

## **ADVANCING FIRE EMERGENCY MANAGEMENT FOR SUSTAINABLE COMMUNITY DEVELOPMENT IN OBO/AKPOR LOCAL GOVERNMENT AREA OF RIVERS STATE**

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### **Abstract**

*Fire disasters pose significant threats to lives, property, and sustainable development, particularly in rapidly urbanizing regions such as Obio/Akpor Local Government Area (LGA) of Rivers State, Nigeria. As population density and industrial activities increase, the risks and impacts of fire outbreaks have intensified, exacerbated by inadequate fire emergency infrastructure, limited public awareness, and weak enforcement of safety regulations. This paper examines the current state of fire emergency management in Obio/Akpor, identifying key challenges such as resource constraints, insufficient preparedness, and poor coordination among emergency response agencies. Drawing on global best practices and sustainable development principles, the study emphasizes the need for a holistic approach encompassing prevention, preparedness, response, recovery, and climate adaptation. Key recommendations include strengthening fire prevention mechanisms through strict building codes and safety standards, enhancing community capacity through regular training and public education, improving response systems with modern equipment and infrastructure, and integrating post-fire rehabilitation and climate resilience into policy frameworks. The paper concludes that advancing fire emergency management is essential not only for disaster risk reduction but also for fostering sustainable community development and resilience in Obio/Akpor and similar urbanizing regions.*

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### **Introduction**

Fire disasters remain a significant threat to communities worldwide, especially in rapidly urbanizing regions like Obio Akpor Local Government Area (LGA) of Rivers State, Nigeria. Obio/Akpor Local Government Area (LGA) is one of the prominent LGAs in Rivers State and it serves as a significant urban and commercial hub, characterized by its rapid development, diverse population, and strategic location near Port Harcourt, the state capital. As of the 2023 census estimates, Obio/Akpor has a population of approximately 700,000 people, reflecting its status as one of the most densely populated areas in the state (National Population Commission, 2023). As populations grow and industrial activities intensify, the risk of fire outbreaks increases, posing severe threats to human lives, property, and local economies. Inadequate fire emergency management systems further exacerbate these risks, leading to devastating consequences that can hinder the sustainable development of affected communities (Ijeomanta, 2023).

Fire emergency management is more than just firefighting; it encompasses prevention, preparedness, response, and recovery efforts aimed at minimizing the impact of fire disasters. However, in Obio Akpor, fire emergency services are often under-resourced, leading to delayed response times and ineffective management of fire incidents. This situation is compounded by a lack of public awareness, weak enforcement of fire safety regulations, and insufficient infrastructure, making both residential and commercial areas highly vulnerable to fire hazards (Shokouhi, 2019). Sustainable development in any community requires not only economic growth and infrastructural expansion but also safety and resilience to disasters. In

the context of Obio Akpor, improving fire emergency management is critical to achieving long-term development goals. Without proactive measures to address fire risks, the economic and social gains made in the area could be undone by preventable fire disasters. Thus, there is an urgent need to strengthen fire emergency management systems to protect lives, property, and the environment, while also fostering sustainable development in the region (Nwankwo, 2023).

This paper explores the current state of fire emergency management in Obio Akpor LGA, identifies the key challenges hindering effective fire risk management, and suggests sustainable solutions for advancing fire safety in the community.

## **Understanding Fire**

Fire is a chemical reaction known as combustion, which occurs when a fuel source reacts with oxygen, producing heat, light, and various combustion products. At its core, fire is an exothermic process, meaning that it releases more energy than it consumes. The fire triangle comprising heat, fuel, and oxygen is a widely used model to describe the essential components necessary for fire to ignite and sustain itself (Blazequel, 2024). Without any one of these elements, a fire cannot occur. As a natural phenomenon, fire has been both a vital tool for human survival and a destructive force throughout history. Fire was crucial for cooking food, providing warmth, and offering protection from predators. It also played a significant role in early human settlements, agriculture, and industry, shaping the course of civilization. Fire plays a crucial ecological role, especially in natural ecosystems such as grasslands, savannas, and forests. It helps to clear out dead and decaying organic matter, allowing sunlight to reach the forest floor, which promotes the growth of new plants. It also helps maintain the balance of certain ecosystems by controlling invasive species and encouraging biodiversity. With these beneficial properties of fire, however, when uncontrolled, fire becomes destructive, leading to significant loss of life, property, and environmental degradation (Jumbo et al., 2020)

