



2024 WET SEASON AGRICULTURAL PERFORMANCE IN NIGERIA: NATIONAL REPORT

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National Agricultural Extension and Research Liaison Services (NAERLS)
Ahmadu Bello University, Zaria
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Garki, Abuja

2024 Wet Season Agricultural Performance in Nigeria: National Report

National Agricultural Extension and Research Liaison Services,
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The National Technical Committee on Agricultural Statistics

Collaborators: FDA, FDAE, P&PCD, FDF&A, FDAP&HS, FDV&PCS, NBS, NIFOR, NiMet, IAR, IAR&T, NRCRI, NCRI, LCRI, NAPRI, NIFFR, SG2000, NPC, State ADPs and MoAs

December 2024

**National Agricultural Extension and Research Liaison Services
Ahmadu Bello University, Zaria**

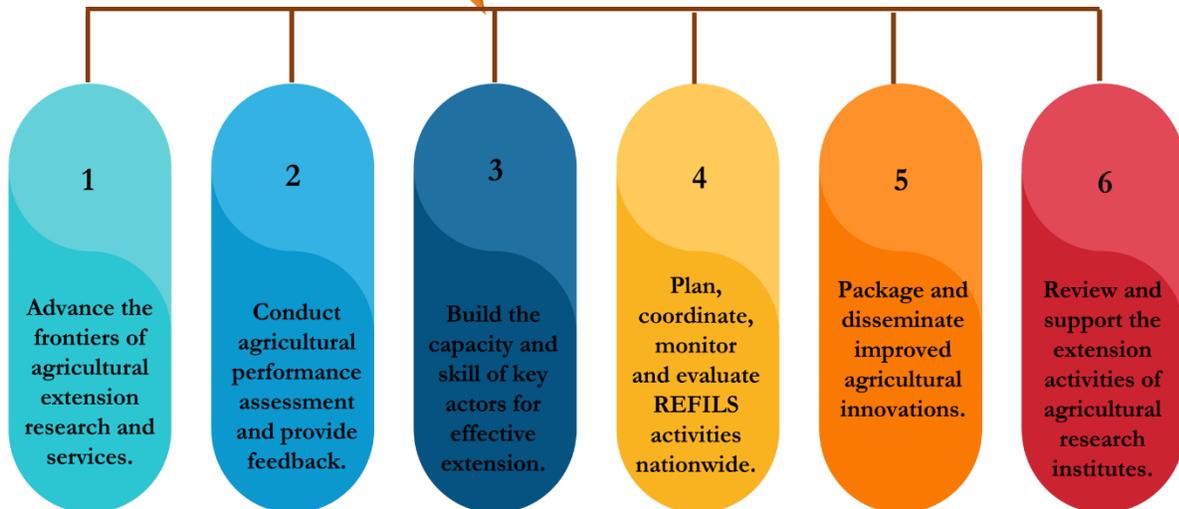


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PREFACE

One of the core mandates of NAERLS is the annual assessment of agricultural performance in Nigeria. The 2024 Wet Season Agricultural Performance Survey was conducted from the 8th to 15th of September. For the exercise, NAERLS collaborated with many Agencies and Organizations, including technical departments of the Federal Ministry of Agriculture and Food Security (FMAFS) - FDA, FDAE, P&PCD, FDF&A, FDAHS, FDV&PCS; the National Bureau of Statistics (NBS); Nigerian Meteorological Agency (NiMET), National Animal Production Research Institute (NAPRI), Institute for Agricultural Research (IAR); Institute of Agricultural Research and Training (IAR&T), Lake Chad Research Institute (LCRI); Nigerian Institute for Oil Palm Research (NIFOR); National Roots Crops Research Institute (NRCRI); National Cereals Research Institute (NCRI), National Institute for Freshwater Fisheries Research (NIFFR), Sasakawa Global 2000 (SG2000), National Productivity Centre (NPC), all the 36 States and FCT Agricultural Development Programmes (ADPs), as well as the 36 State Ministries of Agriculture and the FCT Agriculture and Rural Development Secretariat (FCT-ARDS). Nineteen (19) teams of 58 scientists covered the 36 States and the Federal Capital Territory (FCT). A monitoring team of six scientists, one per agroecological zone, participated in the survey. This report provides insight into the 2024 cropping season with an emphasis on food production, crop pests and disease situation, postharvest losses, market situation, commodity prices, agro-meteorological conditions, and agro-pastoral situation across the country.

The report also provides awareness of the performance of policy and progress made on special agricultural interventions and programs by the Federal and States governments. The outputs of the evaluation exercise formed the executive summary and the national report (copies are usually circulated to all States, relevant agencies and other stakeholders). The findings and statistical analyses are expected to guide and support real-time and evidence-based policy formulation and focused research in agriculture.

To improve the quality and reliability of data, NAERLS continually explores the best practices for strengthening the capacity of key partners in data collection and management in agriculture. The information presented in this executive summary is based on data provided by state ministries of agriculture, ADPs, farmers, agencies, and parastatals across the country. NAERLS sincerely appreciates farmers and farmers' groups, officials of ministries, departments and agencies at federal and state levels for their substantial contribution to the success of the fieldwork. We are highly indebted to the Honourable Minister of Agriculture and Food Security, Senator Abubakar Kyari and the Honourable Minister of State for Agriculture and Food Security, Senator Dr Aliyu Sabi Abdullahi for their untiring support. We greatly appreciate the support of NAERLS' Board Chairman and Vice-Chancellor, Ahmadu Bello University, Zaria, Prof. Kabiru Bala. As stakeholders peruse this report, suggestions, observations, and comments are welcomed.

Prof. Yusuf Ahmad Sani

Executive Director, NAERLS

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LIST OF ACRONYMS/ABBREVIATIONS

ADP	-	Agricultural Development Programme
AfDB	-	Africa Development Bank
APS	-	Agricultural Performance Survey
APSR	-	Agricultural Performance Survey Report
ASC	-	Agro-Service Centres
BES	-	Block Extension Agent
CAYS	-	Crop, Area and Yield Survey
CBARD	-	Community-Based Agricultural and Rural Development
CGIAR	-	Consultative Group on International Agricultural Research
EA	-	Extension Agent
ECOWAS	-	Economic Community of West African States
FAO	-	Food and Agriculture Organization of the United Nations
FCT	-	Federal Capital Territory
FDA	-	Federal Department of Agriculture
FDAE	-	Federal Department of Agricultural Extension
FDF&A	-	Federal Department of Fisheries and Aquaculture
FDAP&HS	-	Federal Department of Animal Production and Husbandry Services
FDV&PCS	-	Federal Department of Veterinary and Pest Control Services
FMAFS	-	Federal Ministry of Agriculture and Food Security
FNT	-	Fortnight Training
IAR	-	Institute for Agricultural Research
IAR&T	-	Institute of Agricultural Research and Training
ICRISAT	-	International Crops Research Institute for the Semi-Arid Tropics
IFAD	-	International Fund for Agricultural Development
LCRI	-	Lake Chad Research Institute
LGA	-	Local Government Area
MoA	-	Ministry of Agriculture
MOP	-	Muriate of Potash
MTP	-	Management Training Plot
MTRMs	-	Monthly Technology Review Meetings
NA	-	Not Available
NAERLS	-	National Agricultural Extension and Research Liaison Services
NASC	-	National Agricultural Seeds Council
NAPRI	-	National Animal Production Research Institute
NBS	-	National Bureau of Statistics
NCRI	-	National Cereals Research Institute
NEMA	-	National Emergency Management Agency
NIFFR	-	National Institute for Freshwater Fisheries Research
NIFOR	-	Nigerian Institute for Oil-Palm Research
NIHSA	-	Nigeria Hydrological Services Agency
NiMet	-	Nigerian Meteorological Agency
NIRSAL	-	Nigeria Incentive-Based Risk Sharing System for Agricultural Lending
NRCRI	-	National Root Crops Research Institute
NPAFS	-	National Programme on Agriculture and Food Security
NPC	-	National Productivity Centre
NPFS	-	National Programme on Food Security

ODK	-	Open Data Kit
OFAR	-	On-Farm Adaptive Research
PM	-	Programme Manager
P&PCD	-	Planning and Policy Coordination Department
RID	-	Rural Infrastructure Department
RTEP	-	Root and Tuber Expansion Programme
SG2000	-	Sasakawa Global 2000
SPAT	-	Small Plot Adaptation Technique
SEMA	-	State Emergency Management Agency
SRRBDA	-	Sokoto Rima River Basin Development Authority
SSP	-	Single Super Phosphate
T&V	-	Training and Visit
ZEO	-	Zonal Extension Officer

EXECUTIVE SUMMARY

The 2024 Wet Season Agricultural Performance Survey was conducted from the 28th August to 4th of September. The survey was carried out by the NAERLS, in collaboration with states' Agricultural Development Programmes (ADPs), Ministries of Agriculture (MoAs), Federal Ministry of Agriculture and Food Security, Research Institutes, other relevant agencies, and NGOs. The survey was conducted using the Participatory Rural Appraisal (PRA) technique to collect data across the 36 states of the Federation, and the FCT. Structured copies of questionnaires, checklists, field visits, focus group discussions, key-informant interviews and document observation (archival) were used for data collection. The results and findings are summarized below.

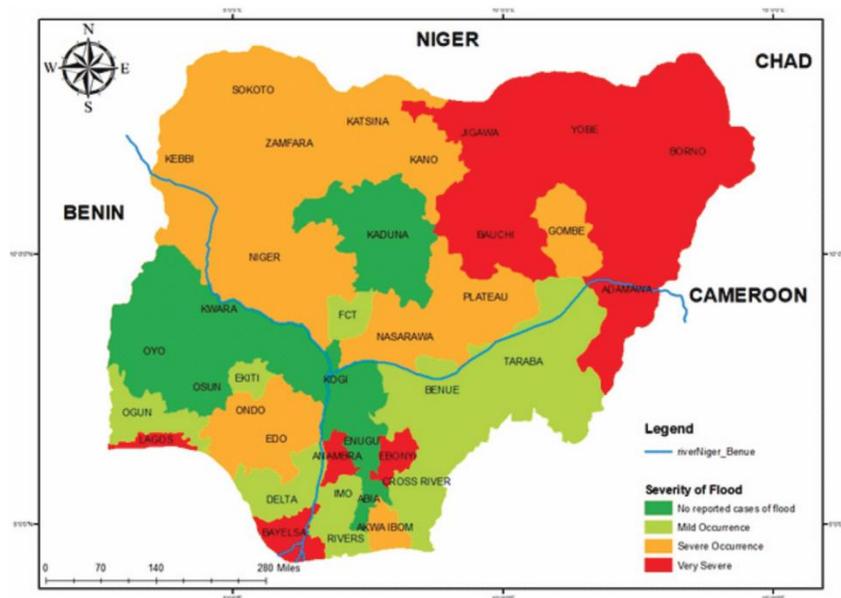
Weather Situation

Rainfall data from NiMet indicates that the rainfall distribution in 2024 was lower than that of the previous year. This decrease probably played a part in the 33-state nationwide dry spell that affected crop growth and development, which in turn caused pest and disease infestations on various crops. Interestingly, though, excessive rainfall continued to occur, resulting in floods in at least 31 states. This paradox illustrates the unpredictable and far-reaching effects of climate change nationwide.

Flood Damage Assessment

A total of 31 states that cut across 180 LGAs were affected by flood with the North-East region being severely affected. The disaster, caused by heavy rainfall and water from a collapsed dam resulted in significant losses.

- Number of human deaths: 280
- Number of human injured: 2,504
- Number of houses destroyed: 122,330
- Number of farmlands destroyed: 17,000
- Number of displaced persons: 641,500



Severity of flood occurrence in Nigeria during wet season of 2024

Incidence of Pests and Diseases on Crops

Pest and diseases caused crop losses of up to an average of 35 to 45 percent in some farms in Nigeria estimated at 54,000 hectares of land in 2024. Cereals and legumes, root and tubers, fruits, vegetables, and tree crops were affected in the 36 States and FCT.

Cereals and Legumes

Fall armyworm (Figure 2), stem borers, downy mildew, smut, spittle bug, bacterial blight, streak and leafy blight were reported in 12 States. Brown spots, rice blasts, bacterial blight, fall armyworm, African gall mites, stem borer, rodents, quela birds and smut affected rice with average losses of about 25%.

Roots and Tubers

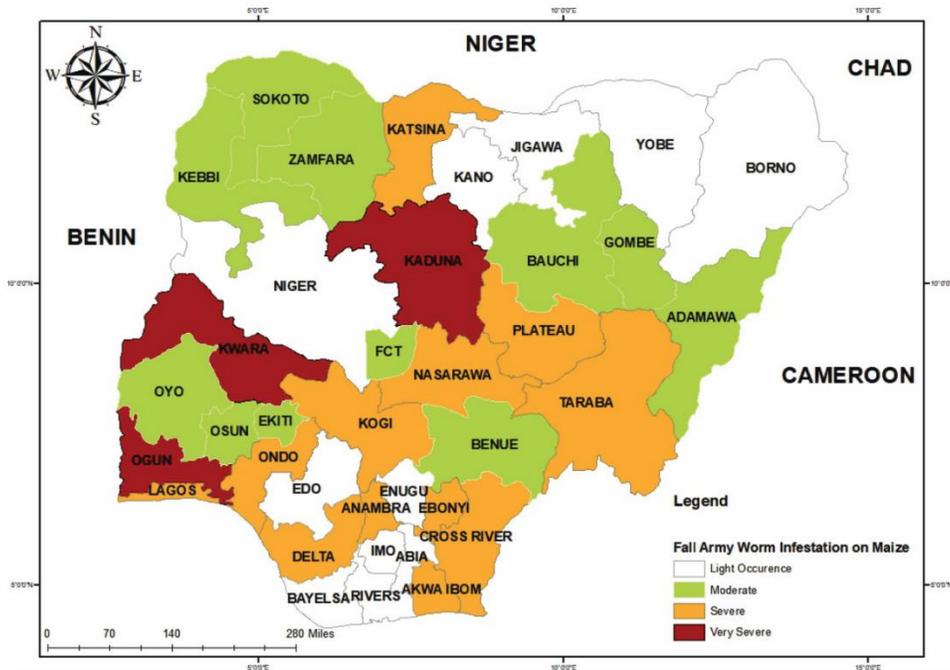
Fifteen (15) States reported incidences of diseases and pests on roots and tubers (cassava, yam, cocoyam and potato). Cassava mosaic virus, green spider mites, root rot, white flies, brown leafy spots, leaf blight, rodents, monkeys and molt all impacted cassava production at light to moderate status with average losses of 20%.

Fruits and Vegetables

Incidences of pests and diseases were reported on tomatoes across nine (9) States with Tuta absolute, leaf miner, fruit rot, mosaic, and blossom end rot with estimated yield losses of about 25%.

Tree crops

Infestation of cocoa by mealy bugs, capsid bugs, black pods, cocoa swelling virus, and pod borer were reported in Edo, Ondo and Osun State. The pod borer disease incidences were severe with estimated yield losses of about 35%.



States where Fall Armyworm Infested maize

Farm Inputs Situation



Cuttings

Major cuttings procured and distributed was that of cassava.



Certified
Seeds

Twenty -five (25) states procured and distributed limited accessible and relatively affordable seeds, which includes Maize, Rice, Cowpea, Soybean, Millet, Sorghum, and Vegetable seeds.



Fertilizers

Nineteen (19) States procured and distributed fertilizers, the major types of fertilizers distributed were NPK and Urea.

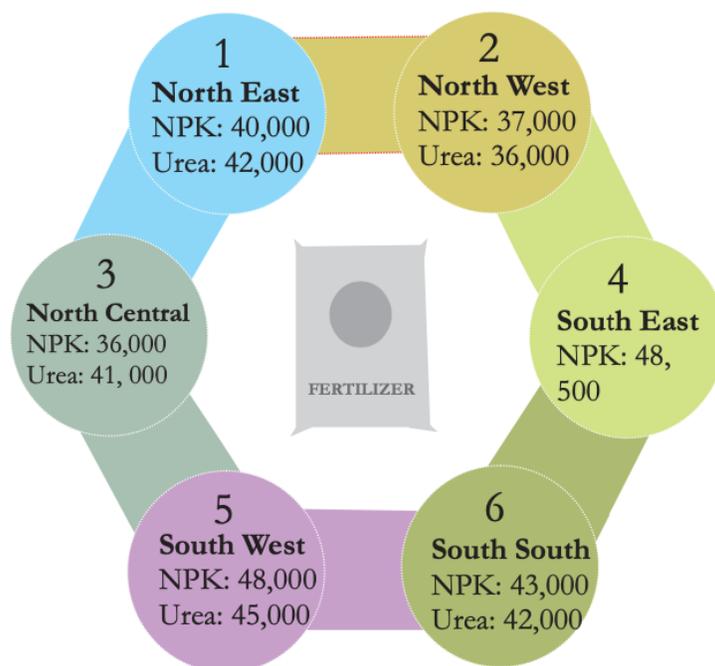


Pesticides
Herbicides

Seventeen (17) States procured and distributed herbicides, pesticides, insecticides and fungicides which were mostly accessible.

Cost of Fertilizer

Average cost of NPK and Urea in 2023 was ₦25,400 and ₦22,350 respectively compared with the average price of ₦42,000 and ₦41,300 in 2024 each. This resulted into 65.4% increase for NPK and 84.8% increase for Urea.



Cost of Fertilizers across the Zones

Agricultural Mechanization

In 2024, data revealed that 32 states struggled with high hiring costs, 24 states faced tractor unavailability, 10 states cited unsuitability, and 15 states lacked genuine spare parts, highlighting substantial barriers to mechanization.

Status of government-owned tractors across the geopolitical zones in 2024

Zones	Government Tractor Availability		Private Tractor Availability	
	Functional	Non-functional	Functional	Non-functional
North-Central	465	57	213	28
North-East	1735	161	246	44
North-West	62	18	207	73
South-East	74	22	7	1
South-South	150	13	8	4
South-West	24	46	106	52

Cost of Tillage Operation



Cost of Production of Crops

There was a general increase in the cost of production of major crops in Nigeria in 2024. Rice for example increased 37.8% from ₦423,400/ha in 2023 to ₦583,505/ha in 2024; while the production cost of maize increased by 69.7% from ₦330,621/ha in 2023 to ₦561,237/ha in 2024. The increment in the cost of production for all the crops recorded this year implied that most families in Nigeria may face a tough time getting these crops into the market due to high market prices across the country.

