

Information Needs and Seeking Behaviour of Sand Loaders in Etche Local Government Area

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Abstract

The sand mining industry serves as a vital economic driver, providing employment opportunities and contributing to infrastructure development. However, the information needs and seeking behaviour of sand loaders, who are integral but seems to be poorly understood. The study therefore, investigated information needs and seeking behaviour of sand loaders in Etche Local Government Area. This study employed qualitative approach. The population of the study was sand loaders in Etche Local Government Area. Accidental sampling technique was utilized to select 24 sand loaders in Etche Local Government. A structured interview was used to gather data from the respondents. Due to low literacy level among the sand loaders, the researcher chose interview method. However, questionnaires as designed were printed in line with the structured interview. The researcher filled in the questionnaires as the participants responded to the questions. The data was analysed using simple percentage. The study revealed that the information needs of sand loaders were safety, market trends, pricing, and legal requirements and government policy. The information seeking behaviour included the sources consulted and the frequently consulted sources which showed that friends and colleagues, social networks, industry associations, and market reports were the frequently consulted sources while government agencies were rarely consulted. The factors that influenced the information-seeking behavior included information literacy skills, level of education, access to technology, geographical location socio-economic status and access to technology. The challenges faced by sand loaders regarding their information-seeking behavior, were technological constraints, poor levels of education, language barriers, lack of information literacy skills, and information hoarding from friends/colleagues. The study recommended among others the digital literacy and access to technology and information resources.

Keywords: Information, information needs, information seeking behaviour, sources, sand loaders

Introduction

In the contemporary society, information is a basis for decision-making processes across various sectors and industries. The effective acquisition and utilization of information is crucial in sectors like sand mining, where safety, market dynamics, and regulatory compliance are paramount.

Among the stakeholders in the sand mining industry, sand loaders in the Etche Local Government Area represent a critical segment whose information needs and seeking behavior need to be examined. Information need refers to the gap between an individual's existing knowledge and the knowledge required to accomplish a specific task or make a decision effectively (Sulistyawat et al. 2021). This underscores the dynamic nature of information requirements, which can evolve based on contextual factors such as changes in regulations, market conditions, or technological advancements. Information-seeking behavior, on the other hand, encompasses the actions undertaken by individuals or groups to fulfill their information needs (Ferraris et al. 2023). It involves processes such as identifying information sources, accessing relevant information, and evaluating its reliability and usefulness.

Sand loaders in the Etche Local Government Area have multifaceted information needs that are integral to their operations and well-being. Firstly, they require access to information pertaining to safety regulations governing sand mining activities. This includes knowledge of protocols for personal protective equipment (PPE), safe handling of equipment, and adherence to environmental regulations to mitigate the impact of sand mining activities on ecosystems (Tripathy, 2024). Additionally, sand loaders rely on information regarding market trends and pricing dynamics to make informed decisions about production levels, pricing strategies, and market entry or exit. Understanding market demand fluctuations, supply chain dynamics, and competitive landscape is essential for optimizing their business operations and sustaining profitability. Moreover, knowledge of legal requirements such as permits, licenses, and taxation policies is critical for ensuring regulatory compliance and avoiding legal penalties. Lack of awareness or misunderstanding of legal obligations can expose sand loaders to legal risks and financial liabilities, underscoring the importance of accurate and accessible legal information. The information-seeking behavior of sand loaders in the Etche Local Government Area could be influenced by various factors, including their preferred sources of information, frequency of seeking information, and challenges encountered in accessing relevant information (Horsfall et al. 2020). Sand loaders often rely on a combination of formal and informal sources for information acquisition. Formal sources may include government agencies, industry associations, and online platforms providing regulatory updates, market reports, and legal guidance and the library. Informal sources encompass social networks, word-of-mouth communication among peers, and experiential knowledge gained through practical involvement in sand mining activities. The frequency of information seeking among sand loaders may vary based on factors such as seasonal fluctuations in demand, technological advancements, and emerging market trends. During periods of heightened activity or market volatility, sand loaders may intensify their information-seeking efforts to stay abreast of developments and make timely adjustments to their operations.

