

Livelihoods Crisis and Emerging Adaptation Strategies in Nigeria's Niger Delta Region

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Abstract

Nigeria's Niger Delta is currently trapped in a web of environmental pollution and livelihood crisis enabled by decades of crude oil exploration and exploitation by both the international and local oil companies. Limited interventions have been made by business concerns that are directly responsible for the environmental degradation, as well as governments at all levels in restoring and creating alternative sources of livelihoods for the people in the impacted communities. This paper submits that there is a connivance between the Nigerian state and the operators of the country's petroleum industry to exploit resources in the region, and the people therein, without serious considerations for their lost sources of livelihood, despite pushing the majority of them into multidimensional poverty. Therefore, the paper examines the extent of the livelihood crisis in the Niger Delta caused by oil and gas operations and climate change; investigates the emerging livelihood options in the region; and suggests ways of revamping the ailing local economy. This study employed the sustainable livelihoods theory in explaining the variables herein. Data were derived from secondary sources such as academic journals, publications by non-governmental organisations, government gazettes, and others. The findings reveal that oil and gas activities have constantly truncated the aquatic and mangrove ecosystem in the region, and that citizens' traditional sources of livelihoods are either on the verge of extinction or already extinct, leading to imminent humanitarian and security crises. To address the existing livelihoods crisis in the region, the study recommends the revival of green, blue, and digital economies to provide alternative sources of livelihoods for the people; the replication of the Ogoni clean-up prototype in other impacted communities in the Niger Delta, and the effective implementation of the Host Communities Development Trusts enshrined in the Petroleum Industry Act, amongst others.

Key words: Crude Oil, Environmental Degradation, Adaptation, Livelihoods, Niger Delta.

Introduction

The Niger Delta people were, until recently, largely dependent on their natural environment as the traditional source of livelihood, engaging in agricultural activities such as farming and fishing for both subsistence and commerce. This era witnessed high crop yields, an abundance of aquatic and land animals, and increased food production. Ikein (1990, p. 328) succinctly captures this thus: 'the local people who inhabited these communities before the advent of oil exploitation in the Niger Delta were food self-sufficient.' However, today, the Niger Delta environment has been gravely impacted by oil and gas operations, as well as climate change, thereby altering and disarticulating the traditional sources of livelihood for the people. Siloko (2024, p. 1) notes that:

This has resulted in the alteration of habitats, biodiversity, and pollution of water bodies. This region is pervaded by a web of socio-economic and environmental

issues that have severely impacted the lives of people and communities due to environmental degradation. For example, the exploration and exploitation of natural resources in this region has had extensive consequences on the livelihood activities of the people.

This situation has adversely affected the region's food productivity as well as its local economy, thereby creating a triple crisis of livelihood, humanitarian, and security challenges—pushing thousands, if not millions, into criminality for survival. In the words of Babatunde:

Food production in the Niger Delta is declining because of the oil industry. This is having a negative effect on the culture of local people. In the oil-rich Niger Delta region of Nigeria, 70 per cent of people live in rural areas, and the majority of them rely on subsistence farming, fishing, and the collection of non-timber forest products for their livelihood. The presence of the oil industry in this region has adversely affected the production of food and the food culture of local people, which has increased their vulnerability to food insecurity (Babatunde, 2023, p. 1).

In a similar vein, Siloko (2024) succinctly posits that the Niger Delta is pervaded by a web of socio-economic and environmental issues that have severely impacted the lives of people and communities due to environmental degradation. For example, the exploration and exploitation of natural resources has had extensive consequences on the livelihood activities of the people. A plethora of studies has shown the devastating consequences of oil exploration activities on agricultural productivity in the region, as communities continue to count their losses, expressed in terms of low crop yields caused by both gas flaring and oil spills (Okoyen et al, 2020; Ukhurebor et al, 2021; Numbere, Gbarakoro and Babatunde, 2023). For instance, Okoyen et al., (2020, p. 60) submit that 'environmental degradation is a major cause of productivity losses and poor human health in the Niger Delta, and issues related to environmental degradation are of topical concern'.