Cost of production of some major crops

S/N	Crop	2023	2024	%Change
1.	Rice	423,400	583,505	37.8
2.	Maize	330,621	561,237	69.7
3.	Soybean	285,395	367,716	28.8
4.	Cowpea	251,122	351,558	40.0
5.	Groundnut	372,319	517,494	39.0
6.	Sorghum	331,870	460,791	38.8
7.	Millet	260,193	405,725	55.9
8.	Cassava	428,380	499,878	16.7
9.	Yam	655,394	888,540	35.6
10.	Sweet potatoes	225,617	310,681	37.7

Food Commodity Prices

Maize Price (₦/Kg)			
Zones	July 2023	July 2024	% Change
North-Central	606	2317	282
North-East	559	1354	142
North-West	840	1683	100
South-East	1700	2388	40
South-South	708	1213	71
South-West	640	1270	98

Maize price significantly increased by over 100% in North-Central and North-East in July, 2024

Milled Rice Price (₦/Kg)			
Zones	July 2023	July 2024	% Change
North-Central	688	2567	273
North-East	886	1938	119
North-West	1197	2804	134
South-East	1075	1400	30
South-South	1258	1872	49
South-West	1260	2564	103

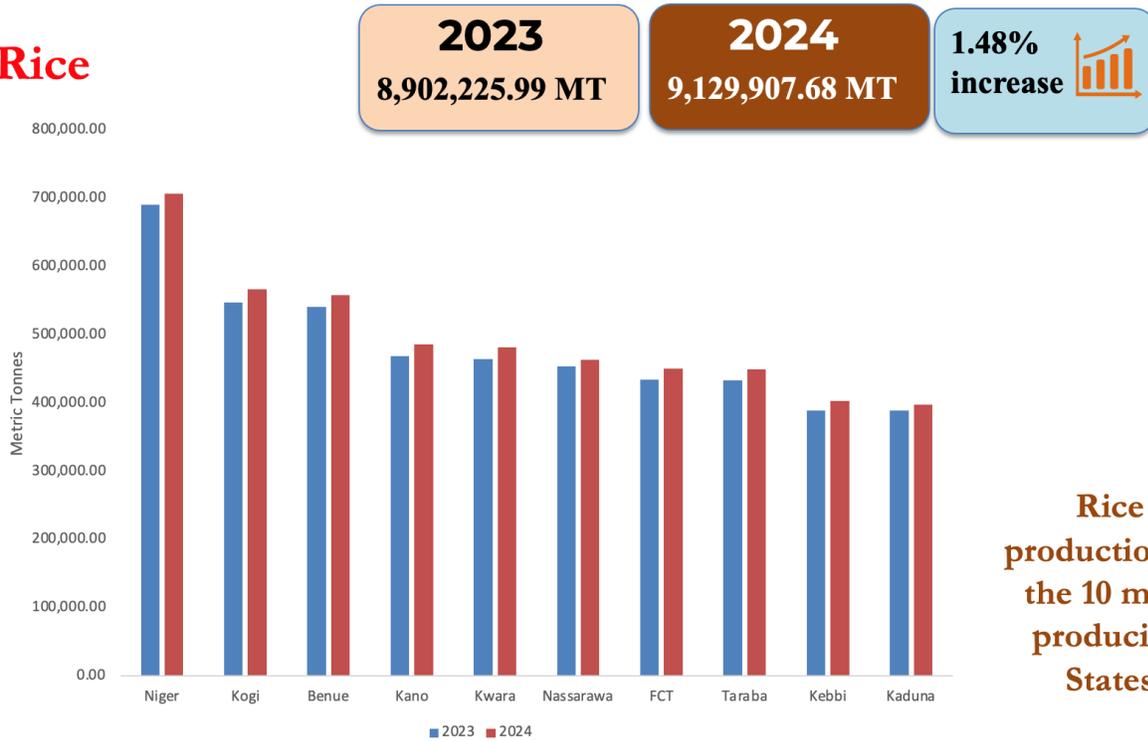
Highest price of Milled Rice in July 2024 was experienced by the Northern States, witnessing over 100% increase when compared to 2023.

Milled Rice Price (₦/Kg)			
Zones	July 2023	July 2024	% Change
North-Central	872	3602	313
North-East	791	1,707	116
North-West	1,005	2,547	153
South-East	1,165	1,265	9
South-South	848	2,291	170
South-West	833	2067	148

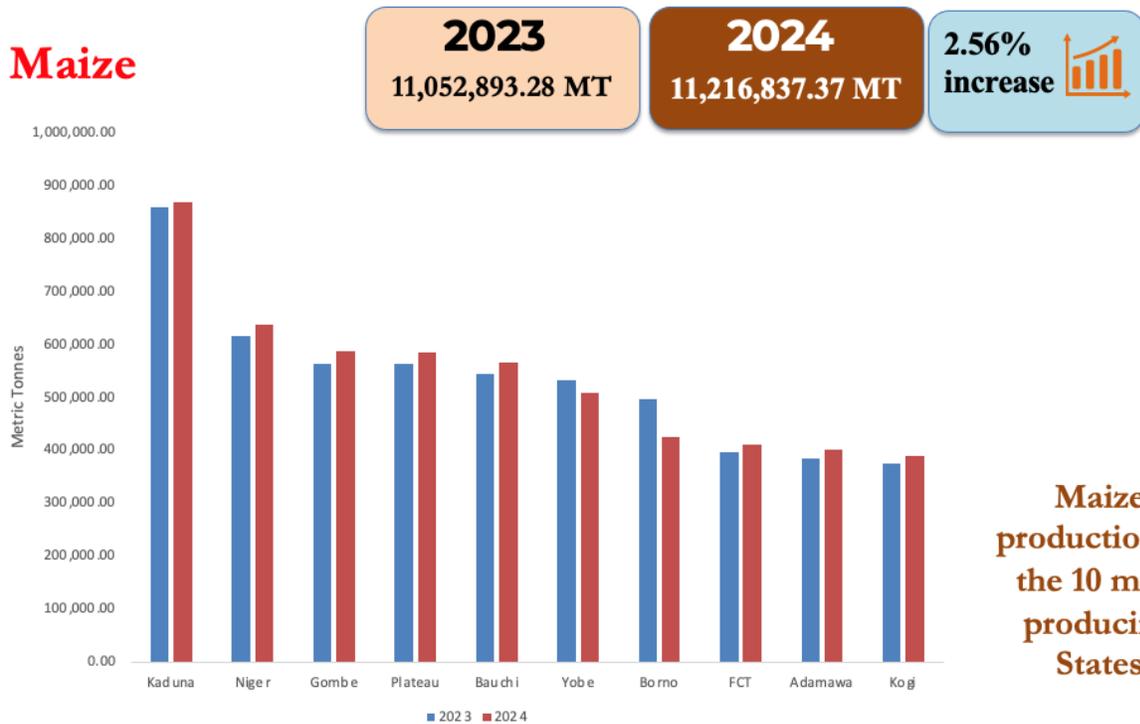
In July 2024, North-Central zone experienced the highest cost of Cowpea with over 300% increase compared 2023.

Crop Production Estimates

Rice

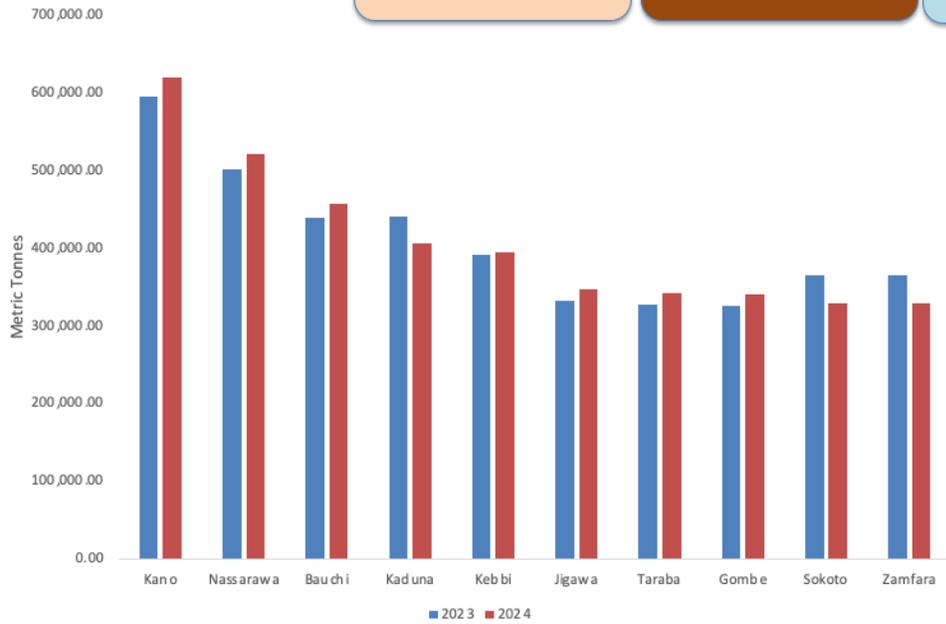


Maize



Sorghum

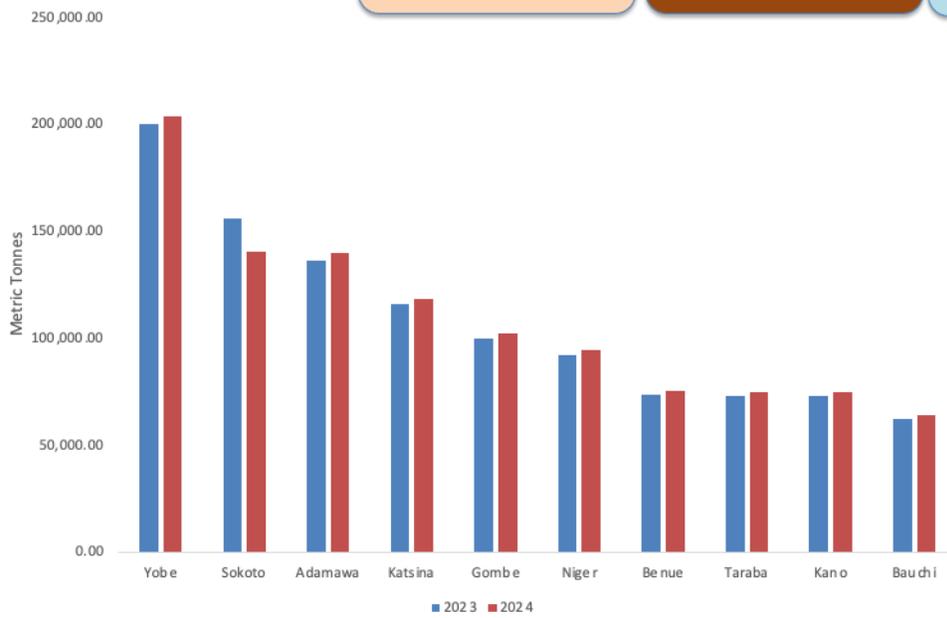
2023 6,401,598.75 MT	2024 6,416,975.27 MT	0.24% increase 
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Sorghum production by the 10 most producing States

Millet

2023 1,549,044.93 MT	2024 1,546,293.37 MT	-0.18% decrease 
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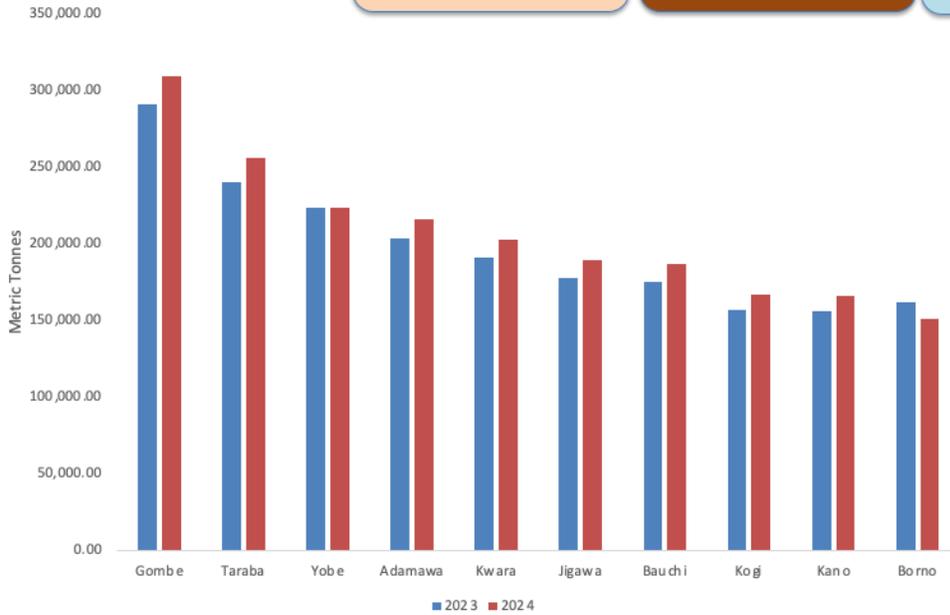
Millet production by the 10 most producing States

Cowpea

2023
3,924,974.44 MT

2024
4,093,945.27 MT

4.31% Increase 



Cowpea production by the 10 most producing States

Groundnut

2023
4,965,239.84 MT

2024
5,084,548.59 MT

2.40% Increase 



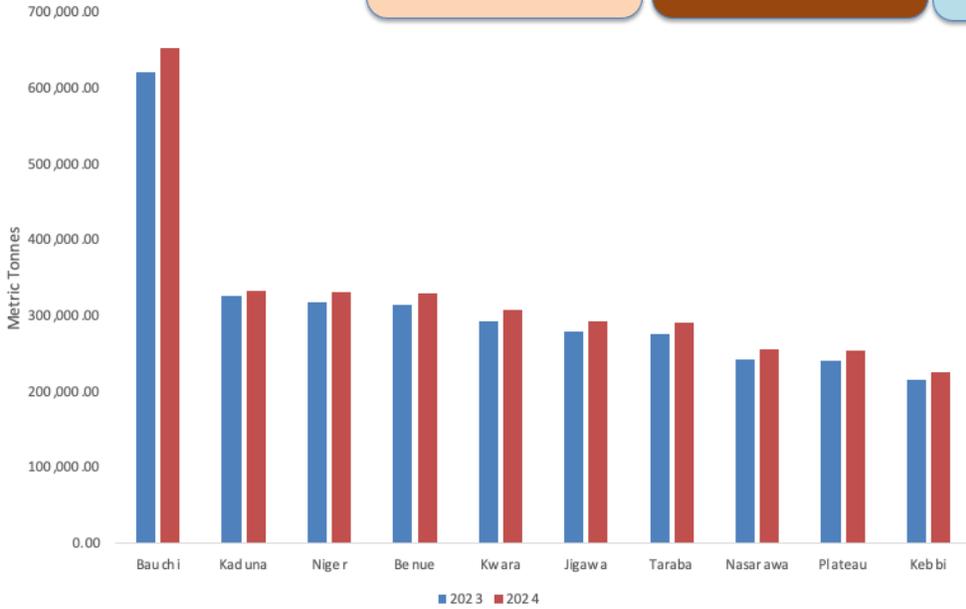
Groundnut production by the 10 most producing States

Soybean

2023
945,870.10 MT

2024
947,952.08 MT

0.22% Increase 



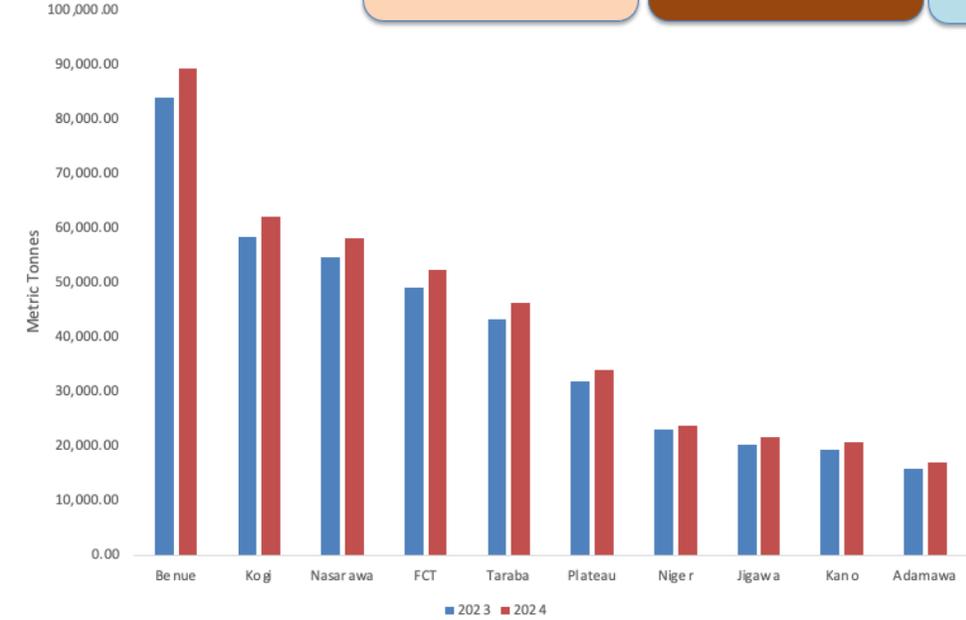
Soybean production by the 10 most producing States

Benniseed

2023
482,913.61 MT

2024
508,920.60 MT

5.39% Increase 



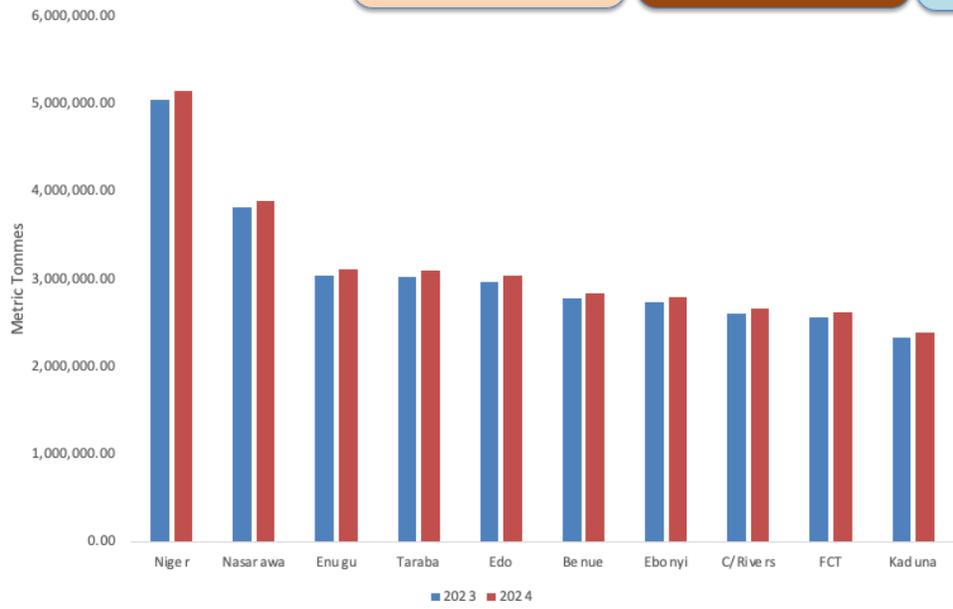
Benniseed production by the 10 most producing States

Yam

2023
53,398,019.83 MT

2024
54,577,973.19 MT

2.21% Increase 



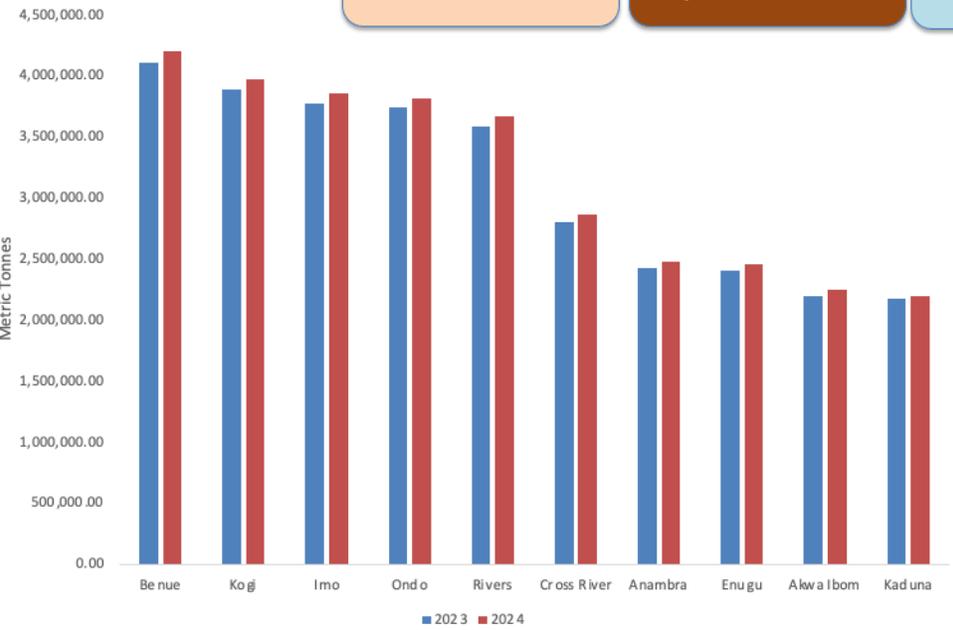
Yam production by the 10 most producing States