Several factors influence the information-seeking behavior of sand loaders in the Etche Local Government Area, including socio-economic status, level of education, access to technology, and geographical location. Socio-economic status plays a pivotal role in determining the resources available for information acquisition and utilization. Sand loaders with higher income levels may

have greater access to digital technologies, formal education, and professional networks, enabling them to access a wider range of information sources and make more informed decisions (Paccoud et al. 2021). Level of education also significantly influences information-seeking behavior, with higher levels of education correlating positively with information literacy and digital skills. Sand loaders with higher educational attainment are more likely to engage with formal information sources, critically evaluate information quality, and adapt to technological advancements in information access and communication. Access to technology emerges as a critical determinant of information-seeking behavior, with technological advancements facilitating access to online information resources, communication platforms, and digital tools for data analysis and decision-making. Sand loaders with access to smartphones, internet connectivity, and computer literacy may leverage these resources to overcome information barriers, access real-time market updates, and engage with online communities for knowledge sharing and collaboration. Geographical location also shapes information-seeking behavior, with sand loaders in urban areas typically having better access to information infrastructure, formal education institutions, and government services compared to their rural counterparts. Rural sand loaders may face greater challenges in accessing timely and relevant information due to limited physical infrastructure, inadequate transportation networks, and marginalization from mainstream information channels (Gibson & Kaplan, 2017).

Challenges in accessing relevant information faced by sand loaders stem from various sources, including limited access to formal education, language barriers, and inadequate information infrastructure in rural areas (Mohamed et al. 2020). Illiteracy or low levels of education may hinder sand loaders' ability to comprehend complex regulatory documents or navigate online information sources effectively. Language barriers further exacerbate these challenges, particularly in regions with linguistic diversity where official documents may be inaccessible or incomprehensible to non-native speakers. Moreover, inadequate information infrastructure, such as unreliable internet connectivity or limited access to digital devices, constrains sand loaders' ability to leverage online information resources effectively.

Statement of the Problem

The sand mining industry in the Etche Local Government Area serves as a vital economic driver, providing employment opportunities and contributing to infrastructure development. However, the information needs and seeking behavior of sand loaders, who are integral, seems to be poorly understood. Despite the critical role that information plays in ensuring safety, regulatory compliance, market competitiveness, and overall operational efficiency, there is a lack of comprehensive research addressing the specific information needs and information-seeking behavior of sand loaders in the Etche Local Government Area. The problem stems from the absence of a clear understanding of the information requirements of sand loaders, encompassing aspects such as safety regulations, market trends, pricing dynamics, and legal requirements. Additionally, there is a gap in knowledge regarding the strategies employed by sand loaders to acquire and utilize information effectively, including their preferred sources of information, frequency of seeking information, and challenges encountered in accessing relevant information.

This knowledge gap hampers efforts to develop targeted interventions and support mechanisms aimed at enhancing the productivity, safety, and overall well-being of sand loaders in the Etche Local Government Area. Furthermore, the factors influencing the information-seeking behavior of sand loaders, including socio-economic status, level of education, access to technology, and geographical location, remain inadequately explored. Understanding these factors is crucial for tailoring information dissemination strategies to suit the diverse needs and circumstances of sand loaders, thereby maximizing the impact of information interventions and fostering sustainable development in the sand mining sector.

Aim and Objectives of the Study

The aim of the study is to determine the information needs and seeking behavior of sand loaders in Etche Local Government. The objectives are to:

1. assess the information needs of sand loaders in Etche Local Government Area
2. examine the information-seeking behavior of sand loaders in Etche Local Government
3. identify the factors influencing the information-seeking behavior of sand loaders in Etche Local Government Area
4. the challenges faced by sand loaders in information seeking in Etche Local Government Area.