## **Causes of Fire**

Jumbo et al (2020) and OSHA (2024) listed the following as the most common causes of fires emergencies:

**Electrical Faults:** Faulty wiring, overloaded circuits, and malfunctioning electrical appliances are frequent causes of fires, particularly in urban settings. Short circuits and damaged cables can generate sparks that ignite surrounding materials, leading to electrical fires. This is especially relevant in areas with aging infrastructure or inadequate maintenance

**Open Flames and Ignition Sources:** Improper handling of open flames, such as candles, matches, lighters, and unattended stoves, frequently leads to accidental fires. In homes and businesses, cooking-related incidents, especially involving grease, are a significant cause of fires. This is particularly common in kitchens where flammable materials are present

**Flammable Materials:** The improper storage or handling of flammable liquids like gasoline, paint thinner, and alcohol can easily lead to fires. In industrial settings, improper chemical storage and exposure to heat or sparks can result in large-scale fires. Gas leaks also pose a serious risk, especially when exposed to ignition sources

**Arson:** Intentional setting of fires, or arson, is a criminal act that contributes to many fire-related incidents. In densely populated urban areas, arson can lead to widespread destruction and loss of life

**Environmental Factors:** In dry and hot climates, natural fires often result from environmental factors like lightning strikes or spontaneous combustion in areas with dry vegetation. Human activities such as careless disposal of cigarettes or campfires in forested regions can exacerbate this risk, leading to devastating wildfires

**Negligence:** Simple negligence, such as leaving electrical devices unattended, improper disposal of smoking materials, or failure to follow fire safety protocols, is a leading cause of accidental fires. Carelessness in industrial, residential, and commercial settings increases the likelihood of fire outbreaks. Fire outbreaks are emergency situations of great concern in the community.

### **Dynamics of Emergency**

Emergencies are complex and unpredictable events that can arise from a variety of causes, ranging from natural disasters such as hurricanes and earthquakes to human-induced incidents like fires, chemical spills, or terrorist attacks. Understanding the dynamics of emergencies requires examining the interplay of several critical elements: the nature of the hazard, the vulnerability of the population, the capacity of responders, and the broader social, political, and economic context. At the core of any emergency lies the hazard itself. Hazards are events or physical conditions that have the potential to cause loss of life, injury, or other health impacts, as well as damage to property, infrastructure, or the environment. These hazards can be natural or human induced. Natural hazards include storms, floods, and earthquakes, while human-induced hazards involve technological accidents, conflicts, or industrial failures. The scale and impact of these hazards depend on their magnitude, frequency, duration, and timing (Peijun, 2019). However, the severity of an emergency does not depend on the hazard alone—it is also shaped by the vulnerability of the people exposed to it.

The vulnerability of the population is therefore a crucial aspect of emergency dynamics. Vulnerability refers to the susceptibility of individuals, communities, or systems to harm due to their exposure to hazards and their ability to cope with, recover from, and adapt to adverse events. Populations such as the elderly, persons with disabilities, low-income individuals, and those residing in high-risk areas tend to suffer disproportionately during emergencies. This heightened vulnerability often stems from limited access to resources, information, or support systems that could enhance resilience to hazards (Du et al., 2015). Understanding vulnerability leads naturally to another essential factor: the capacity of responders to manage and mitigate the consequences of such events.

Response capacity, which encompasses the skills, equipment, and organizational structures of emergency responders, is a key determinant of how effectively emergencies are managed. The readiness and efficiency of services such as fire departments, paramedics, and disaster relief agencies can dramatically influence the outcome of a crisis. In well-prepared regions, early warning systems, emergency drills, and resilient infrastructure can significantly reduce the impact of disasters. Conversely, areas lacking these capacities often experience amplified devastation. This relationship underscores the importance of preparedness and interagency coordination—concepts highlighted by Haddow et al. (2011), who stress the need for pre-incident planning and collaboration among emergency services to reduce response time and improve overall effectiveness.

