The Legal Framework for Occupational Health and Safety in the Manufacturing Sector: Assessing Compliance and Enforcement Mechanisms in Nigeria

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Abstract

Occupational health and safety (OHS) is a crucial aspect of labour regulation, particularly in Nigeria's manufacturing sector, where workplace hazards are prevalent. While Nigeria has enacted various OHS laws, including the Factories Act (2004), Labour Act (2004), and Employee Compensation Act (2010), compliance remains low due to weak enforcement mechanisms, limited employer and worker awareness, economic constraints, and the challenges posed by the informal sector. This article examines the legal framework governing OHS in Nigeria's manufacturing sector, evaluates compliance and enforcement mechanisms, and highlights key challenges and recommendations for improvement. The findings highlight the urgent need for strengthening regulatory agencies, increasing public awareness, providing incentives for compliance, and enforcing stricter legal penalties to bridge the gap between OHS legislation and actual implementation.

Keywords: Occupational health and safety, Manufacturing sector, Compliance, Enforcement mechanisms, Legal framework, Labour regulation, Workplace hazards.

Introduction

Occupational health and safety (OHS) is a critical component of labour regulations, especially in high-risk industries like manufacturing. As noted by Saka and Olanipekun (2021), the manufacturing industry is vital to Nigeria's economic progress, making substantial contributions to employment, industrialisation, and the growth of gross domestic product (GDP). Still, many people in this sector are at risk of getting hurt at work because they use heavy equipment, are exposed to dangerous chemicals, do the same physical tasks over and over, and work in unsafe conditions

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(Almaskati et al., 2024). Employees in manufacturing often face dangers such as mechanical injuries, respiratory issues due to chemical exposure, excessive noise, inadequate ventilation, and ergonomic challenges, which can result in chronic health problems, workplace incidents, and even fatalities. In light of these dangers, it is imperative to prioritise establishing a safe and healthy working environment, as this is both an ethical responsibility and a legal requirement, which is essential for sustainable industrial development and the protection of the workforce.

Recognising the importance of OHS, Nigeria has enacted various laws and policies aimed at protecting employees from occupational risks. Important laws like the Factories Act (2004), the Labour Act (2004), the Employee Compensation Act (2010), and the National Policy on Occupational Safety and Health (2020) set rules for safety at work, what employers are responsible for, and what workers are entitled to (Ememobong & Akpan, 2020). Additionally, Nigeria has signed international treaties, such as the International Labour Organisation's (ILO) Convention No. 155 on Occupational Safety and Health, which highlights the importance of strong regulatory measures (ILO, 2022). Despite these legal structures, guaranteeing workplace safety remains a significant challenge in Nigeria's manufacturing sector due to weak enforcement, inadequate government oversight, low compliance by employers, and limited awareness among workers. The continuous gap between legal standards and actual enforcement has led to persistent workplace injuries, preventable deaths, and financial losses due to decreased productivity and compensation claims.

The Federal Ministry of Labour and Employment, the National Industrial Safety Council of Nigeria (NISCN), and the Occupational Safety and Health Department (OSHD) are not always able to enforce OHS laws in Nigeria. This is a big problem. These organisations often face challenges like inadequate funding, limited staffing, corruption, and bureaucratic inefficiencies, which hinder their ability to carry out routine inspections and maintain safety regulations (Umeokafor, 2014). Moreover, many employers, particularly in the informal sector, disregard safety regulations to boost profits, while workers, experiencing job insecurity, are often reluctant to report unsafe working environments (Onwo & Ohazulike, 2021). This situation exacerbates workplace dangers and diminishes the effectiveness of existing regulations.

The necessity for a robust and effectively enforced legal structure for OHS is pressing, particularly as Nigeria aims to broaden its industrial sector and lure foreign investments. Tackling these obstacles demands multiple strategies, including bolstering regulatory bodies, raising sanctions for violations, improving public awareness initiatives, and encouraging cooperation among governments, labour unions, and private sector participants (Muhammed, 2021). This article analyses the current legal framework regulating OHS in Nigeria's manufacturing industry. Learning more about the complicated health and safety rules that apply to manufacturing can help policymakers, business leaders, and enforcement agencies come up with better ways to protect workers' health, boost productivity, and support long-term industrial growth.