Cassava

2023
63,068,559.09 MT

2024
64,361,224.58 MT

2.05% Increase 



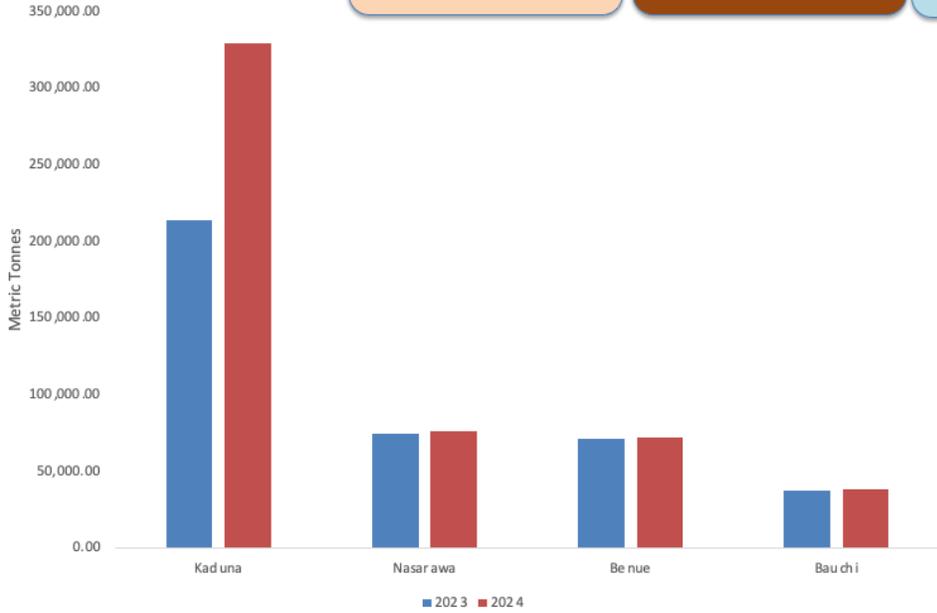
Cassava production by the 10 most producing States

Ginger

2023
395,249.53 MT

2024
514,355.91 MT

30.13% Increase 



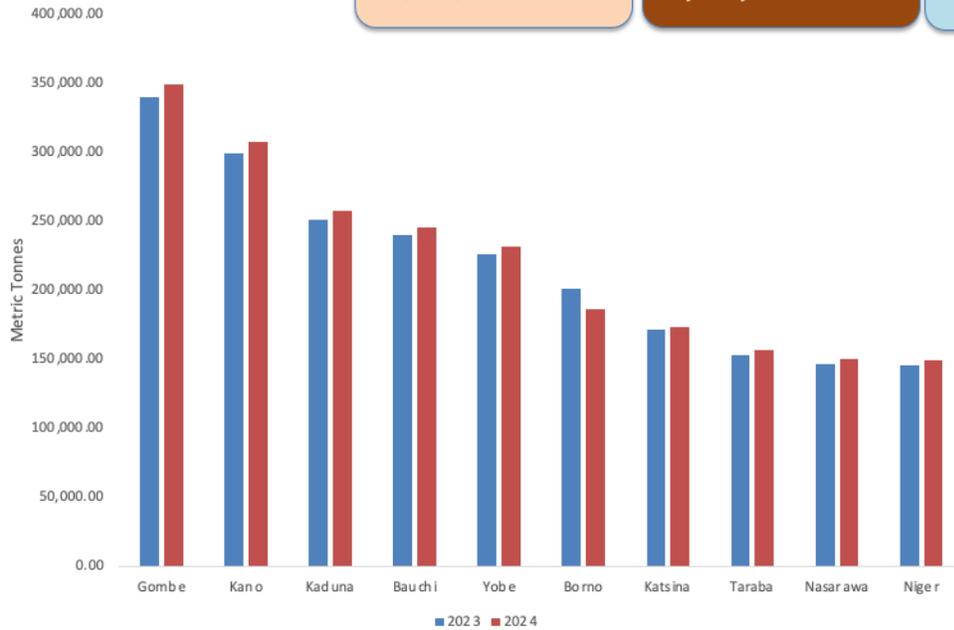
Ginger production by the four (4) producing States

Tomato

2023
3,679,109.10 MT

2024
3,738,255.65 MT

1.61% Increase 



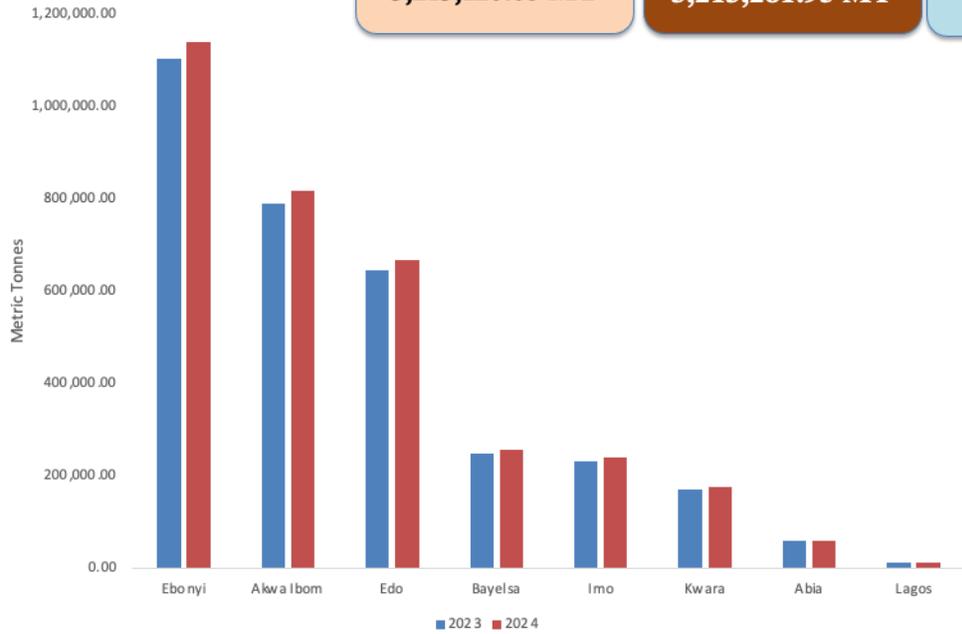
Tomato production by the 10 most producing States

Plantain/Banana

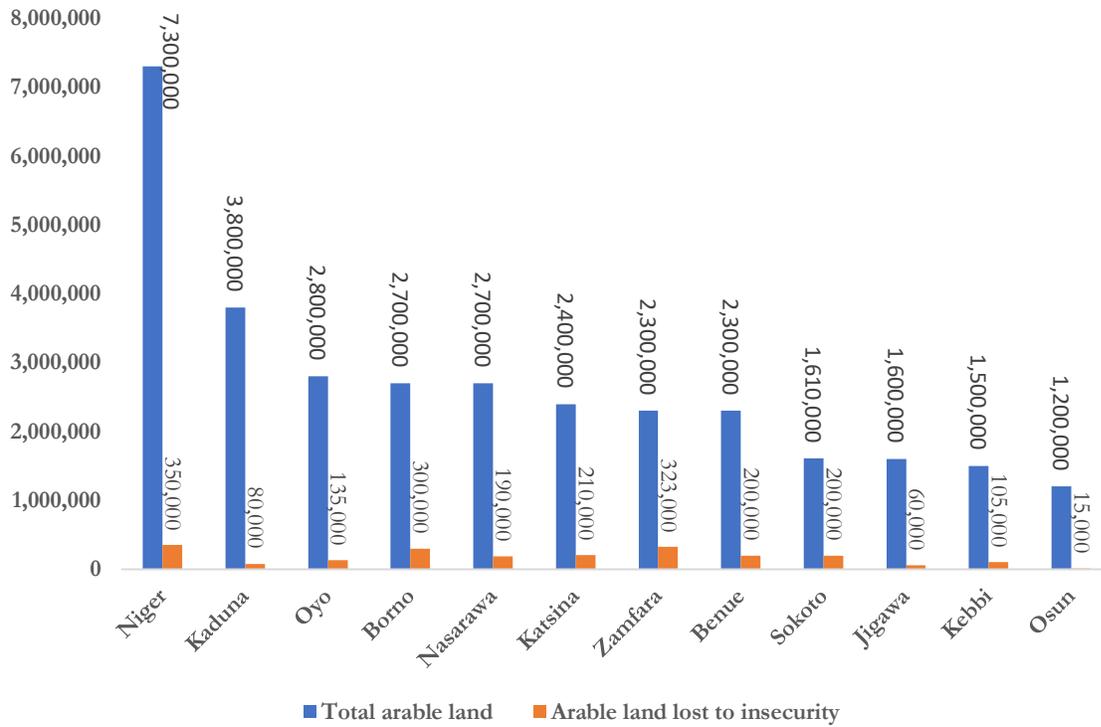
2023
3,213,120.65 MT

2024
3,213,281.95 MT

3.50% Increase 



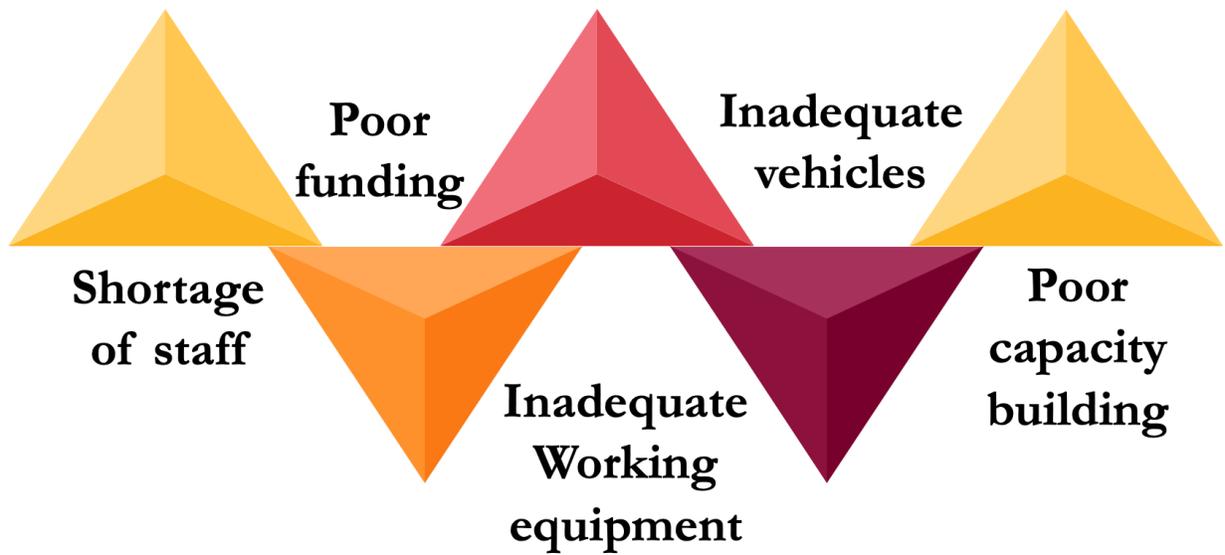
**Plantain/
Banana
production by
the 8 most
producing
States**



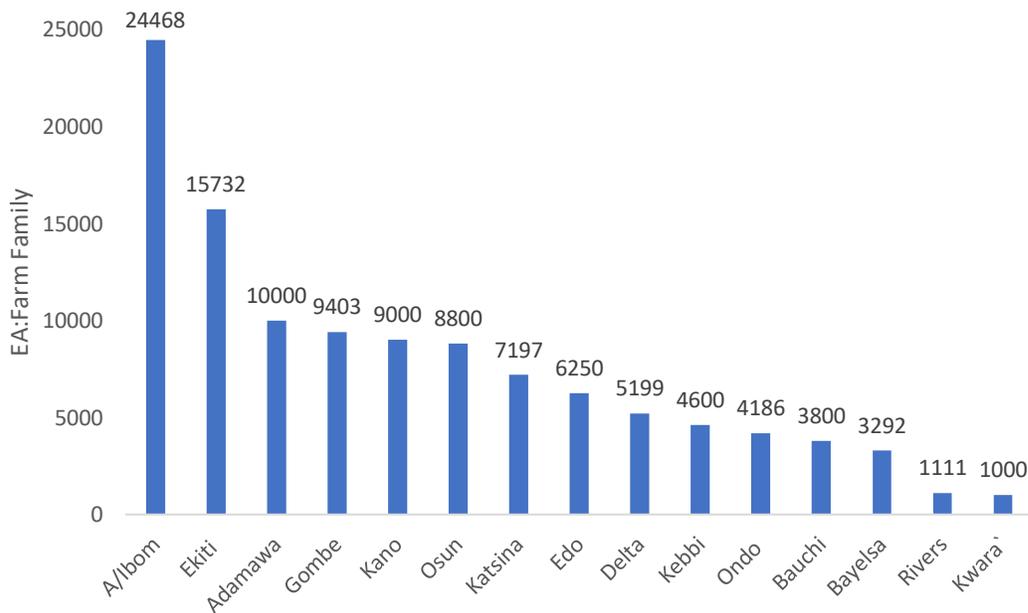
Estimated arable land lost to insecurity (hectare)

ADP EXTENSION ACTIVITIES

Major challenges faced by ADPs



Extension Agents to Farm Families Ratio



The average EA-Farm family's ratio in 2024 is 1:6,446

1.0 INTRODUCTION

This National Report is divided into seventeen (17) thematic areas which include the methodology, rainfall situation, flood occurrences, crop pests and diseases, use of improved farm inputs, agricultural mechanization, postharvest losses, grain reserves, cost of production for major crops in Nigeria, food commodity prices, production estimates for major crops, livestock production situation, fisheries production situation, agricultural development programmes, and extension activities, Special projects/programmes, general constraints in agricultural production for 2024 as well as conclusion and recommendations.

These thematic areas are elaborated with short prose and related charts. The presentation of the thematic information areas flows into one another, facilitating the formation of logical relationships that are easily discernible while reading and using the content. The interconnectedness of the content in each of the thematic areas is a testament to our systematic application of data collection, analysis, and presentation, which we have continually improved over the years. We are critical of the coherence of information among the diverse data presented in the executive summary, which is expanded upon in the full National Report. It is important to also say that the contents are fully considered in the light of the four strategic objectives of the APS, which are to:

- (i.) Assess the performance of the agricultural sector during the wet season and forecast the likely production outputs for the year;
- (ii.) Identify constraints to increased agricultural productivity; and
- (iii.) Identify conditions affecting effective technology transfer and advisory services within the season; and
- (iv.) provide feedback on field situations and farmers' problems for improved research and policy action.

The 2024 APS fieldwork was conducted from the 8th to 15th September by NAERLS in collaboration with relevant agencies, ministries, and related organizations.

2.0 METHODOLOGY

Team formation

Nineteen multidisciplinary teams of three scientists visited the 36 States of the Federation and the FCT, utilizing Participatory Rural Appraisal (PRA) techniques. Each team covered two States within six days. They visited farmers in their communities, where they conducted focus group discussions and interviewed individual farmers. They also interacted with the stakeholders at the State Ministry of Agriculture (MOA) and obtained information through questionnaires from MOA and ADPs.

Data collection

The primary data collection instruments included a structured questionnaire (copies were sent to the ADPs, Ministries, and other parastatals), checklists, field visits, focus group discussions, key informant interviews, and a review of official documents. Information was also obtained from Community-Based Associations/Organizations (COM-BAO). The questionnaire was pre-tested using farmers from one of the NAERLS-adopted villages in the Headquarters. Innovative online training was implemented to enhance the capacity of ADPs and State Ministries of Agriculture staff nationwide, enabling them to utilize survey tools and ODK to collect data for the exercise. Sampling approach: Two ADP zones per State, two LGAs per zone, one community per LGA, and eight respondents per community were selected, resulting in a total of 1,184 respondents nationwide.

Data validation

Teams conducted wrap-up sessions with agricultural stakeholders in each state, based on information obtained from ADPs and MOA.

State Groupings

Team	State combination
1.	Kebbi, Sokoto
2.	Zamfara, Katsina
3.	Ekiti, Ondo
4.	Cross River, Akwa Ibom
5.	Jigawa, Kano
6.	Niger, Kaduna
7.	Kwara, Kogi
8.	Nasarawa, Plateau
9.	Gombe, Bauchi
10.	Borno, Yobe
11.	Adamawa, Taraba
12.	Benue, Enugu
13.	Imo, Anambra
14.	Abia, Ebonyi
15.	Lagos, Ogun
16.	Edo, Delta
17.	Osun, Oyo
18.	Rivers, Bayelsa
19.	FCT

3.0 WEATHER SITUATION

3.1 Rainfall and Rainy days

Rainfall patterns varied across Nigeria in 2003-2004, with some regions experiencing increases and others declines. The North-East and North-West regions experienced increases in rainfall, while the South-East, South-South, and parts of the South-West saw declines. Notable exceptions included Nasarawa State, which saw a significant increase in rainfall, and Bayelsa, which recorded the highest rainfall in the country. Overall, the rainy season typically begins between February and May, peaks between July and September, and ends between October and November, depending on the region.

North-Central

Rainfall in the North-Central zone remained relatively stable between 2003 and 2004, with a slight decline from 1,323 mm to 1,296 mm and a reduction in rainy days from 85 to 80. Nasarawa State had a notable increase in rainfall from 1,774 mm to 2,426 mm and rainy days from 65 to 76, whereas Kwara and Niger experienced a decline from 1,483 mm to 1,174 mm with rainy days dropping from 92 to 74. (Table 3.1 and Table 3.7)

North-East

There was an increase in rainfall from 723 mm in 2003 to 993 mm in 2004 in the Northeast, with the number of rainy days rising slightly from 53 to 57 (Table 3.8). The rainy season typically starts in March, peaks in July, and ends in October. Bauchi had the highest rainfall, increasing from 815 mm to 1,502 mm, despite a drop in rainy days from 64 to 44. Borno experienced an increase in rainfall, from 796 mm to 1,023 mm, with the number of rainy days rising from 56 to 72. In contrast, Adamawa (Yola) experienced a decline in rainfall, from 908 mm to 813 mm, with minimal change in the number of rainy days. In Adamawa, the rainy season typically begins in April and ends in October (Table 3.2).

North-West

As shown in Table 3.3 and Table 3.9, an increase in rainfall was observed in the North-West, from 1,016 mm in 2003 to 1,144 mm in 2004, with rainy days rising from 56 to 63. Sokoto had the highest increase, from 911 mm to 1,634 mm, and the number of rainy days increased from 44 to 61. Kano also recorded an increase, from 697 mm to 917 mm, while Kaduna and Jigawa experienced declines, from 1,334 mm to 1,209 mm and 1,678 mm to 1,433 mm, respectively. The rainy season started in May, peaked in August, and ended in October within the year under review.

South-East

The South-East experienced a significant decline in rainfall, from 2,292 mm in 2003 to 1,766 mm in 2004, with the number of rainy days decreasing from 134 to 113 (Table 3.4 and Table 3.10). Enugu experienced the sharpest drop, from 2,429 mm to 1,507 mm, and the number of rainy days decreased from 114 to 98. Anambra and Imo also recorded decreases, with rainfall falling from 2,229 mm to 1,726 mm and 2,240 mm to 1,824 mm, respectively. The onset of the rainy season remains in February, peaking in July, and ending in November.

