EXAMINATION OF SMALLHOLDER FARMERS' COPING STRATEGIES DURING THE COVID-19 PANDEMIC IN SOUTH WESTERN NIGERIA: GARETT'S RANKING TECHNIQUE

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ABSTRACT
The study examined smallholder farmers' coping strategies during the COVID-19 pandemic in South Western Nigeria using Garrett's ranking technique. A multi-stage sampling technique was used to identify 360 smallholder farmers for the study. Data were collected with the aid of a structured questionnaire. Data were analyzed using descriptive tool. The results showed that the mean age of the smallholder farmers was 40 years. They are mostly (85.56%) male. The majority (89.44%) are married, with a mean of 6 persons per household. The literacy level showed that cumulatively (61.39%) attended either primary, secondary or tertiary form of western education. The mean farm size of 5.12 hectares indicated they are smallholder farmers with a high farm experience of 25 years. The mean score of the Garrett's ranking technique revealed that smallholder farmers in the study area relied on available grains for planting (52.81), family labour (51.64), and household and farm asset sales (50.93) as the major coping strategies during the COVID-19 pandemic. The study concludes that smallholder farmers responded positively by adopting various coping strategies to boost their resilience and adaptive capabilities due to the induced shocks. The study recommended that the Government, extension agencies and Non-Governmental Organizations (NGOs) should collaboratively prioritize organizing periodic training and workshops in the rural area to build smallholder farmers' resilience level and adaptive capacity to cope with the challenges of the COVID-19 pandemic.

Keywords: Agriculture, COVID-19 pandemic, coping strategies, Garrett's ranking technique and livelihood strategies

INTRODUCTION
Smallholder farmers are pivotal to the food chain in Nigeria, as jointly, they accounted for 90% of agricultural production (Akpan and Effiong, 2022). The advent of the COVID-19 pandemic rattled the sector and exacerbated a complex dimension of socioeconomic disruptions (Okidim *et al*., 2021). Further, the government's containment measures to curb the spread of the infection complicated and significantly compromised the smallholder farmers' resilience capabilities and inclusive recovery, both in the immediate or in the future aftermath of the pandemic shocks (Sitko *et al*., 2022). Livelihood is conceptualized as all the activities, assets or capitals, capabilities, income and decisions that enable individuals or a group of individuals to secure the necessities of life such as food, water, shelter, and clothing (UNHCR, 2014).

Smallholder farmers' rural livelihood strategies cut across both agricultural and non-agricultural activities, and the COVID-19 pandemic ensures that their rural livelihood strategies are compromised, thus pushing them further towards pervasive poverty (Sadiq and Sani, 2022). The socioeconomic disruptions of the COVID-19 pandemic and the containment measures were severe and widespread among smallholder farmers (Abiodun *et al*., 2019; Ojediran *et al*., 2021). The effects ascribed to the shock ranged from a significant decline in household income, loss of livelihood strategies, shortages of informal labour, closure of markets, disrupted distribution of agricultural inputs, a hike in staple food prices, to heightened household food insecurity.

Recurrent shocks and risks drive smallholder farmers to cope or adapt to the effects on their livelihoods (Pradhan and Mukherjee, 2018). Coping strategies refer to a deliberate modification to livelihoods through a process of constant learning, creativity, and adjustment, either in preparation for or in response to shocks or changing circumstances (Jeans *et al*., 2017). The choice of coping strategies by smallholder farmers is guided by the available options and resources accessible to them (Iddrisu *et al*., 2022). Nazir *et al*. (2018) revealed crop insurance, contract farming, market monitoring, social setting with neighbours, planned expenditure, precautionary saving, debt reduction, participating in off-farm activities, and crop diversification as major coping strategies adopted by smallholders to mitigate the effects of shocks. Raoul *et al*. (2024) documented withdrawal of savings, sales of household assets, material or financial support from any network, reduced quality of meals eaten and sales of reserved food to generate income were adopted by the smallholder farmers as a coping strategy to mitigate the effects of the COVID-19 pandemic.

