

European International University, EIU-Paris

Master's Thesis

FROM FRAGMENTATION TO INTEGRATION: DEVELOPING GHANA'S NATIONAL OCCUPATIONAL SAFETY AND HEALTH FRAMEWORK (GHANOSH-F): A COMPARATIVE ANALYSIS WITH THE UNITED ARAB EMIRATES

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Date:
August 2026

DECLARATION

I hereby declare that the work in this thesis, entitled "*FROM FRAGMENTATION TO INTEGRATION: DEVELOPING GHANA'S NATIONAL OCCUPATIONAL SAFETY AND HEALTH FRAMEWORK (GHANOSH-F): A COMPARATIVE ANALYSIS WITH THE UNITED ARAB EMIRATES*" has been undertaken and completed by me for the award of the Degree of **Master of Science (MSc) Degree in Occupational Health and Safety** with European International University, under the guidance of Prof. (Dr.) Amit Kapoor

I also declare that this thesis is an original work and has not been submitted for any degree or diploma in any other university or institution. Further, I declare that the texts, figures, tables, and any other material taken from other sources have been acknowledged, referred to, and cited in the best of my knowledge and understanding.

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The thesis represents an original work undertaken in accordance with the academic regulations of the European International University. The content of this thesis reflects the independent research efforts of the candidate. This thesis has not been submitted for the award of any degree, diploma, or other qualification at any other university.



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UNIVERSITY APPROVAL

This dissertation, titled "FROM FRAGMENTATION TO INTEGRATION: DEVELOPING GHANA'S NATIONAL OCCUPATIONAL SAFETY AND HEALTH FRAMEWORK (GHANOSH-F): A COMPARATIVE ANALYSIS WITH THE UNITED ARAB EMIRATES," has been examined and approved by the European International University (EIU-Paris) for the award of the **Master of Science (MSc) Degree in Occupational Health and Safety.**

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Abstract

Occupational safety and health (OSH) remain essential to sustainable national development, economic productivity, and worker well-being. Despite significant legislative developments, Ghana's occupational safety and health governance remains fragmented, with overlapping regulatory responsibilities, inconsistent enforcement mechanisms, and limited coverage of the country's extensive informal economy. These challenges have reduced the effectiveness of existing occupational safety and health interventions and constrained national efforts to build a coordinated, preventive safety culture.

This dissertation examines Ghana's existing occupational safety and health governance system through a comparative analysis with the United Arab Emirates, a country that has developed a more integrated regulatory and institutional approach to occupational safety and health. The study adopts a qualitative research design based on documentary analysis, comparative policy analysis, and an institutional review of legislation, international conventions, government publications, and academic literature. The study collected no primary data; instead, it synthesises authoritative documentary evidence to evaluate institutional arrangements and identify opportunities for reform.

The study finds that Ghana's current occupational safety and health system is characterised by fragmented institutional responsibilities, outdated legislation, inadequate coordination among regulatory agencies, limited professional regulation, and insufficient protection for workers in the informal economy. In contrast, the United Arab Emirates demonstrates stronger institutional coordination, clearer regulatory responsibilities, greater integration of digital compliance systems, and more structured implementation of occupational safety and health management principles aligned with international standards.

Based on these findings, the dissertation proposes the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as an integrated governance model developed to modernise occupational safety and health administration in Ghana. The framework comprises eight mutually reinforcing pillars: institutional coordination; informal economy occupational safety and health integration; a Special Task Force on Compliance and Enforcement; legislative harmonisation; sector-specific risk management; GHANOSH Connect as a national digital occupational safety and health platform; the National Occupational Safety and Health Rating System (NOSHRS); and the National Register of Occupational Safety and Health Professionals (NAROSHP). The framework also proposes a phased institutional pathway toward establishing a **Ghana National Occupational Safety and Health Authority (GHANOSHA).**

The dissertation concludes that strengthening institutional coordination, modernising legislation, improving professional governance, and leveraging digital technologies can significantly enhance occupational safety and health performance in Ghana. The proposed framework provides a practical, context-specific roadmap for policymakers seeking to transition from fragmented regulatory arrangements to an integrated national occupational safety and health system informed by international best practice while remaining responsive to Ghana's socioeconomic realities.

Keywords: Occupational Safety and Health, Ghana, United Arab Emirates, GHANOSH-F, Institutional Reform, Comparative Policy Analysis, Occupational Health Governance, NAROSHP, GHANOSH Connect, National Occupational Safety and Health Rating System (NOSHRS).

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
ADOSH	Abu Dhabi Occupational Safety and Health System Framework
ADPHC	Abu Dhabi Public Health Centre
CPD	Continuing Professional Development
DFI	Department of Factories Inspectorate
EIU	European International University
EPA	Environmental Protection Agency
GHANOSH-F	Ghana National Occupational Safety and Health Framework
GHANOSHA	Ghana Occupational Safety and Health Authority (Proposed)
HSE	Health, Safety and Environment
ILO	International Labour Organization
IOSH	Institution of Occupational Safety and Health
MELR	Ministry of Employment and Labour Relations
MoHRE	Ministry of Human Resources and Emiratisation (UAE)
NAROSHP	National Register of Occupational Safety and Health Professionals
NOSHRS	National Occupational Safety and Health Rating System
OHS	Occupational Health and Safety
OSH	Occupational Safety and Health
PPE	Personal Protective Equipment
UAE	United Arab Emirates
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Occupational Safety and Health (OSH) has become an essential component of sustainable national development, organisational performance, and worker wellbeing. Worldwide, governments increasingly recognise that effective occupational safety and health systems not only prevent workplace injuries and occupational diseases but also improve productivity, reduce economic losses, and contribute to social welfare. According to the International Labour Organisation (ILO), millions of workers still experience work-related accidents and illnesses annually, underscoring the need for effective national governance systems that promote prevention, compliance, and continual improvement (ILO, 2022).

Modern occupational safety and health governance extends beyond compliance with safety regulations. It encompasses national policy development, legislative frameworks, institutional coordination, professional competency, inspection and enforcement mechanisms, worker participation, occupational health surveillance and the integration of digital technologies for monitoring and reporting. Countries with mature occupational safety and health systems increasingly adopt coordinated governance models that encourage collaboration among government agencies, employers, employees, and professional bodies while aligning with international standards such as **ILO Convention No. 155**, **ILO Convention No. 187**, and **ISO 45001:2018**.

In Ghana, several institutions established under different legal instruments share occupational safety and health responsibilities. These include the **Ministry of Employment and Labour Relations (MELR)**, the **Department of Factories Inspectorate (DFI)**, the **Environmental Protection Agency (EPA)**, the **Minerals Commission**, the **Petroleum Commission**, the **Ghana National Fire Service**, district assemblies and other sector regulators. Each institution performs important statutory responsibilities within its respective mandate.

Despite this institutional foundation, Ghana's OSH governance system has developed incrementally over several decades, resulting in multiple agencies operating under separate legislative frameworks with varying operational procedures and reporting mechanisms. Consequently, agencies often administer workplace inspection, occupational accident investigation, environmental protection, fire safety, hazardous substance management, and occupational health surveillance independently. While these institutions have achieved important successes within their individual sectors, limited institutional integration may contribute to overlapping regulatory responsibilities, inconsistent enforcement practices and fragmented national occupational safety and health information.

The challenge is particularly significant within Ghana's informal economy, which employs a substantial proportion of the national workforce. Workers in agriculture, artisan mining, transportation, construction, welding, fishing, small-scale manufacturing, and other informal occupations often operate outside formal regulatory systems.
Traditional inspection models, which primarily focus on registered workplaces, often struggle to provide effective occupational safety and health protection to these workers.

Globally, governments have increasingly responded to similar challenges by strengthening institutional coordination rather than relying solely on legislative expansion. Integrated governance approaches clarify institutional responsibilities, coordinate inspections, share information systems, support evidence-based policymaking, and strengthen stakeholder collaboration. These approaches also support national compliance with international occupational safety and health standards and help use regulatory resources more efficiently.

The United Arab Emirates (UAE) provides an instructive comparative context. Like Ghana, occupational safety and health responsibilities in the UAE are distributed among several federal, emirate-level and sector-specific authorities. However, the UAE has invested significantly in coordinated governance, digital public administration, structured management systems and competency-based regulation. While the UAE's economic and institutional

context differs considerably from Ghana's, several governance principles may offer useful lessons that Ghana can adapt to its circumstances without replicating the UAE's institutional arrangements.

This dissertation therefore examines how Ghana's occupational safety and health governance system can be strengthened through improved institutional coordination. Rather than advocating immediate replacement of existing institutions, the study proposes the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**, a coordinated governance model designed to integrate existing regulatory structures, improve information sharing, strengthen professional competency, enhance protection for informal-sector workers, and promote continual improvement in occupational safety and health performance.

The proposed framework is intended to provide policymakers, regulators, employers, and occupational safety professionals with a practical roadmap for developing Ghana's occupational safety and health governance while preserving the strengths of its existing institutional architecture.

1.2 Statement of the Problem

Occupational Safety and Health (OSH) is fundamental to safeguarding workers, improving organisational performance, and supporting national socio-economic development. An effective national OSH system reduces workplace accidents, occupational diseases, and associated economic losses while promoting a culture of prevention and compliance. Although Ghana has enacted several laws and established institutions to regulate workplace safety and health, concerns remain about the effectiveness of the overall governance system.

The responsibility for OSH regulation in Ghana is dispersed among several institutions, including the Ministry of Employment and Labour Relations (MELR), the Department of Factories Inspectorate (DFI), the Environmental Protection Agency (EPA), the Minerals Commission, the Petroleum Commission, the Ghana National Fire Service and other sector-specific regulators. While each institution performs important statutory functions within its mandate, no fully integrated national framework coordinates policy implementation, inspection planning, information sharing, and performance monitoring across sectors.

This institutional fragmentation presents several governance challenges. **First,** overlapping regulatory responsibilities may lead to duplicated inspections and inconsistent enforcement. **Second,** differences in reporting systems limit the availability of comprehensive national data on occupational injuries, diseases, and workplace hazards, making evidence-based policy development more difficult. **Third,** limited coordination among regulatory agencies can reduce resource efficiency and delay responses to emerging occupational risks.

Another significant concern is protecting workers in Ghana's informal economy. A substantial proportion of the country's workforce is employed in small-scale enterprises, agriculture, artisanal mining, fishing, transport, and other informal occupations. Many of these workers operate outside formal regulatory structures and therefore receive limited occupational safety and health support. Conventional inspection systems, which primarily target registered workplaces, often fail to address the unique challenges of informal employment.

In addition, Ghana's current OSH governance arrangements have evolved through different legislative instruments enacted over several decades. While these laws continue to provide an important legal foundation, they were developed independently to address specific sectors and may not fully reflect contemporary approaches to integrated occupational safety and health management, digital governance, professional competency systems, and coordinated national oversight.

By comparison, the United Arab Emirates has developed a more coordinated approach to occupational

safety and health governance through structured institutional collaboration, digital regulatory systems, competency-based professional requirements, and sector-specific safety programmes. Although Ghana and the UAE differ in their economic, administrative, and labour market contexts, selected UAE governance principles may offer useful lessons that can be adapted to strengthen Ghana's existing system.

