

**EFFECT OF FUEL SUBSIDY REMOVAL ON ROLE PERFORMANCE OF
AGRICULTURAL EXTENSION WORKERS IN EDO STATE, NIGERIA**

BY

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**DEPARTMENT OF AGRICULTURAL ECONOMICS
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FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN
BENIN CITY, EDO STATE
NIGERIA**

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**A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF
AGRICULTURAL ECONOMICS AND EXTENSION SERVICES ,
FACULTY OF AGRICULTURE, UNIVERSITY OF BENIN, BENIN CITY,
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CERTIFICATION

This is to certify that the work contained in this report titled “**Effect Of Fuel Subsidy Removal On Role performance Of Agricultural Extension Workers In Edo State, Nigeria**” was carried out by Andrew Eromose OKPAMEN, of the Department of Agricultural Economics And Extension Services, Faculty of Agriculture, University of Benin, Benin City, Edo State, Nigeria.

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DEDICATION

I dedicate this project report to my God Almighty for his continuous guidance and protection. Also to my parents; Mr. and Mrs. Okpamen, whose endless love and encouragement fuelled my motivation to complete this undergraduate project.

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ABSTRACT

This study assessed the effect of fuel subsidy removal on the role performance of agricultural extension workers in Edo State, Nigeria. The specific objectives were to; describe the socio-economic characteristics of extension workers in Edo state, Nigeria, ascertain effects of subsidy removal on the roles performed by extension workers, identify coping strategies for overcoming the fuel subsidy removal effects by extension workers in performing their roles and identify constraints to extensions role performance in the study area.

A purposive selection of the entire population of extension workers from the three (3) agricultural zones in Edo State, Nigeria constituted the sample for this research. This gave a sample size of One hundred and four (104) respondents for the study. Collected data were analyzed using both descriptive and inferential statistical tools.

The results showed that majority of the respondents were male (55.8%). The average age of the respondents was approximately 46 years. The predominant staff category was Extension agent (47.1%). Marital status showed that a significant majority were married (78.8%). Educationally, most workers held a BSc/ HND (66.3%) . Regarding training, most workers participated in in-service training (65.4%) with a majority attending 6-8 trainings (51.0%). It was observed in the study that annual income varied, with the majority earning between 500,000 and 1,000,000 Naira (53.8%). Household size predominantly ranged from 3-4 members (49.0%). Most respondents had 6 to 10 years of working experience (39.4%). Respondents' grade level showed a concentration in the 6-8 range (47.1%). In terms to examine the effects of fuel subsidy removal when compared to before the removal, knowledge transfer was still majorly performed (\bar{x} 3.33), networking performance dropped significantly (\bar{x} 3.06), technical advising dropped (\bar{x} 3.13), communication dropped (\bar{x} 3.00), program development decreased to \bar{x} 3.11), capacity building dropped to (\bar{x} 3.18) , problem solving performance decreased to (\bar{x} 3.24), community liaison performance dropped to (\bar{x} 3.14), needs assessment dropped to (\bar{x} 3.17), monitoring and evaluation dropped to (\bar{x} 3.03), advocacy dropped to (\bar{x} 3.07). The most commonly adopted coping strategies were telecommuting and virtual meetings (82.7%). The most severe constraints were inadequate institutional support (\bar{x} 3.76). The study concluded the reinstatement of fuel subsidy, investing in sustainable energy solutions, developing robust remote support system, engaging stakeholders including government agencies and private sector partners can restore the high performance levels of extension workers.

CHAPTER ONE

INTRODUCTION

1.1 Background information

The term fuel refers to any combustible substance, containing carbon as its major constituent, which on proper burning gives large amount of heat and can be used economically for domestic and industrial purpose (Syed, 2010). Fossil fuels may be classified according to their respective forms at ambient conditions such as solid fuels (coals), liquid fuels (petroleum) and gaseous fuels (natural gas) (Barbi, Verziroglu and Plass, 1990). Oil plays important roles in the Nigerian economy, contributing about a third of the country's gross domestic product (GDP) in the 1980s and 1990s. The contribution of oil to government revenue has remained quite high, increasing from 70.2 per cent during the 1980s to about 80.0 per cent in the last decade. In terms of trade, oil accounts for about 93.1 per cent of exports and 24.4 per cent in recent times, however, there has been an increasing call for fuel subsidy reforms globally as policy-makers have expressed concerns regarding the efficacy of such programmes as well as its implications for fiscal sustainability (Babatunde, 2019).

Fuel subsidy is a government discount on the market price of fossil fuel, enabling consumers to pay below the current market price for fuel (Ovaga and Okechukwu, 2022). Nigeria's history of fuel subsidies has profound roots, tracing back several decades. Originally designed to ease the economic strain on consumers by maintaining artificially

low fuel prices, these subsidies have played a pivotal role in molding the energy environment (Oluwafemi and Okojie 2018). According to Ozili and Obiora (2023) in Nigeria, fuel subsidies were initially implemented in the 1970s in reaction to the oil price shock of 1973. However, in 2012, the government unexpectedly eliminated the fuel subsidy, sparking extensive protests aimed at persuading the government to reinstate the removed subsidy (Ozili and Obiora, 2023).

Despite Nigeria's abundant natural resources and extensive arable land, its economy is predominantly reliant on crude oil exports as the primary source of government revenue and budgetary expenditure, as highlighted by Umeji and Eleanya (2021). According to Olisah (2020), approximately 90% of Nigeria's foreign exchange earnings, 60% of its revenue, and 8% of its gross domestic product (GDP) come from crude oil sales. Moreover, fuel plays a crucial role in all aspects of the Nigerian economy, serving as a vital factor in production. As noted by Ogubode *et al.* (2015), the Nigerian economy is heavily dependent on Petroleum Motor Spirit (PMS) for the transportation of goods and service provision. Agu, Ekwutosi, and Augustine (2018) emphasize that petroleum motor spirit is a vital energy source driving economic activities in Nigeria.