The reverse migration trend by youths, from the cities back to their respective rural communities during the COVID-19 pandemic, poses a major threat to such communities during the period (Al Dahdah *et al*., 2020). The trend proliferates the spread of the infection due to the inability to maintain social distance and consequently infects other rural dwellers and compromises their resilience to withstand the shock or continue their livelihood strategies.
Despite the growing body of research on the agricultural impacts of the COVID-19 pandemic (Okidim et al., 2021; Ekanem & Akpan, 2023), there remains a clear gap in smallholder farmers' coping strategies in the South-West region of Nigeria, particularly using quantitative ranking techniques such as Garrett's Ranking Technique. While these studies have documented adaptation actions like using available grains instead of seeds, eating less expensive food, storing produce, finding new markets, and shifting production for own consumption, they do not sufficiently capture how farmers rank these strategies in terms of priority or effectiveness. Therefore, based on the aforementioned, how smallholder farmers in Southwestern Nigeria ranked and coped with the induced shock during the COVID-19 pandemic remained a big question to be answered. The specific objectives of the study were therefore, to:

1. describe the socioeconomic characteristics of smallholder farmers in the study area and
2. identify the coping strategies employed by smallholder farmers during the COVID-19 pandemic in the study area.

METHODOLOGY

The study was carried out in Ogun, Osun, and Oyo States, which formed part of the South-West Geopolitical Zone of Nigeria. The region lies between latitude 6°27'14.65" N and longitude 5°40'9.41"E, cumulatively possesses a land area of approximately 79,669 Km^2, one hundred and thirty-seven (137) Local Government Areas (LGAs), twenty-one (21) Agricultural Zones (AGZ) and a population of over 32,334,991 people (NPC, 2006). Utilizing a yearly growth rate of 3.34%, the population of the region was projected to reach 148,740,959 people in 2024 (UNESCAPD, 2024). The region is bounded northwards by the middle belt region with Kwara State, Westwards by the Republic of Benin, Eastwards by the South-south region with Edo and Delta States, and Southwards by the Atlantic Ocean. The region experiences a distinct equatorial tropical climate with an average relative humidity as high as 87%, average annual rainfall ranging between 1500 - 3000 mm, average daily temperature ranging between 25 and 33°C, and weather that alternates between dry and wet seasons. The region is the indigenous cultural homeland of the Yoruba people (Yoruba land) and other major tribes such as the Ibo, Hausa, Bini, and Ibibio, and a host of other small ethnic groups scattered all over the region. Agriculture is the major livelihood strategy of the inhabitants of the region, and the climate favours the cultivation of arable and cash crops such as maize, yams, cassava, vegetables, millet, rice, plantain, cocoa, palm produce, cashew and others. Livestock production is popular in the region, with smallholder farmers raising cattle, sheep, goats, and poultry. The region is a hub for commercial and trading activities. The region is blessed with solid minerals and natural resources in rich deposits such as granite, crude oil, sandstone, lignite, kaolin, clay, coal and tin (https://en.wikipedia.org/wiki /South-Western_ Nigeria).

The study utilized primary data, which was generated with the aid of a well-structured questionnaire administered to the smallholder farmers utilizing a face-to-face interview process and conducted by trained enumerators.

Population for the Study

The population for the study comprised smallholder farmers in Ogun, Osun and Oyo states, Nigeria, who are actively involved in agricultural production during the COVID-19 pandemic period.

Sample and Sampling Techniques

Due to the large population of smallholder farmers, a multistage sampling technique was used to select the smallholder farmers for the study. The first stage involved purposive selection of Ogun, Osun and Oyo States from the Southwestern region of Nigeria owing to the states being prominent centres of COVID-19 incidence in Nigeria during the period (Rotimi and Fatusi, 2020). The second stage involved purposive selection of two (2) agricultural zones (AGZ) each, from the selected states based on the high incidence of the COVID-19 pandemic in the zones, bringing the total AGZ selected for the study to six (6).