In navigating through this challenge, characterised by food shortages, low agricultural yields, high food prices, hunger, and starvation, various interventions have been initiated by both local and international development institutions and partners in a bid to offer survival options and escape routes. However, these initiatives have failed to comprehensively address these crises owing factors, such as the politicization of the interventions, corruption, lack of political will by public office holders, and resistance to new innovations by the community people, particularly among those who are struggling to stay resilient. Some notable interventions include the Niger Delta Development Commission's (NDDC) skills acquisition and empowerment programme for women, youth and persons with disabilities (PwDs); the Nigeria Liquefied Natural Gas's (NLNG) Empowerment Scheme for the host communities; and the Nigerian National Petroleum Company Limited's (NNPC-L) foundation empowerment programme, amongst others.

Several studies have reinforced the above position with facts indicating that most livelihood interventions in the region have failed to meet the criteria for sustainability and lasting impact.

For instance, Babajide (2025, p. 184) observed that the view that ‘the alternative livelihood programmes of rural development intervention agencies were indicative of an attempt at economic empowerment, but existing local conditions showed widespread joblessness and poverty amidst huge development spending’. This is an indication that, despite these intervention efforts, the impacts have been minimal. Therefore, the sustained neglect of the region, which accounts for about 95% of Nigeria’s export earnings, has significantly exacerbated the ongoing livelihood quagmire and impasse among its inhabitants.

The majority of the residents in the region depend on land and water (rivers, streams, oceans, and seas) for their livelihoods and daily survival. As noted by the United Nations Development Programme’s (UNDP) (2006) *Niger Delta Human Development Report*, the environment is very important for the Niger Delta people, where 60% of the population depends directly on the natural environment—both living and non-living resources—for their livelihoods. Similarly, Ukpong and Obok (2018, p. 2) note that ‘the activities of the oil and gas industry directly influence the natural potentials of the ecosystem and human livelihood. In particular, the impacts of crude oil extraction grossly interfere with the daily economic life of man and the natural environment.’ Hence, the natural ecosystem of the Niger Delta has been gravely undermined and distorted by oil and gas operations and climate change, leading to a significant decline in food production, which has in turn triggered the disruption of livelihoods. This reality is reinforced by members of oil-producing communities who expressed the view that ‘the over six decades of oil extraction in the region had bequeathed a legacy of livelihood losses, conflicts, and destitution’ (We the People and Friedrich-Ebert-Stiftung, 2021, p. 1).

The key concern of this paper is that despite the plethora of studies that have focused on the issues of livelihood in the Niger Delta, very little attempt has been made to provide knowledge on the various interventions that have scaled up the chances of adaptation among the people of the region. In light of this, the paper examines livelihood crisis and emerging adaptation strategies in Nigeria’s Niger Delta region. Essentially, it addresses the following objectives: to examine the extent of the current livelihood crisis in the Niger Delta caused by oil and gas operations and climate change; to investigate the emerging livelihood options in the Niger Delta; and to suggest ways of boosting the livelihoods of the people in the region.

Putting the Niger Delta in Context

The Niger Delta houses Nigeria’s oil and gas industry, which accounts for over 70% of the country’s revenue and attracts most of the foreign exchange to the national treasury. It is located in the South-South geopolitical zone, covering about 70,000 km² and making up 7.5 percent of Nigeria’s land mass. The region is highly diverse, with over 40 ethnic groups who speak more than 100 languages and dialects. The region comprises 185 out of the 774 local government areas and covers nine out of Nigeria’s 36 States: Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo,

Ondo and Rivers. With over 30 million people, according to a 2006 population census, and an estimated population density of 265 people per square kilometer, the region accounts for more than 23 percent of Nigeria’s population. (PIND,2023).

The Niger Delta is home to different ethnic configurations such as igbo, Ijaw, Ibibio, Urhobo, Annang, Oron, Efik, Ogoni, Abua, Bini, Esan, Isoko, Kalabari, Okrika, Epie-Atissa, and Obolo, amongst others. It is largely an agrarian enclave, which explains why agriculture is the most dominant occupation of the people, with farming and fishing constituting 90 percent of their economic activities. The region is highly rich, yet the majority of its people live in multidimensional poverty, with limited or no access to quality education, portable drinking water, nutritious food, healthcare service delivery, and shelter.



Fig. 1: Map of the Niger Delta Region (Niger Delta Development Commission).