Agricultural extension workers perform tasks aimed at transformation of farmers' conventional modes of thought, labor, and lifestyle into contemporary, forward-looking practices aligned with current agricultural advancements (Manik *et al.*, 2023). In the performance of these mandates, an extension worker assumes the role of an educator,

equipped with the ability to induce changes in the knowledge, skills, attitudes, and practices of the farmers under their supervision. These workers serve as guides, technicians, liaisons, organizers, and catalysts who influence farmers within the agricultural context (Sudiadnyana *et al.*, 2019). The superior performance of agricultural extension workers substantially contributes to heightened agricultural yields, signifying their pivotal role in addressing the challenges faced by farmers throughout the agricultural process (Sudiadnyana *et al.*, 2019). According to Issa, Ayuba and Nti (2022), the job performance of agricultural extension workers could be influenced by; extension agents' years of experience, salary grade level, transport allowances and other prevailing socioeconomic variables

The elimination of fuel subsidies functions as a representation of the wider overlap between agricultural extension services and economic policies (Oluwafemi and Okojie 2018). It highlights the delicate equilibrium between short-term economic measures and their enduring effects on agricultural sustainability, rural development, and food security. Beyond the immediate consequences for extension workers, the discontinuation of fuel subsidies emphasizes the detailed interplay between short-term economic measures and their lasting impacts on agricultural sustainability, rural development, and food security (Oluwafemi and Okojie 2018).

1.2 Problem statement

The removal of fuel subsidies in Nigeria, poses a multifaceted challenge for agricultural extension workers. This study addresses the socio-economic characteristics of these extension workers, delves into the roles they perform, and explores the extent to which they can execute these roles effectively. With the recent removal of fuel subsidies, understanding the effects on the performance of extension workers becomes imperative.

The study also aims to uncover strategies employed by extension workers to navigate the repercussions of fuel subsidy removal on their roles. Identifying effective strategies is crucial for sustaining agricultural extension services in the face of economic changes. Furthermore, the investigation seeks to pinpoint constraints hindering extension workers in performing their roles optimally within the context of the fuel subsidy removal.

By comprehensively examining these aspects, the study aims to provide valuable insights that can inform policies and interventions to support agricultural extension workers and maintain the efficacy of their roles amidst the challenges brought about by the fuel subsidy removal in Edo State, Nigeria.

The following research questions were raised to guide this study,

1. what are the socio-economic characteristics of agricultural extension workers in Edo State?

2. what specific effects has the removal of fuel subsidies had on the performance of roles by extension workers?
3. what strategies have extension workers employed to overcome the effects of fuel subsidy removal on their roles?
4. what constraints do extension workers face in performing their roles within the context of fuel subsidy removal?

1.3 Objectives of the study

The broad objective of the study was to assess the effect of fuel subsidy removal on role performance of extension workers in Edo State, Nigeria.

The specific objectives were to:

1. describe the socio-economic characteristics of extension workers in Edo state, Nigeria;
2. ascertain effects of subsidy removal on the roles performed by extension workers;
3. identify coping strategies for overcoming the fuel subsidy removal effects by extension workers in performing their roles;
4. identify constraints to extensions role performance in the study area.

1.4 Justification of study

Understanding the impact of fuel subsidy removal on the role performance of agricultural extension workers in Edo State, Nigeria, is crucial. A study by Atoyebi (2012) suggests that subsidy removal, while potentially transformative for the economy, can negatively impact agricultural productivity in the short term. This aligns with research by Oktaviani et al. (2007) highlighting potential challenges for the agricultural sector.

In Edo State, recent policy changes related to fuel costs (e.g., reduced work week) necessitate investigation into how extension workers adapt and ensure they can effectively deliver services and support agricultural development despite potential limitations on mobility and resources. This study aims to provide a comprehensive analysis of extension workers' experiences, particularly in the context of the recent fuel subsidy removal. The findings will not only contribute to the existing body of knowledge but will also serve as a valuable resource for policymakers, agricultural institutions, and extension service providers in tailoring effective strategies to support extension workers in navigating challenges and optimizing their performance. Ultimately, the insights gained from this study will facilitate the development of targeted interventions to strengthen agricultural extension services, thereby fostering sustainable agricultural practices and rural development in Edo state.

1.5 Hypothesis of the study

The hypothesis of study is stated as:

H1: There is a significant difference between the role performance of agricultural extension workers in Edo state, Nigeria between before and after the removal of fuel subsidies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Impact of fuel subsidy removal on economic sectors

Fuel subsidies have long been a controversial issue in economic policy due to their significant implications for government budgets, economic efficiency, and equity. The removal of fuel subsidies has been a subject of debate and research across various economic sectors, with studies examining its effects on inflation, poverty, transportation, agriculture, and industrial production.

A study by Arze del Granado, Coady, and Gillingham (2012) analyzed the impact of fuel subsidy reforms in 20 developing countries and found that these reforms led to a decrease in revenue deficits and improved revenue sustainability. However, the immediate removal of fuel subsidies can also result in short-term inflationary pressures, affecting the purchasing power of households, particularly those in lower-income brackets.

Subsidies often constitute a significant portion of government expenditures. For instance, in 2011, Nigeria spent approximately \$8 billion on fuel subsidies, which was about 30% of the federal government's budget, and the price tag for 2012 was expected to be even greater (Uzonwanne *et al.*, 2015). By removing these subsidies, the government can reallocate funds to other critical areas such as healthcare, education, and infrastructure development.

The removal of fuel subsidies typically leads to an immediate increase in fuel prices, which can have inflationary effects. The rise in fuel costs can lead to higher transportation and production costs, which are often passed on to consumers in the form of higher prices for goods and services (Bacon and Kojima, 2006). Studies have shown that in countries where fuel subsidies were removed, there was a significant short-term spike in inflation rates (Janda *et al.*, 2013). The increase in fuel prices disproportionately affects low-income households, who spend a larger share of their income on energy-related expenses (Sterner, 2012). This can lead to increased poverty and inequality if not mitigated by compensatory measures. For example, in Indonesia, the removal of fuel subsidies in 2005 was accompanied by direct cash transfers to vulnerable populations, which helped to cushion the impact (Beaton and Lontoh, 2010).

Fuel subsidies can lead to significant market distortions by encouraging overconsumption of fossil fuels, contributing to traffic congestion, environmental pollution, and higher greenhouse gas emissions (Davis, 2014). Removing subsidies can lead to more efficient energy use and incentivize investments in renewable energy sources (Ellis, 2010).

In the long run, the removal of fuel subsidies can contribute to sustainable economic growth by creating a more efficient allocation of resources and reducing fiscal deficits. This can enhance macroeconomic stability and create a better environment for investment (Rentschler and Bazilian, 2017). For instance, Malaysia's gradual subsidy reform, initiated in 2010, has been associated with improved fiscal stability and economic growth

(Vagliasindi, 2013). While the immediate impacts of fuel subsidy removal can be challenging, particularly in terms of inflation and household welfare, the long-term benefits include improved economic efficiency, and sustainable growth.

2.2 Social and political effects of fuel subsidy removal

The removal of fuel subsidies can significantly affect households and communities, especially those in lower-income brackets. Higher fuel prices can lead to increased costs of living, as transportation, food, and other goods become more expensive (Arze del Granado *et al.*, 2012). For instance, a study by Iwayemi and Fowowe (2011) found that in Nigeria, the removal of fuel subsidies led to an immediate increase in the cost of public transportation and food items, disproportionately affecting the poor.