While the capacity of responders determines the immediacy of the reaction, the broader social, political, and economic context shapes both the preparation and long-term recovery

phases. Emergency responses in developed nations may differ significantly from those in less developed countries due to variations in governance, resource availability, and technological infrastructure. The government's role is therefore central to emergency preparedness and disaster management, influencing the allocation of resources, communication strategies, and post-crisis recovery efforts. As Tierney (2019) notes, disaster policies and institutional arrangements play a decisive role in shaping not only the initial response but also the sustainability of long-term recovery. Finally, it is essential to recognize that emergencies evolve through distinct stages. The pre-emergency phase involves recognizing—or sometimes overlooking—warning signs of potential hazards. This is followed by the emergency phase, which demands immediate response measures under time-sensitive and often chaotic conditions. The final stage, post-emergency, centers on recovery and evaluation, where lessons learned are integrated into future preparedness planning. According to Perry et al. (2003), the effectiveness of emergency management depends on seamless transitions between these stages, particularly through sustained coordination among multiple stakeholders.

## **Types of Emergencies**

Emergencies can arise from a wide range of situations, and they are typically categorized based on their causes, impacts, and the nature of the threats they pose.

- a. **Natural Disasters:** These emergencies are caused by natural processes or phenomena. These include Earthquakes, Hurricanes/Cyclones/Typhoons, Tsunamis, Wildfires, and volcanic Eruptions
- b. **Technological or Man-Made Emergencies:** These emergencies result from human activities, technological failures, or accidents. These include Industrial Accidents, Transport Accidents, Nuclear Accidents, Hazardous Material (HazMat) Spills and Infrastructure Failures
- c. **Public Health Emergencies:** These emergencies involve threats to public health due to disease outbreaks, pandemics, or biological hazards. These include – Pandemics, Epidemics: Bioterrorism and Foodborne Illnesses
- d. **Fire Emergencies.** These comprise of uncontrolled fires in residential, industrial, or natural environments, such as -Residential Fires, Wildfires and Chemical Fires
- e. **Civil Unrest and Terrorism:** These emergencies arise from social or political instability and intentional acts of violence. They include Riots, Terrorist Attacks and Insurgencies
- f. **Environmental Emergencies:** These are caused by significant harm to the environment, often due to human activity. These include – Oil Spills, deforestation, and Pollution disasters
- g. **Complex Humanitarian Emergencies:** These are large-scale emergencies involving a combination of conflict, natural disasters, and mass displacement. They include - Refugee Crises, famine and Internally Displaced Persons (IDPs) (United Nations Office for the Coordination of Humanitarian Affairs
- h. **Cybersecurity Emergencies:** These involve attacks on information systems that can cripple infrastructure, businesses, or government functions. They include – Cyberattacks, Data Breaches and Critical Infrastructure Attacks (Healey (2014), Chansey, (2009), Haddow et al., (2011) and WHO (2020))

## **Fire Emergencies**

A fire emergency refers to any unanticipated situation where fire poses a serious risk to life, property, or the environment, requiring immediate action. Fire emergencies can result from various causes, such as electrical faults, accidental ignition, arson, industrial accidents, or natural events like wildfires. Understanding fire emergencies involves looking at their causes, phases, response protocols, mitigation efforts, and recovery actions.

### **Causes of Fire Emergencies**

Fire emergencies can result from a variety of factors, both natural and human induced. Fires can originate from a variety of causes, both human-made and natural, each posing unique risks in residential, commercial, and industrial settings. One of the most common causes is electrical faults, which occur when circuits are overloaded, wiring becomes defective, or electrical appliances malfunction. Such faults can easily spark fires, particularly in densely populated areas or industrial facilities where heavy electrical use is common. Another frequent source of fire hazards involves open flames, such as unattended candles, stoves, or fireplaces. These everyday household items, when left unsupervised, can quickly ignite surrounding materials and escalate into uncontrollable fires. Closely related are cooking accidents, which remain among the leading causes of residential fires. These typically result from overheating oils, leaving food unattended on the stove, or mishandling kitchen appliances—all of which can rapidly lead to dangerous flare-ups.