The third stage involved purposive selection of two (2) LGAs each, from the six (6) AGZ selected in the first stage due to the preponderance of farming activities and the availability of farmers who were affected by the COVID-19 pandemic, bringing the total LGAs to twelve (12). The fourth stage involved random selection of two (2) farming communities each, with a relatively high population of active farmers from the twelve (12) LGAs purposively selected in the second stage, resulting in a total of twenty-four (24) farming communities. The fifth and final stage involved purposive selection of 15 farmers each, who were actively engaged in agricultural production during the COVID-19 pandemic from the 24 farming communities identified in stage four, to arrive at a sample size of 360 for the study.

Table 1: Sample Size Selection Plan

States	AGZ	LGA	Communities	Sample Frame	Sample Size
Ogun	Ilaro	Yewa North	Ayetoro	234	15
			Ijoun	272	15
		Imeko-Afon	Alagbe	250	15
			Agbakula	214	15
	Ikenne	Obafemi-Owode	Ogunmakin	380	15
			Ibafo	346	15
		Ikenne	Ikenne	360	15
			Iperu	250	15
Osun	Ife/Ijesa	Ife South	Araromi	234	15
			Olode	226	15
		Obokun	Ibokun	318	15
			Okegun	336	15
	Iwo	Aiyedire	Alatise	280	15
			Ekerin	368	15
		Iwo	Agberire	260	15
			Iyangan	330	15
Oyo	Oke-Ogun	Iseyin	Gboleya	396	15
			Gbokoyi	360	15
		Saki West	Aba Ogbomoso	270	15
			Aroje	294	15
	Oyo	Atiba	Ayetoro	350	15
			Arinkinkin	321	15
		Oyo West	Fashola	262	15
			Ojongbodu	282	15
Total	**6**	**12**	**24**	**7,193**	**360**

Source: Field Survey, 2024

Analytical Techniques

Descriptive statistical tool, such as tables, frequency, percentages and mean, was used to analyze the socioeconomic characteristics of the smallholder farmers. The Garrett Ranking Technique (GRT) was used to analyze the coping strategies employed by the smallholder farmers during the COVID-19 pandemic in the study area. The choice of GRT to analyze the coping strategies employed by the smallholder farmers during the COVID-19 pandemic was premised on its ability to exploit smallholder farmers' subjective assessments of the options before them based on severity, unlike the simple frequency distribution, which is direct and straightforward (Ashok *et al*., 2020 and Munish *et al*., 2020). To determine smallholder farmers' preferences, ranks were assigned to the coping strategies used during the COVID-19 pandemic from 1 to 10. The per cent position value was calculated using the formula:

$$\text{Percent Position} = \frac{100(R_{ij} - 0.50)}{N_{ij}}$$

where;

R_{ij} = Rank given by i^{th} item by j^{th} individual;

N_{ij} = Number of items ranked by the j^{th} individual.

Using the Garrett table, the estimated percent position value was converted into scores. By multiplying the Garrett value by the given raw scores, the total score of each factor rank was calculated. The average score was calculated by dividing the total score by the total number of smallholder farmers for the selected sample. These mean scores were then arranged in ascending order and ranked accordingly. The highest percentage score represents the first rank, whilst the lowest percentage score represents the least rank of the chosen coping strategy.