Despite previous studies examining occupational safety and health legislation, workplace compliance and accident prevention in Ghana, limited research has focused specifically on institutional coordination as the central determinant of national OSH governance effectiveness. Furthermore, few studies have proposed a comprehensive governance framework that integrates existing institutions while preserving their statutory mandates.

This research addresses that gap by undertaking a comparative analysis of occupational safety and health governance in Ghana and the United Arab Emirates. Based on the findings, the study proposes the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as a practical model to improve institutional coordination, strengthen professional competence, enhance digital governance, expand protection for informal-sector workers, and support continuous improvement in national occupational safety and health performance.

1.3 Aim of the Study

The aim of this study is to examine Ghana's occupational safety and health governance system through a comparative analysis with the United Arab Emirates and to develop an integrated governance framework (**GHANOSH-F**) that strengthens institutional coordination, improves regulatory effectiveness, and enhances occupational safety and health outcomes while preserving the statutory mandates of existing institutions.

1.4 Research Objectives

The study seeks to achieve the following objectives:

General Objective

To develop an integrated occupational safety and health governance framework capable of strengthening institutional coordination and improving national occupational safety and health performance in Ghana.

Specific Objectives

1. To examine the existing occupational safety and health governance system in Ghana.
2. To analyse the occupational safety and health governance framework of the United Arab Emirates.
3. To compare the institutional, legislative, and operational arrangements of Ghana and the UAE to identify transferable governance principles.
4. To identify institutional gaps affecting the effectiveness of occupational safety and health governance in Ghana.
5. To develop the Ghana National Occupational Safety and Health Framework (GHANOSH-F) as a coordinated model for strengthening national occupational safety and health governance.

1.5 Research Questions

This study is guided by the following research questions:

1. What are the key characteristics of Ghana's current occupational safety and health governance system?
2. How is occupational safety and health governance organised and implemented in the United Arab Emirates?
3. What governance principles from the UAE can be adapted to improve Ghana's occupational safety and health system?

4. What institutional challenges limit effective occupational safety and health governance in Ghana?
5. How can the proposed GHANOSH-F improve institutional coordination and occupational safety and health governance in Ghana?

1.6 Significance of the Study

This study is significant because it advances occupational safety and health (OSH) governance in Ghana by proposing a practical framework to strengthen institutional coordination while preserving the statutory responsibilities of existing regulatory bodies. The findings are expected to benefit policymakers, regulatory institutions, employers, employees, occupational safety professionals, researchers, and the wider community.

1.6.1 Significance to Government and Policymakers

The study provides evidence-based recommendations for improving national OSH governance. By identifying institutional gaps and comparing Ghana's system with selected governance practices in the United Arab Emirates, the research offers policymakers practical options for strengthening coordination, legislative harmonisation, and national implementation without requiring immediate institutional restructuring. The proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** may serve as a reference for future national OSH policy reforms.

1.6.2 Significance to Regulatory Institutions

Institutions such as the Ministry of Employment and Labour Relations (MELR), the Department of Factories Inspectorate (DFI), the Environmental Protection Agency (EPA), the Minerals Commission, the Petroleum Commission and the Ghana National Fire Service may benefit from improved mechanisms for collaboration, information sharing and coordinated enforcement. The proposed framework encourages greater institutional cooperation while respecting existing legal mandates.

1.6.3 Significance to Employers

Employers play a central role in maintaining safe and healthy workplaces. The study highlights the importance of proactive risk management, compliance with legal requirements, and adopting internationally recognised management systems such as ISO 45001. Improved national coordination may also reduce regulatory duplication and provide employers with clearer guidance on compliance expectations.

1.6.4 Significance to Workers

Workers are the primary beneficiaries of effective occupational safety and health governance. The proposed framework seeks to improve workplace protection through stronger regulatory coordination, enhanced reporting systems, greater emphasis on prevention and expanded coverage for workers in both the formal and informal sectors. Improved governance may help reduce occupational injuries, illnesses, and fatalities while promoting healthier working environments.

1.6.5 Significance to Occupational Safety and Health Professionals

The study proposes establishing the National Register of Occupational Safety and Health Professionals (NAROSHP) to promote competency-based professional registration, continuing professional development, and ethical practice. This initiative could strengthen the professionalisation of occupational safety and health practice in Ghana.

1.6.6 Significance to Academia and Future Research

This research contributes to the limited body of literature on integrated occupational safety and health governance in Ghana. The development of GHANOSH-F provides a conceptual framework that future

empirical studies may examine, validate, and refine. Researchers may also build upon this work by investigating implementation challenges, stakeholder perceptions, and policy outcomes associated with integrated OSH governance.

1.6.7 Significance to National Development

Improved occupational safety and health governance contributes directly to sustainable development by protecting human capital, improving productivity, reducing healthcare costs and supporting decent work. Strengthening national OSH systems aligns with Ghana's broader development objectives and international commitments relating to worker welfare and sustainable economic growth.

1.7 Scope of the Study

This study focuses on national-level governance of occupational safety and health in Ghana. It examines the legal, institutional and administrative arrangements that support occupational safety and health management and compares them with selected governance practices in the United Arab Emirates.

The study specifically considers:

national occupational safety and health legislation;
institutional responsibilities and coordination
mechanisms; inspection and enforcement systems;
employer and worker responsibilities;
occupational safety and health management systems;
professional competency arrangements;
digital governance;
occupational incident reporting; and
protection of workers within the informal economy.

The comparative analysis is limited to governance principles that are relevant and adaptable to Ghana's context. It does not attempt to compare every aspect of labour administration or occupational health services in the two countries.

The study adopts a qualitative documentary approach and therefore relies on legislation, policy documents, government publications, international standards and academic literature rather than primary data collected through interviews or surveys.

1.8 Limitations of the Study

Like all research, this study has certain limitations.

First, the research is based entirely on documentary evidence. It does not include interviews with government officials, employers, workers, or occupational safety professionals. Consequently, the findings reflect the interpretation of published documents rather than stakeholder experiences.

Second, the study compares Ghana with only one country, the United Arab Emirates. Although the UAE provides valuable governance lessons, other jurisdictions may also offer relevant practices that were beyond the scope of this research.

Third, differences in economic development, labour market structure, administrative capacity and financial resources between Ghana and the UAE may influence the direct applicability of some governance practices. Accordingly, the study focuses on adapting governance principles rather than replicating institutional structures.

Finally, because occupational safety and health legislation and administrative arrangements continue to evolve, some policies or regulations may change after this study is completed.

Despite these limitations, the documentary methodology provides sufficient evidence to support the comparative analysis and the development of the proposed governance framework.

1.9 Delimitations of the Study

To maintain a clear research focus, the study is subject to the following delimitations:

- It focuses exclusively on occupational safety and health governance rather than broader labour relations or employment policy.
- It examines national governance structures rather than detailed operational procedures within individual organisations.
- The comparative analysis is limited to Ghana and the United Arab Emirates.
- The study concentrates on institutional coordination, legislation, governance systems and policy implementation rather than technical engineering controls or medical aspects of occupational health.
- The research proposes a conceptual governance framework and does not evaluate its implementation through pilot testing or field validation.

These delimitations enable the study to address its objectives within the scope of a Master's dissertation while maintaining sufficient analytical depth.

1.10 Structure of the Dissertation

This dissertation is organised into six chapters.

Chapter One introduces the study by presenting the research background, problem statement, aim, objectives, research questions, significance, scope, limitations, delimitations, and the dissertation's overall structure.

Chapter Two reviews relevant literature on occupational safety and health governance. It examines the evolution of occupational safety and health, international standards, Ghana's institutional framework, occupational safety and health governance in the United Arab Emirates, informal economy protection, digital governance, institutional coordination and the theoretical and conceptual foundations underpinning the study.

Chapter Three describes the research methodology adopted for the study. It explains the research philosophy, qualitative documentary research design, data sources, document selection, thematic analysis procedures, ethical considerations, and the methodology's limitations.

Chapter Four presents the findings of the comparative analysis. It compares occupational safety and health governance in Ghana and the United Arab Emirates, identifies institutional strengths and weaknesses, and discusses governance principles that may strengthen Ghana's national system.

Chapter Five introduces the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**. The chapter outlines the framework's vision, mission, guiding principles, governance structure, eight strategic pillars, implementation phases, funding considerations and monitoring and evaluation mechanisms.

Chapter Six concludes the study by summarising the principal findings, presenting conclusions, outlining recommendations for policymakers and stakeholders, identifying the study's contribution to knowledge and suggesting areas for future research.

CHAPTER TWO

LITERATURE

REVIEW

2.1 Introduction

Occupational Safety and Health (OSH) has become an increasingly important area of public policy, organisational management and sustainable development. The protection of workers from occupational injuries, illnesses and fatalities is recognised internationally as both a human rights issue and an economic necessity. Effective OSH governance improves productivity, reduces healthcare costs, enhances employee wellbeing, and supports national economic growth. Consequently, governments, employers, employees and international organisations continue to strengthen policies and systems that promote safer and healthier workplaces.

The concept of OSH has evolved considerably over the past century. Earlier approaches focused primarily on responding to workplace accidents after they occurred. Contemporary OSH governance, however, emphasises prevention, risk management, continuous improvement and shared responsibility among governments, employers, workers and professional bodies. This shift reflects growing recognition that occupational hazards should be anticipated, assessed and controlled before they result in harm.

International organisations have played a significant role in shaping modern OSH governance. The International Labour Organisation (ILO) has developed conventions and recommendations that establish minimum standards for protecting workers, while the International Organisation for Standardisation (ISO) has introduced management system standards that encourage organisations to integrate occupational safety and health into their overall business operations. These international instruments provide a common foundation on which national OSH systems can be developed, while allowing individual countries to adapt implementation to their legal, social, and economic contexts.

In Ghana, several government institutions with different legislative mandates share occupational safety and health responsibilities. Although these institutions perform important regulatory functions, the absence of an integrated national governance framework has contributed to fragmented implementation and inconsistent coordination. By contrast, the United Arab Emirates has developed a more coordinated approach to OSH governance through structured regulatory systems, digital administration and competency-based management practices.

This chapter critically reviews literature relevant to the study. It examines the concept and evolution of occupational safety and health, international governance frameworks, ILO conventions, ISO management system standards, occupational safety and health governance in Ghana and the United Arab Emirates, institutional coordination, informal economy protection, digital transformation, professional competency and the theoretical foundations that support the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**.

2.2 Concept of Occupational Safety and Health

Occupational Safety and Health refers to the policies, systems and practices established to protect workers from hazards arising from their work activities. It aims to prevent workplace accidents, occupational diseases and work-related illnesses while promoting physical, mental and social wellbeing in the workplace.

The International Labour Organisation defines occupational safety and health as the discipline concerned with preventing occupational injuries and diseases through identifying, evaluating, and controlling workplace hazards. This definition emphasises prevention rather than reaction and recognises that effective occupational safety and health requires collaboration among governments, employers and workers.

The World Health Organisation extends this definition by describing occupational health as promoting and maintaining the highest degree of physical, mental, and social wellbeing of workers in all occupations. This broader perspective highlights that occupational health involves more than the absence of injury; it also includes psychological wellbeing, ergonomic design, workplace welfare and organisational health.