In contrast to accidental fires, arson represents the deliberate setting of fires, often driven by malicious intent, vandalism, or insurance fraud. Such acts are particularly concerning in urban environments, where the potential for widespread damage is high. Similarly, chemical reactions can also trigger devastating fires, especially in industrial settings where flammable or reactive substances are improperly stored or handled, leading to explosions or spontaneous combustion. Natural causes are another significant contributor to fire outbreaks. Events such as lightning strikes, volcanic eruptions, and prolonged droughts can ignite wildfires, particularly in dry or forested regions where vegetation provides abundant fuel. Negligence also plays a considerable role; simple careless acts—like discarding cigarette butts improperly, leaving flammable materials exposed, or mishandling fireworks—can easily result in fires that spread rapidly.

Furthermore, vehicle accidents can also lead to fires, particularly when collisions involve fuel-carrying vehicles or when explosions occur in damaged engines. Lastly, faulty heating systems pose an additional risk, especially during colder seasons. Malfunctioning space heaters, central heating units, or other heating appliances can ignite nearby materials, resulting in serious fire incidents. According to reports from the World Meteorological Organization (WMO, 2023), the Occupational Safety and Health Administration (OSHA, 2023), and the National Fire Protection Association (NFPA, 2023), these causes collectively represent the most common and preventable sources of fire emergencies worldwide.

### **Fire Emergency Management (FEM)**

Fire Emergency Management is a vital component of public safety, focusing on preventing, mitigating, responding to, and recovering from fire incidents. Given the increasing risks of both urban fires and wildfires due to climate change, FEM requires an adaptive, multi-layered approach that integrates prevention strategies, technological innovations, and coordinated

responses across sectors. As fire incidents continue to increase in frequency and intensity, effective management is critical to saving lives, protecting property, and minimizing environmental damage. Effective fire management involves a series of interconnected phases that aim to minimize the occurrence, impact, and long-term consequences of fires. The first phase, prevention and mitigation, focuses on reducing the likelihood and severity of fire incidents. This involves identifying fire-prone areas and implementing measures to remove or reduce flammable materials that could fuel a blaze. Activities such as controlled burning, vegetation management, enforcing building codes, and promoting fire-safe practices among communities all contribute to decreasing the potential for devastating fires.

The second phase, preparedness, ensures that individuals, communities, and authorities are ready to act swiftly and effectively when a fire occurs. Preparedness efforts typically include developing emergency plans, conducting fire drills, training response personnel, and maintaining firefighting equipment. Public education campaigns also play a crucial role in enhancing awareness and ensuring that people know how to respond safely during fire emergencies. Once a fire breaks out, the response phase is immediately activated. This stage demands rapid coordination among firefighting units, emergency medical services, law enforcement, and local governments. Speed and precision are essential during this phase to contain the fire, protect lives and property, and prevent the situation from escalating further. Efficient communication and resource mobilization often determine the success of response operations. Finally, the recovery phase begins after the fire has been extinguished. Recovery focuses on restoring normalcy and rebuilding affected communities. This includes repairing damaged infrastructure, providing housing assistance, and restoring essential services. Beyond physical reconstruction, recovery also addresses the psychological and economic impacts of fires, offering mental health support and financial aid to victims. According to the Red Cross (2023), long-term recovery is crucial for helping communities regain stability and resilience, ensuring they are better prepared for potential future emergencies.