South-South

The rainfall volume and rain days data presented in Table 3.5 and Table 3.11 for the South-South region, which is the wettest zone, indicate that the zone experienced a decline in total rainfall, from 2,965 mm in 2003 to 2,622 mm in 2004, accompanied by a decrease in rainy days from 151 to 129. However, Bayelsa was an exception, recording the highest rainfall in the country, with an increase from 4,021 mm to 4,987 mm. In contrast, Akwa Ibom (Uyo) and Cross River experienced declines,

from 4,179 mm to 3,326 mm and 2,914 mm to 2,312 mm, respectively. The rain started in January, peaked in September, and ended in November.

South-West

The rainy season typically begins in March, peaks in July, and concludes in October. The South-West experienced a decline in total rainfall, from 1,912 mm in 2003 to 1,492 mm in 2004, with the number of rainy days decreasing from 112 to 94 (Table 3.6 and Table 3.12). Ekiti experienced the sharpest drop, from 1,727 mm to 995 mm, and the number of rainy days decreased from 125 to 98. Lagos also recorded a significant decrease, from 2,086 mm to 1,595 mm, with the number of rainy days falling from 111 to 97, alongside reductions in Ogun, Ondo, and Osun.

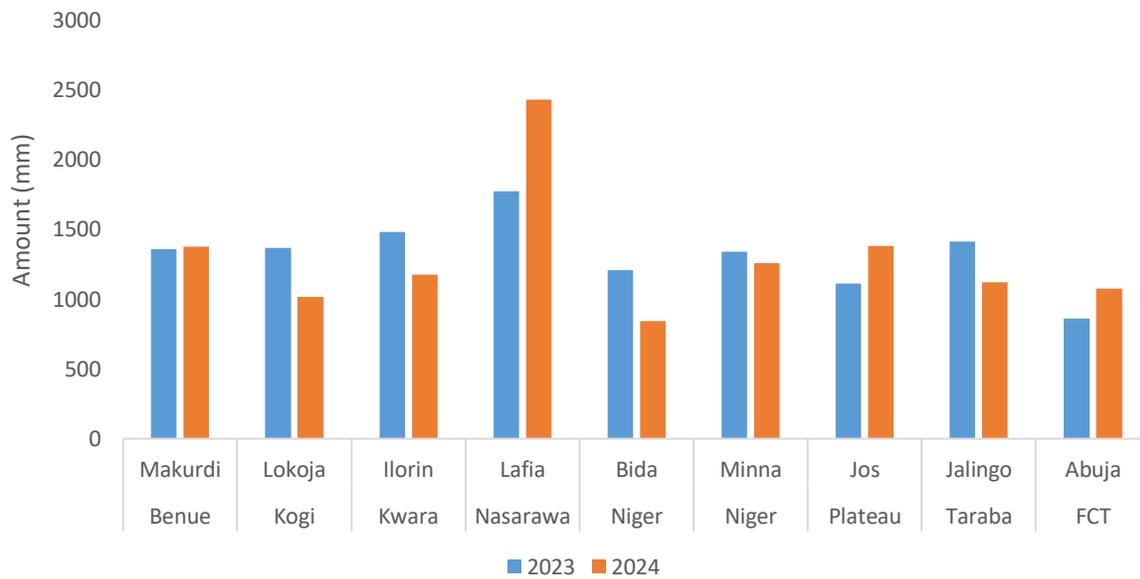


Figure 3.1: North-Central Total Rainfall (Jan-Dec)

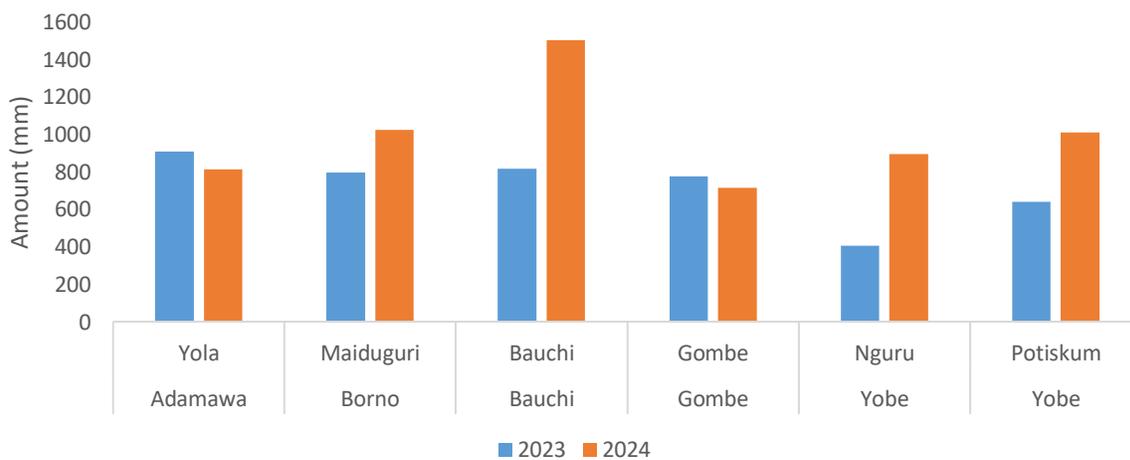


Figure 3.2: North-East Total Rainfall (Jan-Dec)

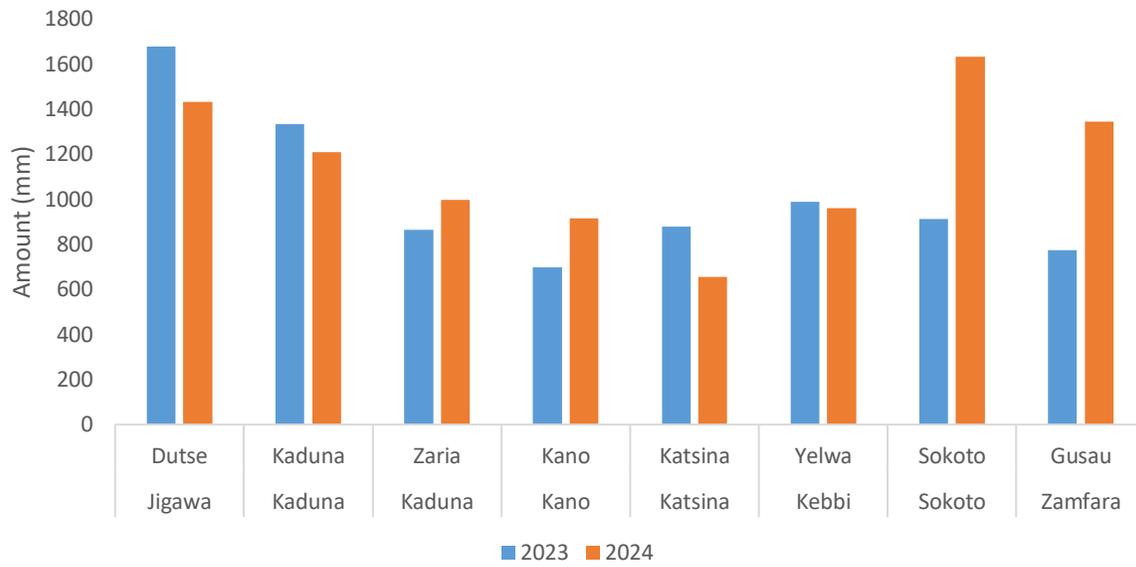


Figure 3.3: North-West Total Rainfall (Jan-Dec)

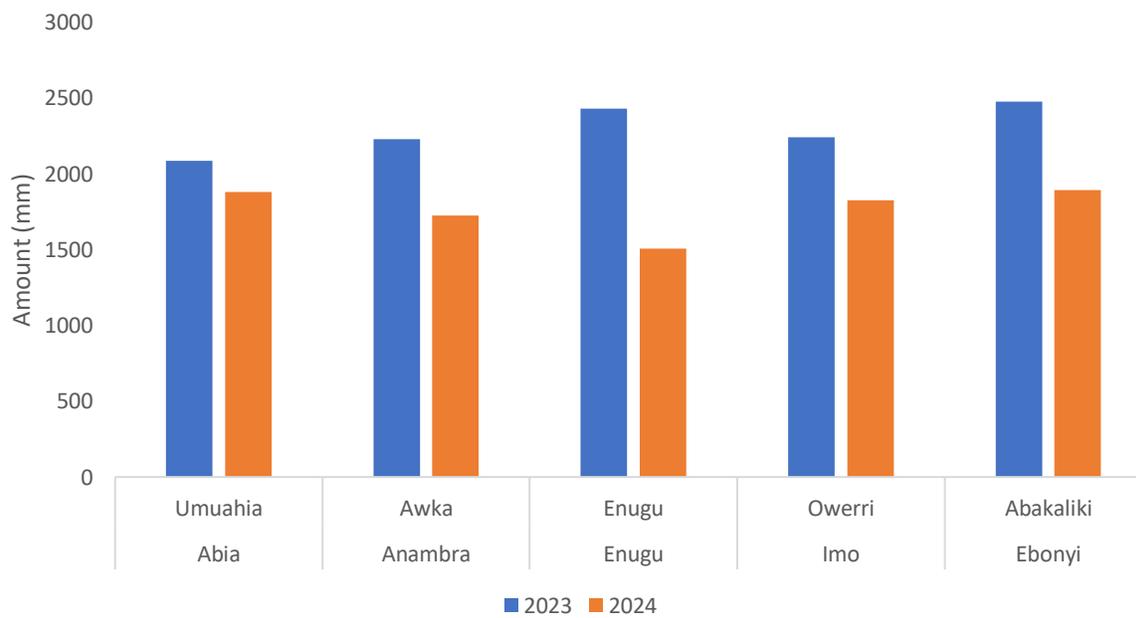


Figure 3.4: South-East Total Rainfall (Jan-Dec)

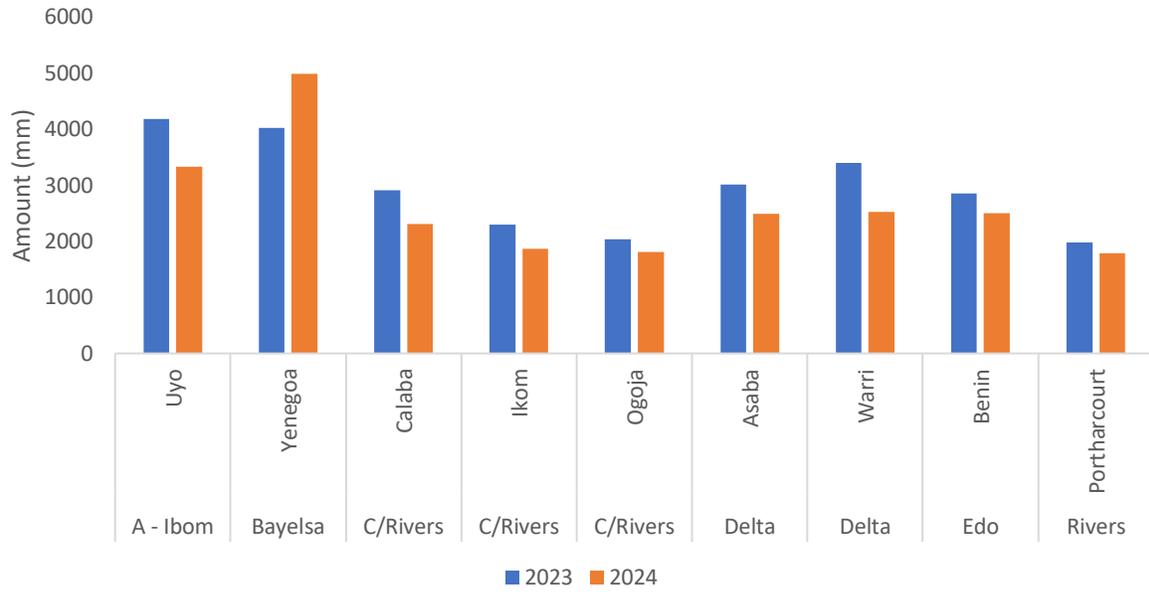


Figure 3.5: South-South Total Rainfall (Jan-Dec)

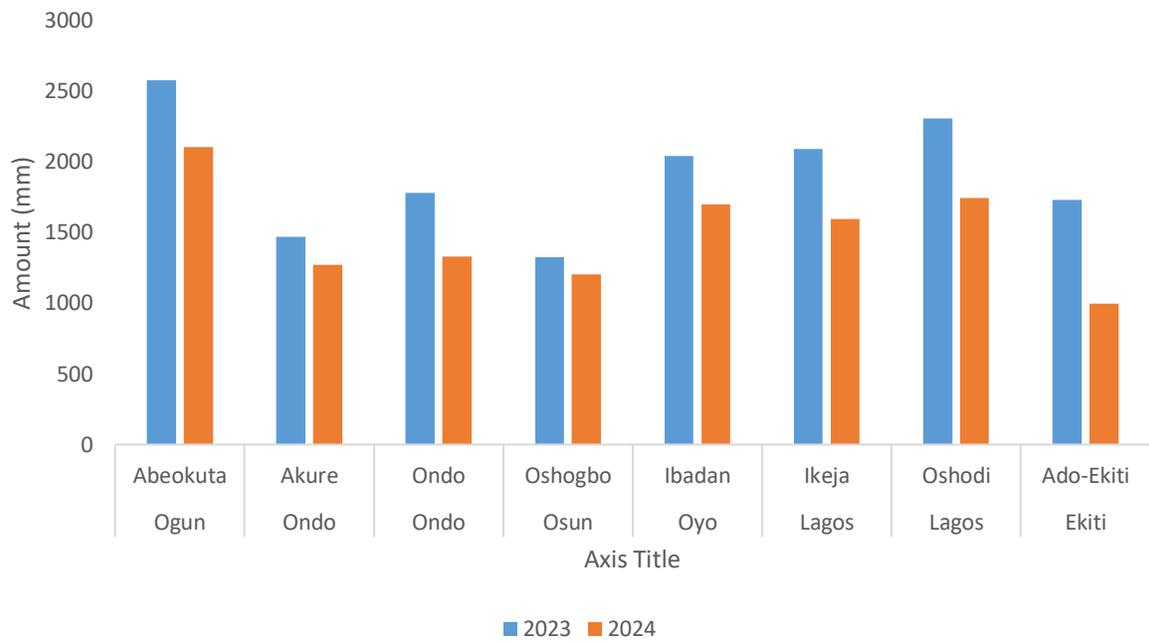


Figure 3.6: South-West Total Rainfall (Jan-Dec)

Table 3.1: North-Central Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Benue	Makurdi	0	0	0	1	1	0	101	60	217	90	144	454	107	313	143	122	469	159	131	175	44	0	0	0	1358	1374
Kogi	Lokoja	0	0	0	0	46	33	173	34	198	181	122	137	129	170	243	183	267	175	174	103	17	0	0	0	1367	1014
Kwara	Ilori	1	0	26	0	44	19	231	172	157	121	309	192	224	121	126	45	183	251	135	253	47	0	0	0	1483	1174
Nasarawa	Lafiya	0	0	0	3	26	30	130	284	177	150	369	343	199	766	339	381	403	268	130	202	2	0	0	0	1774	2426
Niger	Bida	0	0	0	0	4	5	92	48	138	117	210	60	222	170	280	161	162	164	51	119	50	0	0	0	1208	844
Niger	Mina	0	0	0	0	3	11	46	40	105	125	261	216	243	156	179	215	371	265	128	228	3	0	0	0	1337	1256
Plateau	Jos	22	0	0	0	32	0	124	92	74	254	143	216	231	266	228	228	184	264	68	61	6	0	0	0	1112	1382
Taraba	Jalingo	0	0	0	0	28	0	51	44	137	122	347	182	220	123	233	260	256	204	97	186	40	0	0	0	1410	1121
FCT	Abuja	0	0	0	1	19	29	40	50	115	103	169	149	150	178	254	259	116	175	132	131	38	0	0	0	862	1074
Average		3	0	3	1	23	14	110	91	146	140	230	217	192	251	225	206	268	214	116	162	27	0	0	0	1323	1296

Table 3.2: North-East Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		Decemer		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Adamawa	Yola	0	0	0		0	0	56	6.7	35	18	218	203	119	88	195	159	211	190	74	149	0.0	0	0.0	0	908	813
Borno	Maiduguri	0	0	0	0	0	0	7	0	18	1	228	264	104	244	208	244	230	242	18	28	0.0	0	0.0	0	796	1023
Bauchi	Bauchi	0	0	0	0	0	0	50	0	88	88	161	262	165	540	197	371	154	192	16	49	4.0	0	0.0	0	815	1502
Gombe	Gombe	0	0	0	0	0	0	27	0	122	22	171	105	158	164	153	212	146	146	104	66	5.5	0	0.0	0	776	714
Yobe	Ngu	0	0	0	0	0	0	0	0	9	0	75	34	111	277	130	425	81	139	5	16	0.0	2	0.0	0	405	894
Yobe	Potisk	0	1	0	0	0	0	0	10	48	19	199	177	134	112	138	540	121	127	0	26	0.0	0	0.0	0	641	1011
Average		0	0	0	0	0	0	23	3	53	25	175	174	132	237	170	325	157	173	36	56	2	0	0	0	723	993

Table 3.3: North-West Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Jigawa	Dutse	0	0	0	0	0	0	15	0	61	35	196	357	246	262	206	483	67	268	48	29	0	0	839	0	1678	1433
Kaduna	Kaduna	0	0	0	0	0	30	87	26	127	205	296	127	126	230	293	237	355	294	14	142	37	0	0	0	1334	1209
Kaduna	Zaria	0	0	0	0	0	1	26	18	100	153	162	161	197	163	207	169	156	326	8	27	8	0	0	0	864	999
Kano	Kano	0	0	0	0	0	0	0	0	25	26	176	151	180	202	141	299	104	239	70	24	0	0	0	0	697	917
Katsina	Katsina	0	0	0	0	0	0	1	0	17	33	287	82	327	114	147	271	97	156	1	15	0	0	0	0	878	656
Kebbi	Yel	0	0	0	0	0	0	78	37	50	121	137	168	208	226	297	188	176	182	45	118	0	0	0	0	990	962
Sokoto	Sokoto	0	0	0	0	0	0	0	64	75	91	129	183	331	373	103	575	271	412	2	52	0	0	0	0	911	1634
Zamfara	Gusau	0	0	0	0	0	0	0	0	21	143	166	170	92	191	322	502	134	338	15	194	27	0	0	0	775	1344
Average		0	0	0	0	0	4	26	18	59	101	194	175	213	220	214	340	170	277	25	75	9	0	105	0	1016	1144

Table 3.4: South-East Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Abia	Umuhia	15	0	0	24	154	111	232	96	200	211	275	272	103	408	225	149	411	324	404	269	70	16	0	0	2087	1882
Anambra	Awkaibom	10	0	0	7	154	119	113	88	424	265	254	345	192	284	286	84	424	223	215	310	159	1	0	0	2229	1726
Enugu	Enugu	0	0	0	43	80	108	43	45	265	172	424	250	315	230	166	140	398	229	327	291	312	0	99	0	2429	1507
Imo	Owri	19	0	0	25	221	49	187	103	304	254	290	249	185	386	252	183	413	338	275	237	94	0	0	0	2240	1824
Ebonyi	Abakuta	14	0	0	5	135	110	159	86	387	275	176	419	226	278	336	183	472	264	399	248	171	12	0	12	2476	1893
Average		12	0	0	21	149	99	147	84	316	235	284	307	204	317	253	148	424	276	324	271	161	6	20	2	2292	1766