Global perspective on occupational health and safety frameworks

Acknowledging the global significance of workplace safety, many international entities have formulated legal frameworks, guidelines, and policies to enhance Occupational Health and Safety (OHS) standards across various sectors and nations. These frameworks focus on preventing workplace injuries, health risks, and deaths, to establish safe, respectful, and efficient work settings (Schulte et al., 2022). As per Alli (2008), the International Labour Organisation (ILO) has served as a prominent proponent of occupational health and safety (OHS). It creates legally binding conventions, non-binding guidelines, and technical standards that support national governments in formulating their OHS regulations. The ILO bases its efforts on the fundamental principle that every worker has a right to a secure and healthy workplace. To accomplish this, the organisation works alongside governments, employers, and employees to establish OHS policies tailored to national situations.

Key ILO conventions on OHS

The ILO's conventions serve as global benchmarks for OHS legislation and set out minimum safety and health standards. Some of the most significant conventions include:

- 1. ILO Convention No. 155 (1981) on Occupational Safety and Health
- This convention establishes a comprehensive framework for national policies on occupational safety and health.
- It mandates that countries develop preventive strategies, legislative frameworks, and enforcement mechanisms to protect workers from workplace hazards.
- It emphasizes the tripartite involvement of government, employers, and workers in policy formulation and implementation.
- 2. ILO Convention No. 161 (1985) on Occupational Health Services
- This calls for the establishment of occupational health services at the enterprise level, ensuring that companies take preventive and protective measures.
- It stresses the importance of health surveillance, risk assessment, and early detection of work-related diseases.
- 3. ILO Convention No. 187 (2006) on the Promotional Framework for Occupational Safety and Health
- Encourages countries to develop a national culture of prevention in OHS by integrating safety policies into broader economic and labour strategies.
- It also supports continuous improvements in OHS through research, innovation, and adaptation to emerging risks.

These conventions, alongside various ILO recommendations (such as Recommendation No. 164 on Occupational Safety and Health, 1981), provide a comprehensive framework that countries can ratify and incorporate into domestic laws. In addition to the ILO, the World Health Organization (WHO) plays a crucial role in promoting health-centered workplace policies. The WHO's approach to OHS emphasizes:

- Preventive healthcare measures, such as vaccinations, ergonomics, and mental health programs.
- Universal access to occupational health services, ensuring that all workers, including those in informal sectors, receive medical support.
- Research on work-related diseases, such as respiratory illnesses from industrial pollutants, and strategies for early detection and intervention.

The WHO's Global Plan of Action on Workers' Health (2008-2017) called for the integration of OHS into public health systems, urging governments to develop policies that reduce occupational hazards across all sectors, including informal employment (WHO, 2013). Many developed nations have wellestablished OHS laws that enforce strict compliance mechanisms. Some of the most notable examples include:

- 1. United States (OSHA Occupational Safety and Health Administration)
- OSHA enforces federal workplace safety laws under the Occupational Safety and Health Act of 1970, which mandates that employers provide a workplace free from recognized hazards (US Institute of Medicine 2001).
- The agency conducts inspections, penalizes non-compliant businesses, and provides training programs to improve workplace safety.
- OSHA has played a key role in reducing workplace injuries and fatalities in the U.S. manufacturing sector.
- 2. European Union (EU OSH Strategic Framework)
- The European Union's OHS laws are governed by the EU Framework Directive 89/391/EEC, which requires employers to assess and mitigate workplace risks (ILO, 2019)
- EU member states adopt sector-specific safety directives, ensuring tailored regulations for industries such as construction, mining, and heavy manufacturing.
- The EU's Vision Zero approach aims for zero work-related fatalities, serious injuries, and occupational diseases.
- 3. Canada (CCOHS Canadian Centre for Occupational Health and Safety)
- Canada's federal and provincial laws mandate strict employer obligations, including workplace safety assessments, hazard control, and worker training.
- The CCOHS provides extensive guidance, research, and safety resources to industries, ensuring compliance with national OHS standards.

These global best practices demonstrate how well-structured legal, institutional, and enforcement mechanisms can significantly enhance workplace safety and reduce occupational risks.