Table 2: Percentage Positions and Corresponding Garrett Table values

Rank	Percentage Position				Garrett Table
	100	R_{ii} **- 0.5**	R_{ii} **- 0.5/10**	**100(**R_{ii} **- 0.5/10)**	
1	100	0.5	0.05	5	82
2	100	1.5	0.15	15	70
3	100	2.5	0.25	25	63
4	100	3.5	0.35	35	58
5	100	4.5	0.45	45	52
6	100	5.5	0.55	55	48
7	100	6.5	0.65	65	42
8	100	7.5	0.75	75	36
9	100	8.5	0.85	85	29
10	100	9.5	0.95	95	18

RESULTS AND DISCUSSION

Smallholder Farmers Socioeconomic Characteristics

The breakdown of the smallholder farmers' socioeconomic characteristics is presented in Table 3. The analysis of age showed a mean of 40 years amongst the smallholder farmers, which implied that they were in the active and productive age to withstand the demanding and exhaustive nature of agricultural production activities. The finding is consistent with Olowookere *et al*. (2022), who documented that most smallholder farmers are in their young age of between 30 – 50 years. Based on the result of sex, the majority (85.56%) of the smallholder farmers were male, suggesting that agricultural production activities in the study area tend to be male-dominated. The finding contrasts with Loki and Mdoda (2023), who revealed that mostly (70%) women are involved in smallholding farming with the intent to augment the male heads' efforts in contributing significantly to the welfare of the households, aside from their primary function of home keeping.

In terms of marital status, a significant proportion (89.44%) of the smallholder farmers were married, connoting a high level of responsibility amongst them. The finding tallied with Khan (2022), who contended that being married is akin to responsibilities and inclined rural dwellers towards farming, as offspring from such a union will constitute a cheap and readily available family labour source and the propensity to diversify livelihoods to earn additional income. Further, the result of the household size revealed a mean of 6 persons per household, which could be a comparative advantage of ease of economies of scale through cultivating a larger area of land. Henry (2020) differed in opinion and averred that large household size could significantly strain household income, food reserves and savings occasioned by increased expenditure on consumption and other household welfare, restricting livelihood strategies expansion and market participation.

The findings indicated a high literacy level, with cumulatively, most (61.39%) of the smallholder farmers attended either primary, secondary or tertiary form of western education. The result is in agreement with Adesoji *et al*. (2020), who posited that being literate aids smallholder farmers in better processing information about agricultural practices, predisposes them to be early adopters of agricultural technology in their farm operations, enhances their managerial abilities and decision-making process in the choice or types of agricultural livelihood to engage themselves. The mean of 5.12 hectares per farming household, as depicted by the result of analysis, suggested that they are subsistence farmers with small landholdings. The result aligns with the submission by Ayinde *et al*. (2018), who documented that the majority of smallholder farmers in Nigeria possess a small land holding between 2 – 5 hectares, often fragmented and discourage mechanization of their agricultural activities. The breakdown of the farm experience showed a mean of 25 years of farm experience amongst the smallholder farmers. The analysis of the result conformed to Ojo *et al*. (2020), who posited that farm experience predisposes smallholder farmers to make informed decisions regarding their agricultural livelihood activities, understand the extent of risks involved and justify their positions based on the most profitable livelihood venture to engage.

Table 3: Socioeconomic Characteristics of Smallholder Farmers in the Study Area

Variables	Frequency	Minimum	Maximum	Mean	Standard Deviation
Age (Years)					
20 – 29	30 (8.33)	25	66	40.21	8.73
30 – 39	148 (41.11)				
40 – 49	126 (35.00)				
50 – 59	42 (11.67)				
Above 60	14 (3.89)				
Sex					
Male	308 (85.56)				
Female	52 (14.44)				
Marital Status					
Single	35 (9.73)				
Married	322 (89.44)				
Widowed/Widower	3 (0.83)				
Household Size (Numbers)					
1 – 4	83 (23.06)	1	16	6.07	2.5
5 – 8	228 (63.33)				
9 – 12	43 (11.94)				
13 and above	6 (1.67)				
Education Level					
No formal education	95 (26.39)				
Qur'anic education	44 (12.22)				
Primary education	96 (26.67)				
Secondary education	81 (22.50)				
Tertiary education	44 (12.22)				
Farm Size (Hectares)					
1 – 5	221 (61.39)	1	22	5.51	4.07
6 – 10	94 (26.11)				
11 – 15	34 (9.44)				
16 and above	11 (3.06)				
Farm Experience (Years)					
1 – 7	124 (34.44)	2	27	12.42	7
8 – 14	90 (25.00)				
15 – 21	97 (26.94)				
22 and above	49 (13.61)				

