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EFFECTS OF FUEL SUBSIDY REMOVAL ON ARABLE CROP PRODUCTION IN SOUTHWEST, NIGERIA

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ABSTRACT: This study investigated the effects of fuel subsidy removal on arable crop production in Southwest Nigeria. A multi-stage sampling procedure was employed to select 120 respondents, and data were analyzed using descriptive statistics—frequency counts, percentages, means, and Weighted Mean Scores (WMS)—as well as Pearson Product Moment Correlation (PPMC). The majority of respondents (93.33%) were married, with an average age of 46 years, a household size of eight persons, and a mean farm size of 6.7 hectares. Major livelihood activities included crop farming (WMS = 2.97), livestock farming (WMS = 2.54), livestock processing (WMS = 2.37), and trading (WMS = 1.98). The most prominent perceived effects of subsidy removal on arable crop production were reduced profits from produce (WMS = 3.16), decreased hectares cultivated (WMS = 2.98), high production costs (WMS = 2.81), increased produce transportation costs (WMS = 2.79), and elevated food prices (WMS = 2.63). Based on the perception index ($\bar{x}$ = 10.16, σ = 4.88), 73.3% of respondents were categorized under a high perception index, indicating severe impact. Coping strategies adopted included reducing farmland size to manageable levels

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(WMS = 1.97), reverting to manual cultivation (WMS = 1.60), engaging in additional economic activities (WMS = 1.48), and using family labour for farm operations (WMS = 1.12). PPMC analysis revealed significant relationships between perceived effects of subsidy removal and age ($r = 0.331$, $p < 0.05$), household size ($r = 0.242$, $p < 0.05$), farm size ($r = 0.305$, $p < 0.05$), income ($r = 0.400$, $p < 0.05$), and farming experience ($r = 0.514$, $p < 0.05$). Similarly, coping strategies were significantly associated with age ($r = 0.309$, $p < 0.05$), household size ($r = 0.210$, $p < 0.05$), farm size ($r = 0.334$, $p < 0.05$), income ($r = 0.497$, $p < 0.05$), and farming experience ($r = 0.306$, $p < 0.05$). Respondents proposed solutions such as provision of farm implements at subsidized prices (WMS = 2.61), extension worker training (WMS = 2.16), household palliatives (WMS = 1.78), and subsidized farm inputs (WMS = 1.51). The study concluded that fuel subsidy removal has had a severe adverse effect on arable crop production in the region. It is recommended that government and relevant stakeholders provide targeted palliatives to arable crop farmers and implement farm input subsidy programs to cushion the impact.

Keywords: *Fuel subsidy, Agricultural productivity, Input costs, Rural livelihoods, Energy prices*

Introduction

Before the discovery of crude oil, Nigeria's economy depended largely on the exportation of agricultural products as its primary source of foreign exchange and livelihood for the majority of its population (Behnassi et al., 2021). This trend shifted dramatically after the discovery of oil, leading to a gradual neglect of agriculture in favour of crude oil exports, which remain the country's main revenue earner. By the end of the first decade after independence, oil had completely replaced agriculture as the most important source of national income. Subsidy exists when the government offsets part of the prevailing market price of a commodity to make it more affordable to consumers. Specifically, fuel subsidy refers to the difference between the actual market price of fuel and the subsidized amount consumers pay (Frison, 2018). Many developing countries adopt fuel subsidies to achieve economic, social, and environmental goals such as poverty reduction, inflation control, and wealth redistribution (Behnassi et al., 2021). In Nigeria, petroleum subsidies were intended

to encourage industrial growth, support wealth distribution, and expand domestic consumption of petroleum products (Bennett et al., 2021).

However, on May 29, 2023, President Bola Ahmed Tinubu announced the immediate removal of fuel subsidy, citing budgetary constraints and the need to redirect funds towards infrastructure and improving citizens' welfare (Khan et al., 2022). This decision triggered widespread economic implications, including rising fuel prices, inflation, and increased production and transportation costs across sectors, particularly in agriculture. In rural areas—where poverty rates are higher and livelihoods depend on agriculture—the impact is more severe, with many farmers struggling to afford agricultural inputs, transport produce, and operate farm machinery. The removal of fuel subsidy threatens food security by reducing the scale of arable crop production, increasing production costs, and diminishing farmers' purchasing power. Labour costs have also risen, as farm workers demand higher wages to cope with the elevated cost of living. If these challenges persist, the agricultural sector may witness reduced productivity, scarcity of staple crops, and higher unemployment rates.