Modern OSH therefore incorporates several interconnected components, including:

hazard identification; risk assessment; implementation of control measures; occupational health surveillance; emergency preparedness; worker consultation; safety leadership; competency development; and continual improvement.

The implementation of these components is generally guided by the **hierarchy of controls**, which prioritises eliminating hazards where possible before relying on engineering controls, administrative controls or personal protective equipment (PPE). This systematic approach reflects internationally accepted good practice in occupational risk management.

In addition, contemporary occupational safety and health increasingly adopts a management systems perspective. Rather than treating safety as an isolated compliance function, organisations integrate occupational safety and health into strategic planning, operational management, performance measurement and organisational culture. ISO 45001 supports this approach by encouraging organisations to establish systematic processes to manage occupational risks and continuously improve safety performance.

For governments, OSH extends beyond individual workplaces to include national legislation, regulatory institutions, inspection systems, data collection, professional standards and public awareness. Consequently, effective occupational safety and health governance requires coordinated action across multiple institutions and sectors.

2.3 Evolution of Occupational Safety and Health Governance

The development of occupational safety and health has closely followed industrial and economic transformation. During the early stages of industrialisation, workplace regulation was limited, and employers often operated without comprehensive legal obligations to protect workers. Industrial accidents, occupational diseases and poor working conditions were common, leading to increasing public concern and demands for government intervention.

During the nineteenth and early twentieth centuries, many countries introduced factory legislation that established minimum standards for working conditions, machinery safety, child labour and working hours. Factory inspectorates were subsequently established to monitor compliance and enforce legal requirements. These developments marked the beginning of formal occupational safety and health regulation.

The establishment of the International Labour Organisation in 1919 represented a major milestone in the

international development of occupational safety and health. Through conventions and recommendations, the ILO promoted universal labour standards that recognised safe and healthy working conditions as a fundamental component of decent work.

During the second half of the twentieth century, occupational safety and health expanded beyond accident prevention to include occupational hygiene, ergonomics, psychosocial risks, occupational medicine and

environmental management. Governments increasingly recognised that preventing workplace harm required comprehensive risk management rather than isolated regulatory enforcement.

The adoption of **ILO Convention No. 155** in 1981 strengthened this preventive approach by encouraging member states to establish coherent national occupational safety and health policies and clearly define the responsibilities of governments, employers and workers. Later, **ILO Convention No. 187** reinforced continual improvement through national OSH systems, programmes, and preventive cultures.

The publication of **ISO 45001** in 2018 further transformed occupational safety and health by introducing an internationally recognised management system standard based on risk-based thinking, leadership commitment, worker participation and continual improvement. Organisations implementing ISO 45001 are encouraged to integrate occupational safety and health into broader organisational decision-making processes rather than treating it solely as a regulatory obligation.

Today, occupational safety and health governance is increasingly characterised by digital reporting systems, data-driven decision-making, competency-based professional development and multi-agency collaboration. Many countries have adopted integrated governance approaches that encourage coordination among labour authorities, environmental agencies, emergency services, public health institutions and sector regulators. These developments demonstrate the growing recognition that effective occupational safety and health requires coordinated governance rather than isolated institutional action.

2.4 International Occupational Safety and Health Governance

Occupational Safety and Health (OSH) governance has become a global policy priority because of its significant contribution to worker welfare, organisational productivity and sustainable economic development. International governance is shaped primarily by the International Labour Organisation (ILO), the World Health Organisation (WHO), the International Organisation for Standardisation (ISO), and other international bodies that develop standards, conventions, and technical guidance for member states.

The International Labour Organisation remains the principal institution responsible for promoting safe and healthy working conditions worldwide. Since its establishment in 1919, the ILO has developed numerous conventions and recommendations that underpin national OSH legislation. These instruments encourage member states to establish national policies, regulatory institutions, labour inspection systems, employer responsibilities and worker participation mechanisms that promote continual improvement in workplace safety and health.

The World Health Organisation complements the ILO's work by promoting occupational health as an integral component of public health. WHO emphasises preventing occupational diseases, promoting workplace health, supporting mental wellbeing, improving ergonomics, and protecting vulnerable worker populations. Collaborative initiatives between the ILO and WHO have strengthened global recognition that occupational health extends beyond accident prevention to encompass workers' physical, psychological, and social wellbeing.

The International Organisation for Standardisation has also significantly influenced international OSH governance by publishing management system standards. ISO 45001 provides organisations with a structured framework for identifying hazards, assessing risks, implementing preventive controls and continually improving occupational safety and health performance. Unlike legislative instruments, ISO standards are voluntary; however, they are widely adopted internationally as benchmarks for effective safety management.

International OSH governance has progressively shifted from reactive enforcement to preventive, risk-based management. This transition emphasises leadership commitment, worker consultation,

organisational learning and evidence-based decision-making. Governments are increasingly encouraged to develop integrated national systems that coordinate legislation, inspection, professional competency, digital reporting and occupational health surveillance rather than relying solely on enforcement after workplace incidents.

Another key feature of modern international governance is promoting a **preventive safety culture**. Rather than viewing occupational safety as regulators' responsibility alone, international frameworks recognise that governments, employers, workers, professional associations, educational institutions, and civil society all contribute to safer workplaces. This collaborative approach strengthens accountability while encouraging continuous improvement across all sectors of the economy.

For developing countries such as Ghana, international governance frameworks provide useful guidance for strengthening national occupational safety and health systems. However, successful implementation requires adapting to local institutional capacity, legislative structures, economic conditions, and workforce characteristics rather than directly replicating practices from other jurisdictions.

2.5 International Labour Organisation Conventions and ISO Standards

International standards provide an essential foundation for effective occupational safety and health governance. Among the most influential instruments are **ILO Convention No. 155**, **ILO Convention No. 187** and **ISO 45001:2018**, which collectively promote systematic, preventive and coordinated approaches to occupational safety and health management.

2.5.1 ILO Convention No. 155

The **Occupational Safety and Health Convention, 1981 (No. 155)** establishes the fundamental principles for national occupational safety and health governance. It requires member states to formulate, implement and periodically review coherent national policies designed to prevent occupational accidents and diseases.

Convention No. 155 assigns responsibilities to three principal stakeholders:

- Governments are responsible for developing national policies, legislation, enforcement mechanisms and inspection systems.
- Employers are required to provide safe workplaces, assess workplace hazards, implement preventive measures and provide appropriate information, instruction and training.
- Workers are expected to cooperate with safety measures, follow established procedures and participate in maintaining safe working environments.

A key contribution of Convention No. 155 is its emphasis on prevention through hazard identification and risk control rather than reliance on compensation after workplace accidents occur. This preventive philosophy underpins many modern occupational safety and health systems worldwide.

2.5.2 ILO Convention No. 187

The **Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)** complements Convention No. 155 by encouraging countries to establish sustainable national occupational safety and health systems.

Convention No. 187 promotes four essential components:

- a national OSH policy; a national OSH system;
- a national OSH programme; and
- continuous improvement through periodic evaluation.

Unlike Convention No. 155, which focuses primarily on legal obligations, Convention No. 187 places

greater emphasis on long-term institutional development and preventive safety culture. It encourages governments to

strengthen coordination among institutions, improve occupational safety data collection, enhance stakeholder participation, and integrate occupational safety into national development planning.

The principles contained in Convention No. 187 strongly support the integrated governance approach proposed in this dissertation.

2.5.3 ISO 45001:2018

ISO 45001 is the international standard for Occupational Health and Safety Management Systems. Published in 2018, it replaced OHSAS 18001 and introduced a more comprehensive framework based on organizational leadership, risk management, and continual improvement.

ISO 45001 is built around the **Plan–Do–Check–Act (PDCA)** cycle, encouraging organizations to:

- establish occupational safety policies and objectives;
- identify hazards and assess risks;
- implement operational controls; monitor performance;
- investigate incidents;
- conduct internal audits; and
- continually improve their management systems.

The standard also emphasises leadership commitment, worker participation, consultation and integration with other management systems such as ISO 9001 (Quality Management) and ISO 14001 (Environmental Management).

Although ISO 45001 applies primarily at the organisational level, its principles can also inform national policy by promoting consistent approaches to risk management and performance improvement.

2.5.4 Relevance to Ghana

The principles contained within ILO Conventions No. 155 and No. 187 and ISO 45001 provide valuable guidance for strengthening occupational safety and health governance in Ghana.

These instruments support:

- coordinated national leadership; preventive risk management; stakeholder participation; continual improvement; competency development;
- systematic performance monitoring;
- and evidence-based decision-making.

The proposed **GHANOSH-F** framework incorporates these principles while adapting them to Ghana's institutional and legislative context.

2.6 Occupational Safety and Health Governance in Ghana

Occupational safety and health governance in Ghana has developed through the gradual evolution of legislation, regulatory institutions and sector-specific policies. Rather than a single national authority, OSH

responsibilities are distributed among several government institutions under different legislative mandates.

The **Ministry of Employment and Labour Relations (MELR)** provides national leadership on labour policy and plays an important role in developing employment-related legislation and workplace policies. Within the Ministry, the **Department of Factories Inspectorate (DFI)** has historically served as the principal institution responsible for factory inspections and enforcement of occupational safety requirements in manufacturing and other registered workplaces.

In addition to MELR and DFI, several specialised institutions regulate occupational safety within their respective sectors. The **Environmental Protection Agency (EPA)** oversees environmental protection and pollution control, including matters that may affect occupational health. The **Minerals Commission** regulates health and safety within the mining industry, while the **Petroleum Commission** oversees petroleum-sector operations. The **Ghana National Fire Service** contributes to workplace fire prevention, emergency preparedness and fire safety inspections.

This multi-institutional arrangement applies sector-specific expertise to occupational safety and health regulation. However, because the institutions operate under separate legal mandates, coordination mechanisms are not always fully integrated. Individual institutions often maintain information on inspections, occupational accidents, occupational diseases, and enforcement actions rather than a unified national system.

Another important feature of Ghana's occupational safety and health governance is the continued reliance on legislation enacted over different historical periods. While these laws remain valuable, they were developed independently to address specific regulatory needs and therefore do not always provide a comprehensive framework for integrated national governance. As workplace technologies, employment arrangements and occupational risks continue to evolve, greater legislative harmonisation may improve consistency across sectors.

The informal economy presents an additional governance challenge. A significant proportion of Ghana's workforce works in agriculture, artisanal mining, construction, transportation, fishing, and other informal occupations where regulatory oversight is limited. Many workers operate outside formal workplace registration systems, reducing opportunities for routine inspection, training and occupational health surveillance.

Despite these challenges, Ghana possesses important institutional strengths. The country has experienced regulators, established legal frameworks, professional expertise and increasing awareness of occupational safety and health within both the public and private sectors. These existing strengths provide a solid foundation for strengthening national coordination rather than replacing current institutions.

The findings of this study therefore suggest that Ghana's principal governance challenge is not the absence of occupational safety and health institutions, but the need for improved coordination, integrated information systems and a coherent national framework capable of bringing existing institutions together under common strategic objectives. The proposed **GHANOSH-F** seeks to address these governance needs while preserving the statutory mandates and technical expertise of existing regulatory agencies.

