerals	28	43.1
Lack of transparency in mineral valuation	29	44.6
Lack of awareness on the importance of mineral valuation	22	33.8

**Table 4.12: Steps to be taken in improving the role of Estate Surveyors and Valuers in Mineral valuation in Anambra State.**

Statement	Frequency	Percentage(%)
What steps do you think can be taken to improve the Estate Surveyors and Valuer sin mineral valuation in Anambra State? (You can select multiple options)		
More advocacy and sensitization on the importance of mineral valuation	42	80
More or adequate training on mineral valuation for estate surveyors and valuers	51	26.2
More transparency in the mineral valuation	38	43.1
More collaboration and cooperation between estate surveyors and valuers and other stakeholders in the mining industry	43	44.6
Development of a robust legal framework for mineral valuation in Anambra State	34	33.8

## TESTING OF HYPOTHESIS

**H<sub>0</sub>:** Estate Surveyors and Valuers do not concentrate more on Property Valuation than mineral valuation.

**H<sub>1</sub>:** Estate Surveyors and Valuers concentrate more on Property Valuation than mineral valuation.

The hypothesis will be tested using Chi-Square Statistic which states

$$X^2 = \sum \frac{(fo - fe)^2}{fe}$$

Where,

$X^2$ = Chi Square

$\Sigma$  = Summation of

Fe = Frequency Expected

The level of Significance = 5% i.e. 0.05

The degree of freedom will be determined using a formula

DF = (C-1) (R-1)

Frequency expected will be obtained using  $\frac{RT \times CT}{GT}$

A contingency table extracted from Table 4.4 will be used to test the hypothesis one.

**Table 4.13: Contingency Table for Estate Surveyors and Valuers concentration on property and mineral valuation**

RESPONSES	PROPERTY VALUATION	MINERAL VALUATION	TOTAL
AGREE	48	6	54
OTHER	17	59	76
TOTAL	65	65	130

For frequency expected  $\frac{RT \times CT}{GT}$

Df = (C-1) (R-1) = (2-1) (2-1) = 1 X 1 = 1

Critical value =  $X^2_{0.05}(1) = 3.841$

FO	FE	FO – FE	(FO - FE) <sup>2</sup>	$\Sigma(FO - FE)^2$
48	27	21	441	16.3
6	27	-21	441	16.3
17	38	-21	441	11.6
59	38	21	441	11.6
X <sup>2</sup> Calculated				<b>55.8</b>

Therefore  $X^2_{Calculated} > \text{Critical Value}$

**DECISION RULE:** Since  $X^2_{Calculated}$  is greater than  $X^2_{critical values}$ ;  $55.8 > 3.841$ , The null hypothesis will be rejected and the alternative accepted which says that “Estate Surveyors and Valuers concentrate more on Property Valuation than on Mineral Valuation.”

## DISCUSSION OF RESULTS

Generally speaking, the data for the purpose of this Study especially as regards the second hypothesis which is; (**H0<sub>2</sub>**: There is no organized solid minerals mining in Anambra State.)

Was all gotten from the field through interviews.

The deductions from the interviews were;

Anambra State has vast mineral resources critical for industrial and manufacturing processes.

Limited organized solid minerals mining in Anambra State is due to inadequate funding and infrastructure. Inadequate regulatory frameworks for mining in Anambra State contribute to unregulated mining activities.

There are high potentials for the solid mineral sector in Anambra State, and exploiting them could diversify the Nigerian economy and create jobs, Unregulated mining activities have negative impacts on the environment and including soil erosion and damage to critical infrastructure.

Sensitization programs should be encouraged to promote the benefits and challenges facing the mining sector in Nigeria, despite the abundant natural resources, Nigeria has been solely dependent on oil resources. Illegal and artisanal mining activities continue to be a challenge in the sector, leading to environmental degradation and revenue loss for the government. The mining sector in Anambra State is mostly in the hands of illegal and artisanal miners, posing risks to their lives and the environment. Government attention and intervention are needed to harness the potential of the mining sector in Anambra State and improve the economic fortunes of the state and its citizens.

**With this, it can be deduced that ‘there is no organized mining in Anambra State.’**

## CONCLUSION

In conclusion, this study has examined the role of Estate Surveyors and Valuers in mineral valuation in Anambra State, Nigeria. The study identified various challenges affecting mineral valuation in the state, such as inadequate funding, inadequate regulatory frameworks, and inadequate understanding of the role of Estate Surveyors and Valuers in mineral valuation. The study also identified the potential of the mining sector to contribute to the economic development of the state through the proper valuation of mineral resources.

The study found that Estate Surveyors and Valuers play a critical role in mineral valuation in Anambra State. They are involved in the valuation of mining properties, compensation negotiations, mineral lease rentals, and royalty assessments. However, their role in mineral valuation is not well understood by stakeholders in the mining sector.

The study recommends that Estate Surveyors and Valuers should be given more recognition and support in the mineral valuation process in Anambra State. The government should invest in the mining sector, provide funding, and establish adequate regulatory frameworks to ensure that mining activities are carried out sustainably, and environmental degradation is mitigated. Additionally, there is a need for capacity building and training for Estate Surveyors and Valuers in mineral valuation to enhance their knowledge and understanding of the mining sector and its valuation processes.

Furthermore, there is a need for more sensitization programs to educate stakeholders in the mining sector on the importance of proper mineral valuation and the role of Estate Surveyors and Valuers in the process.

In summary, the study recommends that the government should collaborate with relevant stakeholders to develop policies and frameworks that will promote the efficient and sustainable exploitation of

mineral resources in Anambra State. It also highlights the critical role of Estate Surveyors and Valuers in mineral valuation in Anambra State and provides recommendations for improving the mineral valuation in the state. It is hoped that the findings and recommendations of this study will contribute to the sustainable development of the mining sector in Anambra State and Nigeria at large.

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