Table 3.5: South-South Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
A - Ibom	Uyo	142	0	0	65	409	147	349	259	332	328	793	750	437	572	551	243	488	490	356	381	313	92	10	0	4179	3326
Bayelsa	Yenagoa	0	0	41	324	343	233	271	398	338	458	857	453	585	501	272	347	542	1017	483	1134	208	123	82	0	4021	4987
C/Rivers	Calabar	25	0	1	18	216	95	219	123	200	224	404	434	392	373	311	188	406	437	441	252	261	161	40	7	2914	2312
C/Rivers	Ikom	17	0	0	4	168	262	187	45	342	188	358	307	259	325	180	210	214	158	391	366	177	0	0	0	2292	1865
C/Rivers	Ogon	0	0	0	22	50	31	53	29	313	127	131	348	310	341	151	280	335	357	535	273	163	0	0	0	2041	1808
Delta	Asaba	1	0	0	0	132	233	23	58	452	391	471	367	468	209	451	247	545	556	340	435	125	0	0	0	3007	2496
Delta	War	174	57	49	12	168	176	216	184	359	401	671	480	407	622	404	51	508	287	307	235	117	19	15	0	3394	2522
Edo	Benin city	28	17	79	70	312	113	52	242	372	397	472	390	328	342	325	205	432	307	300	405	139	11	17	2	2854	2499
Rivers	Porter court	2	0	15	118	98	90	156	129	314	205	410	251	189	215	155	221	386	313	149	183	107	35	1	28	1982	1787
Average		43	8	21	70	211	154	169	163	336	302	507	420	375	389	311	221	428	436	367	407	179	49	18	4	2965	2622

Table 3.6: South-West Total Rainfall (mm) January – December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total	Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Ogun	Abekuta	0	76	5	114	161	151	100	186	149	306	359	441	360	52	180	131	382	125	600	516	96	1	180	0	2572	2101
Ondo	Akure	8	0	39	49	198	61	63	126	190	114	59	236	273	87	169	72	241	195	177	299	49	32	0	0	1466	1269
Ondo	Ondo	5	4	80	114	125	56	110	79	165	233	248	132	296	111	155	85	352	184	201	320	43	11	0	0	1779	1329
Osun	Onisha	1	0	55	29	75	79	123	83	102	163	135	234	159	54	93	42	133	169	334	297	111	53	0	0	1322	1202
Oyo	Ibadan	0	0	10	40	62	72	165	231	161	159	541	243	260	109	214	147	286	248	303	421	37	28	0	0	2038	1698
Lagos	Iketi	6	7	30	106	140	73	228	129	179	291	323	322	245	207	54	41	505	75	188	263	181	80	8	1	2086	1595
Lagos	Oshogbo	64	4	110	146	118	101	191	109	238	346	404	318	194	237	26	40	465	87	277	308	192	47	24	0	2302	1744
Ekiti	Ado-Ekiti	50	0	70	17	145	69	128	64	104	140	362	161	194	45	176	52	254	187	155	261	91	0	0	0	1727	995
Average		17	11	50	77	128	83	138	126	161	219	304	261	247	113	134	76	327	158	279	336	100	31	27	0	1912	1492

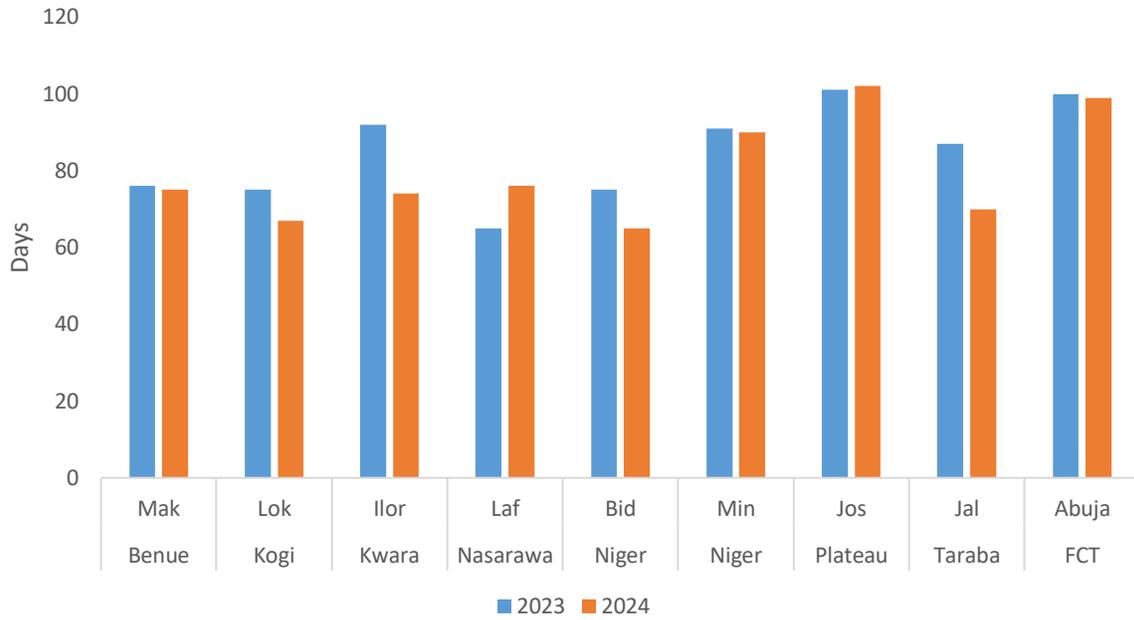


Figure 3.7: North-Central Rainy Days January- December

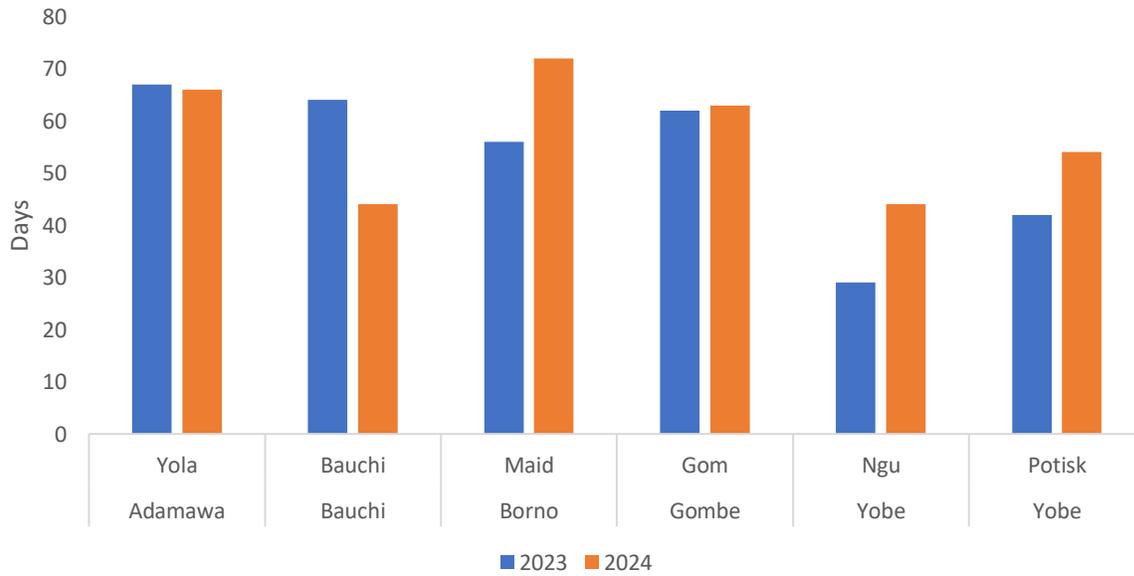


Figure 3.8: North-East Rainy Days January- December

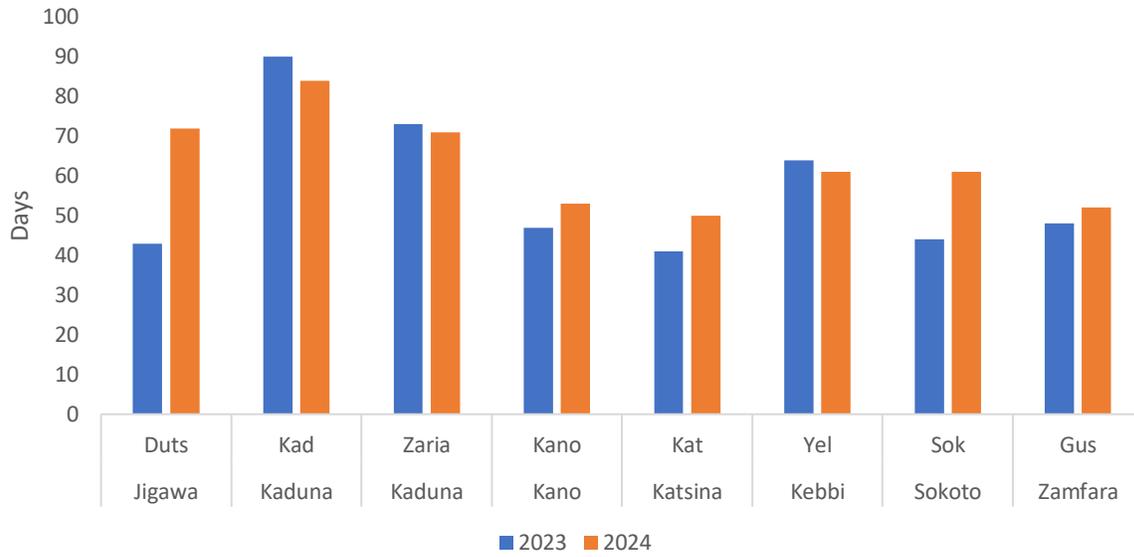


Figure 3.9: North-west Rainy Days January- December

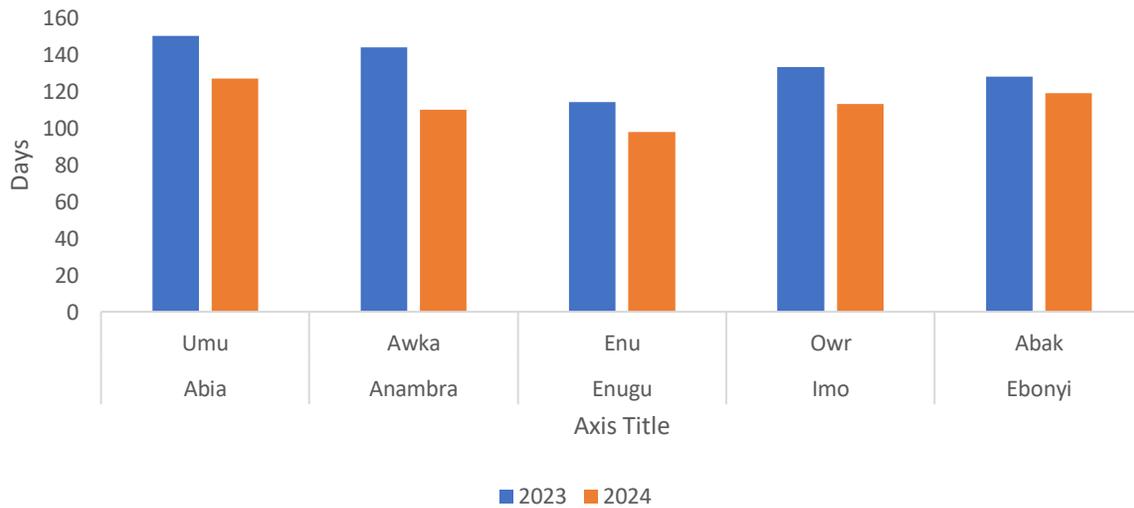


Figure 3.10: South-East Rainy Days January- December

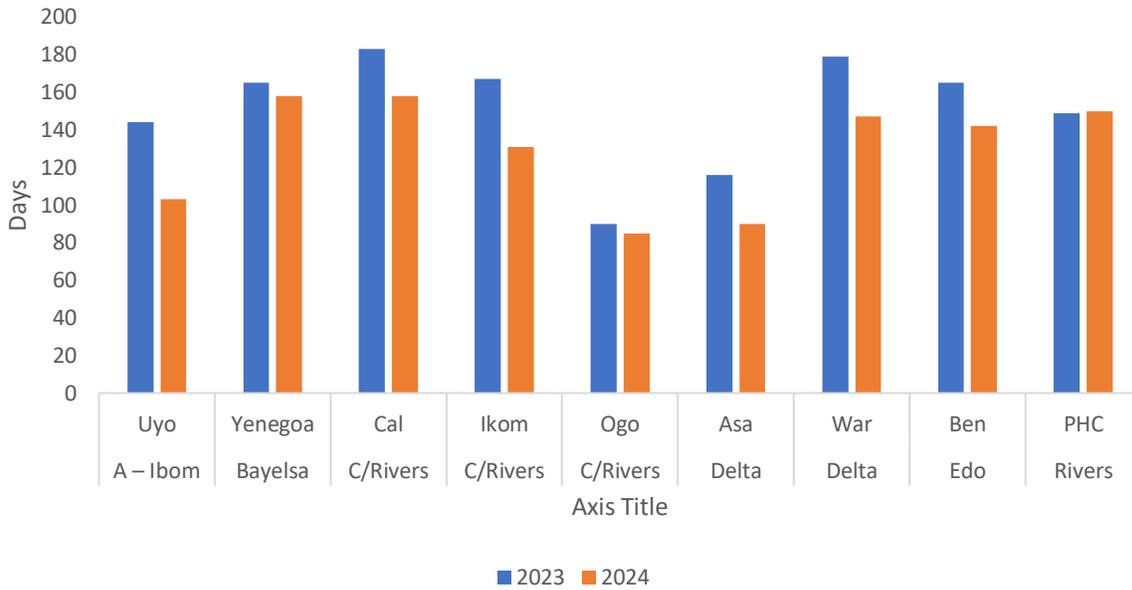


Figure 3.11: South-South Rainy Days January- December

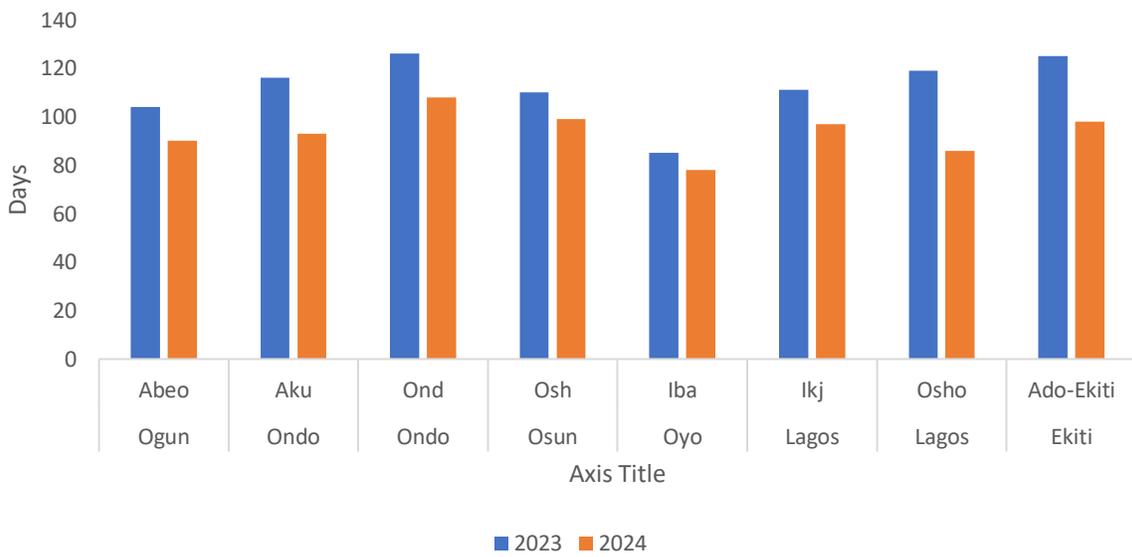


Figure 3.12: South-West Rainy Days January- December

Table 3.7: North-Central Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Total	Total
Benue	Makurdi	0	0	0	1	1	0	5	4	9	6	13	14	10	15	11	7	16	14	6	14	5	0	0	0	76	75
Kogi	Lokoja	0	0	0	0	4	2	5	4	9	9	13	8	10	13	13	8	12	11	7	12	2	0	0	0	75	67
Kwara	Ilori	1	0	1	0	5	3	6	7	14	9	14	11	13	6	12	6	9	17	15	15	1	0	1	0	92	74
Nasarawa	Lafiya	0	0	0	1	3	1	3	6	8	6	11	13	10	13	9	12	12	11	8	13	1	0	0	0	65	76
Niger	Bida	0	0	0	0	2	1	5	7	9	8	15	7	15	12	11	12	12	10	4	8	2	0	0	0	75	65
Niger	Minna	0	0	0	0	1	1	3	5	12	5	14	14	17	16	16	14	18	19	9	16	1	0	0	0	91	90
Plateau	Jos	1	0	0	0	3	0	7	7	12	16	14	12	20	21	23	17	15	18	3	11	3	0	0	0	101	102
Taraba	Jalingo	0	0	0	0	2	0	6	4	9	8	15	8	11	11	13	10	21	14	7	15	3	0	0	0	87	70
FCT	Abuja	0	0	0	1	4	2	5	8	15	10	13	12	18	17	13	17	15	17	14	15	3	0	0	0	100	99
Average		0	0	0	0	3	1	5	6	11	9	14	11	14	14	13	11	14	15	8	13	2	0	0	0	85	80

Table 3.8: North-East Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Total	Total
Adamawa	Yola	0	0	0	0	0	0	3	2	4	3	14	11	14	12	13	14	14	14	5	10	0	0	0	0	67	66
Bauchi	Bauchi	0	0	0	0	0	0	4	0	6	0	14	7	12	10	13	12	13	12	1	3	1	0	0	0	64	44
Borno	Maiduguri	0	0	0	0	0	0	5	0	9	11	13	10	10	19	11	14	5	13	3	5	0	0	0	0	56	72
Gombe	Gombe	0	0	0	0	0	2	3	0	10	3	9	9	9	13	13	17	13	10	4	9	1	0	0	0	62	63
Yobe	Enugu	0	0	0	1	0	0	0	0	1	0	6	3	5	12	11	16	5	9	1	2	0	1	0	0	29	44
Yobe	Potisk	0	0	0	0	0	0	0	1	3	3	14	10	7	11	12	17	6	9	0	3	0	0	0	0	42	54
Average		0	0	0	0	0	0	3	1	6	3	12	8	10	13	12	15	9	11	2	5	0	0	0	0	53	57

Table 3.9: North-West Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Tot al	Tot al
Jigawa	Dutse	0	0	0	0	0	0	1	0	3	8	10	9	10	17	13	18	5	15	1	5	0	0	0	0	43	72
Kaduna	Kaduna	0	0	0	0	3	0	5	5	11	9	16	14	9	14	22	12	19	20	3	10	2	0	0	0	90	84
Kaduna	Zaria	0	0	0	0	1	1	4	4	8	9	14	11	14	13	18	10	10	16	2	7	2	0	0	0	73	71
Kano	Kano	0	0	0	0	0	0	0	0	1	3	11	7	9	12	15	18	8	10	3	3	0	0	0	0	47	53
Katsina	Katsina	0	0	0	0	0	0	1	0	2	4	8	6	6	8	14	18	9	12	1	2	0	0	0	0	41	50
Kebbi	Yel	0	0	0	0	0	0	3	3	3	6	8	7	11	17	19	11	15	10	5	7	0	0	0	0	64	61
Sokoto	Sokoto	0	0	0	0	0	0	0	2	3	4	6	7	12	11	11	18	11	16	1	3	0	0	0	0	44	61
Zamfara	Gusau	0	0	0	0	0	0	0	0	0	5	9	5	10	9	14	13	12	12	1	8	2	0	0	0	48	52
Average		0	0	0	0	0	0	1	1	2	4	8	6	10	11	15	16	11	12	2		0	0	0	0	56	63