2.7 Occupational Safety and Health Governance in the United Arab Emirates

The United Arab Emirates (UAE) has developed a modern occupational safety and health (OSH) governance system that combines federal legislation, emirate-level implementation and sector-specific regulation. Although regulatory responsibilities are distributed among multiple authorities, the system is characterised by clear institutional mandates, structured compliance requirements and increasing use of digital technologies to support implementation.

At the federal level, the **Ministry of Human Resources and Emiratisation (MoHRE)** oversees labour

relations and sets workplace requirements related to worker welfare, employment conditions, and occupational safety.
Employers must provide safe working environments, implement appropriate protective measures, and comply with labour regulations governing occupational health and safety.

In addition to federal oversight, individual emirates have developed complementary regulatory systems. Abu Dhabi, for example, has implemented a structured occupational safety framework that promotes risk management, leadership commitment, performance monitoring and continual improvement across both public and private sectors. Sector-specific authorities also regulate industries such as oil and gas, construction, aviation and utilities through specialised technical standards and operational requirements.

A distinguishing characteristic of the UAE's OSH governance is its emphasis on **prevention through systematic risk management**. Organisations are expected to identify workplace hazards, conduct risk assessments, implement appropriate control measures and regularly review their safety performance. These practices closely align with the principles contained in ISO 45001 and other internationally recognised management system standards.

Digital transformation has also strengthened occupational safety administration within the UAE. Electronic systems support labour administration, workplace inspections, reporting processes and regulatory communication, enabling more efficient monitoring and data management. These technologies improve regulatory coordination and support timely decision-making.

Professional competency is another important feature of the UAE system. Many sectors require occupational safety personnel to possess recognised qualifications, relevant experience, and ongoing professional development. This emphasis on competency supports consistent implementation of safety management systems across industries.

Despite these strengths, the UAE does not operate through a single national occupational safety authority. Responsibility remains shared among federal ministries, emirate governments and sector regulators. Consequently, one of the principal lessons for Ghana is not institutional centralisation but effective coordination among specialised **institutions**, supported by clear governance structures, digital systems and shared strategic objectives.

The UAE therefore offers useful governance principles that Ghana can adapt, while recognising differences in institutional capacity, labour market characteristics, and economic context.

2.8 Institutional Coordination in Occupational Safety and Health Governance

Institutional coordination refers to the processes through which multiple organisations collaborate to achieve common policy objectives while maintaining their respective statutory responsibilities. In occupational safety and health governance, coordination is essential because workplace risks frequently involve legal, environmental, technical, medical and emergency management considerations that extend beyond the mandate of any single institution.

Effective coordination reduces duplication of regulatory activities, improves information sharing and enables government agencies to respond more efficiently to occupational risks. It also supports consistency in policy implementation, inspection planning and enforcement while promoting better use of available financial and human resources.

The literature identifies several characteristics of effective institutional coordination:

- clearly defined institutional responsibilities;
- formal communication mechanisms;
- inter-agency cooperation agreements;
- shared information systems;
- coordinated inspections;
- joint strategic planning;

common national performance indicators; and regular stakeholder engagement.

Countries with integrated occupational safety systems generally establish mechanisms that encourage cooperation among labour ministries, environmental agencies, public health institutions, emergency services, industry regulators and professional bodies. Such arrangements strengthen governance while allowing individual agencies to retain their specialist expertise.

In Ghana, sector-specific institutions already possess significant technical knowledge within their respective mandates. However, opportunities remain to strengthen collaboration through coordinated planning, integrated reporting systems and shared national priorities. Improved institutional coordination could reduce administrative fragmentation while enhancing consistency across sectors.

The proposed **GHANOSH-F** builds on this principle. Rather than creating new regulatory responsibilities for existing agencies, the framework seeks to improve cooperation through coordinated governance structures, common performance objectives and integrated digital information systems. This approach reflects international good practice while remaining consistent with Ghana's existing institutional architecture.

2.9 Occupational Safety and Health in the Informal Economy

The informal economy represents one of the greatest challenges to occupational safety and health governance in many developing countries. Informal employment generally includes economic activities that operate outside formal regulatory and administrative systems. Workers in this sector often lack written employment contracts, structured safety management systems, and regular regulatory oversight.

In Ghana, a substantial proportion of the labour force works in informal economic activities such as agriculture, artisanal mining, fishing, transportation, construction, welding, street trading, small-scale manufacturing, and vehicle repair. These occupations frequently expose workers to significant physical, chemical, biological and ergonomic hazards.

Several factors contribute to occupational safety challenges within the informal economy. Small enterprises often operate with limited financial resources, making investment in safety equipment and training difficult. Many workers also have limited access to occupational safety education, personal protective equipment and professional technical advice. In addition, regulatory agencies face practical challenges in identifying, registering and inspecting numerous dispersed workplaces.

Traditional inspection systems, which primarily focus on formally registered organisations, may therefore be less effective at protecting informal-sector workers. As a result, many occupational injuries and illnesses occurring within the informal economy remain unreported, reducing the availability of reliable national occupational safety data.

The literature increasingly recognises that improving occupational safety in the informal economy requires approaches that extend beyond conventional enforcement. Effective strategies include:

community-based safety education;
simplified workplace registration;
mobile advisory services;
technical support for small enterprises;
partnerships with local authorities and trade associations;
phased compliance programmes; and
awareness campaigns promoting preventive safety practices.

These approaches encourage voluntary improvement while recognising the practical realities informal enterprises face.

The proposed **GHANOSH-F** incorporates these principles by establishing a dedicated pillar for informal economy integration. The framework proposes simplified registration, targeted education, technical assistance, and proportionate regulatory intervention designed to extend occupational safety protection to workers currently underserved by conventional regulatory systems.

2.10 Digital Transformation in Occupational Safety and Health Governance

Digital technologies are transforming occupational safety and health administration worldwide. Governments increasingly rely on electronic systems to improve workplace registration, inspection management, incident reporting, regulatory communication and national performance monitoring.

Digital governance offers several advantages. First, electronic reporting systems improve the speed and accuracy of occupational safety data collection. Second, integrated databases enable regulators to identify national trends in workplace injuries, occupational diseases and compliance performance. Third, digital platforms improve communication between regulatory agencies, employers and workers while reducing administrative delays associated with paper-based systems.

Many countries have introduced digital tools that support:

workplace registration;
inspection scheduling;
electronic incident reporting;
corrective action monitoring;
occupational disease surveillance;
licensing processes;
professional registration; and
national performance dashboards.

These systems strengthen evidence-based decision-making by providing regulators with timely, reliable information to plan inspections, allocate resources, and evaluate policy effectiveness.

In Ghana, individual institutions generally collect occupational safety information under their respective statutory responsibilities. While these systems perform important regulatory functions, opportunities remain to improve integration through shared national digital platforms that connect multiple regulatory agencies.

The proposed **GHANOSH Connect** platform forms a central component of the GHANOSH-F model. It is designed as a national digital information system that integrates workplace registration, inspection records, occupational accident reporting, occupational disease surveillance, inter-agency referrals, professional registration, and workplace performance assessments. By consolidating information from existing institutions, GHANOSH Connect would support more coordinated governance, improve transparency and facilitate evidence-based policymaking without replacing existing regulatory responsibilities.

2.11 Professional Competency in Occupational Safety and Health

Professional competency is widely recognised as a critical element of effective occupational safety and health (OSH) governance. While legislation establishes minimum legal requirements, competent professionals ensure that these requirements are interpreted, implemented and continuously improved within workplaces. The effectiveness of an OSH system therefore depends not only on regulatory institutions but also on the knowledge, skills and ethical conduct of those responsible for managing occupational risks.

The International Labour Organisation (ILO) and ISO 45001 both emphasise competency as a prerequisite for effective occupational safety management. ISO 45001 specifically requires organisations to ensure that people

performing work under their control have appropriate education, training, skills, and experience. Competent personnel are expected to identify hazards accurately, conduct risk assessments, recommend suitable control measures, investigate incidents and promote continual improvement.

Professional competency extends beyond technical knowledge. Modern OSH practitioners are expected to demonstrate leadership, communication skills, ethical decision-making, legal awareness, emergency preparedness and the ability to influence organisational safety culture. Continuous Professional Development (CPD) is therefore essential to ensure professionals stay current with changing legislation, emerging workplace hazards, and technological advancements.

Many countries have established professional registration systems that recognise competency through qualifications, practical experience, professional examinations and continuing education. Such systems enhance public confidence, promote ethical practice, and give employers greater assurance about the capabilities of occupational safety professionals.

In Ghana, occupational safety and health professionals work across a wide range of industries, including construction, mining, manufacturing, petroleum, healthcare and transportation. However, Ghana currently has no nationally coordinated system for recognising competency levels across the profession. Although many practitioners hold internationally recognised qualifications, no unified national register verifies qualifications, practical experience, continuing professional development, and professional conduct.

This study therefore proposes establishing the **National Register of Occupational Safety and Health Professionals (NAROSHP)** as one of the eight pillars of GHANOSH-F. The proposed register would categorise professionals according to competency, qualifications, and experience while encouraging continuous professional development and adherence to ethical standards. Such a system would strengthen professional credibility and improve consistency in occupational safety practice across Ghana.

2.12 Theoretical Framework

This study draws on **Systems Theory**, which provides an appropriate framework for understanding occupational safety and health governance as an interconnected system rather than a collection of independent institutions.

Systems Theory argues that organisational performance depends upon the interaction of multiple components working together towards common objectives. Changes in one part of the system influence the performance of other components, making coordination essential for overall effectiveness. Within occupational safety and health governance, these components include legislation, regulatory institutions, employers, workers, professional bodies, inspection systems, information management and policy leadership.

From a systems perspective, occupational safety and health outcomes cannot be explained solely by individual institutions' performance. Instead, effectiveness depends on how these institutions communicate, coordinate activities, share information, and collectively respond to occupational risks. Fragmented systems often experience duplication of effort, inconsistent decision-making and reduced efficiency because individual organisations operate independently rather than collaboratively.

Applying Systems Theory to this study supports the argument that Ghana's principal governance challenge lies in limited institutional integration rather than institutional absence. Existing regulatory agencies possess valuable expertise and statutory authority; however, greater coordination among these institutions is required to improve national occupational safety and health performance.

The proposed GHANOSH-F reflects Systems Theory by promoting cooperation among existing institutions through shared governance structures, integrated digital information systems, coordinated planning and common

national performance objectives. Rather than replacing individual agencies, the framework strengthens the relationships between them, enabling the national OSH system to function more effectively as an integrated whole.

Systems Theory therefore provides an appropriate theoretical foundation for examining institutional coordination and for guiding the development of the proposed governance framework.

2.13 Conceptual Framework

The conceptual framework developed for this study illustrates the relationship between institutional coordination and improved occupational safety and health governance in Ghana.

The framework assumes that **institutional fragmentation** is the primary governance challenge affecting the effectiveness of Ghana's national occupational safety and health system. Fragmentation may lead to inconsistent policy implementation, duplicated regulatory activities, limited information sharing, and reduced worker protection.