Fuel subsidy removal can exacerbate poverty and inequality if compensatory measures are not implemented. The poor spend a larger share of their income on energy-related expenses, making them more vulnerable to price increases (Sterner, 2012). For example, in a study of fuel subsidy removal in Ghana, Cooke *et al.* (2016) found that the poorest households experienced a significant decline in their standard of living due to higher fuel costs. The public perception of fuel subsidy removal is often negative, leading to social unrest and protests. In many cases, the populace views subsidies as a direct benefit from the government, and their removal is seen as a betrayal (Beaton *et al.*, 2013).

Fuel subsidy removal can impact political stability and the legitimacy of the government. Policymakers must navigate the delicate balance between economic reforms and public acceptance. Failure to manage the social backlash can lead to political instability and loss of public trust (Victor, 2009). In Nigeria, the abrupt removal of fuel subsidies without adequate public consultation and preparation led to significant political backlash and eroded the government's credibility (Ogbu, 2012).

Governments can implement various mitigation measures to cushion the social and political impact of fuel subsidy removal. These measures include targeted social safety nets, cash transfers, and public communication strategies to explain the benefits of subsidy reforms (Clements *et al.*, 2013). For instance, Indonesia successfully managed the social impact of subsidy removal by providing direct cash transfers to the poor and investing in social programs (Beaton and Lontoh, 2010).

Several case studies highlight the diverse social and political outcomes of fuel subsidy removal across different countries; In Indonesia, the government implemented a phased approach to subsidy removal, combined with compensatory social programs, which helped mitigate public backlash and maintain political stability (Widjaja, 2009). In Egypt, the abrupt removal of fuel subsidies in 2014 led to widespread public protests and a significant decline in the government's popularity, highlighting the importance of gradual and well-communicated reforms (Breisinger *et al.*, 2019). While the economic rationale for subsidy

removal is strong, the social and political consequences can be severe if not managed properly.

2.3 Role and importance of agricultural extension workers

Agricultural extension services encompass a wide range of activities, including educational programs, field demonstrations, and advisory services aimed at improving agricultural practices (Swanson and Rajalahti, 2010). The concept of agricultural extension has evolved over time. Originally focused on improving crop yields through the dissemination of modern farming techniques, the role of extension services has expanded to include aspects such as farm management, marketing, and environmental conservation (Rivera and Sulaiman, 2009).

In Nigeria, agricultural extension services have been crucial since the establishment of the Agricultural Development Programs (ADPs) in the 1970s (Adebayo and Idowu, 2000). Agricultural extension workers play a critical role in the agricultural development process, particularly in developing countries. Their primary function is to disseminate knowledge, technologies, and practices to farmers to improve agricultural productivity and sustainability. Agricultural extension workers perform several key functions some of which include;

Information Dissemination: They act as conduits for transferring knowledge from research institutions to farmers. This includes educating farmers on new agricultural

practices, pest control, crop rotation, and soil management (Van den Ban and Hawkins, 1996).

Capacity Building: Extension workers organize training sessions and workshops to build the capacity of farmers, helping them adopt new technologies and improve their farming practices (Swanson and Claar, 1984).

Advisory Services: They provide personalized advice to farmers, addressing specific issues and challenges faced by individual farmers or communities (FAO, 2017).

Facilitation and Linkages: Extension workers facilitate access to resources such as seeds, fertilizers, and credit, and link farmers to markets and other service providers (Al-Rimawi *et al.*, 2006).

Agricultural extension workers play an important role in agricultural development by providing farmers with up-to-date information and technologies, extension services contribute to increased agricultural productivity and efficiency (Birkhaeuser *et al.*, 1991), promoting sustainable agricultural practices that help conserve natural resources and ensure long-term agricultural sustainability (Pretty, 2008), improving food security leading to higher crop yields and better food quality, directly contributing to improved food security (Christoplos, 2010), improving their knowledge and skills of farmers, enabling them to make informed decisions and become more self-reliant (Feder *et al.*, 2011).

Despite their importance, agricultural extension workers face several challenges such as limited funding and resources hinder the ability of extension services to reach all farmers effectively (Anderson and Feder, 2004), lack of adequate training and professional development opportunities, impacting the quality of services provided (Rivera *et al.*, 2001). Agricultural extension workers are vital to the development and sustainability of the agricultural sector. Their roles in disseminating information, building capacity, providing advisory services, and facilitating access to resources significantly enhance agricultural productivity, sustainability, and food security. Addressing the challenges faced by extension workers and investing in their capacity building can further amplify their impact on agricultural development.

2.4 Fuel subsidy removal and agricultural extension

The removal of fuel subsidies is a significant economic policy shift that impacts various sectors, particularly those heavily reliant on transportation. For agricultural extension workers in Edo State, Nigeria, the increase in fuel prices can hinder their mobility and accessibility, ultimately affecting the delivery of agricultural services to farmers. The immediate consequence of fuel subsidy removal is a sharp rise in fuel prices, which escalates transportation costs. Agricultural extension workers, who must frequently travel to rural and remote areas, face increased operational expenses. According to Victoria *et al.*, (2014), transportation costs account for a substantial portion of the budget for agricultural extension services, and an increase in fuel prices directly reduces the funds available for

other essential activities. Rural and remote areas are particularly affected by the increased transportation costs due to poor infrastructure and greater distances. Extension workers may prioritize more accessible areas, leading to a disparity in service delivery. According to Apantaku *et al.* (2016), farmers in remote areas often rely heavily on extension services for critical agricultural information and resources. The reduction in visits to these areas can leave farmers without the necessary support to improve their agricultural practices. Fuel subsidy removal also affects the accessibility of agricultural inputs and markets. Extension workers play a crucial role in helping farmers access quality seeds, fertilizers, and other inputs. Increased transportation costs can limit their ability to facilitate these connections. As observed by Akinyemi-Babajide *et al.* (2017), higher fuel prices also raise the cost of transporting agricultural produce to markets, which can reduce farmers' income and their ability to invest in improved agricultural practices. To mitigate the impact of increased transportation costs, extension services may need to adopt various strategies. One such strategy is the increased use of digital tools and mobile technologies to provide advisory services remotely. A study by Aker (2011) demonstrated the effectiveness of mobile phones in delivering agricultural information to farmers in remote areas, suggesting a potential avenue for maintaining service delivery despite reduced physical mobility. The removal of fuel subsidies significantly impacts the mobility and accessibility of agricultural extension workers in Edo State, Nigeria. Increased transportation costs reduce the frequency of field visits, limit access to remote areas, and hinder the provision of essential

agricultural inputs and market access. However, adaptation strategies such as the use of digital tools and more fuel-efficient transportation can help mitigate these challenges, ensuring continued support for farmers.