Figures in parenthesis represents percentages
Source: Field Survey, 2024

Coping Strategies of the Smallholder Farmers under the COVID-19 Pandemic

The coping strategies of the smallholder farmers during COVID-19 pandemic in the study area are presented in Table 4 as shown by the rank scores using the GRT. Reliance on available grains for planting, with a mean score of 52.81, was ranked first. Apparently, COVID-19 and the containment measures hampered access to agricultural production inputs such as improved seeds, fertilizer and agro-chemicals and impacted livelihood strategies and food security of smallholder farmers. As a result, smallholder farmers resorted to their available grains as planting material to keep up with food production during the COVID-19 pandemic period. This action led to a proportional decline in household food storage, food insecurity, and loss of income resulting from no surplus to be marketed and increased incidence of conflicts due to competition for survival, yet it is the most rational decision to embark on at that point to ensure the availability of food to keep up with the induced stress. The result is consistent with Andam *et al*. (2021) and Famakinwa *et al*. (2023).

Reliance on family labour, with a mean score of 51.64, was ranked second. Smallholder farmers with large household sizes had a comparative advantage of available labour to continue food production, as the COVID-19 pandemic and the government's containment measures hindered the movement of migratory labour required for farm operations. Hired labour augments the existing family labour to produce extra food to meet the family's needs and to generate income through the marketing of surplus. The implication of reliance on family labour led to increased pressure to cater for the households and prevent acute food shortage as food reserve is drastically depleted, increased conflicts amongst household members, lowered resilience level to cope, and undue sharp anti-social practices like theft of farm produce from the farms and incidence of malnutrition. The finding aligns with the assertion of Egwue *et al*. (2020) and Adebisi *et al*. (2021).

Household and farm asset sales, with a mean score of 50.93, were ranked third. With livelihood strategies significantly disrupted or outrightly disrupted by smallholder farmers, resorting to sales of household and farm assets as a temporary measure to generate income to meet household needs becomes popular as a coping strategy. The implication is that it exerted additional pressure on the household, pushed them to the brink of pervasive poverty and forced them to indulge in activities which expose them further to the risk of being infected as the pressure lingers. The finding aligns with Iddrisu *et al*. (2022) and Pelemo *et al*. (2023).

Increased use of organic manure, with a mean score of 50.91, was ranked fourth. As access to production inputs becomes unattainable due to the COVID-19 pandemic and the impasse of movement restrictions, the use of organic manure generated from waste products like animal dung and pellets, poultry dropping, and a host of other household wastes has become popular amongst smallholder farmers. The decision has far-reaching implications due to the slow release and uptake of nutrients from organic manure, adversely impacting yield and productivity.

The situation triggers food insecurity and malnutrition owing to the huge pressure exerted on available food reserves, as the quantity of organic manure used effectively is on small and fragmented landholdings, which could barely produce enough food due to size and the already impoverished nature of the land. The result conforms to Bolarin (2022) and Mutegi *et al*. (2024). Further, produce sales at the frontage or the nearest open public space, with a mean score of 50.85, were ranked fifth. COVID-19 pandemic and the government's containment measures called for innovative ways of marketing agricultural produce at frontages and nearest open public spaces close to the households, while smallholder farmers still observed some level of social distancing during the transaction activities. The lockdown by the government, which though very critical to safeguard lives, significantly impacted the local and urban markets, which were closed down as a result of the movement restriction. The strategy comes with some measure of positive inclinations as households are able to generate incomes to keep up with family welfare and to safeguard against food wastage, especially highly perishable foods. The finding agrees with Chimela *et al*. (2021).