Conceptual Clarifications

Livelihood Crisis

Although the major concept here is *livelihood crisis*, it is necessary to first clarify the enabling variable—*livelihood*. The concept of livelihood has been variously defined by economists, researchers, and other social scientists, depending on their ideological leanings and disciplinary orientations. The International Federation of Red Cross and Red Crescent Societies defines livelihoods as “the means of making a living, the means that allow human beings to construct a living and satisfy their daily needs. Livelihoods are one of the main components to create resilience within households and communities.” From this definition, it can be deduced that livelihoods refer to the economic avenues through which individuals and communities pursue and sustain their

means of survival. Similarly, Chambers and Conway (1992) define livelihoods as “the capabilities, assets (including both material and social resources), and activities required for a means of living.” In other words, all human efforts directed toward securing a means of survival constitute the creation of livelihoods. Beyond arriving at a universally acceptable definition, however, is the growing global concern about the *sustainability* of livelihoods. Scholars argue that livelihoods can only be considered sustainable when they are able to cope with and recover from stress and shocks (such as drought, flooding, war, etc.), maintain or enhance their capabilities and assets, and do so without undermining the natural resource base.

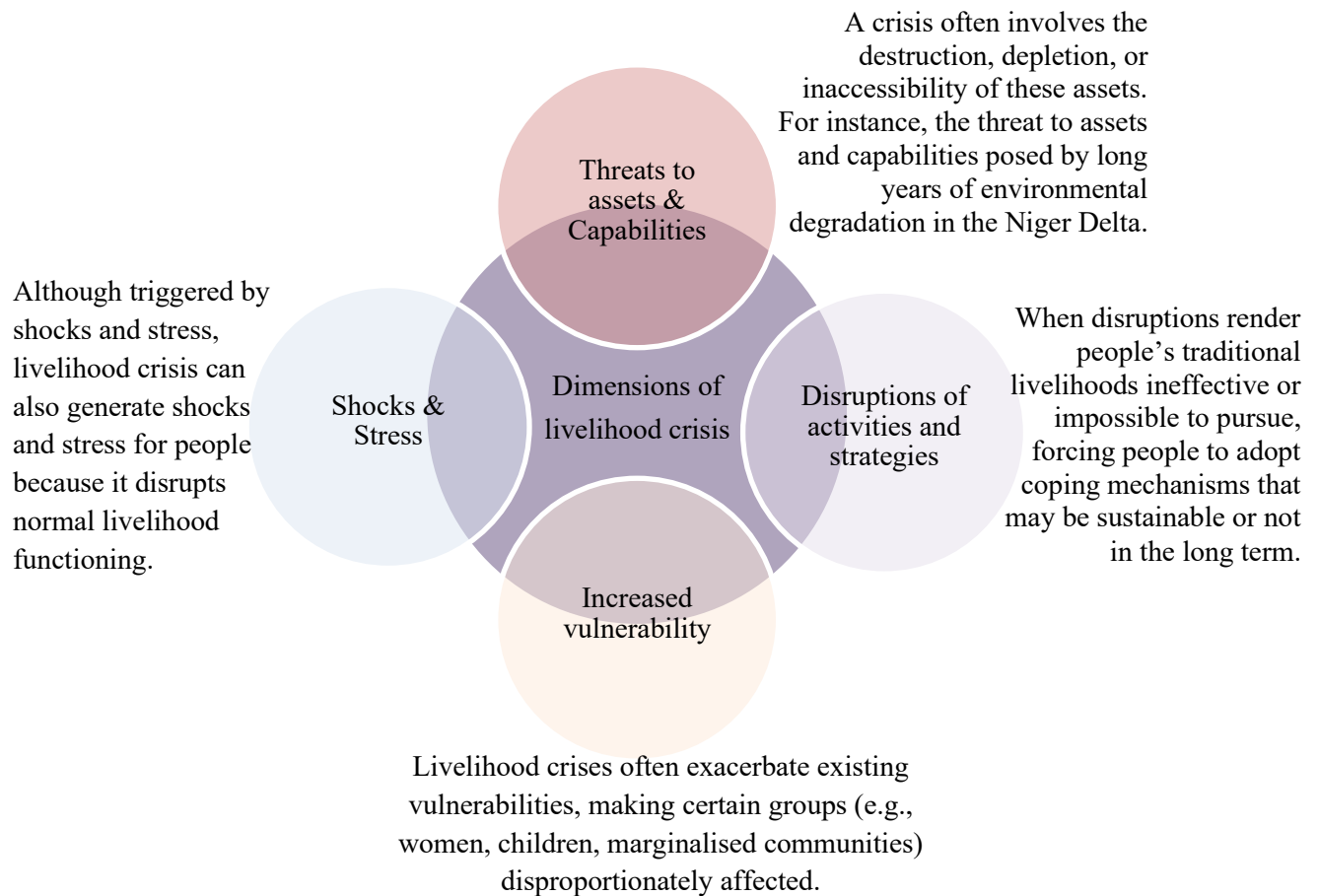


Fig. 2: Aspects of Livelihood Crisis, applied from Ellis (2000).