Literature Review

According to Humbhi et al. (2022) general information needs were related to finding a research topic, conducting a literature review, reading journals, using online research databases, and conducting other research, workshop and seminar presentations, academic activities, and life events that motivate a researcher towards information seeking. However, Sand mining is a complex industry that demands adherence to safety regulations, market awareness, pricing strategies, and legal compliance to operate sustainably. Safety regulations are paramount in ensuring the well-being of sand loaders. Studies emphasize the importance of occupational health and safety measures in mining activities (Whiting, 2023). Compliance with safety protocols reduces the risk of accidents and occupational hazards, safeguarding the health and lives of sand loaders. Market trends and pricing dynamics are crucial for sand loaders to make informed decisions about production levels and pricing strategies. Market intelligence enables them to anticipate demand fluctuations, adjust production schedules, and optimize profit margins. Legal requirements such as permits, licenses, and environmental regulations are essential for regulatory compliance and avoiding legal liabilities. Understanding and adhering to legal obligations ensure the legality and sustainability of sand mining operations (UNEP, 2019).

Seeking information behaviour can help to understand and manage daily operational issues and engage in effectiveness of information delivery (Eshak et al. 2022). Sand loaders exhibit diverse information-seeking behaviors influenced by various factors. Their preferred sources of information often include a mix of formal and informal channels. Formal sources may include

government agencies, industry associations, and online platforms providing regulatory updates, market reports, and legal. Informal sources encompass word-of-mouth communication among peers, and experiential knowledge gained through practical involvement in sand mining activities and social networks. Bicen, Sadikoglu & Sadikoglu (2015) and Mahadi et al. (2016) and Facemire (2020) studies where they showed that the use of social media by undergraduate students is increasing. The frequency of seeking information among sand loaders may vary based on factors such as workload, market conditions, and seasonal demand fluctuations.

The identified influencing factors such as innovative behaviour, information need, information sources and personality traits influence information seeking behaviour (Eshak et al. 2022). Several factors influence the information-seeking behavior of sand loaders. Socio-economic status plays a significant role, with higher-income individuals having greater access to information resources and technology. Sand loaders with higher educational attainment are more likely to engage with formal information sources and adapt to technological advancements in information access and communication. Access to technology emerges as a critical determinant of information-seeking behavior, enabling sand loaders to leverage digital tools for accessing real-time market updates, engaging with online communities, and overcoming information barriers (Jiang, et al 2021). Geographical location also shapes information-seeking behavior, with sand loaders in urban areas typically having better access to information infrastructure and formal education institutions compared to rural counterparts.

Challenges in accessing relevant information are prevalent among sand loaders, particularly in rural areas with limited access to formal education and information infrastructure. Badurine and Lisek (2018) noted that unawareness of appropriate information sources and poor search abilities are cognitive obstacles, negative feelings, such as the fear of discovering negative facts are common affective barriers. To sand loader, Illiteracy or low levels of education may hinder sand loaders' ability to comprehend complex regulatory documents or navigate online information sources effectively. Language barriers and technological constraints further exacerbate these challenges, limiting the accessibility and usability of information resources.

Methodology

This study employed qualitative approach. The population of the study was sand loaders in Etche Local Government Area. Accidental sampling technique was utilized to interview 24 sand loaders Umuechem (7), Chokocho (9), Egwu (5) and Umuanyagu (3) in Etche Local Government. A structured interview was used to gather data from the respondents. Due to perceived low literacy level among the sand loaders, the researcher chose interview method. However, 30 copies of the questionnaires were designed and printed in line with the structured interview. The researcher filled in the questionnaires as the participants responded to the questions. Only 24 copies were filled and found valid for analysis. The data was analysed using simple percentage. Unfortunately, the study may be limited by desirability bias in survey responses. The use of accidental sampling was