2.5 Impact of fuel subsidy removal on operational costs of agricultural extension

The removal of fuel subsidies in Nigeria has significantly influenced the operational costs of various sectors, particularly agriculture. Agricultural extension services, which are crucial for supporting farmers, have faced increased operational challenges due to the rise in fuel prices. One of the most immediate impacts of fuel subsidy removal is the increase in transportation costs. Agricultural extension workers rely heavily on transportation to reach remote farming communities, provide training, and distribute agricultural inputs. With the subsidy removal, the cost of petrol has risen sharply, thereby increasing the expenses for travel and logistics. This rise in transportation costs can lead to reduced frequency of visits to farmers, thereby limiting the support and advisory services that extension workers can provide (Ekong and Akpan, 2014; Braun and Clarke, 2022).

The cost of fuel affects not only the direct transportation expenses but also the prices of agricultural inputs such as fertilizers, pesticides, and seeds. These inputs are often transported over long distances, and the increased fuel costs are passed down the supply chain, resulting in higher prices for the end-users—farmers. This situation makes it difficult for agricultural extension services to promote the adoption of modern farming techniques

and inputs among farmers, who may be discouraged by the increased costs (Ani *et al.*, 2021).

The removal of fuel subsidies has forced many agricultural extension agencies to re-evaluate their budgets. Given that a significant portion of their operational costs is related to fuel, the increased prices necessitate reallocations within limited budgets. This often results in cuts to other essential services or programs, potentially reducing the overall effectiveness of agricultural extension work. This financial strain can lead to a decline in the quality and scope of services offered to farmers (Chiluwa, 2015; Meludu *et al.*, 2023).

Higher operational costs can also lead to reduced efficiency and coverage of agricultural extension services. Extension workers may need to reduce the number of visits or the geographical areas they cover to stay within budget. This reduction in service coverage can disproportionately affect farmers in remote and underserved areas, who rely heavily on the support and information provided by extension workers. The decrease in face-to-face interactions can hinder the dissemination of vital agricultural knowledge and innovations (Harun *et al.*, 2018; Evans and Mesagan, 2022).

The cascading effects of increased operational costs due to fuel subsidy removal ultimately impact agricultural productivity. When extension workers are unable to perform their roles effectively, farmers miss out on critical support, leading to lower adoption rates of improved farming practices and technologies. This situation can adversely affect crop

yields and overall agricultural productivity, exacerbating food security issues in the region (Husaini *et al.*, 2019; Feng *et al.*, 2018).

The removal of fuel subsidies in Nigeria has led to significant increases in operational costs for agricultural extension services. These increased costs have resulted in higher transportation expenses, inflated prices for agricultural inputs, budgetary constraints, reduced service efficiency and coverage, and ultimately, negative impacts on agricultural productivity. Addressing these challenges requires strategic interventions, including potential government support to offset the increased costs and the promotion of alternative energy sources for agricultural operations.

The removal of fuel subsidies has significant economic, social, and sector-specific impacts. Economically, subsidy removal often leads to increased fuel prices, which can have cascading effects on the cost of goods and services. A study by Siddig *et al.* (2014) indicated that the elimination of fuel subsidies in Nigeria resulted in a considerable increase in transportation and food costs, which in turn affected household expenditures and overall economic stability. Socially, fuel subsidy removal can lead to public discontent and protests, as observed in Nigeria during the 2012 subsidy removal attempt (Akanle *et al.*, 2014). This social unrest can affect various sectors, including agriculture. Agricultural extension services play a crucial role in enhancing agricultural productivity by providing farmers with the necessary knowledge and resources. However, these services are highly dependent on mobility and accessibility, both of which are affected by fuel prices.

According to Agbamu (2005), agricultural extension workers in Nigeria face numerous challenges, including inadequate funding, poor infrastructure, and limited mobility. These challenges are exacerbated by increases in fuel prices, which limit the ability of extension workers to reach remote areas.

Numerous studies have examined the broad economic and social impacts of fuel subsidy removal. For instance, Abdelkrim and Verme (2016) explored the welfare implications of fuel subsidy removal in developing countries, highlighting significant adverse effects on household welfare, especially among the poor. Similarly, Coady *et al.* (2016) provided a comprehensive review of the global impact of fuel subsidies, demonstrating that while subsidy removal can lead to long-term economic benefits, the short-term impacts often disproportionately affect vulnerable populations. However, these studies tend to focus on general economic outcomes and household welfare, with limited attention to specific sectors such as agriculture. For example, Lin and Li (2011) discussed the economic and environmental impacts of subsidy reforms but did not delve deeply into sectoral analysis, leaving a gap in understanding the nuanced effects on sectors like agriculture, which is crucial in countries like Nigeria where agriculture is a significant part of the economy.

Research specifically addressing the agricultural sector is relatively sparse. Echeverria and Beintema (2009) emphasized the importance of investment in agricultural research and development but did not consider how fuel subsidy policies impact this sector. In Nigeria, Olomola (2014) examined the macroeconomic implications of fuel subsidy removal but did

not provide a detailed analysis of its impact on agricultural productivity or the operational efficiency of agricultural extension services. This oversight highlights a significant research gap, considering the critical role of agriculture in Nigeria's economy and the dependency of rural farming activities on fuel for transportation and machinery.

While the broader impacts of fuel subsidy removal have been well-documented, significant gaps remain in understanding its specific effects on the agricultural sector and the role performance of agricultural extension workers, particularly in Edo State, Nigeria. Future research should aim to fill these gaps by focusing on sector-specific impacts, regional variations, and practical mitigation strategies. Such research is essential for developing informed policies that support the agricultural sector and enhance the performance of agricultural extension services in the wake of subsidy reforms.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study area and scope

This study was conducted in Edo state, a state located in the South-South geopolitical zone of the federal republic of Nigeria. As of 2006 National population census, the state was ranked as the 24th populated state (3,233,366) in Nigeria. The state population figures was expected to be about 4,777,000 in 2022 (Nigeria Data Portal, 2021). Edo State is the 22nd largest State by landmass in Nigeria. Edo state has a Tropical wet and dry or savanna climate with yearly temperature of 28.78°C (83.8°F) and it is -0.68% lower than Nigeria's averages. Edo typically receives about 183.49 millimeters (7.22 inches) of precipitation and has 265.91 rainy days (72.85% of the time) annually and at an elevation of 239.16 meters (784.65 feet) above sea level. Edo State borders Kogi State to the north for 133 km and across the Niger River for 81 km to the northeast, Anambra State to the east for about four km across the Niger River, Delta State to the southeast and south for 350 km (218 miles), and Ondo State to the west.