Drawing from Ellis’ (2000) aspects of livelihood crisis presented in Figure 2 above, the case of Nigeria’s Niger Delta aligns significantly, particularly if we focus our attention on the sustained threats to livelihood assets and human capabilities. These threats emerge from long years of disruptions to the natural environment, which has traditionally served as the primary source of livelihoods for the inhabitants. The notable traditional sources of livelihoods in the region are the rivers, streams, and oceans, which supports fishing activities, as well as arable lands used for crop farming. Unfortunately, these traditional livelihood sources have been stressed and stretched

beyond their regenerative capacity, making it nearly impossible for the people to continue relying on them for their livelihood and survival.

Livelihood Adaptation

Livelihood adaptation can be viewed as the measures that individuals, households, families, and communities take to adjust their means of living in response to the adverse impacts of climate change and environmental pollution, such as crude oil spills and gas flaring. For example, a number of studies have reported adaptation practices being undertaken by communities elsewhere in response to climate change and other shocks (Shaffril et al. 2018; Menghistu et al. 2020). Such adaptation practices starkly demonstrate how individuals and communities can be resilient in the face of disruptions to their natural sources of livelihoods.

Dorward et al. (2009) have gone further to classify the adaptation strategies adopted by smallholders as 'stepping up' (SU) and 'stepping out' (SO). This classification has been generally accepted by some scholars in elaborately explaining how individuals, households, and communities adapt to new sources of livelihoods (Wang et al. 2019). Simply put, 'Stepping Up' can be referred to as adapting or improving traditional sources of livelihoods, such as agriculture, through new investments and activities. 'Stepping Out', on the other hand, is reducing or exiting traditional sources, such as agriculture, for non-agricultural activities and venturing into the digital economy, for instance. Relatively speaking, Dorward et al.'s livelihood adaptation strategies present two possible options for individuals, households, and communities in the Niger Delta in response to the alarming rate of environmental degradation and climate change, enabling them to sustain their living.

Theoretical Analysis

This work employed the Sustainable Livelihoods Framework (SLF) to explain the link between livelihoods and the environmental shocks and stresses affecting the natural environment. These include oil spills, gas flaring, climate change, and institutional regulatory policies. A major proponent of this framework, the United Nations Development Programme (UNDP, 2017), believes that the SLF encompasses the core factors significantly impacting people's livelihoods. It can be used for planning new development activities and evaluating livelihood sustainability. The SLF focuses on finding resolutions to the problems of vulnerable individuals, households, and communities by creating human-centered, participatory, and dynamic development opportunities. Other proponents of the SLF, such as Chambers and Conway (1991), note that a livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, and do so without undermining the natural resource base.

Consequently, applying the SLF to the Niger Delta situation is apt. This is especially true considering how the region's natural and traditional sources of livelihood have been distorted by the twin challenges of climate change and environmental pollution from oil spills and gas flaring. The framework also helps us to comprehend the degree of resilience among the Niger Delta people in the face of these livelihood shocks and stresses, as well as their capacity to adapt new strategies to sustain their livelihoods. A thorough examination of the submissions made by proponents of the SLF and other scholars aligns with this paper's position that 'distorted and disrupted livelihoods, as seen in Nigeria's Niger Delta, can only be restored through the people's resilience via livelihoods diversification.' This diversification can be activated by adapting to new and emerging livelihood trends like climate-smart agriculture, digital economic activities (such as web design, coding, auto-architectural design, software and hardware engineering, phone repairs, etc.), and petty trading, among others. Therefore, the author's position is that a comprehensive application of the SLF to the livelihoods situation in the Niger Delta is the surest pathway and escape route from the livelihood trap that the people in the region currently face.