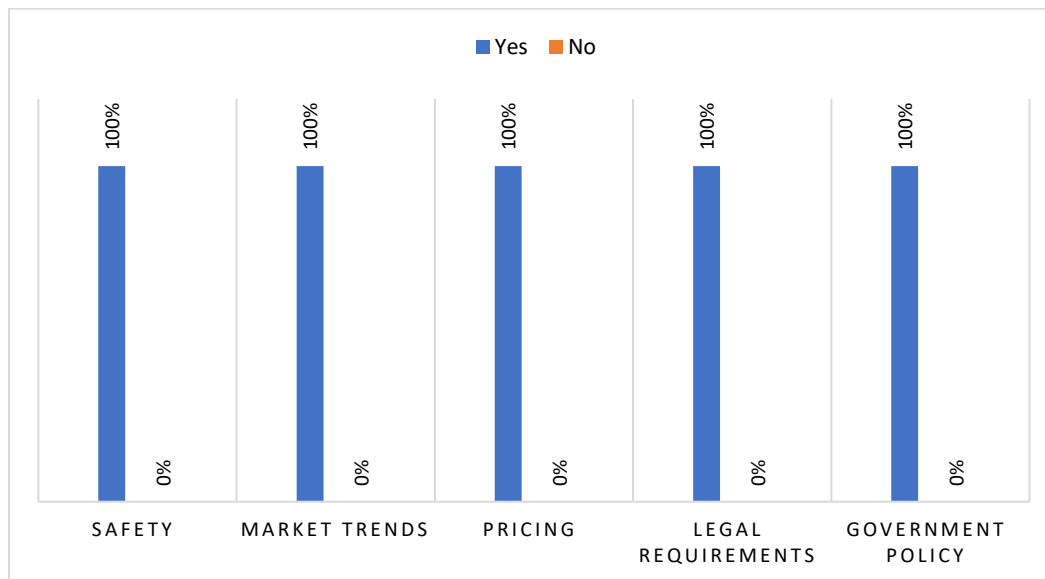
constrained by time and resources limitations which led to the use of just a sample of 15 participants.

Findings and Discussion

Table 1: Information Needs of Sand Loaders

Item	Yes	No
Safety	100%	0%
Market trends	100%	0%
Pricing	100%	0%
Legal requirements	100%	0%
Government policy	100%	0%

Fig 1: Information Needs of Sand Loaders



The study shows that the information needs of sand loaders in Etche Local Government Area, including their requirements for safety regulations, market trends, pricing, and legal requirements and government policy. These findings emphasize the critical role of access to accurate and timely information in enabling sand loaders to navigate the complexities of the sand mining industry effectively. Addressing these information needs requires a comprehensive approach that involves government policies aimed at promoting occupational health and safety standards, fostering market transparency, ensuring regulatory compliance, and facilitating stakeholder engagement (Horsfall et al. 2020). By prioritizing the provision of relevant information and creating an enabling regulatory environment, policymakers can empower sand loaders to make informed

decisions, mitigate risks, and contribute to the sustainable development of the sand mining sector in the Etche Local Government Area.

Table 2: Information Seeking Behaviour

Sources of Information consulted	Yes	No
Government agencies	23%	77%
Industry associations	64%	26%
Market reports	58%	42%
Social networks	95%	5%
Friends/colleagues	100%	0%

Table 3: Frequency of information seeking

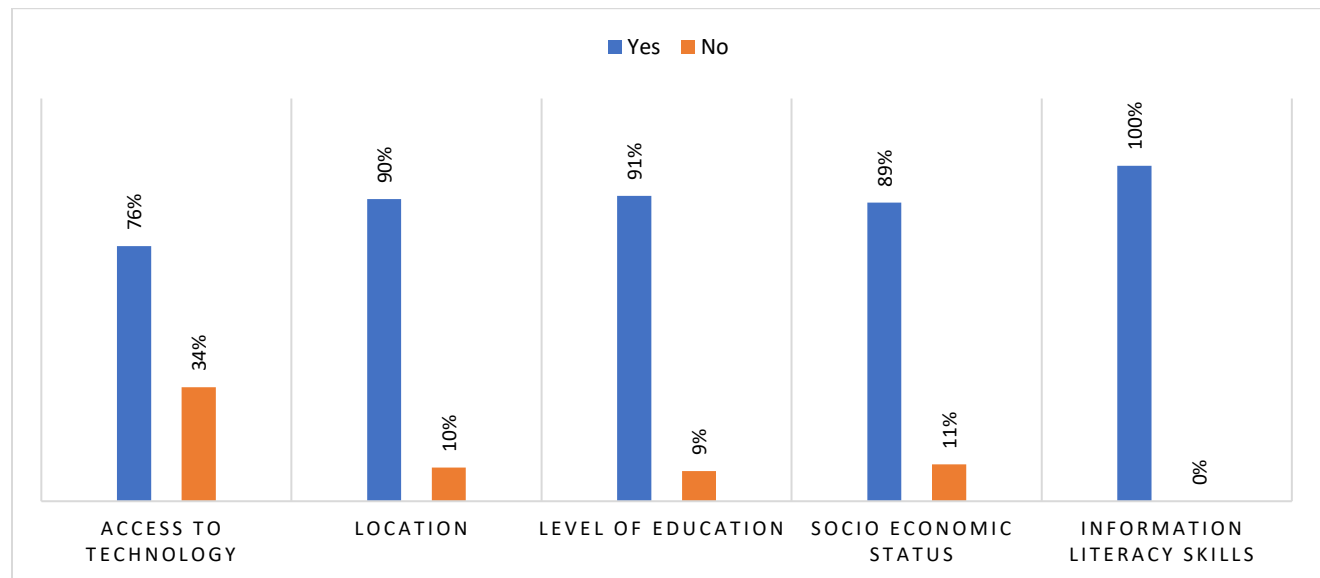
Frequency of seeking the following information sources	frequently	occasionally	Rarely	Never
Government agencies	12%	16%	67%	5%
Industry association	64%	26%	8%	2%
Market reports	54%	40%	4%	2%
Social networks	81%	11%	5%	3
Friends/colleagues	100%	0%	0%	0%