The Edo state Agricultural Development Programme (ADP) is divided into three (3) agricultural zones as follows: Edo Central, Edo North and Edo South zones. Edo Central is divided into five (5) blocks as follows: Esan central, Esan west, Esan north - east, Esan south - east, Igueben Local Government Areas (LGAs). The Edo North comprises of 6 blocks namely; Owan west, Owan east, Akoko Edo, Etsako west, Etsako east, Etsako central LGAs. The Edo South consists of seven (7) blocks namely; Oredo, Ovia south - west, Ovia north - east, Ikpoba - okha, Egor, Uhunmwode and Orhionmwon LGAs. In all there are a total of 18 blocks or LGAs in the study area.

3.2 Sampling size

This involved a purposive (total population) sampling technique of all extension workers from the three (3) zones and the various six (6) units constituting the administrative structure of ESADP. This gave a sample size of One hundred and four (104) respondents based on recent attendance collected from my survey.

3.3 Data collection

The data used for this study was generated from a combination of two sources; primary and secondary sources. The primary sources comprised of questionnaire and interview amongst fellow respondents which was structured according to the specific objective of study while the secondary sources comprised of journals, articles, textbooks, news bulletins and the internet.

3.4 Measurement of variables

3.4.1 Socio-economic characteristics

Staff Category: This was measured as ordinary value with the following categories: Extension Administrator [], Extension Supervisor [], Evaluation Officer [], Enumerator [], Extension Agent [].

Location: This was measured as ordinary value with the following categories: Location: a) Headquarters [], b) Zonal office [], c) Block [], d) Cell [].

Sex: The respondents were asked to indicate their gender. This was measured as ordinary value with the following categories: Male [], Female []

Age: The respondents were asked to indicate their age in actual number of years.

Marital status: This was measured as ordinary value with the following categories: Single [], Married [], Widow [], Widower [], Divorced []

Educational Status: This was measured as ordinary value with the following categories: OND/NCE [], BSc/ HND [],MSc/ other Post graduate []

Household size (number): The respondents were asked to indicate their household size in actual number of persons.

Membership of Agricultural Professional Associations: This was measured as ordinary value with the following categories: Yes [], No []

Working experience in extension Services (years): The respondents were asked to indicate their working experience in extension services in actual number of years.

Grade Level: The respondents were asked to indicate their grade level in actual number.

Number of trainings attended: The respondents were asked to indicate the number of trainings attended

Types of trainings attended: This was measured as ordinary value with the following categories: In-house [], Off-shore [], Off-project trainings [] and International []

Annual Income (N): The respondents were asked how much they earn as extension workers annually in actual number.

3.4.2 Effects of subsidy removal on extension workers' roles

The respondents were asked to give their perception on how the removal of fuel Subsidy has affected their ability to perform roles as extension workers. This will be measured using a before 5-point Likert scale of Highly performed (5) performed (4) undecided (3) moderately performed (2) and not performed (1) for before fuel subsidy removal and after 5-point Likert scale of Highly performing (5) Performing (4) undecided (3) moderately performing (2) and not performing (1)

3.4.3 Coping strategies for subsidy removal effects

The respondents were asked to indicate what strategies they adopted to overcome challenges of post-subsidy removal. This was measured by asking the respondents tick what strategies they adopted.

3.4.6 Constraints to extension role performance

This was achieved using a Likert scale of Very serious (5) serious (4) undecided (3) Not serious (2) and Not a problem(1).

3.5 Data analysis

Objective 1: to describe the socio-economic characteristics of extension workers in Edo State, Nigeria. This was achieved using a descriptive statistics such as frequency counts, percentage and mean.

Objective 2: to ascertain effects of subsidy removal n the roles performed by extension workers. This was achieved using a before and after 5-point likert scale.

Objective 3: to identify coping strategies for overcoming the fuel subsidy removal effects by extension workers in performing their roles. This was achieved using a descriptive statistics such as frequency and percentage.

Objective 4: to identify the constraints to extension role performance in the study area. This was achieved using a 5-point Likert scale.

Test of hypothesis

Hypothesis 0 was tested using Minimum Sample Size Formula:

$$n = NZ^2p(1 - p) \div e^2(N - 1) + Z^2p(1 - p)$$

Where:

n = Required Sample Size

N = Population size (total number of agricultural extension workers in Edo state.)

Z = z score

p = Estimated proportion of the population affected

e = estimated error

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Socio - economic characteristics

Results from Table 1 showed that majority of the respondents were male (55.8%), with females representing 44.2%. The predominant staff category was Extension Agent (47.1%), followed by Evaluation Officer (35.6%). The staff categories show a diverse group with the majority being Extension Agents (47.1%) and Evaluation Officers (35.6%). Most respondents are stationed at cell (38.5%) and zonal offices (28.8%). Marital status showed that a significant majority were married (78.8%), while single and widowed respondents each comprised 10.6%. Educationally, 66.3% held B.Sc./HND degrees, and 31.7% had OND/NCE qualifications, only a small fraction have advanced degrees (M.Sc/PhD, 1.9%). Interestingly, none of the respondents were members of agricultural professional associations which contradicts studies such as Adani et al. (2022), which emphasize that professional membership enhances career development, networking, and access to training.

Regarding training, 65.4% participated in in-service training, with fewer engaging in off-shore (33.7%) or off-project (1.0%) training. Annual income varied, with the majority earning between 500,000 and 1,000,000 Naira (53.8%). Age distribution indicated that the largest group was aged 41-50 years (45.2%). The average age of respondents is approximately 46 years. The mean age of 45.97 years aligns with Aja et al. (2024), who

found that many agricultural extension workers in Nigeria are aging, which could reduce their ability to cope with policy changes like fuel subsidy removal.

Household size predominantly ranged from 3-4 members (49.0%). Most respondents had 6-10 years of working experience (39.4%) with an average of 8.32 years in the field. Respondents' grade levels average at 9.51, indicating a moderately high level of seniority and experience. Grade levels showed a concentration in the 6-8 range (47.1%). Finally, the number of trainings attended varied, with a majority attending 6-8 trainings (51.0%).

The socio-economic characteristics of the respondents revealed a well-educated and experienced workforce. The majority are extension agents, suggesting that they are directly involved in field activities and farmer interactions. The distribution across different office locations indicates a widespread presence of extension services in various parts of Edo State.