Given that fuel subsidy removal is a recent development in Nigeria, its specific effects on arable crop production in Southwest Nigeria warrant urgent investigation. This study seeks to address the following research questions:

1. What are the socio-economic characteristics of arable crop farmers in Southwest Nigeria?
2. What are the major livelihood activities of the respondents in the study area?
3. What are the perceived effects of fuel subsidy removal on arable crop production?
4. What coping strategies have farmers adopted to mitigate the effects of fuel subsidy removal?
5. What solutions can be proposed to address the challenges caused by fuel subsidy removal in arable crop production?

General Objective

The general objective of this study is to examine the effects of fuel subsidy removal on arable crop production in Southwest Nigeria.

Specific Objectives

The specific objectives are to:

1. Describe the socio-economic characteristics of respondents in the study area.
2. Identify the livelihood activities engaged in by respondents in the study area.
3. Examine the effects of fuel subsidy removal on arable crop production in the study area.
4. Identify coping strategies adopted by respondents to mitigate the effects of fuel subsidy removal.
5. Suggest possible solutions to address the effects of subsidy removal on arable crop production.

Methodology

The study was conducted in selected States of Southwest Nigeria. The Southwest geopolitical zone comprises six States: Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti. Geographically, the region lies between latitudes 5°N and 9°N of the Equator and longitudes 2.5°E and 6°E of the Greenwich Meridian. This zone is characterized by diverse agro-ecological conditions, which make it a prominent area for arable crop production.

A **multi-stage sampling technique** was employed to select 120 respondents from the study area.

Stage 1: Three States—Ekiti, Oyo, and Ogun—were purposively selected based on their high engagement in arable crop production.

Stage 2: Within each selected State, major food crop-producing Local Government Areas (LGAs) were identified: Oyo State has 21 LGAs, Ekiti State has 12 LGAs, and Ogun State has 15 LGAs.

Stage 3: Thirty percent (30%) of the identified LGAs in each State were randomly selected, resulting in 6 LGAs from Oyo, 3 from Ekiti, and 3 from Ogun, making a total of 12 LGAs.

Stage 4: From each selected LGA, a list of registered arable crop farmers was obtained, and ten (10) farmers were randomly chosen, giving a total sample size of **120 respondents.**

Data were collected through an **interview schedule,** ensuring that both literate and non-literate farmers could participate. The instrument elicited information on socio-economic characteristics, livelihood activities, perceived effects of fuel subsidy removal, and coping strategies. Data were analyzed with the assistance of a statistician using both **descriptive** and **inferential** statistical techniques. Descriptive statistics such as tables, frequency distributions, and percentages were used to summarize responses. Inferential statistics included **Chi-square (χ^2)** to test associations between categorical variables and the **Pearson Product Moment Correlation (PPMC)** to assess the relationship between continuous variables.

Results and discussion

Socioeconomic characteristics of Respondents in the study area

The socioeconomic characteristics of the respondents are summarized in Table 1. The age distribution revealed that 13.33% of respondents were aged 30 years and below, 25.83% were between 31–40 years, 27.50% were between 41–50 years, while 33.33% were above 50 years of age. The mean age was 46 years, indicating that the majority of respondents were in their economically productive years. Religious affiliation showed that the majority (69.17%) were Muslims, followed by Christians (26.67%) and Traditional worshippers (4.17%). Regarding marital status, most respondents (93.33%) were married, while only 6.66% were single, divorced, or widowed. Educational attainment indicated that 14.17% had no formal education, 23.33% had primary education, 55.00% had secondary education, and 7.50% had tertiary education. This aligns with the findings of (Omotayo et al., 2025; Omotoso & Omotayo, 2025) who reported that most arable crop farmers in Nigeria are married, have a mean age of 46 years, and possess at least a secondary school

education. Household size distribution showed that 45.83% had fewer than four members, 50.83% had between four and eight members, and 3.33% had more than eight members, with the mean household size being six persons. In terms of farm size, 4.17% of respondents cultivated less than 5 hectares, 69.17% had between 5–10 hectares, and 26.67% cultivated more than 10 hectares.