Table 3.10: South-East Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Tota l	Tota l
Abia	Umuahia	2	0	0	1	11	7	11	9	14	11	23	20	20	25	17	12	26	21	18	18	8	3	0	0	150	127
Anambra	Awka	1	0	0	1	9	3	4	9	20	13	20	17	22	22	17	15	22	12	19	17	10	1	0	0	144	110
Enugu	Enugu	0	0	0	2	10	5	8	3	12	10	16	14	13	15	13	15	20	18	13	16	6	0	3	0	114	98
Imo	Owrrre	2	0	0	2	11	4	11	9	16	13	19	18	18	21	12	18	19	15	13	13	12	0	0	0	133	113
Ebonyi	Abekuta	1	0	0	2	8	5	9	4	14	13	17	19	17	19	18	15	18	17	20	21	6	2	0	2	128	119
Average		1	0	0	2	10	5	9	7	15	12	19	18	18	20	15	15	21	17	17	17	8	1	1	0	134	113

Table 3.11: South-South Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		Total
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	
A – Ibom	Uyo	3	0	0	3	13	6	15	3	12	10	19	14	18	14	20	10	18	19	15	18	10	6	1	0	144
Bayelsa	Yenegua	0	0	1	6	19	9	16	13	14	18	22	15	23	20	13	21	21	27	18	24	14	5	4	0	165
C/Rivers	Calabar	3	0	1	2	17	9	17	12	13	19	23	23	24	22	23	20	20	21	21	18	18	9	3	3	183
C/Rivers	Ikom	1	0	0	1	15	12	14	6	19	11	24	21	18	23	22	16	21	17	22	24	11	0	0	0	167
C/Rivers	Ogo	0	0	0	1	3	2	3	1	12	7	7	16	10	16	15	16	14	14	20	12	6	0	0	0	90
Delta	Asabar	2	0	0	0	5	4	1	5	14	13	16	14	18	12	18	12	19	15	13	15	10	0	0	0	116
Delta	Warri	7	4	6	2	12	12	17	9	18	15	25	20	20	22	21	18	23	21	17	17	11	7	2	0	179
Edo	Benin city	3	3	3	4	15	8	11	15	14	11	22	20	24	19	19	14	21	20	19	24	12	3	2	1	165
Rivers	Porter court	2	0	2	6	9	7	11	8	19	16	20	22	21	21	21	20	22	20	11	17	10	7	1	6	149
Average		2	1	1	3	12	8	12	8	15	13	20	18	20	19	19	16	20	19	17	19	11	4	1	1	151

Table 3.12: South-West Rainy Days January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Total	Total
Ogun	Abeakuta	0	2	2	4	7	7	5	8	13	11	13	15	13	6	8	9	15	8	18	19	8	1	2	0	104	90
Ondo	Akure	2	0	3	5	11	4	9	6	11	9	7	12	13	12	18	10	16	17	17	16	8	2	3	0	116	93
Ondo	Ondo	1	1	4	5	10	7	8	6	8	11	20	14	18	10	16	14	17	20	14	18	7	2	4	0	126	108
Osun	Onisha	1	0	3	3	6	6	7	8	10	10	15	15	14	9	11	9	16	16	21	21	4	2	3	0	110	99
Oyo	Ibadan	0	0	1	2	4	4	6	7	5	8	15	13	12	7	7	6	15	11	14	19	5	1	1	0	85	78
Lagos	Ikeja	1	1	2	4	8	4	8	7	13	11	12	19	14	8	13	8	18	11	11	18	10	5	2	1	111	97
Lagos	Oshogbo	1	1	3	4	8	5	9	7	11	8	17	22	14	7	11	9	22	5	13	14	8	4	3	0	119	86
Ekiti	Ado-Ekiti	3	0	3	3	11	5	9	9	10	10	20	14	16	8	17	12	15	16	14	21	7	0	3	0	125	98
Average		1	1	3	4	8	5	8	7	10	10	15	16	14	8	13	10	17	13	15	18	7	2	3	0	112	94

Temperature

Temperatures in Nigeria showed varying trends across regions in 2024 compared to 2023. The North-Central, North-East, and South-South regions experienced increases in temperature, while the North-West and South-West regions saw mixed trends with some areas increasing and others decreasing. Overall, temperatures rose in many areas, with notable increases in the North-Central region, where the highest temperature increased by 2.2°C.

North-Central Zone

The mean temperature in the North-Central region increased in 2024 compared to 2023. The highest recorded temperature in 2023 was 38.1°C in Niger (March), which rose to 40.3°C in March 2024, reflecting an increase of 2.2°C. The lowest temperature in 2023 was 22.9°C in Plateau (August), while in 2024, the lowest recorded was 30.2°C in Nasarawa in August.

North-East Zone

The highest temperature in 2023 was 41.2°C in Yobe (April), while in 2024, it increased to 43.8°C in Borno (April). The lowest recorded temperature in 2023 was 29.7°C in Bauchi (August), whereas in 2024, it increased slightly to 31.1°C in Yobe (August). Adamawa experienced a surge in temperature with an average of 32.9°C and 35.7°C in 2023 and 2024, respectively, whereas Borno and Yobe experienced a decline in average temperature in 2024.

North-West Zone

A noticeable decrease in temperature was not recorded in 2024, contrary to initial observations. The highest temperature in 2023 was 40.6°C in Kano (April), which rose to 41.7°C in Sokoto (April) in 2024. The lowest temperature in 2023 was 27.3°C in Kaduna (August), while in 2024, the lowest recorded was 30.4°C in Jigawa (August), showing a significant increase. However, state-wise temperature data showed a decrease within some states compared to 2023.

South-East Zone

In the South-East, the highest temperature in 2023 was 37.8°C in Ebonyi (April), which saw a minor increase to 37.9°C in Ebonyi (April) in 2024. The lowest temperature in 2023 was 29.5°C in Imo (August), increasing to 30.2°C in Anambra (August) in 2024.

South-South Zone

Temperature variations in the South-South region also indicated an upward trend. The highest recorded temperature in 2023 was 38.2°C in Cross River (April), which increased to 38.5°C in Cross River (April) in 2024. The lowest recorded temperature in 2023 was 29.2°C in Warri, Delta (July), rising to 30.1°C in Delta (July) in 2024.

South-West Zone

A slight increase in temperature was noted in some areas of the South-West region, while others experienced a decrease. The highest recorded temperature in 2023 was 43.1°C in Ogun (March); however, in 2024, the highest recorded temperature was 37.2°C in Osun (March), indicating a decrease of 5.9°C. Ogun and Ondo experienced decreased temperatures between 2023 and 2024.

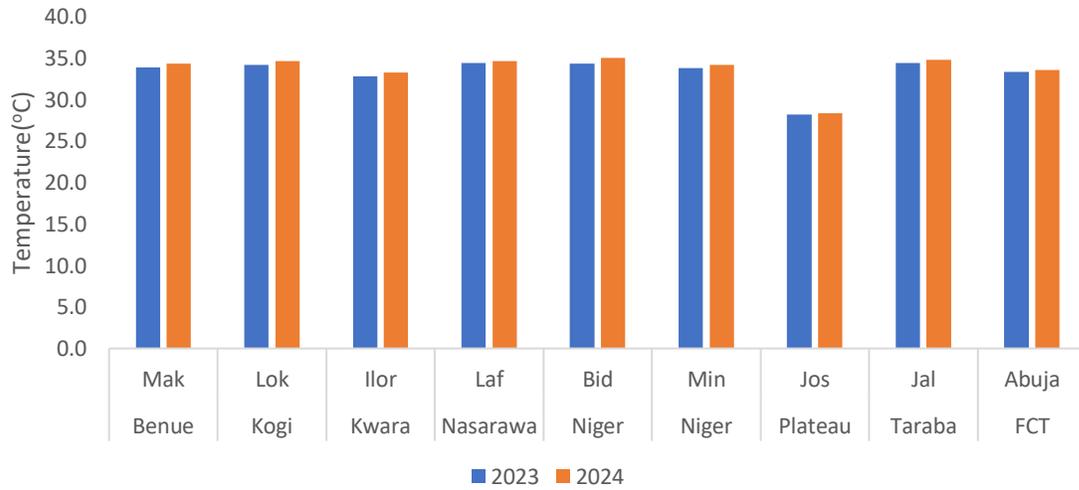


Figure 3.13: North-Central Temperature (°C) January- December

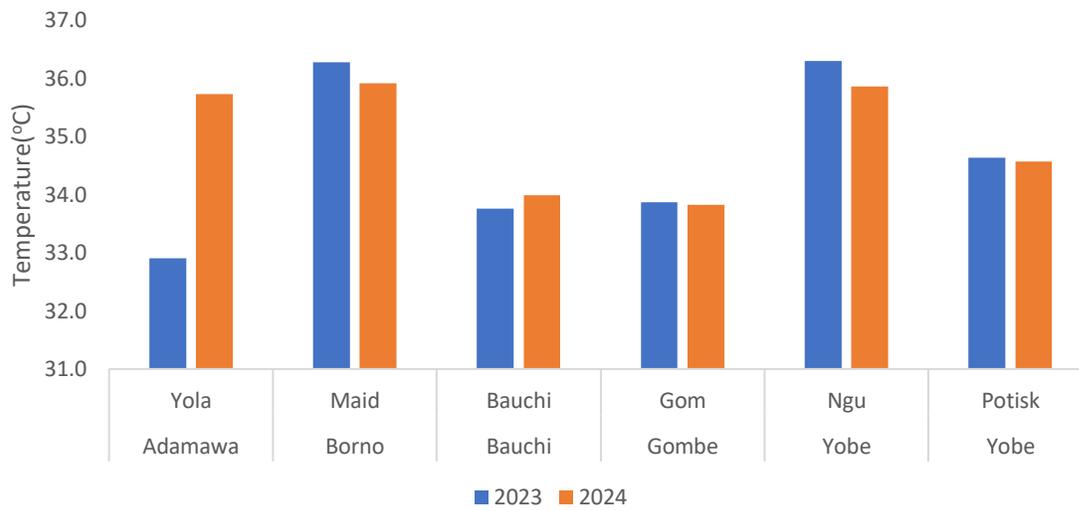


Figure 3.14: North-East Temperature (°C) January- December

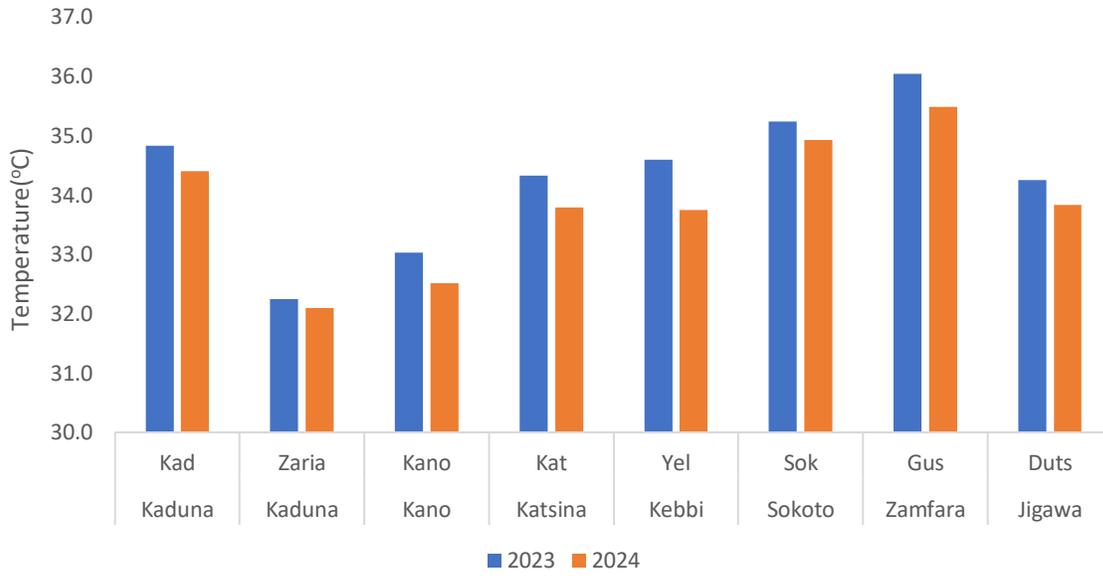


Figure 3.15: North-West Temperature (°C) January- December

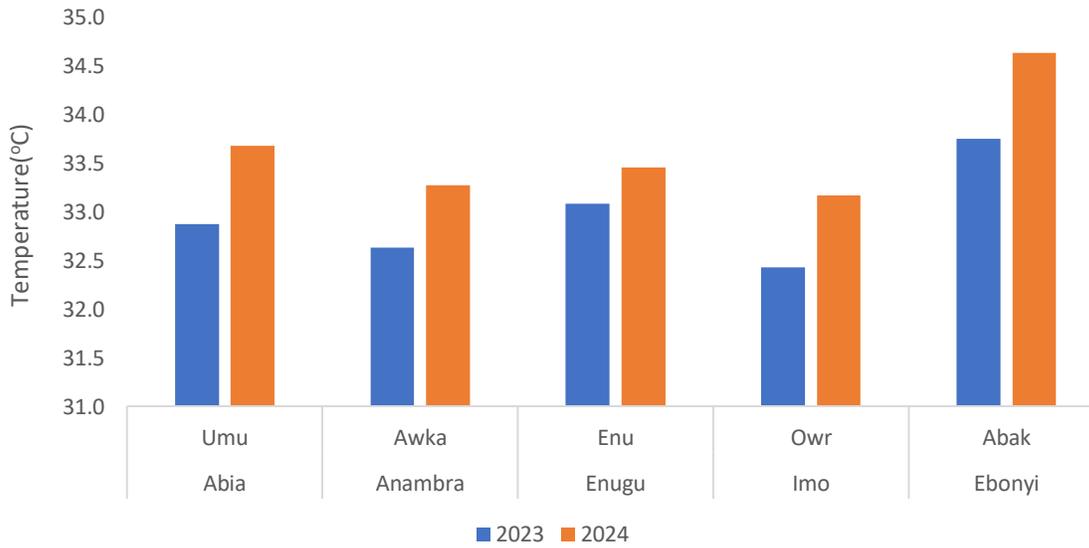


Figure 3.16: South-East Temperature (°C) January- December

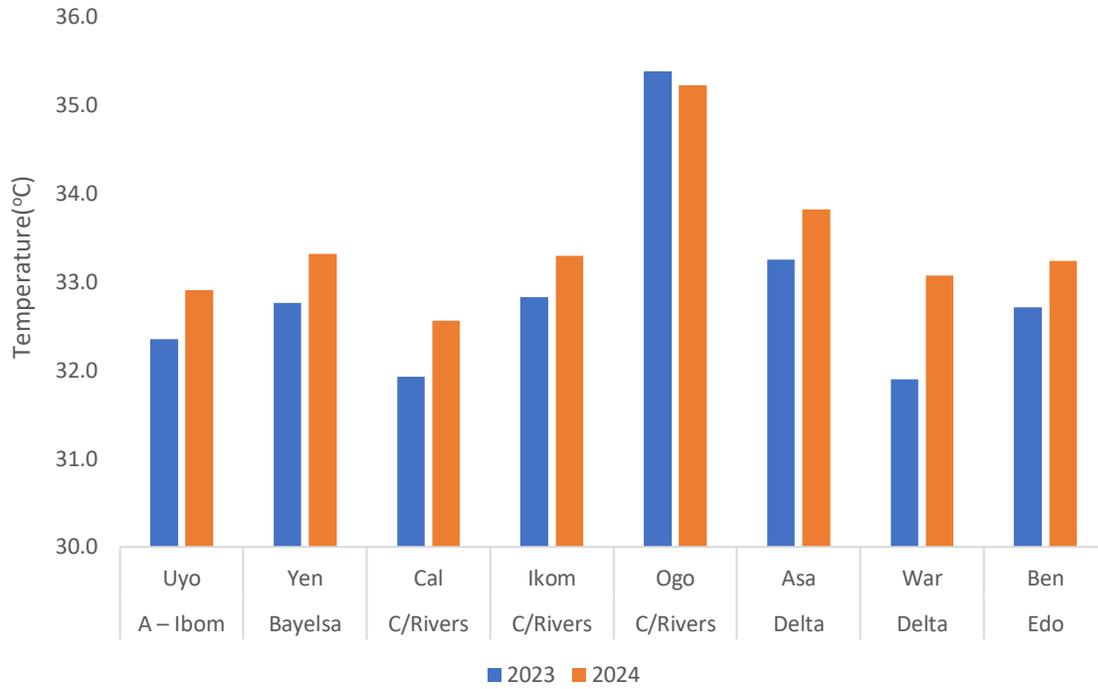


Figure 3.17: South-South Temperature (°C) January- December

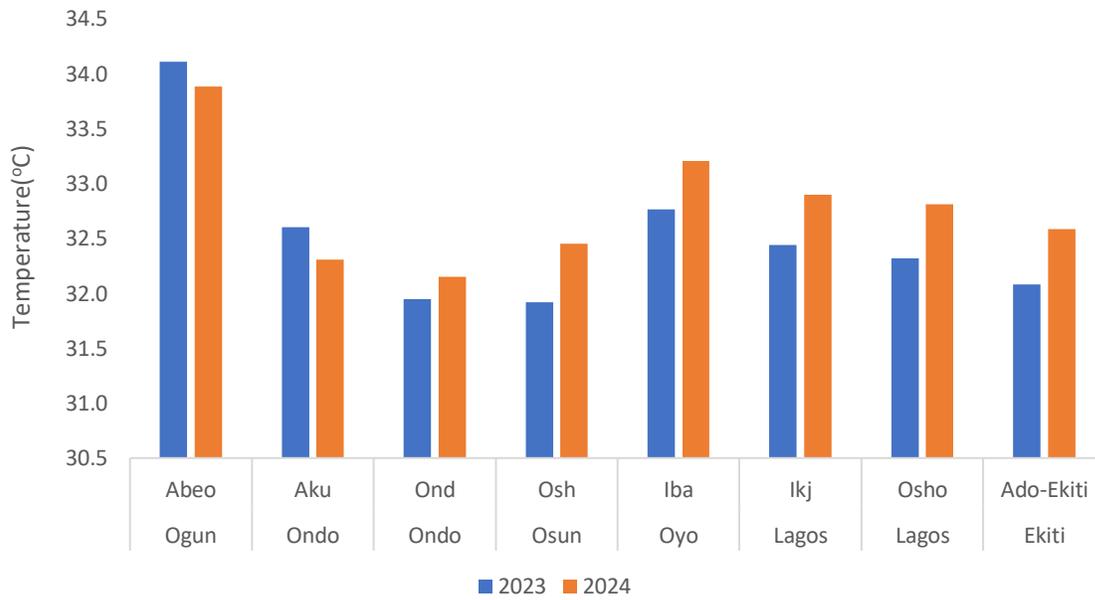


Figure 3.18: South-West Temperature (°C) January- December

Table 3.13: North-Central Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Average	Average		
Benue	Makurdi	35.8	36.6	37.8	38.0	36.8	39.0	35.5	37.1	33.6	34.4	31.3	32.0	31.7	31.1	30.8	30.6	31.1	31.5	33.2	31.9	33.9	34.8	35.4	35.3	33.9	34.4
Kogi	Lokoja	36.1	36.7	38.1	38.1	36.9	38.4	36.0	38.2	34.5	35.0	31.5	32.2	31.8	31.7	31.2	31.1	31.0	32.0	33.2	32.3	34.6	35.3	35.6	35.2	34.2	34.7
Kwara	Ilori	34.7	35.4	36.3	36.9	35.3	38.0	33.8	35.4	32.5	33.2	30.3	31.1	30.6	28.9	29.9	29.3	30.8	30.6	31.7	31.4	33.9	34.4	34.6	34.8	32.9	33.3
Nasarawa	Lafiya	36.5	37.2	37.7	38.3	37.2	39.3	36.4	37.1	34.8	34.5	31.0	31.6	31.5	30.7	31.3	30.2	31.7	31.8	33.4	32.4	35.5	36.6	36.8	36.7	34.5	34.7
Niger	Bida	35.9	34.8	38.0	38.4	38.1	40.3	36.4	39.1	34.0	35.5	31.5	32.5	32.2	31.5	31.2	31.4	31.5	32.3	33.3	32.9	35.2	36.3	35.7	36.1	34.4	35.1
Niger	Minna	35.7	36.3	37.6	37.7	37.8	39.5	36.1	38.2	33.7	35.2	30.2	31.1	30.5	29.7	30.1	29.5	31.0	30.8	32.6	32.0	34.9	35.3	36.2	35.6	33.9	34.2
Plateau	Jos	28.2	29.2	29.8	30.8	31.3	34.2	30.2	32.5	29.0	29.4	26.1	27.5	26.4	25.3	25.4	22.9	27.0	26.1	28.4	27.6	28.5	27.6	28.2	27.9	28.2	28.4
Taraba	Jalngo	36.0	36.4	38.2	38.0	38.6	40.3	37.2	38.9	35.2	35.9	30.6	32.3	31.6	31.2	30.8	30.4	31.0	31.0	33.1	32.0	35.0	36.2	36.5	35.4	34.5	34.8
FCT	Abuja	36.2	35.9	37.9	37.4	36.4	37.7	35.5	36.7	32.8	33.6	30.2	30.7	30.5	29.2	30.1	28.6	30.6	30.7	32.0	31.4	33.2	35.6	35.3	36.1	33.4	33.6
Average		35.01	35.39	36.82	37.06	36.49	38.51	35.23	37.00	33.34	34.06	30.30	31.23	30.76	29.93	30.09	29.34	30.63	30.77	32.32	31.54	33.86	34.67	34.92	34.80	33.31	33.69