Diversifying livelihood activities, with a mean score of 50.79, was ranked sixth. The COVID-19 pandemic and the containment measures by the government crippled economies, and as significant socioeconomic disruptions of livelihood strategies linger, smallholder farmers resorted to diversifying their livelihood strategies as the pressure weighs heavily on households. By implication, this was a conscious attempt to improve streams of income during the period by delving into non-farm strategies such as handicrafts, barbing and plaiting and off-farm strategies such as sales of firewood, sales of agricultural produce and rentage of production assets to supplement the primary on-farm strategies, which were severely impacted by the shock. This is with the view to improve the living standards of the household and increase the household's resilience to cope with risks and uncertainties. The result validates Chipenda (2023) and Anang *et al*. (2024).

Backyard livestock rearing, with a mean score of 50.64, was ranked seventh. As the biting effects of the COVID-19 pandemic and the containment measures by the government continued, smallholder farmers resorted to raising livestock in their backyard to raise funds and keep up with the expenditures of the household. By implication, additional fund is generated by the households, hence cushioning pressure. Organic manure is generated from waste products and used in the farm to boost production, and family enjoy some measure of improved and balanced nutrition with the inculcation of animal protein into their meal. The result is in tandem with (Bolarin *et al*., 2022). Precautionary savings and expenditure, with a mean score of 49.68, was ranked eighth. As the COVID-19 pandemic and the secondary effects of the enforced lockdown intensified, precautionary savings and expenditure were adopted as a coping strategy to cushion the built-up pressure within the households. The result is in tandem with Harris *et al*. (2020) and Usman *et al*. (2021).

Received palliative care from the government with a mean score of 49.68, and was ranked ninth. During the health-related shocks and the government enacted policies aimed to mitigate transmission of the infection, adopting government palliatives as a coping strategy connotes smallholder farmers' survival strategy through short-term support and offers abrupt relief but devoid of a guaranteed long-term security. The implication of adopting the coping strategy has a wide dimension, being a preventive measure for resorting to distress sales of household and farm assets, provision of short-term cushioning against shocks and stabilizing livelihood strategies temporarily during crisis periods. Equally too, it initiates complacency to adopt proactive coping strategies like diversification of enterprise to generate additional income, unequal access and targeted beneficiaries' problems, which are all negatively inclined. The finding conforms with La'aro *et al*. (2020) and Bamikole and Adebowale (2023).

Reduced consumption of food, with a mean score of 49.61, was ranked tenth. Adopting a coping strategy connotes a desperate situation of acute vulnerability to food insecurity among the smallholder farmers. The result has a huge implication on the smallholder farmers owing to the coping strategy offering a short-term resilience for survival, but, in the long term, it poses grave consequences as it significantly impacts health, human capital and overall productivity adversely. The condition ended up rendering households even more vulnerable than they actually were before the advent of the stressor. Acute malnutrition, significant decline in productivity, intergenerational problems like stunting and impaired cognitive development among children and loss of livelihood strategies are direct negative effects of the coping strategy. It is no surprise that it fell amongst the least adopted coping strategies by the smallholder farmers. The finding is in tune with Khan (2022) and Mukaila *et al*. (2024) and diverges from Hale *et al*. (2021), who asserted that the coping strategy was not popular amongst farming households to cushion the effects of the COVID-19 pandemic due to the untenable complications associated with adopting the coping strategy.

Reliance on remittance, with a mean score of 49.28, was ranked eleventh. The lingering effects of the COVID-19 pandemic weighed heavily on smallholder farmers' households and forced them to reach out to family members who are either in the cities or outside the shores of the country to seek aid as a short-term buffer to cope with the exertive stress. Resorting to the coping strategy by smallholder farmers possessed tremendous mixed implications; positively, it helped them stabilize their income through provision of safety net to cushion stress, reduce conflicts between members of household or other households due to competition, ease pressure on adoption of distressed coping strategies whereas, negatively, it increased uncertainty and volatility due to irregularities and expectations falling short and, non-productive inclination as it targets consumption primarily. The finding synchronizes with FAO (2020) and Onyeneke (2022).