Occupational Health and Safety in Africa

Although OHS has advanced significantly in industrialized nations, Africa still struggles with major obstacles when enforcing effective workplace safety measures. In Africa, OHS often has problems because there aren't enough laws, they aren't enforced well, and there is a lot of informal work, where safety rules aren't followed (Onyenechere et al., 2022). Acknowledging these difficulties, the African

Union (AU) has implemented policies intended to enhance occupational safety throughout the continent. Some key initiatives include:

- 1. Agenda 2063 The Africa We Want
- This long-term strategy prioritizes decent work and social protection as key pillars of Africa's sustainable development.
- It calls for enhanced labour regulations, social security, and improved workplace environments.
- 2. African Regional Labour Administration Centre (ARLAC)
- ARLAC provides policy guidance, research, and training to labour ministries across Africa to enhance OHS laws and their enforcement (Kaigama & Abdullahi, 2021).
- 3. Southern African Development Community (SADC) Code on Social Security
- This regional framework promotes harmonization of labour laws, ensuring that workers across Southern Africa receive basic occupational health protections.
- 4. African Union Social Policy Framework (2008)
- This policy underscores the importance of integrating occupational health into national economic and labour development plans.

Although attempts have been made to implement occupational health and safety (OHS) frameworks in Africa, various ongoing challenges impede their successful execution. Wilcox (2021) states that a major obstacle to implementing OHS in Africa is inadequate institutional capacity. Numerous governments are allegedly lacking the necessary infrastructure, knowledge, and resources to effectively implement workplace safety regulations. At the same time, Kohn et al. (2023) observed that, although OHS laws are present, regulatory bodies frequently face challenges due to insufficient staffing, outdated enforcement methods, and poor coordination among pertinent organisations. This leads to inadequate compliance since companies, particularly in high-risk fields such as mining, construction, and agriculture, continue to function without following safety regulations.

A significant obstacle is the widespread occurrence of informal employment. Christiaensen and Maertens (2022) observed that a significant portion of Africa's labour force operates outside established legal and regulatory systems. Jobs in the informal sector, including street vending, domestic work, artisanal mining, and small-scale agriculture, frequently lack legal safeguards, making it challenging to uphold OHS standards. Research demonstrates that employees in these industries often encounter dangerous situations that involve contact with toxic substances, faulty equipment, and severe weather conditions, lacking any legal safeguards or compensation if they suffer from injury or illness (Abdalla et al., 2017). Authorities find it more difficult to monitor work conditions and ensure adherence to safety protocols due to the casual nature of these positions.

While some African nations, such as South Africa, have made notable progress in implementing strong OHS laws and enforcement mechanisms, many others still struggle to effectively integrate occupational health and safety into their national labour policies. South Africa has made significant progress in OHS through comprehensive legal frameworks and strict enforcement mechanisms (Kale, 2023). The Occupational Health and Safety Act (1993) mandates:

- Risk assessment and hazard control measures in all workplaces.
- Regular safety inspections and severe penalties for non-compliance.
- Worker education and safety training programs to ensure compliance at all employment levels.

South Africa's progress shows how strong legal enforcement, institutional commitment, and worker education can lead to better workplace safety outcomes. However, in many other African nations, OHS remains a secondary concern, often overlooked due to economic constraints and governance challenges

Legal Framework for Occupational Health and Safety in Nigeria

Nigeria has created numerous laws and regulatory frameworks to guarantee the safety, health, and welfare of employees, especially in high-risk sectors like manufacturing. These legal documents specify employer responsibilities, employee rights, and the methods for upholding occupational health and safety (OHS) regulations. Though there are difficulties in enforcement and adherence, these regulations establish an essential framework for workplace safety in Nigeria. These are:

1. The Constitution of the Federal Republic of Nigeria (1999, as amended): The Nigerian Constitution establishes a foundation for labour rights and protections in the workplace. Although it does not specifically detail OHS provisions, Section 17(3) of the Constitution requires the state to guarantee humane working conditions and the maintenance of health, safety, and welfare standards. This rule acts as a foundational guideline for OHS policies and regulations nationwide. However, Ebikake-Nwanyanwu and Woripre (2025) pointed out that the Constitution's enforcement methods are indirect, which is why extra laws like the Factories Act and Labour Act are needed to carry out and keep an eye on certain OHS provisions. 2. The Factories Act (2004): The 2004 Factories Act continues to be the foundation of workplace safety regulations in Nigeria. Initially established in 1987 and subsequently updated, this Act specifically regulates factory activities and requires employers to uphold safety protocols in every industrial setting. The legislation pertains to manufacturing facilities, assembly operations, processing sectors, and additional factory-type establishments where employees encounter dangerous conditions (Labour Act, Cap. [L1], 2004). Key provisions of the Factories Act include:

Workplace Sanitation and Ventilation: Employers must ensure that workspaces are clean, well-ventilated, and free from conditions that could cause respiratory diseases or infections. Proper waste disposal and sanitation facilities are also required to prevent workplace illnesses.

Protection Against Dangerous Machinery: The Act mandates that machinery with moving parts be adequately guarded to prevent workplace injuries. Employers must ensure that machines are properly maintained, and workers receive appropriate training before handling dangerous equipment.

Provision and Use of Personal Protective Equipment (PPE): Workers must be provided with protective clothing, gloves, helmets, goggles, and other safety gear to minimize exposure to hazardous substances or prevent physical injuries.

Regular Safety Inspections and Audits: The Act empowers labour inspectors to visit factories, conduct safety audits, and issue compliance notices where necessary. Employers who fail to meet the prescribed safety standards can face penalties or even the closure of their establishments.

Despite its significance, the Factories Act has limitations, particularly in its scope. It primarily applies to registered factories, while leaving workers in non-industrial workplaces with fewer legal protections.

3. **The Labour Act (2004).** The Labour Act provides a broader legal framework governing employment relationships, including OHS obligations. While it does not focus exclusively on workplace safety, it establishes the general responsibilities of employers in ensuring the welfare of employees (Nigerian Labour Act, 2004). Under the Labour Act, employers are required to:

• Provide safe working conditions that do not expose workers to undue hazards.

- Ensure that employees are not required to work under conditions that threaten their health or physical well-being.
- Offer medical care in cases where employees suffer work-related injuries or illnesses.
- Comply with labour inspectors' directives concerning workplace safety and health regulations.

While the Act offers general safety provisions, it lacks specific and detailed OHS requirements, particularly concerning modern workplace risks. It is often seen as outdated in addressing contemporary industrial hazards such as chemical exposure, ergonomics, and workplace stress.

4. **The Employees' Compensation Act (2010).** The Employees' Compensation Act (ECA) of 2010 introduced a structured compensation system for workers who suffer workplace injuries, occupational diseases, or fatalities. The Act replaced the previous Workmen's Compensation Act and expanded the scope of protection and modernized compensation procedures. According to the Employees' Compensation Act (2010), the key provisions include:

Employees' Compensation Scheme (ECS): The Act established a contributory insurance scheme managed by the Nigeria Social Insurance Trust Fund (NSITF). Employers are required to contribute to this scheme, ensuring that injured workers receive financial compensation without resorting to lengthy legal battles.

Medical and Rehabilitation Support: Injured workers are entitled to medical treatment, rehabilitation services, and retraining where necessary. This provision ensures that workers who suffer permanent disabilities can reintegrate into the workforce.

Compensation for Dependents: If a worker dies due to a workplace accident, their dependents are entitled to compensation, reducing the financial burden on affected families.

No-Fault System: Unlike traditional legal claims that require workers to prove employer negligence, the Employees' Compensation Act operates on a no-fault basis, meaning employees receive benefits regardless of who was responsible for the injury.

5. National Policy on Occupational Safety and Health (2020). The National Policy on Occupational Safety and Health (OSH), introduced in 2020, provides a strategic framework for implementing OHS regulations across different industries (ILO, 2020). Unlike the legal statutes that prescribe employer obligations, the policy focuses on promoting preventive measures and strengthening workplace safety culture. The objectives of the policy include:

- Encouraging a proactive approach to OHS compliance by promoting risk assessments, regular safety drills, and workplace hazard evaluations.
- Enhancing collaboration between government agencies, employers, and workers to ensure that OHS measures are implemented effectively.
- Integrating OHS considerations into national development plans, recognizing the link between worker health and economic growth.