The predominance of male respondents and married individuals reflects typical demographics in the agricultural extension sector. The high educational attainment and significant work experience suggest that the respondents are likely to be knowledgeable and skilled in their roles.

The variety in training types attended and the relatively high income levels highlight the importance of continuous professional development and adequate compensation in maintaining the effectiveness of agricultural extension workers. Studies by Egbe et al.,

(2024) argue that frequent training enhances the effectiveness of extension workers, making them better prepared for challenges like fuel subsidy removal. The findings also indicate that the respondents are actively engaged in improving their skills through various training programs.

Table 1: Socio- economic characteristics of respondents

Variables	Description	Freq	Perc	Mean
Staff category	Extension Administrator	8	7.7	
	Extension Supervisor	10	9.6	
	Evaluation Officer	37	35.6	
	Extension Agent	49	47.1	
Location	Headquarters	18	17.3	
	Zonal office	30	28.8	
	Block	16	15.4	
	Cell	40	38.5	
Sex	Male	58	55.8	
	Female	46	44.2	
Marixtal status	Single	11	10.6	
	Married	82	78.8	
	Widow/Widower	11	10.6	
Educational status	OND/ NCE	33	31.7	
	B.Sc/ HND	69	66.3	
	M.Sc / PhD	2	1.9	
Membership of Agricultural profession associations	Yes	0	0.0	
	No	104	100.0	
Types of training attended	In-service	68	65.4	
	Off-shore	35	33.7	
	Off-project trainings	1	1.0	
Annual income (N)	500001 - 1000000	56	53.8	
	1000001 - 1500000	31	29.8	
	1500001+	17	16.3	
	<= 30	4	3.8	45.97
Age	31 - 40	23	22.1	
	41 - 50	47	45.2	
	51+	30	28.8	
	<= 2	3	2.9	4.63
Household size	3 — 4	51	49.0	
	5 — 6	43	41.3	
	7+	7	6.7	
	<= 5	32	30.8	8.32
Working experience (years)	6 — 10	41	39.4	
	11 — 15	25	24.0	
	16+	6	5.8	
	<= 5	1	1.0	9.51
Grade level	6 — 8	49	47.1	
	9 — 11	17	16.3	
	12+	37	35.6	
	<= 5	41	39.4	6.22
Number of trainings attended	6 — 8	53	51.0	
	9 — 11	10	9.6	

Source: Field survey, 2024

4.2 Effects of fuel subsidy removal

Table 2 shows the before and after effects of fuel subsidy removal. From the table, before subsidy removal, knowledge transfer before subsidy removal was highly performed by 54.8% of respondents (Mean: 4.47), after subsidy removal, majority performed (65.4%) but mean dropped to 3.33. Networking before subsidy removal was highly performed by 56.7% of respondents (Mean: 4.45), after subsidy removal, performance dropped significantly, with a mean score of 3.06. Technical advising before subsidy removal was highly performed with 67.3%, mean score of 4.62, after subsidy removal, there was a drop in performance to a mean of 3.13. Communication before subsidy removal had the highest mean performance of 4.76, after subsidy removal, mean dropped to 3. Program development before subsidy removal had a mean score of 4.45, after subsidy removal: mean decreased to 3.11. Capacity building before subsidy removal had the highest mean performance of 4.76 and after subsidy removal, the mean dropped to 3.18. Problem-solving before subsidy removal had a mean of 4.51, after subsidy removal the mean decreased to 3.24. Community liaison before subsidy removal had a mean of 4.47, after subsidy removal, the mean dropped to 3.14. Needs assessment before subsidy removal as well performed with mean of 4.60 and after subsidy removal, the mean dropped to 3.17. Monitoring and Evaluation before subsidy removal was performed with a mean of 4.43 which dropped to 3.03 after subsidy removal. Advocacy before subsidy removal was performed with a mean

of 4.47 which reduced to 3.07 after subsidy removal. Data collection before subsidy removal was performed with mean of 4.44 which reduced to 3.06 after subsidy removal.

The removal of the fuel subsidy has led to a notable decline in the performance of agricultural extension workers across all measured roles. This decline is evident in the mean scores, which have dropped significantly post-subsidy removal. The ability to perform key functions such as knowledge transfer, technical advising, and communication has been severely impacted, likely due to reduced mobility and increased operational costs. Aiyede Emmanuel (2021) found that financial constraints due to rising costs of transportation often lead extension workers to reduce their field visits, affecting rural farmers' access to information. Extension workers rely heavily on fuel for field visits, community engagement, and effective service delivery. The relatively stable performance in networking and data collection suggests that some extension workers may be shifting to virtual training and digital record-keeping. Cynthia et al., (2016) highlighted the potential of ICT tools in extension services as a way to cope with mobility challenges. However, this may not fully replace face-to-face interaction. Without the subsidy, their capacity to perform these roles effectively has diminished, affecting the overall support provided to farmers.

Table 2: Effect of fuel subsidy removal

Roles	Before Subsidy Removal											After Subsidy Removal										
	Not performed		Slightly performed		Neutral		Performed		Highly performed		Mean	Not performed		Slightly performed		Neutral		Performed		Highly performed		Mean
	F	%	F	%	F	%	F	%	F	%		F	%	F	%	F	%	F	%	F	%	
Knowledge Transfer	2	1.9	1	1.0	0	0.0	44	42.3	57	54.8	4.47	4	3.8	28	26.9	3	2.9	68	65.4	1	1.0	3.33
Networking	2	1.9	3	2.9	0	0.0	40	38.5	59	56.7	4.45	6	5.8	39	37.5	2	1.9	57	54.8	0	0.0	3.06
Technical advising	0	0.0	3	2.9	0	0.0	31	29.8	70	67.3	4.62	1	1.0	43	41.3	2	1.9	58	55.8	0	0.0	3.13
Communication	0	0.0	0	0.0	0	0.0	25	24.0	79	76.0	4.76	2	1.9	38	36.5	3	2.9	61	58.7	0	0.0	3.18
Program development	1	1.0	6	5.8	1	1.0	33	31.7	63	60.6	4.45	6	5.8	35	33.7	5	4.8	58	55.8	0	0.0	3.11
Capacity building	0	0.0	3	2.9	0	0.0	36	34.6	65	62.5	4.57	7	6.7	39	37.5	1	1.0	57	54.8	0	0.0	3.04
Problem solving	1	1.0	4	3.8	0	0.0	35	33.7	64	61.5	4.51	5	4.8	31	29.8	2	1.9	66	63.5	0	0.0	3.24
Community liaison	0	0.0	7	6.7	0	0.0	34	32.7	63	60.6	4.47	4	3.8	37	35.6	4	3.8	58	55.8	1	1.0	3.14
Needs assessment	1	1.0	2	1.9	0	0.0	32	30.8	69	66.3	4.60	3	2.9	35	33.7	8	7.7	57	54.8	1	1.0	3.17
Monitoring and evaluation	1	1.0	6	5.8	0	0.0	37	35.6	60	57.7	4.43	3	2.9	42	40.4	8	7.7	51	49.0	0	0.0	3.03
Advocacy	1	1.0	4	3.8	0	0.0	39	37.5	60	57.7	4.47	5	4.8	38	36.5	6	5.8	55	52.9	0	0.0	3.07
Data collection	0	0.0	4	3.8	0	0.0	46	44.2	54	51.9	4.44	4	3.9	40	38.8	5	4.9	54	52.4	0	0.0	3.06