Table 1: Socioeconomic characteristic of the respondents

Variables	Frequency	Percentage	Mean	Std. Dev.
Age (years)				
≤30	16	13.33		
31 – 40	31	25.83		
41- 50	33	27.50	46.4	18.07
Above 50	40	33.33		
Religion				
Christianity	32	26.67		
Islam	83	69.17		
Traditional	5	4.17		
Marital Status				
Single	4	3.33		
Married	112	93.33		
Divorced/Separated	4	3.33		
Sex				
Male	112	93.33		
Female	8	6.67		
Educational Qualification				
No Formal	17	14.17		
Primary	28	23.33		
Secondary	66	55.00		
Tertiary	9	7.50		
Farming Experience (years)				
Less than 5	34	28.33		
5 - 10	82	68.33	8.3	4.10

Above 10	4	3.33		
Farm size				
Less than 5	5	4.17		
5 – 10	83	69.17	6.7	4.09
Above 10	32	26.67		
Household Size				
Less than 4	55	45.83		
4 – 8	61	50.83	6	3.42
Above 8	4	3.33		
Income				
Less than 50,000	63	44.17		
50,000 – 100,000	65	52.50	76,863.16	20,742.01
Above 100,000	4	3.33		

Livelihood activities of the respondents

The distribution of respondents based on livelihood activities in the study area is presented in Table 2. The majority of respondents reported frequent engagement in crop farming (Weighted Mean Score [WMS] = 2.97), livestock farming (WMS = 2.54), and livestock processing (WMS = 2.37). Other livelihood activities pursued by respondents included trading, food processing, artisanal work, hunting, and various other occupations. These findings indicate that food crop farming constitutes the predominant agricultural activity in the study area. This observation aligns with (Dwivedi et al., 2017; Omotoso & Omotayo, 2024) who noted that agriculture remains the principal employer of labour in rural areas of Nigeria, with crop production being the dominant agricultural enterprise among rural farmers.

Table 2: Distribution based on the livelihood activities engaged in by the Respondents in the study area (n=120)

S/N	Agricultural Enterprises	Always participate		Occasionally participate		Never participate		WMS	Rank
		Freq.	%	Freq.	%	Freq.	%		
1	Trading	52	43.3	42	35.0	26	21.7	1.98	4th
2	Livestock	86	71.7	17	14.2	17	14.2	2.37	3rd

	processing								
3	Hunting	29	24.2	21	17.5	70	58.3	1.40	7th
4	Livestock farming	118	98.3	2	1.7	0	0.0	2.54	2nd
5	Artisan	30	25.0	51	42.5	39	32.5	1.52	6th
6	Civil service	14	11.7	46	38.3	60	50.0	1.20	9th
7	Tie and Dye	0	0.0	2	1.7	118	98.3	1.01	10th
8	Food processing	46	38.3	41	34.2	33	27.5	1.72	5th
9	Marketing of farm products	14	11.7	38	31.7	60	50.0	1.29	8th
10	Crop farming	115	95.8	2	1.7	3	2.5	2.97	1st

Perceived effects of fuel subsidy removal on arable crop production

Perceived effects of fuel subsidy on arable crop production in the study area were presented in Table 3. The respondents affirmed that fuel subsidy removal has led to reduced profits from arable crop production (WMS of 3.16). This aligns with the findings of (Iyiola et al., 2022; Oluwole et al., 2023), who reported that fuel subsidy removal often increases input and operational costs, thereby compressing farm profit margins. Also observed were reductions in the hectare of land cultivated (WMS of 2.98), corroborating the results of (Bennett et al., 2021) who noted that higher fuel prices reduce farmers' capacity to maintain or expand cultivated land due to increased mechanization and irrigation costs.

Furthermore, the respondents indicated high production costs (WMS of 2.81) and the expensiveness of transporting produce from farm to market (WMS of 2.79). Similar trends were highlighted by (Behnassi et al., 2021; Iyiola et al., 2022) who emphasized that transportation is a critical cost driver in the agricultural value chain, especially when fuel prices surge. The perception of high food prices (WMS of 2.63) supports the conclusions of (Frison, 2018; Jacob et al., 2021) who argued that fuel subsidy removal in developing countries can trigger cost-push inflation in food markets. These effects—when combined—contribute to reduced market competitiveness and food accessibility, thereby posing challenges to food security in rural areas.