Methodology

The study relies exclusively on secondary sources to provide a detailed understanding of the livelihood crisis and adaptation responses in the Niger Delta. The data sources include academic journals, publications of non-governmental organisations, international development and donor partners, and government gazettes. The materials were sourced from reputable academic databases like Scopus and Google Scholar, as well as internet search engines such as Google. The search for related literature was guided by pre-determined inclusion criteria, based on the direct relevance to the understanding of the concept of livelihood crisis and its manifestations within the Niger Delta. In order to ensure comprehensive coverage, the search covered a set of keywords and phrases, including 'livelihood crisis and Niger Delta', 'adaptation to environmental degradation', and 'non-governmental (NGO) interventions and the Niger Delta'. From an initial pool of 96 articles, 41 articles were selected for inclusion, serving as the main data sources for subsequent analysis.

Livelihood Crisis in the Niger Delta

Considering the volume of studies that have examined focused of the livelihood crisis in the Niger Delta, there seems to be a well-founded consensus among scholars that the region has drifted into a protracted state of livelihood crisis. This crisis has now assumed a disturbing dimension because of the security and humanitarian threats it poses to the region. The downward slope in food production, a result of the polluted environment (caused by oil spills and gas flaring) and adverse climatic conditions, negatively impacts the livelihoods of the Niger Delta people, especially subsistence rural farmers. One early study by Ayuba (2010, p. 75) submits that 'environmental

destruction affects the livelihoods of local and indigenous communities who depend on the ecosystem for survival, leading to increased poverty and displacement.’

However, beyond the issue of food shortages linked to the livelihood crisis in the region, studies also highlight its implications for security. Concerns suggest that the livelihood crisis in the Niger Delta has metamorphosed into general insecurity, pushing individuals who lack resilience into a life of crime and criminality as a dysfunctional means of survival and sustenance. As Babatunde (2023, p. 1) emphasises, ‘the destructive impacts of oil exploitation on the natural environment, which the inhabitants of Niger Delta depend on for their livelihood, pose major threats to food as well as social insecurity.’ This perspective is largely supported by Zabbey (2005, p. 2), who expressed concern that ‘prolonged years of oil-induced frustrations and neglects have deepened insecurity and crises in the oil-rich Niger Delta.’

Drawing from the views above, it is safe to argue that a lack of sustainable livelihoods breeds insecurity. Consequently, the nature of the livelihood crisis in the Niger Delta has contributed significantly to the upsurge in insecurity. This situation is further exacerbated by the near or total absence of state-driven interventions, which could have ordinarily catalyzed livelihood diversification in the region. Perhaps Nwagboso (2012, p. 245) captured this better by pointing out that ‘the failure of the Nigerian State over time to address issues of sustainable livelihoods, poverty, and inequitable distribution of wealth is one of the major causes of insecurity in Nigeria, including the Niger Delta.’ A recent literature corroborates this viewpoint, noting that the pervasive livelihood crisis in the Niger Delta region is a major driver of insecurity, and governance failure is strongly indicted for exacerbating the problem (Ehizoyanyan and Oke, 2024).

The progressive inability of state-driven support aimed at addressing the root causes of livelihood crisis in the region is widely believed to be responsible for the cycle of violence (Raimi and Boroh, 2018) and insecurity. To further put this in perspective, Ikenga, Edo and Ighoshemu (2025) note that despite the establishment of different interventionist institutions and agencies like the Niger Delta Development Commission (NDDC), the entrenched evil of corruption, mostly manifested in financial misappropriation and a general lack of focus on sustainable, community-driven livelihood diversification programming, has rendered the impact of state-driven interventions less effective.

Other scholars also argue that the gradual extinction of the traditional livelihoods in the Niger Delta is contributing immensely to the high rate of youth involvement in cybercrimes, ritual killings, yahoo plus, kidnapping, and other social vices. For instance, Ojeifo (2018) and Chidi-Igbokwe et al. (2023) share the view that the withering of economic stability in the Niger Delta region provides a huge incentive for individuals, particularly young people to turn towards illicit socio-economic activities such as kidnapping for ransom, artisanal crude oil refining, armed robbery, and many more. This illicit economy has gradually transformed the region into a hotbed of violent social relations, while also enabling a peculiar geography of insecurity.