To address these challenges, the study proposes the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as an integrated governance model built upon eight interconnected pillars:

1. Institutional Coordination;
2. Informal Economy OSH Integration;
3. Special Task Force on Compliance and Enforcement;
4. Legislative Harmonisation;
5. Sector-Specific Risk Management;
6. GHANOSH Connect;
7. National Occupational Safety and Health Rating System (NOSHRS); and
8. National Register of Occupational Safety and Health Professionals (NAROSHP).

The Ministry of Employment and Labour Relations (MELR) provides strategic leadership, and the Department of Factories Inspectorate (DFI) provides operational coordination, while existing sector regulators retain their statutory responsibilities.

The framework proposes that stronger institutional coordination, supported by digital governance, professional competency, harmonised legislation and targeted protection for informal workers, will improve regulatory effectiveness, strengthen compliance and contribute to better occupational safety and health outcomes nationally.

Accordingly, the conceptual relationship underpinning this study can be summarised as follows:

Institutional Fragmentation → GHANOSH-F Implementation → Improved Coordination → Stronger National OSH Governance → Enhanced Worker Protection and Sustainable Development

This conceptual framework guides both the comparative analysis presented in Chapter Four and the proposed governance model developed in Chapter Five.

2.14 Literature Gap

A review of existing literature indicates that occupational safety and health research in Ghana has largely focused on workplace accident prevention, legal compliance, mining safety, construction safety, occupational hazards and employer responsibilities. Numerous studies have examined sector-specific

safety challenges and the implementation of occupational safety legislation within individual industries.

However, relatively few studies have examined occupational safety and health governance from a national institutional perspective. Existing literature provides limited analysis of how multiple regulatory agencies interact, coordinate responsibilities and collectively contribute to national occupational safety and health performance.

Similarly, comparative studies examining Ghana alongside countries with more developed occupational safety governance systems remain limited. While international literature discusses occupational safety management systems and global standards, it has given relatively little attention to adapting international governance principles to Ghana's institutional context.

Furthermore, previous studies have not proposed a comprehensive governance framework that integrates existing regulatory institutions while preserving their statutory mandates. Much of the available literature discusses legislative reform but does not provide practical implementation mechanisms to improve institutional coordination.

This study addresses these gaps by:

- examining occupational safety and health governance from an institutional coordination perspective;
- comparing Ghana's governance arrangements with selected practices in the United Arab Emirates;
- identifying transferable governance principles rather than direct institutional replication; and
- proposing the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as an integrated model for strengthening national occupational safety and health governance.

The development of GHANOSH-F therefore represents the principal original contribution of this research.

2.15 Chapter Summary

This chapter reviewed literature on occupational safety and health governance and established the study's theoretical foundation. The review examined the concept and evolution of occupational safety and health, international governance frameworks, ILO conventions, ISO management system standards, occupational safety and health governance in Ghana and the United Arab Emirates, institutional coordination, informal economy protection, digital transformation and professional competency.

The literature demonstrates that effective occupational safety and health governance depends not only on legislation but also on coordinated institutions, competent professionals, integrated information systems and a strong preventive culture. The review further indicates that Ghana has a substantial institutional foundation for occupational safety and health but still faces challenges from fragmented governance and limited national coordination.

Systems Theory was identified as the most appropriate theoretical foundation because it explains how coordinated interaction among multiple institutions contributes to improved organisational performance. Guided by this theory, the study developed the conceptual framework underpinning the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**.

Finally, the literature review identified an important research gap concerning integrated occupational safety and health governance in Ghana. This gap justifies the comparative analysis undertaken in this study and supports the development of **GHANOSH-F** as a practical framework for strengthening national occupational safety and health governance.

CHAPTER THREE

RESEARCH

METHODOLOGY

3.1 Introduction

This chapter outlines the methodology adopted to achieve the objectives of this study. It describes the research philosophy, research approach, research design, data sources, document selection criteria, data collection procedures, data analysis methods, ethical considerations, measures taken to ensure trustworthiness, and the methodology's limitations.

The study investigates how Ghana's occupational safety and health (OSH) governance system can be strengthened through a comparative analysis with the United Arab Emirates (UAE). Because the research focuses on legislation, institutional arrangements, governance structures, and policy documents rather than measuring numerical relationships, a qualitative documentary research methodology was considered most appropriate.

3.2 Research Philosophy

Research philosophy refers to the assumptions that guide how knowledge is generated and interpreted. It influences the choice of research methods and how findings are interpreted.

This study is primarily guided by the **interpretivist research philosophy**. Interpretivism recognises that social systems, policies and institutions should be understood within their specific legal, historical and organisational contexts. Rather than seeking universal laws, interpretivist research aims to understand how governance systems function and how relationships among institutions influence policy implementation.

Interpretivism is appropriate because this study examines occupational safety and health governance as a complex institutional system involving legislation, regulatory agencies, employers, and workers. The research seeks to understand the interactions among these institutions rather than establish statistical relationships.

Although interpretivism provides the principal philosophical foundation, the study also adopts a **pragmatic perspective** in developing the proposed Ghana National Occupational Safety and Health Framework (GHANOSH-F). The framework is intended to provide practical recommendations that can support policy development and institutional improvement in Ghana.

3.3 Research Approach

The study adopts an **inductive research approach**.

An inductive approach allows themes, patterns and governance principles to emerge from the analysis of documentary evidence rather than testing predetermined hypotheses. By examining legislation, government reports, international standards, and academic literature, the research identifies institutional strengths, governance gaps, and opportunities for improvement.

The inductive approach is appropriate because the study seeks to develop a new governance framework based on evidence obtained from comparative analysis rather than validating an existing theoretical model.

3.4 Research Design

The study adopted a qualitative documentary comparative research design.

Qualitative research suits studies that seek to understand organisational structures, institutional arrangements, legal frameworks, and governance processes. Unlike quantitative research, which relies primarily on numerical data, qualitative research enables detailed examination of policies, legislation and institutional relationships.

Documentary research involves systematically analysing existing documents to answer research questions. These documents include legislation, government publications, policy reports, international conventions, professional standards and academic literature.

The comparative element of the design allows a systematic examination of similarities and differences between Ghana and the United Arab Emirates. Comparative analysis facilitates identifying governance principles that Ghana may adapt while recognising differences in institutional capacity, economic development, and administrative structures.

This design was selected because it aligns directly with the study's objectives and provides sufficient evidence to develop GHANOSH-F.

3.5 Data Sources

The study relied exclusively on **secondary data** obtained from credible documentary

sources. The principal sources included:

3.5.1 Legislative Documents

Legislation governing occupational safety and health in Ghana and the United Arab Emirates served as the primary source of information on legal responsibilities and institutional mandates.

3.5.2 Government Publications

Official reports, policy documents, strategic plans and guidance issued by government ministries and regulatory agencies were reviewed to understand institutional structures and implementation practices.

3.5.3 International Standards

International guidance documents published by the International Labour Organisation (ILO), International Organisation for Standardisation (ISO) and World Health Organisation (WHO) provided internationally recognised principles for occupational safety and health governance.

3.5.4 Academic Literature

Peer-reviewed journal articles, textbooks, conference papers and scholarly publications provided theoretical perspectives and empirical evidence relevant to occupational safety and health governance.

3.6 Document Selection Criteria

To ensure the quality and relevance of documentary evidence, documents were selected using predetermined inclusion criteria.

Documents were included if they:

related directly to occupational safety and health governance;

addressed Ghana or the United Arab Emirates;

originated from recognised governmental or international organisations;
discussed legislation, institutional arrangements or policy implementation; or
provided theoretical or empirical evidence relevant to the research objectives.

Documents were excluded if they:

lacked identifiable authorship or institutional credibility;
contained insufficient information relevant to occupational safety and health governance; duplicated information already available in more authoritative sources; or
focused solely on technical engineering issues unrelated to governance.

Applying these criteria ensured the analysis was based on credible, relevant documentary evidence.

3.7 Data Collection Procedure

Data collection involved a systematic review of documentary

sources. The process consisted of the following stages:

1. Identification of relevant legislation, government publications, international standards and academic literature.
2. Collection of documents from official government websites, international organisations, and academic databases.
3. Screening of documents against the established inclusion criteria.
4. Organisation of documents according to thematic areas, including legislation, institutional structures, inspection systems, professional competency, digital governance and informal economy protection.
5. Detailed reading and extraction of information relevant to the research objectives.

This systematic approach ensured consistency throughout the documentary review process.

3.8 Data Analysis

The collected documents were analysed using **thematic analysis** supported by **comparative institutional analysis**.

Thematic analysis involved identifying recurring concepts, governance principles, and institutional patterns within the documentary evidence.

The analysis followed six stages:

1. Familiarisation with the documents.
2. Identification of meaningful codes.
3. Development of broader themes.
4. Comparison of themes across Ghana and the UAE.
5. Interpretation of governance similarities and differences.
6. Development of recommendations and the proposed GHANOSH-F framework.

Comparative institutional analysis was then used to examine how the two countries organise occupational safety and health governance, identify transferable governance principles, and evaluate their relevance to Ghana's institutional context.

The findings from this analysis form the basis of Chapter Four and inform the development of GHANOSH-F presented in Chapter Five.

3.9 Trustworthiness of the Study

In qualitative research, trustworthiness assesses the quality and credibility of findings. This study adopted the four criteria proposed by **Lincoln and Guba (1985)**: credibility, transferability, dependability and confirmability.

Credibility

Credibility was enhanced through authoritative documentary sources, including legislation, official government publications, ILO conventions, ISO standards, and peer-reviewed academic literature.

Transferability

Detailed descriptions of Ghana's and the UAE's occupational safety and health governance systems are provided to enable readers to determine the applicability of the findings to other contexts.

Dependability

The study followed a systematic and transparent research process. The procedures for document selection, data collection, and thematic analysis are clearly described to enhance the consistency and repeatability of the research.

Confirmability

The conclusions presented in this study are based on documentary evidence rather than personal opinion. Findings were derived from multiple sources and interpreted objectively to minimise researcher bias.

3.10 Ethical Considerations

This study did not involve human participants and therefore did not require interviews, surveys, or experimental procedures.

Nevertheless, the study observed several ethical principles.

The study appropriately acknowledged all documentary sources through academic referencing. The study presented information accurately, without misrepresenting the views of original authors or institutions. The study also respected intellectual property rights by properly citing all ideas, legislation, and published materials.

The proposed **GHANOSH-F** framework represents the original conceptual contribution of this research.

3.11 Limitations of the Methodology

The methodology adopted in this study has several limitations.

First, documentary research depends on the availability and quality of published information. Some institutional practices may not be fully documented within publicly available sources.

Second, the study does not incorporate stakeholder interviews or workplace observations. Consequently, the findings reflect documented institutional arrangements rather than individual experiences.

Third, the comparative analysis is limited to Ghana and the United Arab Emirates. Other countries may offer additional governance practices that were beyond the scope of this research.

Despite these limitations, the documentary methodology provides sufficient evidence to examine occupational safety and health governance and to develop an evidence-informed framework for institutional coordination.

3.12 Chapter Summary

This chapter explained the methodology adopted for the study. The research employed an interpretivist philosophical perspective supported by a pragmatic orientation, an inductive research approach and a qualitative documentary comparative research design. The study collected documentary evidence from legislation, government publications, international standards, and academic literature, and analysed it using thematic and comparative institutional analysis.