Table 3: Perceived effects of subsidy removal on arable crop production in the Study Area (n=120)

S/N	Effects of subsidy removal	SA	A	U	D	SD	WMS	Rank
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
1	Transportation of produce from farm to market becomes more expensive for wholesalers and retailers.	70 (58.3)	21 (17.5)	17 (14.2)	6 (5.000)	6 (5.0)	2.79	4th
2	High production cost	86 (71.7)	18 (15.0)	12 (10.0)	2 (1.7)	2 (1.7)	2.81	3rd
3	Prices of food crops becoming high.	85 (70.8)	5 (4.2)	5 (4.2)	18 (15.0)	1 (5.8)	2.63	5th
4	Cost of importation of farm inputs becomes high	67 (55.8)	7 (5.8)	12 (10.0)	24 (20.0)	8 (8.3)	2.19	9th
5	Constant inflation and pressure on the country foreign exchange reserve	48 (40.0)	12 (10.0)	24 (20.0)	22 (18.3)	14 (11.7)	1.53	12th
6	Higher energy expenses on farm machinery	79 (65.8)	15 (12.5)	4 (3.3)	9 (7.5)	13 (10.8)	1.89	11th
7	Reduction in hectares of land cultivated by farmers	101 (84.2)	3 (2.5)	3 (2.5)	10 (8.3)	3 (2.5)	2.98	2nd
8	Low demand of farm produce due to high prices	74 (61.7)	3 (2.5)	9 (7.5)	18 (15.0)	16 (13.3)	2.40	7th
9	Poor yielding of farm produce due to inability to afford the price of neccessary inputs and labour	71 (59.2)	12 (10.0)	12 (10.0)	10 (8.3)	15 (12.5)	2.27	8th
10	Scarcity of farm produce due to the high cost of production	63 (52.5)	12 (10.0)	7 (5.8)	14 (11.7)	24 (20.0)	2.57	6th
11	Reduced profits from arable crop production	88 (73.3)	0 (00.0)	9 (7.5)	12 (10.0)	11 (9.2)	3.16	1st
12	Reduction in production of arable crops	71 (59.2)	3 (2.5)	7 (5.8)	15 (12.5)	24 (20.0)	2.03	10th

Percentages are in parentheses

Perception Index (PI) on the severity of effect of fuel subsidy removal on arable crop production

Table 4 presents the perception index of the severity of the effect of subsidy removal on arable crop production in the study area. The mean value ($\bar{x}$ = 10.16, σ = 4.88) obtained from the perception statements was used to categorize the severity of the effect into high, medium, and low index levels. The results showed that 73.3% of the respondents fell within the category of high perception index, indicating that more than half of the farmers were significantly affected by the removal of fuel subsidy. Only 9.2% of the respondents were classified under the low perception index category. The high proportion of respondents in the high index category suggests that fuel subsidy removal has severely disrupted agricultural development and arable crop enterprises, leading to reduced production, increased costs, and in some cases, the closure of agribusinesses.

These findings align with the observations of (Behnassi et al., 2021; Frison, 2018)who noted that fuel price shocks in Nigeria often trigger cascading economic effects that particularly burden smallholder farmers, reducing their resilience to market volatility. Similarly, (Omotoso & Omotayo, 2025) emphasized that rural agricultural systems are highly vulnerable to energy cost increases because of their dependence on mechanized farming, irrigation systems, and transportation. The results from this study confirm that the removal of fuel subsidy has exacerbated production constraints, increased input prices, and undermined rural livelihoods in Southwest Nigeria.

Table 4: Perception Index (PI) on the severity of effect of fuel subsidy removal on arable crop production in the study area (n=120)

Perception Index ($\bar{x}$ =10.16, σ = 4.88)	Frequency	%age
High Perception Index (HPI)	88	73.3
Medium Perception Index (MPI)	21	17.5
Low Perception Index (LPI)	11	9.2
Total	**120**	**100.0**

$\bar{x}$ = Mean, σ = standard deviation

Coping strategies for mitigating the effect of subsidy removal

Table 5 presents the distribution of respondents based on strategies adopted to mitigate the effects of subsidy removal on crop production in the study area. About 64.2%, 69.2%, and 45.0% of the respondents indicated that reduction in farm size cultivated, employment of family labour, and engaging in manual farm cultivation, respectively, were the most effective measures used to cushion the effects of subsidy removal. Furthermore, the perception statements on coping strategies were ranked based on their Weighted Mean Score (WMS). The results revealed that, due to subsidy removal, respondents reduced farmland cultivated to manageable sizes (WMS = 1.97), diversified into other economic activities to generate additional income (WMS = 1.48), and relied more heavily on family labour for clearing, planting, and harvesting of crops (WMS = 1.12).