Table 3.14: North-East Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023	2024
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	Average	Average		
Adamawa	Yola	35.2	35.5	37.7	36.0	40.1	41.7	39.2	40.8	37.7	39.8	32.8	34.9	32.8	32.8	32.5	32.0	32.2	32.2	34.4	33.0	36.7	35.6	3.6	34.5	32.9	35.7
Borno	Maiduguri	33.1	33.5	35.3	34.1	38.9	41.3	40.7	43.8	40.9	42.9	35.1	37.7	34.6	32.9	33.4	31.4	34.2	32.8	37.4	34.7	37.8	33.9	33.9	32.0	36.3	35.9
Bauchi	Bauchi	31.7	33.1	34.0	34.7	37.8	39.8	38.6	41.2	36.5	38.1	31.8	33.7	32.0	30.9	30.3	29.7	31.7	31.2	33.0	32.3	34.6	32.5	33.1	30.6	33.8	34.0
Gombe	Gombe	32.3	32.8	34.7	34.7	38.2	39.7	38.1	39.8	36.7	37.8	30.9	33.4	31.1	30.6	30.2	29.0	31.3	30.7	33.9	32.6	35.9	33.2	33.1	31.6	33.9	33.8
Yobe	Nuguru	31.5	31.9	34.1	33.0	38.8	41.0	41.2	42.8	41.7	43.0	36.3	37.8	36.7	33.7	33.1	31.1	35.2	34.1	37.6	36.3	36.7	34.3	32.6	31.4	36.3	35.9
Yobe	Potisk	31.3	31.8	33.6	33.2	38.1	40.1	39.9	42.3	39.0	40.8	32.7	34.9	32.8	31.9	31.1	29.9	33.2	32.1	35.5	34.6	36.1	32.9	32.3	30.5	34.6	34.6
Average		32.5	33.1	34.9	34.3	38.7	40.6	39.6	41.8	38.8	40.4	33.3	35.4	33.3	32.1	31.8	30.5	33.0	32.2	35.3	33.9	36.3	33.7	28.1	31.8	34.6	35.0

Table 3.15: North-West Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023 Average	2024 Average
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024		
Jigawa	Dutsaye	30.4	31.3	33.1	32.3	38.1	39.9	40.0	41.9	39.3	41.0	34.4	35.7	33.6	32.1	31.9	30.4	33.7	31.6	35.2	34.3	36.1	32.7	32.2	29.7	34.8	34.4
Kaduna	Kaduna	31.2	32.3	32.8	33.7	35.5	38.1	34.5	37.0	33.8	29.8	30.8	31.2	28.7	29.0	27.3	30.8	29.9	32.4	30.9	33.6	31.7	32.2	31.2	31.1	32.2	32.1
Kaduna	Zaria	30.1	31.7	33.3	33.3	36.9	39.2	37.1	39.2	35.6	34.7	31.0	31.7	30.8	29.4	30.0	27.9	32.0	30.5	33.1	31.6	34.3	31.1	32.1	29.9	33.0	32.5
Kano	Kano	30.1	30.7	33.0	32.0	38.2	39.4	39.7	41.7	39.7	40.6	34.9	34.5	32.5	30.8	30.3	29.9	32.6	31.3	33.5	33.9	34.4	31.7	32.2	29.3	34.3	33.8
Katsina	Katsina	30.1	30.4	32.6	32.1	37.2	39.2	39.4	40.9	38.9	40.0	34.4	34.7	33.3	31.7	30.9	29.3	32.8	31.9	35.7	33.9	35.2	31.7		29.2	34.6	33.7
Kebbi	Yel	35.4	36.6	38.5	38.0	38.9	41.0	38.2	40.6	35.0	37.0	33.0	32.4	32.4	31.3	31.1	31.1	32.6	31.1	34.1	32.3	36.8	33.2	36.2	34.2	35.2	34.9
Sokoto	Sokoto	33.4	34.2	36.4	36.1	39.6	41.3	40.6	41.7	39.5	40.3	35.4	36.1	33.9	31.3	31.6	30.1	33.1	32.1	37.4	35.1	38.1	34.5	34.1	32.4	36.0	35.5
Zamfara	Gusau	31.9	32.9	33.6	34.3	38.2	40.3	39.4	40.6	38.4	37.6	32.5	33.2	31.8	30.6	30.8	28.9	32.4	31.5	34.3	32.5	34.8	32.1	32.9	31.7	34.3	33.8
Average		31.7	32.7	34.3	34.22	37.8	39.8	38.4	40.2	37.4	37.7	33.0	33.4	32.2	30.6	30.6	29.1	32.4	31.2	34.4	32.5	35.3	32.3	33.3	31.1	34.3	33.8

Table 3.16: South-East Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023 Average	2024 Average
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024		
Abia	Umuhia	34.8	35.5	36.3	36.8	33.8	35.4	33.3	35.4	33.2	34.0	30.8	32.5	31.2	31.1	30.8	30.7	31.2	31.8	32.2	32.1	32.0	34.0	34.2	34.9	32.9	33.7
Anambra	Awka	35.5	35.9	36.5	36.4	33.9	35.0	33.5	34.6	32.5	33.1	30.0	31.4	30.5	30.1	30.8	29.3	30.0	31.8	31.6	32.7	34.6	34.3	35.6	32.6	33.3	
Enugu	Enugu	35.4	35.3	37.0	36.3	34.7	35.1	33.8	35.4	33.5	34.0	31.0	31.9	31.6	30.7	30.7	30.1	30.8	31.5	32.4	31.6	32.9	34.3	33.2	35.1	33.1	33.5
Imo	Owrrere	34.8	35.3	36.4	36.2	33.2	34.6	32.8	34.8	32.4	33.1	30.2	31.5	31.0	30.3	30.5	29.3	30.4	31.4	31.2	31.5	32.4	34.4	34.4	35.7	32.4	33.2
Ebonyi	Abeokuta	36.7	37.2	37.8	37.9	35.1	36.5	33.6	36.4	33.3	34.2	30.9	31.8	31.5	31.0	31.2	30.7	32.1	32.4	33.0	33.4	33.9	36.7	35.9	37.4	33.8	34.6
Average		35.4	35.8	36.8	36.7	34.1	35.3	33.4	35.3	33.0	33.3	30.6	31.8	31.6	30.6	30.6	29.9	30.9	31.6	32.1	32.0	32.9	34.8	34.4	35.8	33.0	33.6

Table 3.17: South-South Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023 Average	2024 Average
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024				
A – Ibom	Uyo	35.4	35.8	35.8	36.4	33.7	34.5	33.0	34.5	32.7	32.7	29.2	30.8	29.5	29.2	29.5	29.3	29.7	30.4	31.5	31.3	31.9	33.7	34.7	35.7	32.4	32.9
Bayelsa	Yenagoa	35.4	36.3	36.1	36.1	33.4	34.9	33.5	35.0	33.5	33.0	30.5	31.6	29.9	29.9	29.8	29.6	30.2	30.6	32.1	31.4	32.5	34.2	35.2	35.5	32.8	33.3
C/Rivers	Calabar	34.1	34.3	35.1	35.7	32.4	33.9	32.6	33.7	32.4	33.0	29.8	31.1	29.6	29.7	29.4	29.0	30.0	30.3	31.4	30.7	31.2	32.8	33.5	34.0	31.9	32.6
C/Rivers	Ikom	34.7	34.8	36.5	36.3	33.6	35.3	33.0	35.0	33.2	33.7	30.3	31.7	30.6	30.7	30.7	29.6	31.4	30.9	32.2	32.1	32.2	33.9	33.6	34.5	32.8	33.3
C/Rivers	Ogun	36.4	36.1	38.2	37.7	37.9	37.5	37.0	38.5	33.7	34.5	34.8	33.3	32.5	32.3	32.6	31.8	32.2	33.0	33.3	33.2	33.2	34.6	35.9	34.5	35.4	35.2
Delta	Asabar	36.4	35.8	36.7	36.5	33.9	35.3	34.0	35.4	33.2	33.2	30.6	32.7	30.8	30.9	30.4	30.8	30.6	31.1	32.2	31.8	32.6	34.8	34.5	35.5	33.3	33.8
Delta	Warri	33.4	34.8	34.3	35.1	33.3	34.6	32.8	34.5	32.5	33.1	29.9	31.6	29.4	30.1	29.6	30.8	30.1	30.2	31.7	31.4	32.5	33.7	34.7	35.8	31.9	33.1
Edo	Bennicity	35.4	36.0	35.9	36.1	33.5	34.9	33.2	34.8	33.7	33.2	30.4	31.7	29.8	29.6	29.8	29.5	30.1	30.1	32.6	31.0	32.9	34.1	35.1	35.7	32.7	33.2
Average		35.2	35.5	36.1	36.3	34.0	35.1	33.6	35.2	33.1	33.3	30.7	31.8	30.3	30.2	30.2	30.1	30.5	30.8	32.1	31.6	32.6	34.1	34.5	35.3	32.9	33.4

Table 3.18: South-West Temperature (°C) January- December

State	Station	January		February		March		April		May		June		July		August		September		October		November		December		2023 Average	2024 Average
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024				
Ogun	Abeokuta	36.8	36.4	37.7	37.2	35.6	36.3	43.1	35.9	33.3	33.4	31.2	32.0	30.5	29.6	30.8	29.9	30.8	31.8	32.0	31.9	33.4	35.1	34.1	37.0	34.1	33.9
Ondo	Akure	34.5	35.1	35.6	35.6	32.4	34.4	31.9	34.0	32.1	32.3	29.6	30.6	29.4	28.7	29.2	28.3	29.6	29.6	31.4	30.6	31.8	33.6	43.7	34.9	32.6	32.3
Ondo	Ondo	35.0	35.4	36.0	35.3	32.9	34.1	32.4	33.4	31.9	31.9	29.2	30.5	29.1	28.5	28.8	27.9	29.7	29.3	31.7	30.8	32.2	33.7	34.5	35.0	32.0	32.2
Osun	Onisha	35.1	35.3	36.2	36.0	33.3	35.6	32.5	33.8	32.0	32.4	29.2	30.2	29.2	28.1	28.4	28.1	29.4	29.9	30.6	30.5	32.1	33.9	35.0	35.7	31.9	32.5
Oyo	Ibadan	35.8	36.0	36.6	36.7	34.6	35.9	33.6	34.5	32.8	33.0	29.8	31.4	29.9	28.6	29.4	28.7	30.0	30.5	31.6	31.4	33.3	35.3	35.8	36.5	32.8	33.2
Lagos	Ekiti	34.8	35.5	35.6	35.4	33.8	35.0	33.4	34.6	32.6	33.1	30.4	31.1	29.5	29.0	30.1	29.9	29.9	30.8	32.0	31.3	32.6	33.8	34.6	35.3	32.4	32.9
Lagos	Oshogbo	34.2	34.6	34.6	34.4	33.5	34.7	33.2	34.6	32.6	33.6	30.9	31.3	29.8	29.5	30.2	29.8	30.0	30.9	32.0	31.4	32.6	34.1	34.2	35.0	32.3	32.8
Ekiti	Ado-Ekiti	34.7	35.0	35.5	36.2	32.9	35.2	32.5	35.2	32.0	32.5	29.5	30.9	29.1	29.2	29.3	28.6	29.7	29.8	32.1	31.6	33.0	33.3	34.7	34.5	32.1	32.6
Average		35.1	35.4	36.0	35.9	33.6	35.2	34.1	34.5	32.4	32.7	30.0	31.0	29.6	28.9	29.5	28.9	29.9	30.3	31.7	31.1	32.6	34.1	35.8	35.5	32.5	32.8

4.0 FLOOD SITUATION

The 2024 flood occurrence in Nigeria was devastating, affecting 31 out of 37 states (Figure 4.1) and 180 Local Government Areas across the federation. The North-East region was the most affected due to heavy rainfall between June and August, and the collapse/release of Alau, Kiri, and Lagdo dams between August and September. Adamawa, Borno, and Yobe states were the most affected in the North-East, while Anambra and Ebonyi in the South-East, and Bayelsa and Lagos in the South-South, were also severely affected. Other severely affected states included Bauchi, Gombe, Sokoto, Zamfara, Katsina, Kebbi, Nasarawa, Niger, Plateau, Akwa-Ibom, Edo, and Ondo, although not to the same degree as the North-East. Jigawa, Taraba, Cross-River, Rivers, and Ogun states reported mild flood damage. Fortunately, Abuja, Kwara, Kogi, Enugu, Imo, Delta, Ekiti, Osun, and Oyo states were not affected. The floods resulted in approximately 280 deaths, 2,504 injuries, 122,330 homes destroyed, 17,000 farmlands destroyed, and about 641,500 people displaced between June and September.

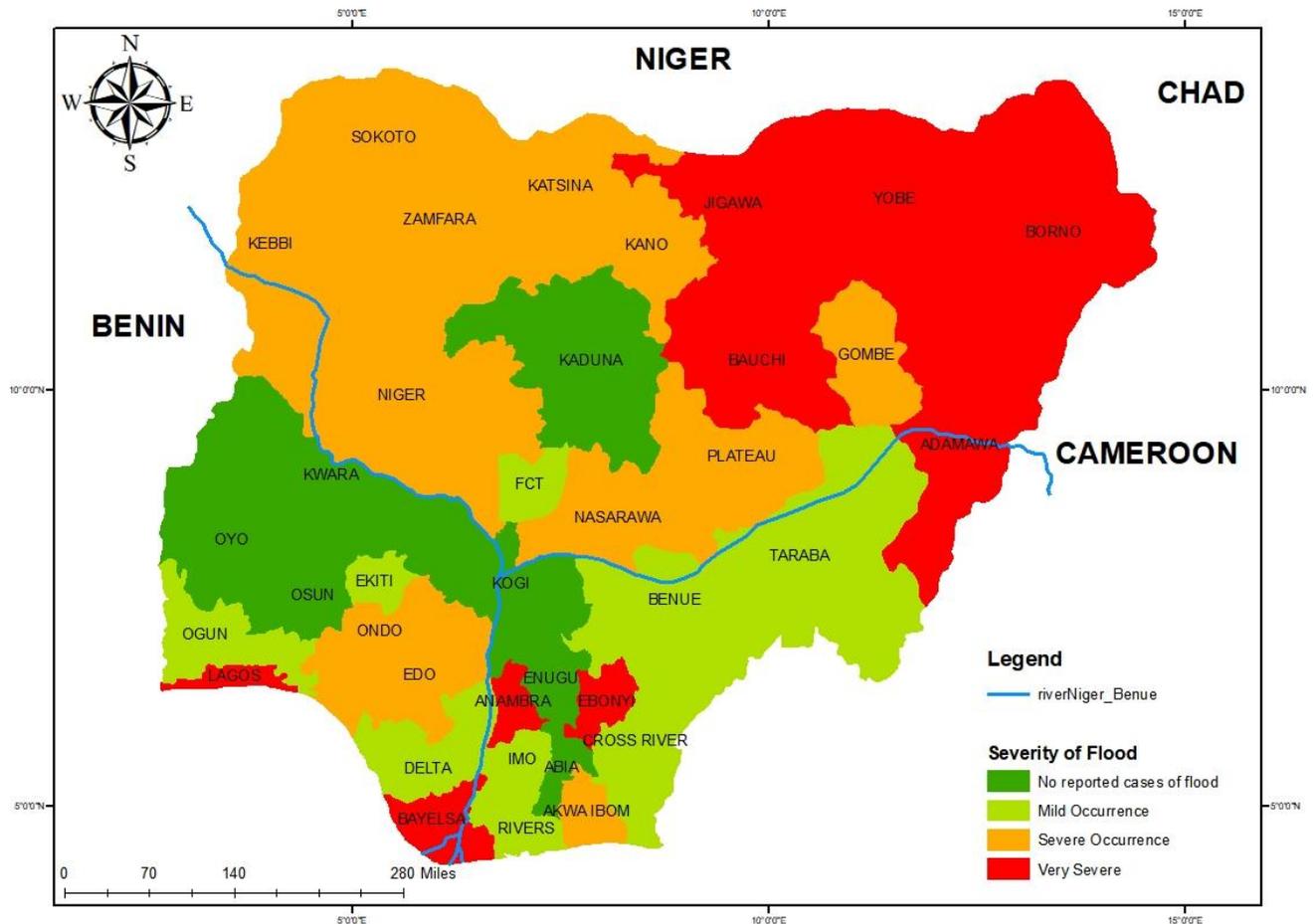


Figure 4.1: Map of Nigeria showing the affected states by flood

Table 4.1 Impact of Flood in the North-East Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Adamawa	Shelleng, Demsa, Yola South, Fofore, Mubi North, Michika, Madagali	> 25%	June-Sept	Houses (60 Households displaced), Farmland, Lives, livestock
Bauchi	Ganjuwa, Kirfi, Giade, Dambam, Misau, Gamawa, Zaki, Jama'are, Shira, Itas/Gadua Kirfi, Kaatagum	10-25%	August	Livestock and Crops (Millet, Sorghum, Rice, Cowpea, Sesame)
Borno	Mafa, MMC, Jere	> 25%	September	Crops, Livestock and Assets
Gombe	Deba, Yamaltu, Funakaye	10-25%	August	Crops (Rice and Millet) and Buildings
Yobe	Bade, Fune, Geidam, Nguru, Nangere, Bursari, Jakusko, Tarmuwa, Karasun	> 25%	August - September	Houses, Farmland, Crops