The chapter also discussed measures to ensure trustworthiness and ethical integrity. The methodology provides a robust foundation for the comparative analysis presented in the next chapter.

CHAPTER FOUR

FINDINGS AND COMPARATIVE ANALYSIS

4.1 Introduction

This chapter presents the findings of the comparative analysis of occupational safety and health (OSH) governance in Ghana and the United Arab Emirates (UAE). The analysis is based on documentary evidence reviewed in the previous chapters and is organised around the research objectives.

The comparison examines legislative frameworks, institutional arrangements, inspection and enforcement systems, employer responsibilities, worker participation, protection of informal-sector workers, digital governance, professional competency and sector-specific risk management. The purpose is not to determine which country has the "better" system but to identify governance principles that can strengthen Ghana's existing occupational safety and health framework.

The findings indicate that both countries have established legal and institutional arrangements for regulating occupational safety and health. However, they differ in institutional coordination, digital integration, and implementation mechanisms. These differences provide valuable lessons for developing the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**.

4.2 Comparative Analysis of Legislative Frameworks

Legislation forms the legal foundation for occupational safety and health governance. Both Ghana and the UAE have enacted laws requiring employers to protect workers from occupational hazards and comply with safety standards.

In Ghana, several legislative instruments enacted over different periods govern OSH responsibilities. These laws assign responsibilities to various regulatory institutions, including labour administration, environmental protection, mining regulation and petroleum oversight. While each law addresses specific occupational safety issues, the legislative framework is dispersed across multiple statutes rather than consolidated within a single national OSH law.

The UAE similarly regulates occupational safety through multiple legal instruments. Federal labour legislation establishes general employer responsibilities, while emirate-level authorities and sector regulators issue additional technical requirements. Rather than relying solely on legislation, the UAE also emphasises structured management systems and regulatory guidance to support implementation.

The comparison indicates that both countries operate multi-layered legislative systems. The principal difference lies not in the number of laws but in the degree of coordination achieved during implementation. The UAE demonstrates stronger alignment between legislation, institutional responsibilities and administrative procedures.

For Ghana, this finding suggests that strengthening coordination among existing laws may be more beneficial than immediately replacing the current legislative framework.

4.3 Institutional Governance Structures

Both countries administer occupational safety and health governance through multiple institutions with specialised responsibilities.

In Ghana, the Ministry of Employment and Labour Relations (MELR) provides national policy leadership,

while the Department of Factories Inspectorate (DFI) conducts workplace inspections. Other important institutions

include the Environmental Protection Agency, Minerals Commission, Petroleum Commission and Ghana National Fire Service.

Each institution contributes specialised expertise; however, coordination mechanisms remain limited. Legislation generally defines institutional responsibilities, but routine cooperation, shared planning, and integrated reporting systems are not fully developed across all sectors.

The UAE also operates through multiple institutions. Federal ministries, emirate governments and sector regulators collectively administer occupational safety and health responsibilities. Despite this multi-agency structure, governance is supported by structured administrative coordination, clearer implementation procedures and stronger integration of regulatory activities.

The comparison demonstrates that institutional effectiveness depends less on the number of agencies involved than on the quality of coordination among them. This finding strongly supports the proposed GHANOSH-F model, which seeks to improve cooperation among Ghana's existing institutions rather than replace them.

4.4 Inspection and Enforcement Systems

Inspection remains a primary mechanism for ensuring compliance with occupational safety and health requirements.

In Ghana, several institutions conduct inspections based on sector-specific responsibilities. Inspectors assess workplace compliance with relevant legislation, investigate incidents and recommend corrective actions where necessary. However, resource constraints, geographical coverage, and overlapping responsibilities may affect inspection consistency across sectors.

The UAE adopts a structured inspection approach that combines regulatory oversight with preventive risk management. Organisations are expected to maintain documented safety management systems, conduct regular risk assessments and demonstrate ongoing compliance with regulatory requirements. Inspection activities increasingly rely on electronic reporting and digital monitoring systems.

A key lesson from the comparison is that effective inspection depends not only on enforcement powers but also on planning, coordination and access to reliable information. Digital inspection management systems improve efficiency by enabling regulators to prioritise high-risk workplaces and monitor corrective actions more effectively.

For Ghana, strengthening coordination among inspection agencies and improving information sharing may significantly enhance inspection effectiveness without requiring major legislative reform.

4.5 Employer Responsibilities

Employers have primary responsibility for providing safe and healthy workplaces under both Ghanaian and UAE legislation.

Common employer responsibilities include:

- identifying workplace hazards;
- assessing occupational risks;
- implementing appropriate control measures;
- providing personal protective equipment where necessary;
- training employees;

maintaining safe systems of work; and

- reporting occupational incidents.

The UAE places considerable emphasis on documented safety management systems and organisational accountability. Employers are expected to demonstrate continuous improvement through systematic planning, monitoring and performance evaluation.

In Ghana, legislation similarly recognises employer obligations, but implementation varies across industries because of differences in organisational capacity, resource availability, and regulatory oversight.

The comparison indicates that strengthening employer guidance, promoting management system implementation and encouraging proactive risk management could improve occupational safety performance in Ghana.

4.6 Worker Participation

Worker participation is widely recognised as an essential component of effective occupational safety and health governance.

International standards emphasise that employees should actively participate in identifying workplace hazards, reporting unsafe conditions, contributing to safety decision-making, and supporting continual improvement.

In Ghana, legislation recognises workers' rights and employers' responsibilities related to occupational safety. However, the level of worker participation varies considerably among organisations depending on management commitment, organisational culture and available resources.

The UAE similarly promotes worker involvement through consultation, communication and participation in occupational safety programmes. Organisations implementing management systems are expected to establish mechanisms that enable employees to contribute to workplace safety improvement.

The comparative analysis demonstrates that effective worker participation strengthens hazard identification, improves compliance and promotes a positive safety culture. Consequently, GHANOSH-F encourages greater worker engagement through awareness programmes, consultation mechanisms and continuous safety education.

4.7 Chapter Summary

This section of the comparative analysis demonstrates that Ghana and the United Arab Emirates both possess established occupational safety and health governance systems supported by legislation and specialised regulatory institutions. The main differences lie in institutional coordination, implementation practices, and the integration of digital administration and management systems, rather than in the existence of regulatory structures themselves.

The findings suggest that Ghana's occupational safety and health governance can be strengthened by improving coordination among existing institutions, enhancing inspection planning, supporting employer implementation of management systems and promoting greater worker participation.

These findings provide the foundation for the remaining comparative analysis and the development of the proposed GHANOSH-F framework presented in Chapter Five.

4.8 Occupational Safety and Health in the Informal Economy

The comparative analysis identified significant differences in how Ghana and the United Arab Emirates address occupational safety and health (OSH) in the informal economy. The informal economy presents one of the greatest challenges to effective OSH governance because many workers operate outside conventional regulatory structures and formal employment relationships.

In Ghana, a large share of the workforce works in informal activities such as agriculture, artisanal mining, construction, transportation, fishing, welding, vehicle repair, and small-scale manufacturing. These workers frequently face occupational hazards including falls, machinery accidents, exposure to hazardous substances, excessive noise, manual handling injuries and inadequate use of personal protective equipment. Many informal enterprises have limited financial resources and little access to occupational safety training or professional guidance.

Conventional regulatory approaches are often less effective in this sector because many workplaces are unregistered and geographically dispersed. Consequently, inspection coverage is limited and occupational incidents may be underreported.

By comparison, the UAE has a much smaller informal labour sector because of its regulatory and employment structures. Occupational safety programmes therefore focus predominantly on registered employers operating within formal regulatory systems. Licensing procedures, labour inspections, and digital administrative systems support compliance monitoring.

While Ghana cannot replicate the UAE's labour market structure, the comparison highlights the importance of adapting regulatory strategies to national circumstances. Rather than relying solely on enforcement, Ghana would benefit from combining regulatory oversight with education, technical assistance and community engagement.

The proposed GHANOSH-F addresses this need through a dedicated pillar that promotes simplified workplace registration, community-based safety education, technical advisory services, partnerships with local authorities and proportionate enforcement strategies. This approach seeks to extend occupational safety protection to informal workers while recognising the practical realities of small enterprises.

4.9 Digital Governance

Digital transformation has become an increasingly important feature of modern occupational safety and health governance. Electronic information systems improve communication between regulators, employers and workers while enhancing data quality, inspection planning and policy evaluation.

The comparative analysis indicates that the UAE has made substantial progress in integrating digital technologies into labour administration and regulatory oversight. Electronic platforms support regulatory communication, workplace administration, inspection processes and information management, enabling authorities to monitor compliance more efficiently.

In contrast, Ghana collects occupational safety information through multiple institutions, each using systems developed to meet its statutory responsibilities. Although these systems support important regulatory functions, they operate largely independently. This fragmentation may reduce opportunities for comprehensive national analysis of occupational injuries, occupational diseases, inspection outcomes and workplace compliance trends.

An integrated digital information system could strengthen occupational safety governance by:

- improving workplace registration;
- supporting electronic incident reporting;
- facilitating information sharing among regulatory agencies;
- improving inspection planning;
- monitoring corrective actions;
- supporting occupational disease surveillance; and

- providing national performance dashboards for policymakers.

Based on these findings, the proposed **GHANOSH Connect** platform is designed to integrate information from existing institutions rather than replace their operational systems. Through coordinated data management, GHANOSH Connect would support evidence-based decision-making while improving transparency and administrative efficiency.

4.10 Professional Competency

Competent occupational safety professionals play a vital role in translating legal requirements into practical workplace improvements. The comparative analysis found that both Ghana and the UAE recognise the importance of qualified personnel in managing occupational risks.

The UAE places considerable emphasis on competency through recognised qualifications, ongoing professional development and organisational responsibility for ensuring that personnel performing safety-related functions possess appropriate knowledge and experience. These requirements contribute to more consistent implementation of occupational safety management systems.

Ghana has many well-qualified occupational safety practitioners working across public and private sectors. However, professional recognition is currently based largely on individual qualifications and employer requirements rather than a nationally coordinated competency framework. As a result, no unified mechanism exists to recognise competency levels, verify continuing professional development, or promote consistent professional standards nationwide.

The comparison therefore suggests that strengthening professional competency systems could improve national occupational safety governance. Accordingly, the proposed **National Register of Occupational Safety and Health Professionals (NAROSHP)** would establish competency categories based on qualifications, experience, continuing professional development and ethical practice. This initiative would enhance professional credibility while supporting consistent standards across industries.

4.11 Sector-Specific Risk Management

Different industries present different occupational hazards, requiring regulatory approaches that reflect sector-specific risks. Both Ghana and the UAE recognise this principle by assigning specialised responsibilities to institutions with technical expertise in particular sectors.

In Ghana, specialist agencies regulate mining, petroleum, manufacturing, construction, and environmental protection with sector-specific knowledge. This arrangement enables regulators to develop technical guidance and inspection practices that reflect the unique hazards associated with each industry.

Similarly, the UAE applies specialised regulatory approaches to sectors such as construction, oil and gas, aviation and utilities. These sectors often operate under additional technical standards and industry-specific safety requirements that complement broader labour legislation.