Source: Field Survey, 2024

4.3 Coping strategies for subsidy removal effects

Table 3 shows the coping strategies practiced by the respondents. The removal of fuel subsidies necessitated the adoption of various coping strategies by agricultural extension workers to maintain their performance levels. The most commonly adopted coping strategies were telecommuting and virtual meetings (82.7%) which was the most frequently practiced strategy, significantly reducing the need for travel and associated fuel costs, utilizing social media and online platforms (81.7%) which involves leveraging digital tools for networking and information sharing helped maintain communication and collaboration, online outreach and communication (74.0%) which involves the use of digital tools to facilitate continued outreach without the need for in-person meetings, seeking additional income (67.3%) to cope with increased transportation costs, renewable energy sources (63.5%) which includes adoption of solar power and other renewables helped reduce dependency on fuel.

Less commonly adopted strategies were professional Development (39.4%) which involves enhancing skills in financial planning and resource management, was less frequently practiced but still notable, shared transportation (26.9%); this strategy was not widely practiced, possibly due to logistical challenges, flexible work schedules (18.3%) and telecommuting opportunities (16.3%); these were the least practiced, indicating potential areas for further exploration and support.

Overall, the coping strategies highlight a shift towards digital solutions and diversification of income sources as key responses to the removal of fuel subsidies. These adaptations were crucial in maintaining the performance levels of agricultural extension workers amidst the challenging economic environment.

Table 3: Coping strategies for subsidy removal effects

Coping strategies	Not practiced		Practiced		Rank
	Freq	Perc.	Freq	Perc.	
Telecommuting and virtual meetings to reduce the need for frequent travel.	18	17.3	86	82.7	1 st
Utilizing social media and online platforms for networking and information sharing	19	18.3	85	81.7	2 nd
Utilizing online platforms and digital tools for outreach and communication to reduce reliance on in-person meetings and travel.	27	26.0	77	74.0	3 rd
Seeking additional income opportunities outside of extension work	34	32.7	70	67.3	4 th
Renewable energy sources like solar power	38	36.5	66	63.5	5 th
Seeking professional development opportunities to enhance skills in budgeting, financial planning, and resource management.	63	60.6	41	39.4	6 th
Shared transportation arrangements among fellow workers to reduce individual fuel costs.	76	73.1	28	26.9	7 th
Flexible work schedules to minimize travel and optimize fuel usage	85	81.7	19	18.3	8 th
Exploring opportunities for telecommuting or remote work	87	83.7	17	16.3	9 th

Source: Field Survey, 2024

4.4 Constraints to extension role performance

From the results in table 4, it shows the constraints due to the removal of fuel subsidy and their severity as reported by the respondents. The primary constraints faced by the respondents are ranked based on their mean scores. The most severe constraints were inadequate institutional Support (Mean: 3.76) which was rated as the most serious constraint, with 46.2% of respondents identifying it as a very serious problem, transportation challenges (Mean: 3.75), which was ranked second, 41.3% of respondents considered this a very serious issue, highlighting the difficulties faced in travel due to increased fuel costs, competition from private sector advisers (Mean: 3.66) which was also significant, with 47.1% of respondents viewing it as very serious, indicating the growing influence of private advisers in the sector and distrust of extension workers (Mean: 3.50) which was rated as very serious by a considerable number of respondents (38.5%) , reflecting challenges in building trust with the farming community.

The less severe constraints were difficulty using technology (Mean: 2.26) which was the least serious constraint, with only 13.5% considering it very serious. This suggests that while technology adoption is a challenge, it is not as critical as other constraints. Low Literacy Rates (Mean: 2.40) which was ranked 12th, indicating that while literacy issues are present, they are not the most pressing concern compared to other constraints.

Lai-Solarin et al., (2024) emphasized that inadequate institutional support and limited government funding are primary constraints affecting extension workers' efficiency in

Nigeria. The lower-ranked constraints, such as limited internet access and difficulty using technology, suggest that digital tools are yet to be widely adopted, aligning with Camillone et al., (2020), who noted that ICT usage in extension services remains low due to infrastructural challenges.

Overall, the data indicates that while extension workers are performing their roles to the best of their abilities, they face significant constraints exacerbated by the removal of fuel subsidies. Addressing these constraints is essential for enhancing the effectiveness and efficiency of agricultural extension services in Edo State.

Table 4: Constraints to extension role performance

Constraints	Not a problem		Not serious		Undecided		Serious		Very serious		Mean	Rank
	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc		
Inadequate Institutional Support	9	8.7	23	22.1	0	0.0	24	23.1	48	46.2	3.76	1 st
Transportation Challenges	0	0.0	34	32.7	1	1.0	26	25.0	43	41.3	3.75	2 nd
Competition from Private Sector Advisers	9	8.7	28	26.9	1	1.0	17	16.3	49	47.1	3.66	3 rd
Distrust of Extension Workers	8	7.7	34	32.7	0	0.0	22	21.2	40	38.5	3.50	4 th
Gender Inequality	9	8.7	36	34.6	1	1.0	17	16.3	41	39.4	3.43	5 th
Language Barriers	23	22.1	23	22.1	0	0.0	8	7.7	50	48.1	3.38	6 th
Limited Market Access	8	7.7	40	38.5	2	1.9	21	20.2	33	31.7	3.30	7 th
Limited Funding	0	0.0	49	47.1	4	3.8	23	22.1	28	26.9	3.29	8 th
Limited Equipment and Supplies	0	0.0	49	47.1	4	3.8	23	22.1	28	26.9	3.29	8 th
Limited Government Support	2	1.9	54	51.9	2	1.9	21	20.2	25	24.0	3.13	9 th
Long Working Hours	23	22.1	51	49.0	2	1.9	3	2.9	25	24.0	2.58	10 th
Limited Internet Access	14	13.5	61	58.7	2	1.9	13	12.5	14	13.5	2.54	11 th
Low Literacy Rates	19	18.3	61	58.7	1	1.0	9	8.7	14	13.5	2.40	12 th
Difficulty Using Technology	23	22.1	62	59.6	2	1.9	3	2.9	14	13.5	2.26	13 th

Source: Field survey, 2024

CHAPTER FIVE

SUMMARY AND CONCLUSION AND RECOMMENDATION

5.1 Summary

The study assessed the Effect of fuel subsidy removal on role performance of agricultural extension workers in Edo state, Nigeria. A purposive (total population) sampling technique was employed to get a sample size of 104 respondents and a well structured questionnaire validated by agricultural extension experts was used to generate primary data from the respondents.