Information-seeking behavior of sand loaders include their preferred sources of information, and frequency of seeking information. The findings reveal a notable pattern in the sources consulted by sand loaders in the Etche Local Government Area of Rivers State, with friends and colleagues, social networks, industry associations, and market reports emerging as frequently consulted sources, while government agencies were rarely consulted. This trend suggests a reliance on informal channels and peer-to-peer networks for information acquisition among sand loaders, potentially driven by factors such as trust, accessibility, and familiarity. Friends and colleagues likely serve as trusted sources of firsthand knowledge and practical insights, while social networks facilitate knowledge exchange and information sharing within the community (Dahlqvist, 2021). Industry associations and market reports are valued for their specialized expertise and market intelligence, offering valuable insights into safety regulations, market trends, pricing dynamics, and legal requirements. In contrast, the low consultation of government agencies may reflect perceived barriers such as bureaucratic processes, language barriers, or a lack of awareness about available government resources. The frequency of seeking information among sand loaders may vary based on factors such as workload, market conditions, and seasonal demand fluctuations.

Table 4: Factors influencing information seeking behaviour

Items	Yes	No
Access to technology	76%	34%
Location	90%	10%
Level of education	91%	9%
Socio economic status	89%	11%
Information literacy skills	100%	0%

Fig. 2: Factors influencing information seeking behaviour



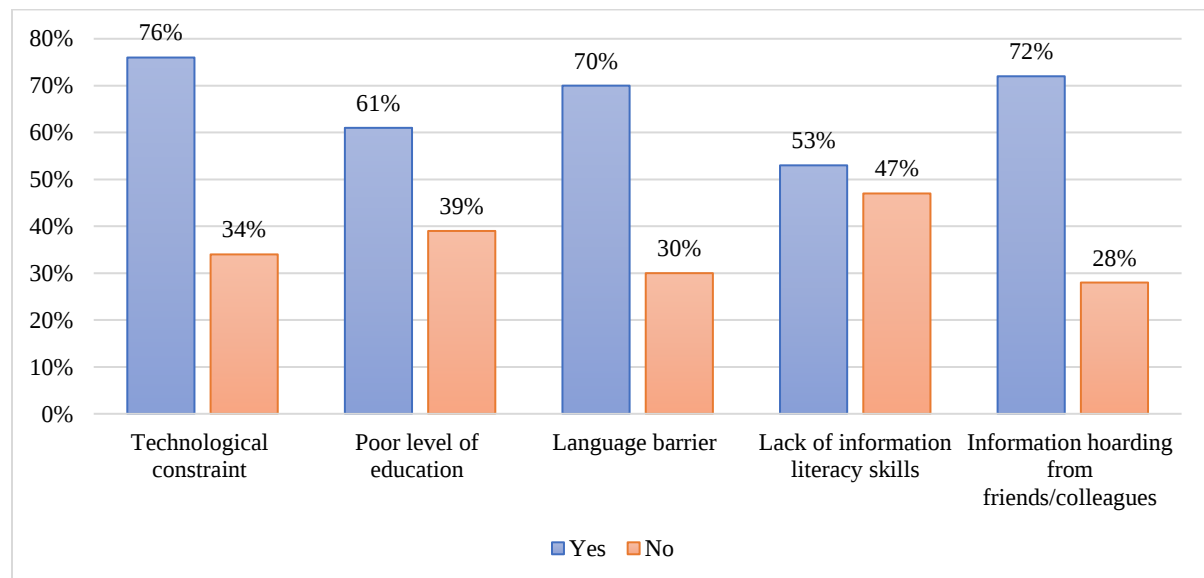
The study indicates that the factors influencing the information-seeking behavior included information literacy skills, level of education, access to technology, geographical location socio-economic status and access to technology. Level of education plays a pivotal role, with higher levels of education impacting positively with information literacy and digital skills. Socio-economic status is also a critical determinant, with higher-income individuals often having greater access to information resources and technology, enabling them to engage more actively in seeking behavior (Eshak et al. 2022). Geographical location further shapes information-seeking behavior, with sand loaders in remote or rural areas facing greater challenges in accessing information due to limited infrastructure and resources. Access to technology, including internet connectivity and digital devices, facilitates information access and communication, particularly in urban areas where infrastructure is more readily available. Understanding and addressing these socio-economic, educational, technological, and geographical factors are essential for designing targeted