### **Current State of Fire Emergency Management in Obio Akpor**

Obio/Akpor Local Government Area (LGA) is one of the most densely populated and economically dynamic regions in Rivers State, encompassing extensive residential, commercial, and industrial zones. However, the pace of urbanization in the area has significantly outstripped the development of essential fire safety infrastructure. Consequently, fire incidents—particularly in high-density locations such as markets, residential neighbourhoods, and industrial sites—have become increasingly frequent and severe. In June 2025, a major fire ravaged the Rumuomasi Morning Market in Obio/Akpor. The blaze, which began between 7:30 and 8:00 p.m. following the restoration of power, destroyed goods worth millions of naira and numerous stalls and shops (Odiegwu, 2025). Similarly, in July 2025, a fire outbreak at a furniture shop in the Mile 4, Rumueme area spread to nearby residential buildings, triggering gas cylinder explosions (Akari, 2025). Earlier in January 2025, a tragic apartment fire on Rumuworlu Street in the Eneka area claimed the life of an eight-month-old baby (Akari, 2025b).

Response to these incidents largely depended on the state fire service, which is not located within immediate reach of the LGA. Recognizing this gap, both the local and state governments have intensified efforts to enhance fire response infrastructure. Notably, these efforts culminated in the inauguration of a new fire service sub-station at Rumuodomaya in Obio/Akpor LGA. The rehabilitated facility includes 54 offices, staff quarters, new fire trucks, and a 45,000-litre water tank (Akutamadu, 2025). In addition to infrastructural

improvements, the LGA has introduced regulatory measures aimed at preventing future disasters. For instance, following a gas explosion, the LGA Chairman implemented a ban on gas-refilling shops operating within residential areas (The Guardian Nigeria, 2025).

### **Challenges Facing Fire Emergency Management in Obio Akpor**

Several factors contribute to the ineffectiveness of fire emergency management in Obio Akpor. One of the primary challenges is the lack of adequate infrastructure and resources for firefighting. Fire stations in the area are underfunded, leading to the use of outdated equipment and insufficient training for firefighters. Also, scarcity of fire hydrants or accessible water sources, especially in densely populated residential and commercial areas (Shokouhi, 2019).

Also, poor enforcement of fire safety regulations, building codes and safety standards are frequently ignored in both residential and industrial developments. Informal settlements and industrial zones often lack proper road access, fire exits, and compliance with fire safety regulations, making these areas particularly vulnerable to fire outbreaks.

Furthermore, local authorities often lack the capacity to monitor and enforce compliance with fire safety standards, leading to widespread negligence (Fakunle, 2020). Public engagement is also minimal. While fire prevention and preparedness are community-level concerns, there is little collaboration between fire services, local government, and residents. Public education campaigns on fire safety are rare, and fire drills, which are essential for preparing communities to respond effectively during emergencies, are virtually non-existent in most areas of Obio Akpor (Jumbo et al., 2020). These challenges inhibit the drive for a sustainable community development.

### **Overview of Community Development**

Community development is a holistic approach aimed at fostering economic growth, social well-being, and environmental sustainability within local communities. It involves empowering individuals and groups to identify their needs, develop their capabilities, and create sustainable solutions to improve their quality of life. The concept has evolved significantly over the years, encompassing various strategies and practices that engage community members in the decision-making process and promote collaborative efforts for positive change. According to the UNDP (2023), community development practices have become increasingly important in achieving the Sustainable Development Goals (SDGs), which emphasize inclusive and sustainable growth.

### **Challenges of Community Development**

Despite its potential benefits, community development faces several significant challenges. One major obstacle is resource constraints, as limited financial and human resources often hinder the effective implementation of development initiatives. Many communities, particularly those in low-income areas, struggle to secure adequate funding and skilled personnel to support their projects. Another challenge lies in inequities, where social and economic disparities affect participation and the fair distribution of benefits from community development efforts. Ensuring that marginalized and vulnerable groups have equal access to resources and decision-making opportunities is crucial for achieving inclusive and equitable development (International Fund for Agricultural Development [IFAD], 2023). Additionally,

the sustainability of initiatives poses an ongoing difficulty, as maintaining the progress and impact of community development programs can be hard once external funding or support is withdrawn. To address this, it is essential to build local capacity, foster community ownership, and strengthen internal systems that can sustain development efforts over the long term.