These findings are consistent with (Behnassi et al., 2021; Jacob et al., 2021), who reported that farmers in rural Nigeria often adopt cost-minimization strategies such as scaling down production and utilizing household labour during periods of economic shocks. Similarly, (Bennett et al., 2021; Khan et al., 2022), noted that when faced with rising input costs, smallholder farmers tend to rely on non-mechanized farming techniques and diversify income sources to maintain household food security. The coping mechanisms identified in this study suggest that while farmers attempt to adapt to the challenges posed by subsidy removal, these strategies often come at the expense of production scale and efficiency, which could have long-term implications for food availability and rural livelihoods in the region.

Table 5: Distribution of respondents based on the strategies adopted to cushion the effect of subsidy removal on arable crop production in the study area (n=120)

S/N	Strategies of insecurity	Effective	Not effective	Not a strategy	WMS	Rank
		Freq (%)	Freq (%)	Freq (%)		
1	Due to subsidy removal, I have reduced the farmland I cultivate to manageable size	77 (64.2)	8 (6.7)	35 (29.2)	1.97	1st
2	As a result of removal of subsidy, I now employ family labour for	39 (32.5)	33 (27.5)	48 (40.0)	1.12	5th

	the clearing, planting and harvesting of crop					
3	Subsidy removal has prompted me to manually cultivate the farm rather than using mechanized means	53 (44.2)	25 (20.8)	42 (35.0)	1.60	2nd
4	I have reduced the number of crops to be planted due to fuel subsidy removal	42 (35.0)	25 (20.8)	53 (44.2)	1.21	4th
5	Subsidy removal has prompted me to engage in other economic activities that could fetch me income	50 (41.7)	41 (34.2)	29 (24.2)	1.48	3rd

Percentages are in parentheses

Perceived solutions to effect of fuel subsidy removal on arable crop production

Table 6 presents the distribution of respondents based on perceived solutions to the effects of subsidy removal on arable crop production in the study area. The various solutions highlighted were ranked according to their effectiveness in mitigating the adverse impacts of subsidy removal, using the Weighted Mean Score (WMS). The results revealed that the provision of farm implements at subsidized prices ranked highest (WMS = 2.61), followed by the training of extension workers to better support farmers in improving productivity (WMS = 2.16). Provision of palliatives to farming households ranked third (WMS = 1.94), while other suggested measures included improving rural road networks to enhance market access (WMS = 1.78), subsidizing farm input prices through government and non-governmental interventions (WMS = 1.51), and reverting to fuel subsidy (WMS = 1.31).

These findings align with (Behnassi et al., 2021), who emphasized that improving farmers' access to affordable farm machinery and inputs is critical in enhancing productivity and reducing vulnerability to economic shocks. Likewise, Oladele (2015) noted that strengthening extension services through adequate training of extension agents is essential for disseminating improved agricultural practices and

coping strategies, especially in resource-constrained environments. Improved rural infrastructure, particularly road networks, has also been shown to significantly reduce transaction costs and post-harvest losses, thereby increasing farmers' net returns. Collectively, these solutions suggest that a combination of targeted input subsidies, capacity building, infrastructure development, and social protection measures could substantially cushion the negative impacts of fuel subsidy removal on arable crop production in Southwest Nigeria.

Table 6: Perceived possible solution to effect of subsidy removal on arable crop production in the Study Area (n=120)

S/N	Effects of Insecurity on farming households	SA	A	U	D	SD	WMS	Rank
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
1	Government/non-government organization should subsidize the price of farm input	88 (73.3)	0 (00.0)	9 (7.5)	12 (10.0)	11 (9.2)	1.51	5th
2	Provision of farm implement at subsidized price	71 (59.2)	3 (2.5)	7 (5.8)	15 (12.5)	24 (20.0)	2.61	1st
3	Provision of palliative to farmers' households	70 (58.3)	15 (12.5)	7 (5.8)	9 (7.5)	19 (15.8)	1.94	3rd
4	Reverting back to subsidizing fuel	0 (0.00	15 (12.5)	71 (59.2)	24 (20.0)	10 (8.3)	1.13	6th
5	Good road network from farm to market	54 (45.0)	15 (12.5)	18 (15.0)	19 (15.8)	14 (11.7)	1.78	4th
6	Training of extension worker in order to help farmer increase their productivity	25 (20.83)	67 (55.83)	26 (21.67)	2 (1.67)	0 (0.00)	2.16	2nd