Emerging Livelihoods Adaptation Strategies in the Nigeria's Niger Delta

The impacts of environmental pollution and climate change in the Niger Delta region have been so quite severe. They have disrupted traditional livelihoods like crop farming and fishing, leading to low agricultural yields, the extinction of different species of fish, animals, birds and crops, and by extension, hunger due to the shrinking individual and household incomes. However, either through personal initiative or support from non-governmental organisations, most people in the region continue to find new means of survival, which we refer to here as adaptive strategies. A recent survey titled *Intergenerational Economic Livelihoods* in selected communities across Bayelsa and Delta States by Stakeholder Democracy Network (SDN, 2024), in collaboration with consortium partners, identified the following emerging livelihood adaptation strategies in the region:

Provision of Digital Solutions

The digital economy is becoming one of the fastest-growing sub-sectors globally, and this holds true for Nigeria as well. More people strive daily to connect to the internet, not only to communicate with loved ones and business partners but also because it has become a major source of information. Accordingly, the number of people now immersed in the "digital web" has increased over time, creating a demand for digital expertise and skills to address the evolving needs of this growing user population. With internet penetration in Nigeria believed to have grown substantially to approximately 47.3% as of March 2025 (Okonji, 2025), digital solutions to problems of livelihood disruption and displacement are also on the rise, pushing youth to gravitate towards acquiring digital skills.

In response to this emerging need for digital skills amidst shrinking local livelihoods, many people in the Niger Delta, who were hitherto involved in farming and fishing, are now exploring new opportunities. This they do by learning digital skills such as phone repairs, computing, software engineering, to sustain their livelihoods, since their traditional sources of livelihood have been degraded. This shift towards digital skills is mostly championed by indigenous and international development agencies or non-governmental organisations, as a way of diversifying local economies in the Niger Delta. One near example is the European Union-funded DIGISOL project in Imo state, which provided digital financial solutions training to 5,000 farmers and cooperatives to address the effects of climate change on agriculture (see Osuji, 2025).

In addition to the DIGISOL project, the Stakeholder Democracy Network (SDN) has been active in the Niger Delta region for over two decades, providing digital solutions to help scale up livelihood activities in the region. According to the SDN (2024, p. 5), 'the digital sector in Nigeria is rapidly growing, driving economic development and creating job opportunities across the country.' This shows that the digital economy is thriving, creating job opportunities for the region's large, environmentally impacted population. SDN's digital intervention programmes have

empowerment approximately 4,700 people in Niger Delta with digital skills. Cumulatively, the provision of digital skills empowerment programmes, by state and non-state institutions, have contributed significantly to the diversification of the traditional livelihoods in the region. This approach has helped to enhance the survival and well-being of the people. This position is further strengthened in a publication by The Guardian Newspaper (2024, p. 2), where it was noted that ‘access to wealth has been democratised through the acquisition of digital/tech skills.’

We can argue here that the declining livelihoods in the Niger Delta, caused by climatic conditions and oil and gas pollution, can be substituted through the acquisition of digital skills capable of generating substantial returns sufficient to guarantee and sustain their livelihoods. This may have triggered the NDDC to kickstart digital skills empowerment programmes for members of key demographics such the youths, women, and persons with disabilities (Punch Newspapers, 2025). Undoubtedly, this is one of the sure pathways through which productive energies of the people in the region, especially the youths, can be shifted from cybercrime and other trending social vices into legitimate livelihoods sustainability.

Climate Smart Agriculture

Climate-Smart Agriculture (CSA) is a well-designed and developed approach to managing landscapes—including cropland, livestock, forests, and fisheries—that are heavily impacted by environmental pollution and climate change. These challenges have collectively created livelihood and security crises in Nigeria's Niger Delta. Farmers in the Niger Delta are gravely affected by climate change, and as an escape route, most of them have now embraced CSA. They are doing this through the planting of improved seedling varieties and other agricultural inputs, as well as switching to organic farming practices to boost the fertility of their degraded lands and enhance crop yields. This aligns significantly with the aspirations of the Food and Agricultural Organisation's (FAO, 2017) understanding that CSA represents the desire to sustainably increase productivity, income, adaptation, and resilience in the face of climate change, while also reducing greenhouse gas emissions.

Within the Niger Delta, frontline organisations like the Stakeholder Democracy Network (SDN) and the Foundation for Partnership Initiatives in the Niger Delta (PIND) have implemented several projects that teach farmers climate-smart agriculture techniques. By adapting these techniques, farmers are empowered to adjust to the changing climate and become resilient to the shocks and stress it creates. For instance, farmers who typically face significant losses during the perennial flooding that engulfs the region now know how to cultivate improved seedlings that are ready for harvesting before the peak of each year's rainy season. As Farming First (2023, p. 162) notes:

More than a billion farmers and their families around the world are on the frontline of climate change. Their lives and livelihoods are directly affected by its impacts,

and they are also vital to implementing many of the solutions we need to help prevent it. Climate-smart agriculture describes agricultural practices which contribute to increasing farm productivity and incomes, building greater resilience, and minimising agriculture's greenhouse gas emissions, all in an equitable and sustainable manner.