## **Achieving Sustainable Community Development**

The concept of sustainability is rooted in the idea of meeting the needs of the present without compromising the ability of future generations to meet their own needs. This principle, popularized by the 1987 Brundtland Report, has become central to global discussions on how humanity interacts with the environment, economy, and society. Sustainability is now a guiding framework for addressing the world's most pressing challenges, such as climate change, biodiversity loss, inequality, and resource depletion. Its core pillars—environmental, social, and economic sustainability—are interconnected and must be balanced to achieve long-term resilience and well-being for people and the planet. (UN, 2024)

Sustainable Community Development (SCD) is an integrated, people centred approach that seeks to improve the quality of life within communities while balancing social, economic, and environmental priorities. It focuses on meeting present community needs, such as access to clean water, education, healthcare, housing, and livelihoods and without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987; United Nations Development Programme [UNDP], 2020). At its core, SCD promotes participation, inclusiveness, and empowerment, encouraging residents to take ownership of their development by identifying community priorities and mobilizing local resources (World Bank, 2021). It emphasizes that community wellbeing is interconnected with sustainable economic practices, environmental conservation, and social equity (Dale & Newman, 2005). This involves integrating:

Economic sustainability, through job creation, entrepreneurship, and sustainable livelihoods that enhance income security (Todaro & Smith, 2020).

Social sustainability, through equitable access to education, healthcare, social justice, and civic participation (UNDP, 2020).

Environmental sustainability, by conserving natural resources, promoting renewable energy, and enhancing resilience to climate-related risks (United Nations, 2015).

By linking these three dimensions, Sustainable Community Development provides a holistic framework for addressing immediate community needs—such as poverty reduction, infrastructure development, and disaster preparedness, while safeguarding the environment and promoting long-term resilience. Ultimately, SCD ensures that the progress made today contributes to a self-reliant, equitable, and sustainable future for all (Dale & Newman, 2005; UN-Habitat, 2022).

This concept acknowledges the interconnectedness of various community elements, emphasizing the need for holistic strategies that address environmental sustainability, economic viability, and social equity. As communities worldwide face challenges such as climate change, economic disparities, and social fragmentation, SCD has emerged as a crucial framework for fostering resilience and adaptability

## **Strategies for Sustainable Community Development**

UNESCO (2023) identified the following strategies for sustainable community development: **Local Economic Development:** Building local economies through entrepreneurship, job creation, and support for small businesses is a cornerstone of SCD. Initiatives such as microfinance programs and vocational training can help communities become economically self-sufficient

**Sustainable Infrastructure:** Investing in sustainable infrastructure—such as energy-efficient buildings, public transportation systems, and green spaces—can significantly improve the quality of life in communities.

**Education and Capacity Building:** Education is a critical component of SCD, as it equips individuals with the knowledge and skills needed to participate actively in their communities. Capacity-building initiatives, such as training programs and workshops, enhance local skills and foster innovation.

**Community Resilience and Adaptation:** Building resilience to environmental shocks—such as floods, droughts, and climate change—is essential for sustainable development. Communities can implement strategies that enhance their adaptive capacity, including disaster risk reduction and climate-smart agricultural practices.

## **Advancing Fire Emergency Management for Sustainable Community Development**

Fire emergency management plays a crucial role in protecting lives, property, and the environment. Effective fire management goes beyond immediate response to incidents, it involves preventive measures, risk assessment, and public awareness campaigns, all of which are essential for building resilient and sustainable communities. In urbanizing regions like Obio Akpor, where economic activities and infrastructural development are rapidly expanding, fire disasters can have devastating impacts, leading to significant economic losses, displacement of residents, and environmental degradation (Ijeomanta, 2023). The following approaches are key to advancing fire emergency management for sustainable community development

**Strengthening Fire Prevention Mechanisms:** Effective fire prevention lies at the core of fire emergency management. Communities must reduce fire hazards by adopting risk mitigation strategies. This includes the creation of building codes that emphasize fire-resistant construction materials and safe electrical installations. Installing smoke detectors, fire alarms, and sprinkler systems in homes and commercial buildings is essential in urban areas to prevent fire outbreaks before they escalate.