The comparative analysis demonstrates that sector-specific regulation should be preserved because it enables regulators to apply specialised expertise while addressing complex occupational hazards. However, greater coordination among sector regulators would strengthen consistency in policy implementation and national performance monitoring.

Consequently, GHANOSH-F proposes maintaining sector-specific regulatory responsibilities while improving collaboration through common national objectives, coordinated planning and integrated reporting systems.

4.12 Transferable Lessons from the United Arab Emirates

The comparative analysis identified several UAE governance principles that could strengthen occupational safety and health governance in Ghana.

First, stronger institutional coordination improves consistency in policy implementation while reducing unnecessary duplication of regulatory activities.

Second, greater use of digital technologies enhances information management, regulatory communication and evidence-based decision-making.

Third, competency-based approaches promote higher professional standards and improve the quality of occupational safety practice.

Fourth, structured management systems encourage organisations to integrate occupational safety into routine business operations through leadership commitment, risk management and continual improvement.

Finally, sector-specific regulatory approaches demonstrate that specialised expertise can coexist with coordinated national governance.

These principles are incorporated into the proposed GHANOSH-F while recognising Ghana's institutional and economic context.

4.13 Contextual Differences Limiting Direct Transferability

Although the UAE provides valuable governance lessons, important contextual differences limit direct replication of its occupational safety and health system.

The UAE has a different administrative structure, labour market composition, technological capacity and level of economic development. Greater financial resources and widespread digital infrastructure support regulatory implementation in ways that may not currently be achievable in Ghana.

Similarly, the relative size of Ghana's informal economy presents governance challenges that differ significantly from those encountered in the UAE. Consequently, occupational safety strategies effective in one country may require substantial adaptation before implementation in another.

These differences reinforce the importance of developing a governance framework specifically tailored to Ghana rather than importing foreign institutional models without modification.

Accordingly, this study adopts an adaptive approach that identifies transferable governance principles while respecting Ghana's legal framework, institutional capacity and socioeconomic realities.

4.14 Overall Findings

The comparative analysis produced several important findings.

First, Ghana possesses a substantial institutional and legislative foundation for occupational safety and health governance.

Second, the principal governance challenge is institutional fragmentation rather than the absence of regulatory agencies.

Third, improved coordination among existing institutions offers greater potential benefits than immediate institutional restructuring.

Fourth, digital information systems have considerable potential to improve national coordination, inspection planning and performance monitoring.

Fifth, strengthening professional competency systems would improve consistency in occupational safety practice.

Finally, targeted interventions are required to improve occupational safety protection within Ghana's informal economy.

Collectively, these findings strongly justify developing the **Ghana National Occupational Safety and Health Framework (GHANOSH-F).**

4.15 Chapter Summary

This chapter compared occupational safety and health governance in Ghana and the United Arab Emirates using documentary evidence. The analysis examined legislative frameworks, institutional arrangements, inspection systems, employer responsibilities, worker participation, informal economy protection, digital governance, professional competency and sector-specific regulation.

The findings indicate that Ghana's occupational safety and health governance challenges stem primarily from institutional fragmentation rather than inadequate legislation or insufficient regulatory institutions. Existing agencies have valuable expertise, but stronger coordination, integrated information management, and structured collaboration are needed to improve national performance.

The UAE demonstrates several governance principles, including coordinated implementation, digital administration, competency-based practice, and systematic risk management, that Ghana can adapt to its context. However, differences in institutional capacity and labour market characteristics mean that these principles should be modified rather than directly replicated.

The findings presented in this chapter provide the evidence base for **Chapter Five**, which introduces the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as an integrated model for strengthening occupational safety and health governance in Ghana.

CHAPTER FIVE

PROPOSED GHANA NATIONAL OCCUPATIONAL SAFETY AND HEALTH FRAMEWORK (GHANOSH-F)

5.1 Introduction

This chapter presents the study's principal contribution: the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**. The framework was developed through a comparative analysis of occupational safety and health (OSH) governance systems in Ghana and the United Arab Emirates (UAE), supported by international best practices reflected in International Labour Organisation (ILO) conventions and ISO 45001.

The findings in Chapter Four showed that Ghana has a strong institutional foundation for OSH governance. However, fragmented institutional coordination, limited digital integration, inconsistent implementation mechanisms and inadequate protection of workers in the informal economy reduce the overall effectiveness of the national system.

Rather than recommending the creation of entirely new regulatory institutions, **GHANOSH-F** seeks to **strengthen coordination among existing institutions** while preserving their statutory mandates. The framework promotes collaboration, digital transformation, professional competency and evidence-based decision-making to improve national occupational safety and health governance.

5.2 Vision

To establish a coordinated, inclusive and internationally aligned occupational safety and health governance system that protects all workers in Ghana while promoting sustainable national development.

5.3 Mission

To strengthen occupational safety and health governance through institutional coordination, harmonised legislation, digital innovation, professional excellence and effective stakeholder collaboration while maintaining the statutory responsibilities of existing regulatory institutions.

5.4 Guiding Principles

The GHANOSH-F is guided by the following principles:

Prevention before reaction.
Institutional collaboration rather than institutional competition. Evidence-based policymaking.
Continuous improvement.
Worker participation.
Inclusiveness, including protection of informal-sector workers. Accountability and transparency.
Digital transformation.
Professional competence.
Alignment with international standards, including ILO Conventions No. 155 and No. 187 and ISO 45001.

These principles provide the foundation for all activities undertaken within the framework.

5.5 Governance Structure of GHANOSH-F

The proposed governance structure builds upon Ghana's existing institutional architecture.

National Policy Leadership

The **Ministry of Employment and Labour Relations (MELR)** provides overall national policy direction, approves national OSH strategies and coordinates government-level policy decisions.

Sector Department

The **Department of Factories Inspectorate (DFI)** serves as the national coordinating institution responsible for enforcing health and safety standards under the Factories, Offices and Shops Act. It also coordinates regionally with local government and regional structures, facilitating collaboration among regulatory agencies, managing inter-agency communication, and monitoring implementation of the framework.

Sector Regulators

Existing regulators continue exercising their statutory mandates, including:

Environmental Protection Agency (EPA)
Minerals Commission
Petroleum Commission
Ghana National Fire
Service Ghana Health
Service Energy
Commission
Local Government Authorities
Other sector-specific regulatory bodies

No regulatory authority is removed or replaced. Instead, **GHANOSH-F** strengthens communication and cooperation among them.

Stakeholders

Key stakeholders include:

employers;
workers;
trade
unions;
employers'
associations;
professional
institutions;
universities;
research institutions;
civil society organisations;
and development partners.

5.6 The Eight Strategic Pillars of

GHANOSH-F Pillar One: Institutional

Coordination

This pillar establishes structured cooperation among regulatory institutions. Key actions include:

Inter-agency coordination committee chaired by DFI.
Annual national OSH strategy meetings.
Joint inspections where appropriate.
Shared national work plans.
Common reporting procedures.
National policy coordination.

Expected outcomes include improved communication, reduced duplication of effort and greater consistency in regulatory implementation.

Pillar Two: Informal Economy OSH Integration

Recognising that many Ghanaian workers operate outside formal employment, this pillar focuses on extending occupational safety protection to informal enterprises.

Key initiatives include:

simplified workplace registration;
mobile advisory services;
community-based safety
education; partnerships with local
authorities;
technical support for small enterprises;
affordable safety awareness programmes.

Expected outcomes include improved safety awareness, increased compliance and expanded protection for vulnerable workers.

Pillar Three: National Special Task Force on Compliance and Enforcement

This pillar establishes a coordinated multi-agency task force for high-risk sectors and major national enforcement operations.

Responsibilities include:

coordinated inspections;
investigation of major
incidents; emergency response
support; intelligence sharing;
targeted enforcement campaigns.

The task force complements, rather than replaces, the responsibilities of individual regulatory agencies.

Pillar Four: Legislative Harmonisation

Rather than replacing existing legislation immediately, this pillar seeks to improve consistency among current legal instruments.

Key actions include:

legislative review;
identification of overlapping

provisions; harmonised regulatory guidance;

standard inspection protocols;
long-term preparation for comprehensive legislative reform.

This phased approach reduces disruption while improving legal consistency.

Pillar Five: Sector-Specific Risk Management

Sector regulators continue developing industry-specific technical

guidance. Priority sectors include:

mining;
petroleum;
construction;
manufacturing;
healthcare;
agriculture;
transportation;
energy.

National coordination ensures consistency while preserving specialist expertise.

Pillar Six: GHANOSH Connect

GHANOSH Connect serves as the national digital information platform supporting occupational safety governance.

The platform would integrate:

workplace
registration;
inspection records;
accident reporting;
occupational disease surveillance;
enforcement activities;
regulatory referrals;
statistical reporting;
national performance dashboards.

This pillar significantly improves evidence-based policymaking.

Pillar Seven: National Occupational Safety and Health Rating System (NOSHRS)

The National Occupational Safety and Health Rating System introduces voluntary national recognition for organisational safety and health performance.

Assessment criteria include:

leadership
commitment; legal
compliance; safety
culture;

incident
performance;
training;

continual improvement;
innovation.

High-performing organisations receive national recognition, encouraging voluntary improvement beyond minimum legal compliance.

Pillar Eight: National Register of Occupational Safety and Health Professionals (NAROSHP)

This pillar establishes a nationally coordinated professional registration

system. The register includes:

recognised qualifications;
competency classification;
professional experience;
continuing professional development;
ethical standards;
disciplinary procedures where appropriate.

NAROSHP strengthens professional credibility while promoting high standards across the OSH profession.

5.7 Implementation Roadmap

Implementation should occur in phases to minimise disruption and allow institutional learning.

Phase One (Years 1–2): Foundation

Activities include:

establishment of national coordination structures;
stakeholder engagement;
legislative review;
pilot implementation of GHANOSH Connect;
awareness campaigns.

Phase Two (Years 3–5): Expansion

Activities include:

nationwide rollout of digital systems;
establishment of NAROSHP;
implementation of NOSHRS;
expansion of informal economy programmes;
joint inspection initiatives.

Phase Three (Years 6–10): Consolidation

Activities include:

full national implementation;
policy evaluation;
legislative harmonisation;

continuous system improvement;
consideration of establishing a future **Ghana National Occupational Safety and Health Authority (GHANOSHA)** if implementation demonstrates sufficient institutional maturity and national consensus.

5.8 Monitoring and Evaluation Framework

Effective implementation requires regular monitoring and

evaluation. Suggested Key Performance Indicators **(KPIs)**

include:

Objective	Indicator
Institutional coordination	Number of joint inter-agency programmes
Inspection effectiveness	Percentage of planned inspections completed
Worker protection	Reduction in occupational injury rates
Informal economy	Number of informal enterprises receiving OSH support
Digital transformation	Percentage of institutions connected to GHANOSH Connect
Professional competency	Number of registered OSH professionals
Organisational excellence	Number of organisations participating in NOSHRS

DFI should coordinate annual performance reports and submit them to **MELR** for policy review and strategic decision-making.

5.9 Expected Benefits of GHANOSH-F

Successful implementation of GHANOSH-F is expected to produce several benefits.

Institutional Benefits

Stronger coordination among regulators.
Reduced duplication of responsibilities.
Improved communication.
Better policy implementation.