Furthermore, PIND (2024, p. 1) argues that 'by adopting climate-smart practices, farm service providers can improve the sustainability and productivity of oil palm farming, thereby contributing to environmental conservation and economic growth in the Niger Delta region.' Therefore, the introduction of climate smart agricultural solutions and practices will contribute immensely to addressing declining food productivity and livelihood crisis in the region. Available data from PIND shows that their strategic interventions in the region over the years have empowered more than 989,825 farmers and micro, small, and medium enterprises (MSMEs) with essential knowledge on best practices and technological advancements in agriculture (PIND, 2024). Undoubtedly, these initiatives and others have contributed to boosting the livelihoods of the people in the region and positively impacting its local economy. Therefore, the submission here is that in an era of climate change and oil and gas-induced environmental degradation, food security can only be guaranteed by subscribing to climate-smart agricultural solutions that can support crop growth and yields, which, in turn, will scale up the rate of food productivity.

Petty Trading

Many inhabitants of the Niger Delta region are now venturing into petty trading for income generation and subsistence. They deal in items such as staple foods (rice, garri, fufu, noodles, etc.), fish, beverages, and minor household goods. Petty trading is an economic activity that has contributed to the livelihoods of people in society, including the Niger Delta region. It's a sector characterised by individuals with limited resources who engage in small-scale, informal businesses (Okechukwu and Chinemerem, 2024). Petty trading, characterised by its adaptability and resilience, has emerged as a crucial survival strategy, especially for individuals whose traditional sources of livelihoods have been truncated by factors such as oil and gas exploitation and climate change conditions.

Sadiq (2014) notes that the dearth of jobs, especially traditional ones like farming and fishing, coupled with the desperate need to augment household income, pushes most people to engage in petty trading for their socioeconomic well-being. In the Niger Delta, some individuals previously involved in crop farming and fishing have transited to petty trading due to low crop yields caused by environmental pollution. For instance, a study conducted in Delta State, one of the core Niger Delta states, shows that business or petty trading is considered the second most common livelihood activity after farming. This is believed to be a direct response to the loss of fishing grounds and the contamination of arable land due to constant degradation from oil spills (Murtala et al., 2018).

Conclusion

Nigeria's Niger Delta is undoubtedly in dire need of livelihood restoration initiatives and programmes to halt the looming crisis of food insecurity, which is largely caused by the displacement of the majority of people whose main occupations were crop farming and fishing. This article has shown that traditional livelihood systems in the Niger Delta have been severely impacted by environmental degradation and climate change, forcing majority of its inhabitants to switch their sources of livelihoods to digital skills, climate smart farming, and petty trading. However, a vast number of people in the region are still unable to cope with these devastating stress and shocks.

The interventions, mostly by non-state actors and marginally state-driven agencies, to address livelihoods in the region are quite commendable. However, to cushion the adverse impacts of climate change and oil-induced environmental degradation, multi-stakeholder partnerships are needed. Current realities surrounding these interventions, which cover skills acquisition and empowerment programmes and business support initiatives, are not sufficiently widespread to cover a significant part of the Niger Delta. Interestingly, the government still needs to address old challenges that continue to undermine sustainable livelihood programme delivery in the country. These challenges include corruption, politicization, improper livelihood needs assessment, displacement of acquired skills, and the sale of economic empowerment packages by beneficiaries, among others.

Recommendations

In view of the above, the study recommends the following;

- i. To provide alternative livelihood sources for the people, governments in the region should engage in programmes that are targeted at reviving green, blue, and digital economies.
- ii. The government should also endeavour to replicate the Ogoni clean-up prototype in other impacted communities in the Niger Delta. This would go a long way to scale up the fertility of the land for improved agricultural yields.
- iii. Effective implementation of the Host Communities Development Trusts, as enshrined in the Petroleum Industry Act, will help to facilitate the economic empowerment of the people, enabling them to diversify their sources of livelihoods.

- iv. The core pillars enshrined in the Niger Delta Development Plan targeted at promoting economic livelihoods should be effectively and urgently implemented to fast-track improvements in the people's lives.

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