interventions to improve information access and support the livelihoods of sand loaders in the region.

Table 5: Challenges affecting information seeking behaviour

Items	Yes	No
Technological constraint	76%	34%
Poor level of education	61%	39%
Language barrier	70%	30%
Lack of information literacy skills	53%	47%
Information hoarding from friends/colleagues	72%	28%

Fig. 3: Challenges affecting information seeking behaviour



The findings discovered that the several challenges faced by sand loaders in the Etche Local Government Area regarding their information-seeking behavior, includes technological constraints, poor levels of education, language barriers, lack of information literacy skills, and information hoarding from friends/colleagues. Technological constraints, such as limited access to digital devices and unreliable internet connectivity, hinder sand loaders' ability to leverage online information resources effectively, thereby limiting their access to crucial information. Additionally, a poor level of education exacerbates these challenges, as individuals with lower levels of education may struggle to comprehend complex regulatory documents or navigate online platforms. Language barriers further impede information access, particularly in regions with

linguistic diversity where official documents may be inaccessible or incomprehensible to non-native speakers. Moreover, the lack of information literacy skills inhibits sand loaders' ability to evaluate and utilize information effectively, leading to potential misinformation or disengagement from formal information channels. Furthermore, the practice of information hoarding among friends and colleagues restricts the dissemination of knowledge within the community, depriving sand loaders of valuable insights and resources. Addressing these challenges requires targeted interventions aimed at improving digital infrastructure, enhancing educational opportunities, promoting language diversity initiatives, fostering information literacy skills, and fostering a culture of knowledge sharing and collaboration within the sand mining community (Badurine and Lisek, 2018)

Summary of the Findings

1. The information needs of sand loaders in Etche Local Government Area, including their requirements for safety regulations, market trends, pricing, and legal requirements and government policy
2. The information seeking behaviour included the sources consulted and the frequently consulted sources which showed that friends and colleagues, social networks, industry associations, and market reports were the frequently consulted sources while government agencies were rarely consulted.
3. The factors influencing the information-seeking behavior included information literacy skills, level of education, access to technology, geographical location socio-economic status and access to technology
4. The challenges faced by sand loaders in the Etche Local Government Area regarding their information-seeking behavior, includes technological constraints, poor levels of education, language barriers, lack of information literacy skills, and information hoarding from friends/colleagues.

Implications of the Findings

The implications of the study with the aforementioned findings are multifaceted and can guide various stakeholders in addressing the information needs and improving the information-seeking behavior of sand loaders in the Etche Local Government Area.