6. **International Conventions and Treaties**. As a member of the International Labour Organization (ILO), Nigeria has ratified several key conventions related to occupational health and safety. These include:

ILO Convention No. 155 (1981) – Occupational Safety and Health Convention: This convention establishes the framework for governments, employers, and workers to implement policies that promote workplace safety. Nigeria's commitment to this convention highlights its recognition of OHS as a fundamental labour right.

ILO Convention No. 161 (1985) – Occupational Health Services Convention: This convention mandates that occupational health services be made available at the enterprise level to provide preventive and protective measures for workers.

ILO Convention No. 187 (2006) – Promotional Framework for Occupational Safety and Health Convention: Encourages countries to develop a national prevention culture for OHS, emphasizing continuous improvement and stakeholder involvement.

As can be seen from the foregoing discussion, the legal framework governing occupational health and safety in Nigeria is extensive, covering constitutional protections, specific workplace regulations, compensation mechanisms, and international commitments. However, gaps remain in enforcement, coverage, and compliance. According to Abdalla et al. (2017), many businesses, particularly in the informal sector do not adhere to OHS regulations, while regulatory agencies cannot often conduct thorough inspections and enforce penalties effectively. To strengthen OHS in Nigeria, there is a need for better implementation of existing laws, improved workplace monitoring, and greater employer accountability.

Challenges of compliance with occupational health and safety (OHS) laws in Nigeria's manufacturing sector

Although Nigeria has established a legal framework for occupational health and safety (OHS), the actual situation in the manufacturing sector presents a contrasting narrative. Ngwama (2016) noted that adherence is still inadequate, with numerous factories not achieving fundamental safety standards. This circumstance primarily arises from a mix of insufficient awareness, poor enforcement measures, financial limitations, and the informal characteristics of a significant segment of the industry. All of these elements play a crucial role in maintaining hazardous working conditions in the industry, as illustrated below.

Lack of awareness: a culture of ignorance and neglect

According to Kamoli et al; (2021) one of the biggest hurdles to OHS compliance in Nigeria's manufacturing sector is the prevalent lack of awareness among both employers and employees. Many factory owners and managers do not fully understand the legal requirements for workplace safety, while workers themselves often do not know their rights when it comes to occupational health. This presents a situation where many employers, especially those running small and medium-sized enterprises (SMEs) see compliance with safety as a bureaucratic burden rather than a necessity (Nieuwenhuizen, 2019). Without proper sensitization, some genuinely do not know the extent of their legal obligations. Others may assume that workplace safety is just a matter of common sense and personal responsibility rather than structured policies backed by law.

Weak enforcement mechanisms: laws without impact

Even when employers are aware of OHS laws, Segbenya and Yeboah (2022) argue that the likelihood of them facing serious consequences for non-compliance is low. This is because enforcement mechanisms in Nigeria are largely ineffective. Meanwhile, Umeokafor (2014) contends that regulatory bodies, including the Federal Ministry of Labour and Employment, lack the manpower, resources, and institutional capacity to carry out routine factory inspections, as well as enforce compliance. A major challenge is the inadequate number of labour inspectors relative to the number of businesses operating in Nigeria. With thousands of manufacturing firms spread across the country, it is difficult to maintain regular inspections. Some factories go years without being inspected which gives room for unsafe practices to persist unchecked. In many cases, labour inspectors demand bribes from employers instead of ensuring compliance with safety regulations, Umeokafor (2014) further contends.

Economic constraints: the cost of compliance

Financial limitations play a huge role in the low compliance rates with OHS laws in Nigeria's manufacturing sector. Many business owners, especially those in small and medium-sized enterprises, see safety regulations as a costly requirement that affects their end result (Kitching et al., 2015). Patel et al. (2022) noted that implementing proper workplace safety measures requires financial investment in personal protective equipment (PPE), ventilation systems, fire safety installations, machine guards, and routine safety training. For instance, factories already struggling with high production costs due to unstable electricity supply, high taxes, and fluctuating raw material prices, spending on safety is often seen as an unnecessary expense rather than a long-term investment (Patel et al., 2022).

factory owners may deliberately cut corners to reduce operational costs. Instead of purchasing proper safety gear, they may reuse old or damaged PPE, or require workers to buy their own protective equipment which many cannot afford.