**Capacity Building for Community Fire Preparedness:** Fire preparedness focuses on ensuring that communities are well-equipped to respond swiftly and efficiently when a fire emergency arises. This requires ongoing investment in capacity building for firefighters, volunteers, and community members. Training programs for both professional and volunteer firefighters are crucial in ensuring a timely and effective response during emergencies. Communities can also benefit from organizing regular fire drills to enhance public awareness and readiness, ensuring that every individual knows what actions to take in case of a fire.

**Effective Fire Response Strategies for Resilience:** The immediate response to fire emergencies is critical in minimizing damage and saving lives. Communities need efficient, well-coordinated systems in place to ensure a prompt response to fires. Urban areas should

have well-maintained infrastructure, such as accessible roads and functional fire hydrants, to support fire departments in reaching incident locations quickly. Local fire departments should also be equipped with modern firefighting vehicles, protective gear, and chemical fire suppressants to address complex fires, such as those involving hazardous materials.

**Post-Fire Recovery and Community Rehabilitation:** Recovery efforts following a fire emergency are vital in rebuilding communities and ensuring their long-term development. Post-fire recovery involves not only the restoration of damaged infrastructure but also addressing the psychological and economic impact on affected individuals. Governments, local organizations, and international agencies must work together to provide financial aid for rebuilding homes and businesses and offer counselling services for fire survivors who may experience trauma and loss.

**Integrating Climate Change Considerations in Fire Management:** As climate change exacerbates fire risks, especially in regions prone to extreme weather events, fire emergency management must integrate climate adaptation strategies. Rising temperatures and prolonged droughts are contributing to more frequent and intense wildfires globally. Communities need to incorporate climate data into fire risk assessments, ensuring that development plans are climate-sensitive and account for changing environmental conditions.

Urban and rural areas alike should implement land-use planning that reduces fire risk by creating buffer zones between residential areas and forests.

## **Conclusion**

Fire emergencies remain a major threat to sustainable community development, particularly in rapidly urbanizing areas like Obio/Akpor Local Government Area of Rivers State, Nigeria. The increasing incidence of fires in the region is driven by inadequate infrastructure, weak enforcement of safety regulations, limited public awareness, and insufficient emergency response capacity. Addressing these challenges is vital to safeguarding lives, property, and the environment. To build resilience, fire emergency management must adopt a proactive and integrated approach that emphasizes prevention, preparedness, response, recovery, and climate adaptation. Strengthening building codes, improving community training and awareness, equipping fire services with modern resources, and supporting post-fire recovery initiatives are essential steps toward sustainable safety. Incorporating climate change considerations into fire risk planning further ensures long-term adaptability. Ultimately, advancing fire emergency management in Obio/Akpor is not just about disaster response, it is a crucial pathway to achieving sustainable development, protecting livelihoods, and fostering resilient, thriving communities.

## **Suggestions**

Advancing fire emergency management in Obio/Akpor Local Government Area (LGA) of Rivers State is crucial for promoting sustainable community development. The following are suggestions tailored to the local context, aimed at reducing fire risks and improving response capacity.

Strengthen fire prevention mechanisms by enforcing fire safe building codes, promoting the use of fire-resistant materials, and installing smoke detectors, alarms, and sprinkler systems in homes and commercial buildings.

Enhance community fire preparedness through regular training programs, public education, and fire drills that build the capacity of firefighters, volunteers, and residents to respond effectively to emergencies.

Improve fire response strategies by maintaining accessible infrastructure, ensuring functional fire hydrants, and equipping fire departments with modern vehicles, protective gear, and advanced firefighting tools.

Support post-fire recovery and rehabilitation by providing financial aid, reconstruction support, and counselling services to affected individuals and communities to aid their physical and emotional recovery.

Integrate climate change considerations into fire management by using climate data in risk assessments, adopting adaptive land-use planning, and creating buffer zones to reduce vulnerability to fire hazards.

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