Adjust production through planting a few crops with a mean score of 48.17 was ranked twelfth, and the least adopted coping strategy by smallholder farmers in the study area. Smallholder farmers adopted the coping strategy as a short-term and cost-effective measure to meet immediate needs. By implication, adopting the coping strategy appeared proactive and adaptive, but its success depends on access to resources, knowledge, and markets and when mismanaged, it gravely increases long-term vulnerability by concentrating risk, reducing dietary diversity, undermining resilience to future shocks, and, in the short term, significant depletion and losses of resources. However, the coping strategy had positive dimensions including cost reduction, simplified management, short-term food security achievement and lowered risks. The result conforms with Lal (2020) and Ojediran *et al*. (2021).

CONCLUSION AND RECOMMENDATIONS

Based on the results, the study concluded that, COVID-19 pandemic and the governments' containment policies exacerbated a significant socioeconomic effect on rural livelihood strategies and smallholder farmers responded positively by adopting different coping strategies to boost their resilience and adaptive capabilities to cushion the induced shocks. The study recommended that the Government, extension agencies and Non-Governmental Organizations (NGOs) should collaborate and prioritize organizing periodic trainings and workshops in the rural area to build smallholder farmers' resilience level and adaptive capacity to cope with the significant socioeconomic disruption occasioned by the COVID-19 pandemic.

Table 4: Coping Strategies of the Smallholder Farmers during the COVID-19 Pandemic in the Study Area

COVID-19 Coping Strategies	Ranks Assigned by Smallholder Farmers Pooled												Total Score	Total Mean Score	Rank
	1	2	3	4	5	6	7	8	9	10	11	12			
Reliance on available grains for planting	3,948	2,482	1,188	1,464	952	2,385	2,156	1,628	720	1,054	675	360	19,012	52.81	I
Reliance on family labour	2,100	2,336	1,848	1,891	2,408	2,968	1,127	1,188	760	884	540	540	18,590	51.64	II
Household asset sales	2,016	2,409	1,386	2,013	3,640	1,113	1,715	836	1,040	646	1,107	414	18,335	50.93	III
Increased use of organic manure	3,276	2,774	2,508	1,586	1,400	742	1,176	968	1,320	986	891	702	18,329	50.91	IV
Produce sale at frontage or the nearest open public space	1,764	1,898	1,782	1,769	2,296	1,590	2,548	1,848	840	918	783	270	18,306	50.85	V
Diversifying livelihood activities	3,696	2,117	1,650	1,891	1,288	1,378	882	968	1,400	1,700	864	450	18,284	50.79	VI
Backyard livestock rearing	2,016	3,066	2,112	1,891	2,128	1,060	931	1,232	1,400	1,054	783	558	18,231	50.64	VII
Precautionary savings and expenditure	2,100	2,263	1,914	1,586	1,792	2,120	1,176	1,320	1,240	1,020	729	630	17,890	49.69	VIII
Received palliative care from the government	2,772	1,752	2,574	1,952	672	1,113	1,470	1,100	1,920	1,190	810	558	17,883	49.68	IX
Reliance on remittance	2,436	2,044	2,970	976	1,232	1,484	882	2,024	1,360	578	1,107	648	17,741	49.28	X
Reduced consumption of food	2,016	1,752	2,244	1,769	1,176	2,014	2,303	1,584	840	748	783	630	17,859	49.61	XI
Adjust production through planting few crops	2,100	1,387	1,584	3,172	1,176	1,113	1,274	1,144	1,560	1,462	648	720	17,340	48.17	XII

Source: Field Survey, 2024

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