Percentages are in parentheses

Test of Hypotheses

$H0_1$: There is no significant relationship between the selected socioeconomic characteristics of the respondents and the perceived effects of fuel subsidy removal on arable crop production in the study area

Table 7 presents the test of significant relationship between selected socioeconomic characteristics (age, household size, income, farm size, and farming experience) of respondents and their perceived effects of fuel subsidy removal on arable crop production. PPMC analysis revealed that age ($r = 0.331$, $p < 0.05$), household size ($r = 0.242$, $p < 0.05$), farm size ($r = 0.305$, $p < 0.05$), income ($r = 0.440$, $p < 0.05$), and farming experience ($r = 0.514$, $p < 0.05$) were all significantly related to the perceived effects of fuel subsidy removal. This implies that the age of the household head, household size, farm size, income level, and years of farming experience significantly influence how farmers perceive the impact of subsidy removal on arable crop production. Therefore, the null hypothesis stating no significant relationship between the variables was rejected. The significant positive relationships observed here suggest that older and more experienced farmers, as well as those with larger households and farms, are more likely to feel the pronounced effects of increased production costs, input price hikes, and transportation challenges that follow subsidy removal.

Table 7: Summary of Pearson Correlation analysis showing the relationship between selected socioeconomic characteristics of the respondents and their perceived effects of fuel subsidy removal on arable crop production in the study area (N=120)

Socio-economic characteristics	**r-value**	**p-value**	**Remark**
Age	0.331	0.011	S
Household Size	0.242	0.032	S
Income	0.305	0.004	S
Farm Size	0.440	0.021	S
Farming Experience	0.514	0.011	S

S = significant; NS = not significant

$H0_2$: There is no significant relationship between the selected socioeconomic characteristics of the respondents and the coping strategies to cushion effects of fuel subsidy removal on arable crop production in the study area

Table 8 presents the test of significant relationship between selected socioeconomic characteristics (age, household size, income, farm size, and farming experience) of respondents and the coping strategies adopted to cushion the effects of fuel subsidy

removal on arable crop production in the study area. Pearson Product-Moment Correlation analysis revealed that age ($r = 0.309$, $p < 0.05$), household size ($r = 0.210$, $p < 0.05$), farm size ($r = 0.334$, $p < 0.05$), income ($r = 0.497$, $p < 0.05$), and farming experience ($r = 0.306$, $p < 0.05$) all had significant relationships with coping strategies employed. This implies that these socioeconomic factors—particularly income and farm size—play a critical role in determining farmers' adaptive responses to the economic shocks resulting from subsidy removal. Therefore, the null hypothesis of no significant relationship was rejected.

These findings align with the observations of (Behnassi et al., 2021; Omotayo et al., 2025), who noted that age, farm size, and income levels significantly shape farmers' choice of adaptation measures in the face of agricultural and economic disruptions. In the context of fuel subsidy removal, farmers with higher incomes or larger farm sizes may diversify into complementary livelihood activities, invest in cost-saving technologies, or optimize labour use to cushion the impact on production.

Table 8: Summary of Pearson Correlation analysis showing the Relationship between selected socioeconomic characteristics of the respondents and the coping strategies to cushion effects of fuel subsidy removal on arable crop production in the study area (N=120)

Socio-economic characteristics	**r-value**	**p-value**	**Remark**
Age	0.309	0.001	S
Household Size	0.210	0.007	S
Income	0.334	0.023	S
Farm Size	0.497	0.021	S
Farming Experience	0.306	0.019	S

S = significant; NS = not significant

Conclusion

It can be concluded from the study that the major effects of fuel subsidy removal on arable crop production in the study area were high production cost, high transportation cost, high price of food commodities and energy uses. Also, majority of coping strategies to reduce the effects of subsidy removal includes reduction in number of crops cultivated, reduction in farm land, uses of family labour instead of

machineries and engagement in other income generating activities to mitigate the effect in the study area. The perceived solution to the effects of subsidy removal on arable crop production in the study area includes government or non-government organization should subsidize the price of farm input, provision of farm implement at subsidizes price and training of extension worker in order to help farmer increase their productivity

Recommendations

1. Government and all stakeholders should provide palliative to farmers household to ease the effects of subsidy removal
2. Provision of good road network from farm to market to reduce the cost associated with food crop transportation in the study area.
3. Government should subsidize the prices of farm inputs used for production of arable crops.

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