The informal sector: safety in the shadows

A significant portion of Nigeria's manufacturing sector operates outside the formal regulatory system (Olujobi, 2021), which makes OHS enforcement particularly challenging. Small-scale workshops, roadside factories, and homebased production units make up a large part of the industry, but still, they do not follow labour laws or safety regulations. Mujtaba and Kaifi (2023) noted that most of these businesses are not officially registered with government agencies. The implication is that they do not undergo workplace safety inspections or receive guidance on compliance. Many of them operate in makeshift buildings without proper ventilation, fire exits, or emergency response plans. Workers in these sceneries are often exposed to harmful chemicals, extreme temperatures, and hazardous machinery without any protective measures. The informal nature of these workplaces also means that worker rights are rarely enforced. According to Xhafa and Serrano (2024), employees lack job security and bargaining power

Enforcement mechanisms and challenges

The enforcement of Occupational Health and Safety (OHS) laws in Nigeria is primarily overseen by several regulatory bodies, each playing a crucial role in ensuring workplace safety and compliance.

- *Federal Ministry of Labour and Employment*: This ministry is the primary regulatory authority responsible for overseeing workplace safety regulations, conducting periodic inspections, and ensuring employers adhere to national labour laws regarding health and safety standards.
- *National Industrial Safety Council of Nigeria (NISCN)*: NISCN serves as a consultative body that promotes best safety practices across industries, providing guidance on hazard prevention, risk assessment, and safety management systems.
- *Occupational Safety and Health Department (OSHD)*: This department plays a key role in monitoring compliance with safety laws, investigating workplace accidents, and recommending necessary policy changes to improve enforcement.
- 6.1 Challenges in Enforcement

Despite the existence of these regulatory agencies, several systemic challenges hinder effective enforcement, leading to poor compliance with OHS laws in the manufacturing sector.

- *Limited inspection capacity*: The ability of regulatory agencies to conduct routine inspections is severely constrained by inadequate funding and a shortage of trained personnel. With thousands of workplaces spread across the country, only a small fraction undergo regular inspections, leaving many businesses to operate without oversight. This gap allows unsafe working conditions to persist unchecked.
- Corruption and regulatory capture: Weak enforcement mechanisms have created opportunities for corruption, where some factory owners evade

compliance through bribery. Regulatory officials may overlook violations in exchange for financial incentives, leading to selective enforcement of safety laws. In some cases, powerful business owners influence policymakers to weaken enforcement efforts, further undermining workplace safety.

• Legal ambiguities and outdated regulations: Many of Nigeria's OHS laws are either outdated or lack clear enforcement mechanisms, making it difficult for regulators to hold violators accountable. Some regulations do not specify penalties for non-compliance, allowing businesses to ignore safety standards with minimal consequences. Additionally, overlapping mandates between different agencies often lead to inefficiencies and inconsistencies in enforcement.

Recommendations for improving OHS compliance and enforcement

To enhance compliance and enforcement in Nigeria's manufacturing sector, the following measures should be implemented:

- Strengthening regulatory agencies: Increase funding, staffing, and training for OHS enforcement bodies to improve their capacity.
- Public awareness campaigns: Government and stakeholders should conduct awareness programs to educate employers and employees on OHS laws.
- Incentives for compliance: Introduce tax incentives and recognition awards for manufacturers that uphold high OHS standards.
- Stronger legal sanctions: Amend existing laws to impose stricter penalties for non-compliance, including fines and closures of non-compliant factories.
- Collaborative approach: Enhance partnerships between government agencies, labour unions, and the private sector to promote best practices in workplace safety.

Conclusion

Nigeria has a relatively robust legal framework for occupational health and safety in the manufacturing sector, covering national laws, international conventions, and policy guidelines. However, compliance remains low largely due to weak enforcement mechanisms, financial constraints, lack of awareness and the widespread informal sectors. The study finds that while key regulatory agencies such as the Federal Ministry of Labour and Employment, National Industrial Safety Council of Nigeria (NISCN), and the Occupational Safety and Health Department (OSHD) play significant roles in enforcing OHS regulations, they face systemic challenges such as corruption, inadequate inspection capacity, and outdated legal frameworks.

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