Results showed a diverse workforce with a majority (47.1%) being Extension Agents, predominantly working in zonal offices and cells. Most respondents were male (55.8%), married (78.8%), and had educational qualifications up to B.Sc./HND level (66.3%). The income distribution showed that 53.8% of the respondents earned between 500,001 - 1,000,000 Naira annually, indicating moderate income levels. The performance analysis before and after the fuel subsidy removal showed a decline in several key performance indicators. Activities like knowledge transfer, networking, technical advising, and capacity building were highly performed before the removal but saw a decrease in mean scores after the removal. This highlights the negative impact of fuel subsidy removal on the efficiency and outreach of extension services.

In response to these challenges, extension workers adopted various coping strategies. The most practiced strategies included telecommuting and virtual meetings (82.7%), and utilizing social media for networking (81.7%). Less practiced strategies were exploring opportunities for telecommuting or remote work (16.3%) and flexible work schedules (18.3%).

The constraints faced by the extension workers were significant, with inadequate institutional support, transportation challenges, and competition from private sector advisers being the most serious. The mean scores indicated that these constraints heavily impacted their performance, with inadequate institutional support scoring the highest mean of 3.76.

5.2 Conclusion

The removal of fuel subsidies in Edo State has significantly affected the role performance of agricultural extension workers, leading to reduced efficiency and outreach in key activities. The adoption of coping strategies, though varied in effectiveness, reflects the workers' resilience in adapting to these changes. However, the constraints identified, particularly inadequate institutional support and transportation challenges, need urgent attention to mitigate their impact on extension services. Addressing these constraints through better support systems and infrastructure improvements is crucial for enhancing the performance and effectiveness of agricultural extension services in Edo State.

5.3 Recommendation

- I. **Reinstatement of Fuel Subsidy:** To restore the high performance levels of extension workers, consider reinstating the fuel subsidy or providing alternative forms of financial support to cover transportation costs.
- II. **Alternative Energy Solutions:** Invest in sustainable energy solutions, such as solar-powered vehicles or bicycles, to reduce dependency on fuel and ensure continuous mobility of extension workers.
- III. **Remote Support Infrastructure:** Develop robust remote support systems using digital technologies to facilitate communication and technical advising without the need for extensive travel.
- IV. **Stakeholder Engagement:** Engage stakeholders, including government agencies, NGOs, and private sector partners, to support extension services through funding, resources, and innovative solutions.

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RESEARCH QUESTIONNAIRE
DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES
FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN
BENIN CITY

Dear Sir/Ma,

I am a final year student of the above named Department carrying out a research on the topic, “Effect of fuel subsidy removal on role performance of agricultural extension workers in Edo state, Nigeria. I am soliciting for your help in carrying out this research by providing answers to these questions as correctly as possible. Your objectivity and honesty in providing answers/information will be highly appreciated. Be assured that all information is for research purpose only and will be treated with absolute confidentiality.

Thanks for your cooperation.

Yours faithfully,

Andrew Eromose OKPAMEN

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS OF EXTENSION WORKERS

Please tick [] where appropriate or fill in the spaces provided

1. Staff Category: Extension Administrator [], Extension Supervisor [], Evaluation Officer [], Enumerator [], Extension Agent [].
2. Location: a) Headquarters [], b) Zonal office [], c) Block [], d) Cell [].
3. Sex: male [], Female [].
4. Age (years)
5. Marital Status: Single [], Married [], Widow [], Widower [], Divorce [].
6. Educational status: OND/ NCE [], B.Sc/ HND [], M.Sc/ other Post graduate [].
7. Household size (number)
8. Membership of Agricultural Professional Associations: Yes [], No []

9. If _____ yes, _____ please _____ state
 number;

...

10. Working experience in extension Services (years).....

11. Grade level:

12. Number of trainings attended:

13. Types of trainings attended: In-house [], Off-shore [], Off-project trainings []
 and International []

14. Annual income (N):

SECTION B: EFFECTS OF FUEL SUBSIDY REMOVAL

Tick(✓) the appropriate box for each question.

Roles	Before Subsidy Removal					After Subsidy Removal				
	Highly Performed	Performed	Undecided	Moderately performed	Not performed	Highly Performed	Performing	Undecided	Moderately performing	Not performed
Knowledge Transfer										
Networking										
Technical advising										
Communication										
Program development										
Capacity building										
Problem-solving										
Community liaison										
Needs Assessment										
Monitoring and Evaluation										
Advocacy										
Data collection										

SECTION C: COPING STRATEGIES FOR SUBSIDY REMOVAL EFFECTS

Please tick(✓) the coping strategies you have adopted after the removal of Subsidy

Coping Strategies	Tick(✓)
Renewable energy sources like solar power	
Flexible work schedules to minimize travel and optimize fuel usage	
Telecommuting and virtual meetings to reduce the need for frequent travel.	
Shared transportation arrangements among fellow workers to reduce individual fuel costs.	
Utilizing social media and online platforms for networking and information sharing	
Exploring opportunities for telecommuting or remote work	
Seeking additional income opportunities outside of extension work to offset personal financial strains caused by increased fuel costs.	
Utilizing online platforms and digital tools for outreach and communication to reduce reliance on in-person meetings and travel.	
Seeking professional development opportunities to enhance skills in budgeting, financial planning, and resource management.	

SECTION D: Constraints to Extension Role Performance

Which of these constraints affects your role performance as an extension workers?

Please tick(✓) the appropriate box for each question, indicating which of the these constraints you encounter.

Very serious= 5, Serious = 4 , Undecided= 3, Not serious = 2, Not a problem = 1

Constraints	5	4	3	2	1
Limited Funding					
Limited Equipment and Supplies					
Transportation Challenges					
Language Barriers					
Inadequate Institutional Support					
Distrust of Extension Workers					
Low Literacy Rates					
Difficulty Using Technology					
Limited Internet Access					
Limited Government Support					
Gender Inequality					
Competition from Private Sector Advisers					
Limited Market Access					
Long Working Hours					