Economic Benefits

Reduced workplace accidents.
Increased productivity.
Lower compensation costs.
Improved investor confidence.

Social Benefits

Better protection of workers.
Greater public awareness of occupational
safety. Increased inclusion of informal-sector
workers. Enhanced national wellbeing.

Professional Benefits

- Higher competency standards.

Stronger professional recognition.
Continuous professional development.
Improved quality of occupational safety practice.

5.10 Potential Challenges and Mitigation Strategies

Several implementation challenges may arise.

Challenge	Mitigation Strategy
Limited funding	Phased implementation and government-development partner collaboration
Institutional resistance	Stakeholder engagement and change management
Capacity constraints	Training and technical support
Digital infrastructure limitations	Gradual rollout of GHANOSH Connect
Legislative complexity	Phased legislative harmonisation
Informal-sector engagement	Community partnerships and awareness programmes

Proactively addressing these challenges will improve the framework's sustainability.

5.11 Original Contribution of the Study

The principal original contribution of this research is the development of the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**.

Unlike previous studies that primarily focus on legislation or sector-specific safety issues, GHANOSH-F provides an integrated governance model that:

strengthens coordination among existing institutions;
preserves statutory mandates;
incorporates international best practices; integrates digital governance;
extends protection to the informal economy;
promotes professional competency; and
provides a phased roadmap for implementation.

The framework offers policymakers a practical and context-specific model for developing Ghana's occupational safety and health governance.

5.12 Chapter Summary

This chapter introduced the proposed **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as the study's central contribution. The framework responds directly to the governance challenges identified in the comparative analysis and provides a coordinated approach to strengthening occupational safety and health governance in Ghana.

GHANOSH-F is built on **eight strategic pillars** that reinforce institutional collaboration, improve digital integration, support professional competency, extend protection to informal workers and encourage continuous improvement. The proposed implementation roadmap, monitoring framework and mitigation

strategies provide practical guidance for translating the framework into action.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the study's conclusions and provides recommendations based on the findings. The study examined Ghana's occupational safety and health (OSH) governance system through a comparative analysis with the United Arab Emirates (UAE), aiming to develop a practical framework for strengthening national occupational safety and health governance.

The conclusions are based on the documentary evidence analysed throughout the study and are linked directly to the research objectives. The chapter also highlights the study's contribution to knowledge, discusses policy implications and identifies areas for future research.

6.2 Summary of the Study

The study recognised that occupational safety and health is fundamental to sustainable economic development, worker well-being, and organisational productivity. Although Ghana has established several regulatory institutions responsible for occupational safety and health, governance responsibilities are distributed across multiple agencies operating under different legislative mandates.

The literature review demonstrated that international best practice increasingly favours integrated governance characterised by institutional coordination, preventive risk management, professional competency and digital information systems. Comparative analysis with the UAE further showed that effective occupational safety governance depends not simply on legislation but also on coordinated implementation, structured collaboration and evidence-based decision-making.

Using qualitative documentary analysis, the study examined Ghana's existing governance arrangements, compared them with selected practices from the UAE and developed the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as a context-specific governance model for Ghana.

6.3 Conclusions Based on the Research

Objectives Objective One

To examine the existing occupational safety and health governance framework in Ghana.

The study concludes that Ghana possesses an extensive institutional and legislative foundation for occupational safety and health governance. Several specialised regulatory agencies perform important functions within their respective sectors, and their statutory responsibilities collectively provide a broad framework for protecting workers.

However, fragmented institutional coordination, inconsistent communication mechanisms, and limited integration of national occupational safety information constrain the system's effectiveness. These challenges reduce overall governance efficiency despite capable regulatory institutions.

Objective Two

To examine occupational safety and health governance practices in the United Arab Emirates.

The study found that the UAE has developed a coordinated occupational safety and health governance system characterised by structured institutional collaboration, systematic risk management, digital administration and competency-based implementation.

Although responsibilities remain distributed across multiple institutions, clear coordination mechanisms and integrated administrative practices contribute to more consistent policy implementation.

The UAE therefore provides valuable governance principles rather than a model for direct institutional replication.

Objective Three

To compare Ghana's occupational safety and health governance framework with that of the United Arab Emirates.

The comparative analysis revealed that both countries operate multi-agency occupational safety and health systems supported by legislation and specialised regulatory institutions.

The principal difference lies in implementation rather than institutional design. The UAE demonstrates stronger institutional coordination, greater digital integration and more structured governance processes.

These findings suggest that Ghana's existing institutional architecture can be strengthened through improved coordination rather than comprehensive institutional restructuring.

Objective Four

To identify governance practices that could strengthen Ghana's occupational safety and health system.

The study identified several governance practices capable of improving occupational safety governance in Ghana, including:

- stronger inter-agency coordination;
- integrated digital information systems;
- structured professional competency frameworks;
- coordinated inspection planning;
- improved protection of informal-sector workers;
- harmonised legislative implementation; and
- performance monitoring through measurable national indicators.

These practices informed the design of GHANOSH-F.

Objective Five

To develop a framework for strengthening occupational safety and health governance in Ghana.

The study successfully developed the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)**.

The framework provides an integrated governance model built upon eight strategic pillars that strengthen coordination among existing institutions while preserving their statutory mandates. It also introduces a

phased implementation roadmap, monitoring framework, and performance indicators to support long-term improvement.

6.4 Overall Conclusion

The central conclusion of this study is that **Ghana does not require an entirely new occupational safety and health governance system; rather, it requires a more coordinated one**.

Existing institutions already possess the technical expertise, legislative authority and sector-specific knowledge necessary to regulate occupational safety and health effectively. The principal challenge lies in strengthening collaboration among these institutions through structured coordination, integrated information systems and shared national objectives.

The proposed **GHANOSH-F** therefore offers a practical and sustainable approach to strengthening Ghana's occupational safety and health governance without disrupting existing statutory responsibilities. By promoting institutional coordination, digital transformation, professional competency and evidence-based policymaking, the framework provides a realistic pathway toward improved worker protection and stronger national governance.

6.5 Recommendations

Recommendations for

Government The

Government of Ghana

should:

- formally establish a national institutional coordination mechanism under the Ministry of Employment and Labour Relations;
- strengthen the coordinating role of the Department of Factories Inspectorate;
- support phased implementation of GHANOSH-F;
- allocate sustainable funding for occupational safety governance; and
- promote digital transformation across regulatory institutions.

Recommendations for Regulatory Institutions

Regulatory agencies should:

- strengthen inter-agency collaboration;
- conduct coordinated inspections where appropriate;
- share occupational safety information through integrated digital systems;
- develop common reporting standards; and
- participate in joint national planning exercises.

Recommendations for Employers

Employers should:

- adopt occupational safety management systems aligned with ISO 45001;
- strengthen worker participation;
- invest in occupational safety training;
- improve incident reporting systems;
- and
- promote continual improvement in workplace safety performance.

Recommendations for Professional Bodies

Professional organisations should:

- support the establishment of NAROSHP;
- promote continuing professional development;

strengthen ethical standards;
encourage competency-based certification; and
collaborate with universities to improve occupational safety education.

Recommendations for Academic Institutions

Universities should:

expand occupational safety research;
strengthen collaboration with
industry;
encourage interdisciplinary research on governance;
develop specialised postgraduate programmes; and
support evidence-based policymaking through research.

Recommendations for Future Researchers

Future studies should examine:

stakeholder perceptions of GHANOSH-F implementation;
economic evaluation of integrated occupational safety governance;
digital transformation in occupational safety administration;
occupational safety governance within Ghana's informal economy; and
comparative studies involving additional African countries.

6.6 Policy Implications

The findings have important implications for occupational safety and health policymaking in Ghana.

Rather than pursuing immediate institutional restructuring, policymakers should prioritise improving coordination among existing agencies. Establishing structured collaboration, integrated digital information systems, and common national performance indicators can enhance governance while preserving existing statutory mandates.

The phased implementation approach proposed by **GHANOSH-F** allows gradual institutional improvement while reducing administrative disruption and facilitating stakeholder engagement.

6.7 Contribution to Knowledge

This study makes several contributions to occupational safety and health scholarship.

First, it provides one of the few comprehensive comparative analyses of occupational safety and health governance between Ghana and the United Arab Emirates.

Second, it shifts attention from workplace-level safety management to national institutional governance.

Third, it demonstrates that governance effectiveness depends largely on institutional coordination rather than institutional expansion.

Most importantly, the study introduces the **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** as an original governance model specifically designed for Ghana's institutional context. The framework integrates international best practices while recognising the

country's legal, administrative and socioeconomic realities.

6.8 Final Reflection

Occupational safety and health governance continues to evolve as countries respond to changing work patterns, technological advancement, and emerging occupational risks. Sustainable improvement depends not only on legislation but also on collaboration, leadership, professional competence and continual learning.

Ghana has already established the essential institutions required to protect workers. By strengthening coordination, embracing digital innovation and promoting a preventive safety culture, the country can build a more effective and resilient national occupational safety and health system.

The **Ghana National Occupational Safety and Health Framework (GHANOSH-F)** offers a practical pathway toward achieving this objective and contributes to the broader goal of protecting workers while supporting national economic and social development.

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APPENDIX A

Research Objectives Matrix

Objective	Addressed in Chapter
Examine Ghana's OSH governance	Chapter 4
Examine UAE OSH governance	Chapter 4
Compare both systems	Chapter 4
Identify transferable practices	Chapters 4–5
Develop GHANOSH-F	Chapter 5

APPENDIX B

Documentary Sources Reviewed

Examples include:

ILO Convention No. 155
ILO Convention No. 187
ISO 45001
ISO 9001
ISO 14001
Ghana Labour legislation
Ghana Factories legislation
UAE Labour legislation
Ministry publications
Government reports
Peer-reviewed journal articles
Professional publications

APPENDIX C

Proposed GHANOSH-F Governance Structure

Ministry of Employment & Labour Relations (MELR)
|
Department of Factories Inspectorate (National Coordinator)
|
EPA | Minerals Commission | Petroleum Commission | Fire Service | Other Regulators
|
GHANOSH Connect Platform

Employers • Workers • Professional
Bodies Universities • Local Authorities

APPENDIX D

GHANOSH-F Implementation Timeline

Phase	Years	Activities
Phase 1	1–2	Coordination structures, stakeholder engagement, pilot digital platform
Phase 2	3–5	GHANOSH Connect, NAROSHP, NOSHRS, nationwide implementation
Phase 3	6–10	Full implementation, evaluation, legislative harmonisation, future GHANOSHA consideration

APPENDIX E

Proposed National Occupational Safety and Health Rating System (NOSHRS)

Rating	Description
Platinum	Outstanding OSH performance
Gold	Excellent compliance
Silver	Good compliance
Bronze	Meets statutory requirements
Improvement Required	Significant improvements needed

APPENDIX F

Eight Strategic Pillars of GHANOSH-F

Pillar	Description
1	Institutional Coordination
2	Informal Economy OSH Integration
3	National Special Task Force on Compliance and Enforcement
4	Legislative Harmonisation
5	Sector-Specific Risk Management
6	GHANOSH Connect
7	National Occupational Safety and Health Rating System (NOSHRS)
8	National Register of Occupational Safety and Health Professionals (NAROSHP)