Recognizing the specific information needs of sand loaders regarding safety regulations, market trends, pricing dynamics, legal requirements, and government policies underscores the importance of targeted information dissemination initiatives. Government agencies, industry associations, and other relevant organizations can develop tailored informational resources, workshops, and training programs to address these specific needs effectively. Also, understanding the sources consulted by sand loaders, including friends and colleagues, social networks, industry associations, and market reports, highlights the importance of leveraging informal networks and specialized industry resources in information dissemination efforts. Collaborating with trusted sources and community influencers can enhance the relevance, accessibility, and credibility of information provided to

sand loaders. Furthermore, the finding that government agencies were rarely consulted suggests a need for improved outreach and engagement strategies to bridge the gap between sand loaders and government resources. Government agencies should explore ways to make information more accessible, user-friendly, and relevant to the needs of sand loaders. This could involve streamlining administrative processes, providing language support, and enhancing digital infrastructure to facilitate information access.

Moreover, recognizing the factors influencing information-seeking behavior, such as information literacy skills, level of education, access to technology, geographical location, and socio-economic status, underscores the importance of addressing underlying barriers to information access and utilization. Efforts to improve educational opportunities, digital literacy training, and infrastructure development can empower sand loaders to navigate information more effectively and make informed decisions about their livelihoods. Technological constraints, poor levels of education, language barriers, lack of information literacy skills, and information hoarding from friends/colleagues collectively hinder sand loaders' ability to access and utilize crucial information necessary for their operations and well-being within the sand mining industry. By addressing these implications, stakeholders can empower sand loaders to overcome barriers to information access, make informed decisions, and ultimately contribute to the sustainable development of the sand mining industry in the region.

Conclusion

The study on the information needs and seeking behavior of sand loaders in Etche Local Government Area (LGA) highlights significant insights crucial for understanding and addressing the challenges faced by this vital stakeholder group within the sand mining industry. The identified information needs of sand loaders encompass safety regulations, market trends, pricing dynamics, legal requirements, and government policies, emphasizing the multifaceted nature of their operational requirements. The findings regarding information-seeking behavior reveal a reliance on informal sources such as friends and colleagues, social networks, industry associations, and market reports, while government agencies are underutilized. Factors influencing information-seeking behavior, including information literacy skills, level of education, access to technology, geographical location, and socio-economic status, underscore the complexity of the socio-cultural and economic context within which sand loaders operate. The challenges faced by sand loaders, such as technological constraints, educational limitations, language barriers, and information hoarding, pose significant barriers to accessing and utilizing relevant information effectively. Addressing these challenges necessitates targeted interventions aimed at improving digital infrastructure, enhancing educational opportunities, promoting language diversity initiatives, fostering information literacy skills, and encouraging knowledge sharing within the sand mining community. By addressing these findings, policymakers, industry stakeholders, and community leaders can work collaboratively to support the information needs and enhance the overall well-being of sand loaders in the Etche LGA, thus contributing to the sustainable development of the sand mining industry in the region.

Recommendations

1. **Enhance Access to Information Resources:** Government agencies and relevant organizations should prioritize efforts to improve access to information resources relevant to sand loaders' needs, including safety regulations, market trends, pricing dynamics, and legal requirements..
2. **Promote Digital Literacy and Access to Technology:** Initiatives aimed at promoting digital literacy and improving access to technology are essential for overcoming technological constraints faced by sand loaders. Government agencies, NGOs, and industry associations can collaborate to provide training programs on basic computer skills, internet usage, and information retrieval techniques. Additionally, efforts should be made to improve internet connectivity and infrastructure in rural areas to ensure equitable access to information resources.
3. **Support Educational Initiatives:** Addressing poor levels of education among sand loaders requires targeted educational initiatives. Government agencies and educational institutions can collaborate to provide adult education programs, vocational training, and skill development workshops tailored to the specific needs of sand loaders. These initiatives can empower sand loaders with the knowledge and skills necessary to navigate complex information landscapes effectively.
4. **Foster Knowledge Sharing and Collaboration:** To address challenges such as language barriers and information hoarding, efforts should be made to foster a culture of knowledge sharing and collaboration within the sand mining community. Industry associations, community-based organizations, and peer networks can play a pivotal role in facilitating knowledge exchange, mentoring programs, and peer-to-peer learning opportunities among sand loaders

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