Table 4.2 Impact of Flood in the North-West Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Jigawa	Guri, Gwaram, Ringim, Hadejia, Auyo, Kafin Hausa, Birni Kugu	< 10%	August	Destroyed over 1500 houses and farmlands, lives were also lost, and bridges were as well destroyed.
Kano	Kibiya, Tiwada, Kumbotso, Gaya, Bunkure, Bebeji, Kunchi	> 25%	August	Maize, Rice, Sugar cane, Onion Soybean, Potato 50 persons sustained injuries, killed 26 people and destroyed over 1,000 houses in four Local Government Areas and Crops (Groundnut, Cowpea, Millet, Sorghum, Sesame, Sugarcane, Rice, Watermelon, Onion, Maize, Pepper, Soybeans)
Zamfara	Gusau, Gummi	10-25%	August	Crops and Houses
Katsina	Malumfashi, Sabura, Mai adua Jilbia Zango	10 -25%	July-August	Sorghum, Livestock, Farm Produce
Kebbi	Argungun, Augie, B/Kebbi, Bunza, Kalgo, Dandi, Saw	> 25%	August	Rice, Millet and Livestock
Sokoto	Kebbe, Tambuwal, Shagari, Silame, Illela, Gada, Wurno	10 -25%	August	Crops, Animals and Assets

Table 4.3 Impact of Flood in the North-Central Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Nasarawa	Awe, Keffi, Doma, Lafia	10-25%	July	Maize, Rice, Pepper, Melon
Niger	Mashegu	10-25%	August	Farmlands, Residential Houses
Plateau	Jos North, Kanam, L/North, Wase, Mikaang	10-25%	June	Building, Animals, Crops
Taraba	Lau, Kariml, Jalingo, Ardokola, Gassol, Ibi	<10%	September	Maize and Rice

Table 4.4 Impact of Flood in the South-East Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Abia	Aba North, Aba South, Arochukwu, Isialangwa south, Isialangwa North, Bende, Isiukwuato, Umuahia north, Umuahia south, Osisioma, Iwuano, Ohiafia	10-25%	August	Crops (Oil Palm, Rice, Cassava, Cocoa, Yam), Houses and Roads
Anambra	Anambra East, Anambra West, Ogbaru, Ayamelum	> 25%	April -June	Cassava, Yam, Poultry and Buildings
Ebonyi	Afikpo, Izzi, Ikwo, Ishielu, Onicha, Ohaukwa	> 25%	July - August	Crops, Access Road and Infrastructures

Table 4.5 Impact of Flood in the South-South Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Akwa Ibom	All LGA	10-25%	May-June	Cassava, Platatin, Yam, Water Yam, Fishpond, Telferia, Cocoyam, Banana, Building
Bayelsa	Ekelga, Kolga, Silga, Yelga, Ogbia	> 25%	June - September	Arable Crops, Animal, Road and Building
Delta	NA	NA	NA	NA
Edo	Etsako West, Etsako Central	10-25%	July	Rice
C/River	NA	< 10%	July – August	Buildings and Crops
Rivers	AhoadaWest, Ahoada East, Ogba/Egbema, Abua/Odual	< 10%	June	Cassava, Cocoyam, Plantain

Table 4.6 Impact of Flood in the South-West Zone

STATE	LGA	SEVERITY OF DAMAGES	MONTHS	COMMODITIES/INFRASTRUCTURES AFFECTED
Ekiti	NA	NA	NA	NA
Lagos	Ojo, Ikorodu, Epe Alimosho	>25%	June	Livestock, Maize, Cassava, Vegetable
Ogun	Yewa North	<10%	June	Farmlands and Maize
Ondo	Ilaje, Ese Odo	10-25%	July -August	Farms, Livestock and Fisheries

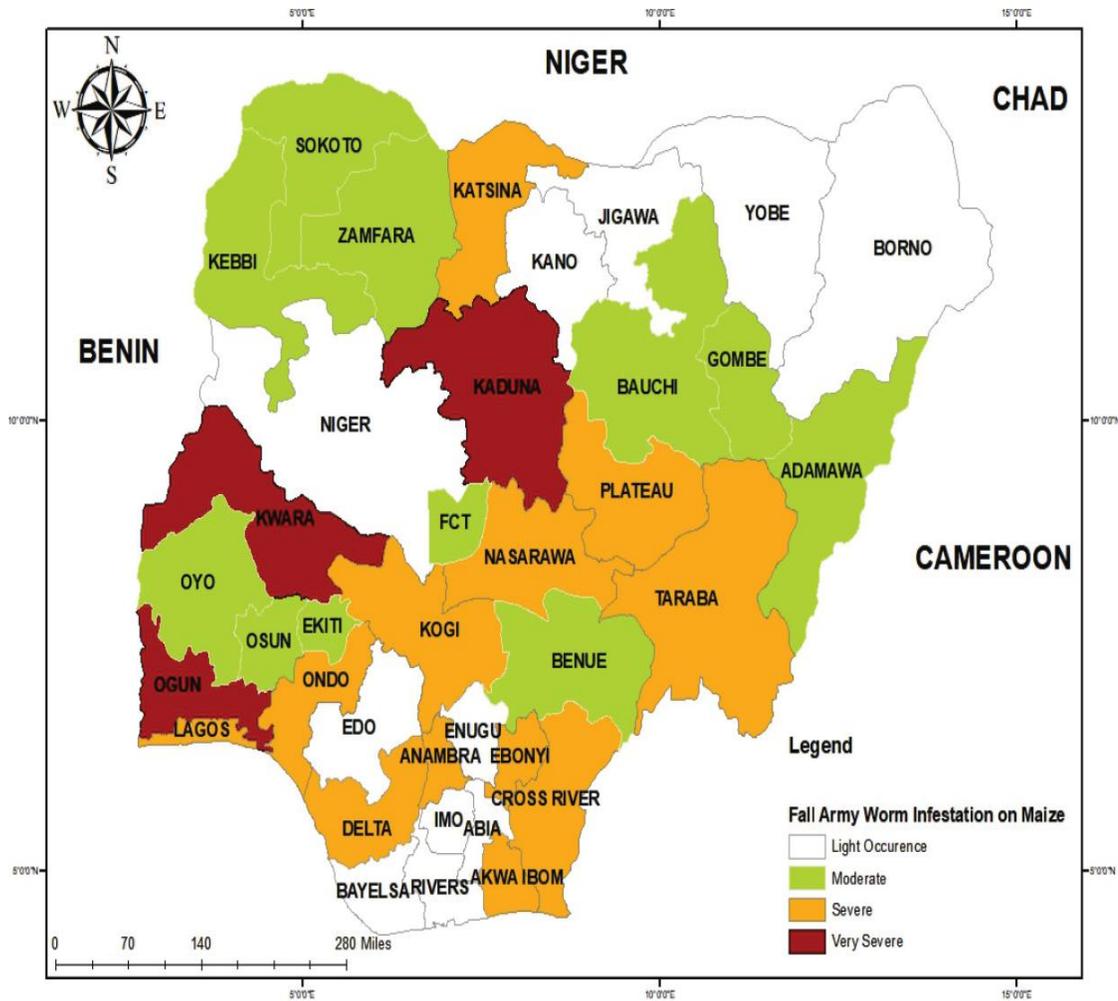
5.0 CROP PESTS AND DISEASES

Pest and diseases caused crop losses of up to an average of 35 to 45 percent in some farms in Nigeria estimated at about 54,000 hectares of land in 2024. Cereal and legumes, root and tubers, fruits, vegetable, and tree crops were affected in thirty-six (36) states and the FCT.

Cereals and Legumes

Cereals and legumes were afflicted largely by fall armyworm, stem borers, downy mildew, smut, spittle bug, bacterial blight, streak, bacterial blight, and leafy blight. The impact of fall armyworm was moderate on maize and spanning across several states, including FCT, Kogi, Plateau, Kano, Abia, Ebonyi, Enugu, Akwa Ibom, Rivers, Lagos, Ogun, and Oyo. However, Lagos, Cross rivers, Ogun and Ondo, the effect of fall armyworm on maize was heavy. The southwest region exhibited the lowest estimated yield loss, with an average value of 2.5%.

The available data on rice cultivation in seventeen (17) states of the federation showed that the pest and disease problems were within light to moderate incidences. The reported pests and disease incidences include brown spots, rice blasts, bacterial leaf blight, fall armyworm, African gall mites, stem borer, rodents, quelea birds, and smut. Millet, cowpea, groundnut, soybean cotton, sesame seed were reported with mild effects from a few states in the country.



States where Fall Armyworm Infested maize

Table 5.1a: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Maize	North-Central					
	Benue	Fall army worm	light	10		Insecticides
	Kwara	Army worms	Moderate	55	200	Use of pesticides
	Nassarawa	Fall army worms	Moderate	40		Use of resistant varieties
	Plateau	Fall army worm	Moderate	40	5000	Spray with caterpillar force
	Taraba	Army Worms	Light	60	170	Use of chemicals
	Kogi	Fall Army worm	moderate	55	500,000	Use of insecticides

Table 5.1b: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Maize	Kogi	Striga	Moderate	10	50	Use of striga tolerant varieties
		Fall army worms	Moderate	10	10	Use of insecticides
	Niger	Fall army worm	Moderate	5		Use of insecticides
	North-East					
	Bauchi	Fall army worm	Moderate	30	50	Use of insecticides
	North-West					
	Kano	Fall army worm				IPM
	Katsina	Fall army worm	Moderate	40	1000	Use of pesticides
	Kebbi	Fall army worms	Moderate	10	20000	Chemical control
	Zamfara	stemborers	Moderate	20		Use of Agrochemicals

Table 5.1c: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Maize	South-East					
	Anambra	Army worms and birds	moderate	40	1000	Pesticides
	Enugu	Fall army worm	Heavy			Spray with agrochemicals
	Ebonyi	Fall army worm	moderate	50	200	Use of pesticides
	South-South					
	Akwa Ibom	Pests: Stem borers, weevils Diseases: Maize Streak, bacterial blight	Moderate	40	420,000	Use of Ampligo 10mls per 20liters of water

Table 5.1d: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Maize	Rivers	Fall army worm	Moderate	60		Treatment of seed before planting
	Cross River	Fall army worm	Heavy	40	500	Use of Caterpillar force
	Delta	Fall army worm	moderate	40	20	Spraying with insecticides
	Edo	Fall army worms, monkey	Light	50	15	Use of fall army worms and monkey scarers
	South-West					
	Ekiti					
	Lagos	Fall army worms	Heavy	25	150	Insecticide
	Ogun	Fall army worms	Heavy	80		Spray with insecticides
	Ondo	Fall army worm	Heavy	60	20	Seed dressing
		Birds and rodents		30	5	Seed dressing
	Oyo	Fall army worms	Moderate	40	40	Spray with insecticides

Table 5.1e: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Millet	North-East					
	Bauchi	smut	Light	20	250	Use of fungicides
	Gombe	Quelea Birds	Moderate	10		
		Millet head miner	light	5		Use of chemicals
	Yobe	Stem borers	moderate	16	23	Chemical control
	North-West					
	Jigawa	Fall army worm	moderate	20	2	Spraying
	Katsina	Fall army worm	Moderate	40	1,200	Use of pesticides
	Kebbi	Quiller birds	moderate	20	55	Bird scaring
	Sokoto	Aphids	moderate	56	88	Spray with insecticides

Table 5.1f: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cotton	North-East					
	Bauchi					
	Gombe	Cotton ball worm	moderate	15		Use of insecticides
	South-East					
	Enugu	Cotton boll worm	heavy			Use of resistant varieties

Table 5.1g: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Sesame	North-East					
	Bauchi	White flies	light	7	150	use of insecticides

Table 5.1h: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Groundnut	North-Central					
	Niger	Aphids	Moderate	10		Use of insecticides
	North-East					
	Bauchi	Rosset	light	5	100	Use of fungicides
	North-West					
	Zamfara	Aphids	Moderate	20		Use of Agrochemicals
	South-East					
	Ebonyi	Rosette disease	light	10	10	Use of chemical

Table 5.1i: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cowpea	North-Central					
	Benue	Pod borers	heavy	70		Pesticide application
	Nassarawa	Pod borer	heavy	60		Resistant varieties
	Kogi	Pod borers	moderate	35	100	Spraying with chemical
	North-East					
	Bauchi	Pod borer	light	10	12	use of insecticides
	Yobe	Aphids	moderate			Use of insecticides
	South-West					
	Oyo	Aphids and pod borers	moderate	20	12	Spraying with insect

Table 5.1h: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Soybeans	South-East					
	Enugu	Aphis and pod borers				Spray with insecticides

Table 5.1j: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Rice	North-Central					
	Benue	Brown spot	moderate	20		Pesticides
	Nassarawa	Fall army worm		40		Use of resistant varieties
	Plateau	Rice blast	Moderate	40	7000	Spray with fungicide
	Kogi	Brown leaf spot	moderate	30	200,000	Spray with chemicals
	Niger	Stem borers	moderate	5		Use of insecticides
	North-East					
	Bauchi	Rice blast	moderate	40	1800	Use of fungicides
	Gombe	Rice blast	moderate	12		Use of chemicals
	Yobe	Rice blast	moderate			Use of chemicals
	North-West					
	Kano	Gall midge	light			Use of insecticides Rocket
	Kebbi	Stem borers	moderate	20		50
	Sokoto	Rice blast	moderate	40	15	Spray with insecticides
	Zamfara	Rice blast	moderate	20		Use of agrochemicals

Table 5.1k: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Rice	South-East					
	Anambra	Birds	moderate	35	1000	Bird scaring
	Enugu	Fall army worm	heavy			Spray with insecticides
	Ebonyi	Stem borers	moderate	50	100	Use of chemicals
	South-West					
	Oyo	Quelled Birds	moderate	30	30	Bird scaring

Table 5.1l: Pest and Disease Infestation on Cereals and Legumes

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Sorghum	North-Central					
	Nassarawa	Fall army worm	moderate	5		Use of insecticides
	Niger	Fall army worm	heavy	10		Use of insecticides
	North-East					
	Bauchi	Sorghum midge	light	15	15	Use of fungicides
	North-West					
	Jigawa	Fall army worms	light	10		Spraying with chemicals
	Katsina	Fall army worms	moderate	40	1000	Use of pesticides
	South-East					
		Enugu	Leaf blight			

ROOT AND TUBERS

Incidences of disease and pest infestations on roots and tubers (cassava, yam, cocoyam, potato) were reported in fifteen (15) states in 2024. Cassava mosaic virus, green spider mites, root rot, while flies, brown leafy spots, leaf blight, rodents, monkeys and molt all impacted cassava production at light to moderate status. However, cassava mosaic infestation was predominant in four (4) out of fifteen (15) where cassava disease infestation was reported. Yam mosaic, viral disease, rodents, nematode, insect, yam beetle, and yam beetle affected yam farm in 2024 in (6) states (Benue, Nasarawa, Niger, and Oyo).

Table 5.2a: Pest and Disease Infestation on Roots and Tubers

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cassava	North-Central					
	Nasarawa	Mosaic	light	5		Use of resistant varieties
	Kogi	Cassava mosaic	noderate	20	200,000	Use of insecticides
	South-East					
	Enugu	Brown streak	moderate			Use of resistant varieties
	Ebonyi	Mealy bug	heavy	60	70	Use of chemicals
	South-South					
	Akwa Ibom	Pests: Stray goats, rodents Diseases: White flies, root rot	moderate	20	54,000	Use of resistant varieties, roughing
	Edo	Rodents and monkeys	heavy	50	15	Traps and animal scarers
	South-West					
	Ogun	Cassava blight, mosaic virus	heavy	40		Physical control measure.
	Oyo	Cassava blight, mosaic virus	moderate	10	5	Use of tolerant varieties and crop rotation
	Ondo	Mosaic virus	moderate	20	3	Resistant varieties

Table 5.2b: Pest and Disease Infestation on Roots and Tubers

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Yam	North-Central					
	Benue	Yam mosaic	light	5	0.5	Use of agrochemicals
	Nassarawa	Virus	light	5		Use of insecticides
	Niger	Yam bittle	moderate	5		Seed dressing
	North-East					
	South-East					
	Anambra	Yam beetle	light	25	2000	Use of improved varieties
	Ebonyi	Dry rot	moderate	50	10	Use of chemicals
	South-West					
	Oyo	Beetle infestation	light	10	5	Crop rotation

Table 5.2c: Pest and Disease Infestation on Roots and Tubers

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Potato	North-Central					
	Plateau	Blight bacteria	moderate	60	400	Spray with fungicides/wood as
	South-East					
	Anambra	Borers	moderate	20	2000	Pesticides
	Enugu	Dry rot				Spray with fungicides

FRUITS AND VEGETABLES

Incidents of pests and diseases were reported on tomatoes across nine (9) states. They involve Tuta absoluta, leaf miners, fruit rot, mosaic, and blossom end rot. Whoever the reports presented light to moderate conditions, except for Enugu, Ogun, and Kano, whose cases were heavy.

Light Incidence of nematodes and moderate infestation of aphids was reported on bananas in in Enugu state. Okra, cucumber, watermelon, telferia, pumpkin, and cocoyam were mildly attacked by both fungal and viral diseases across a few states in the country. The combined effect of these attacks could result in yield losses exceeding 25%.

Table 5.3a: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Tomato	North-Central					
	Plateau	Blight, Tuta Absoluta	moderate	50	400	Spray with fungicides
	North-East					
	Kano	Leaf miner	heavy	25	25	Spraying with agrochemical
	South-East					
	Anambra	Fruit rot	moderate	30	5000	Pesticides
	Enugu	Tomato mosaic	heavy			Use of fungicides
	South-South					
	Akwa Ibom	Pest: Nematodes, bugs Diseases: Blossom end rot	light	15	12,000	Spray with mancozeb, fungicide, use of resistant varieties
	Delta	Nematodes and root rot	light	5	1	Crop rotation
	South-West					
	Lagos	Bacterial blight	moderate	34	28	Resistant varieties
	Ogun	Bacterial wilt	Heavy	80		Use improved seeds that are tolerant. Treat soil before planting
	Oyo	Leaf curling	moderate	50	10	Farm sanitation and crop rotation

Table 5.3b: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Okra	North-Central					
	Niger	Okra leaf curl	Moderate	10		Spray against vectors
		Aphids	Moderate	10		Use of insecticides
	North-West					
	Kano	Leaf hopper	moderate			Spraying
	South-South					
	Edo	Leaf curl	heavy	65	2	Insecticides
	South-West					
	Ogun	Leaf hopper	heavy	90		Fungicides and insecticides
	Osun	Leaf folding	heavy	85	200	Spraying with chemicals

Table 5.3c: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Telferia	North-Central					
	Kano	Leaf hopper	moderate			Spraying
	South-South					
	Akwa Ibom	Pest: Caterpillars, ladybird beetle	light	40	420,000	Spray with attack at two mls/per liter of water

Table 5.3d: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cucumber	Edo	Fungal disease	heavy	65	1	Use of Fungicides

Table 5.3e: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Watermelon	South-South					
	Edo	Fungal disease	heavy	60	1	Use of Fungicides

Table 5.3f: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Pumpkin	South-East					
	Anambra	Lady birds	moderate	25	1500	Pesticides
	South-South					
	Edo	Fungal disease	light	50	1	Use of insecticides

Table 5.3g: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cocoyam	South-East					
	Anambra	Fruit rot	moderate	20	3000	Pesticides
	South-South					
	Edo	Fungal disease	heavy	60	1	Use of Fungicides

Table 5.2f: Pest and Disease Infestation on Fruits and Vegetables

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Banana	South-East					
	Enugu	Aphids				Spray

TREE CROPS

Reports of pest and disease infestations on cocoa were found in Edo, Ondo, and Osun states. Infestations of cocoa by mealybugs, capsid bugs, black pods, cocoa swelling virus, and pod borer were reported. The incidence of pod borer disease was severe. The effect of all the attacks could lead to a yield loss that could be more than 35%.

Table 5.2a: Pest and Disease Infestation on Tree Crops

Crops	State	Pests/Disease	Severity	Estimated Yield Loss (%)	Estimated Hectares Affected	Management
Cocoa	South-South					
	Edo	Black pod disease	Heavy	50	5	Resistant varieties
	South-West					
	Ondo	Black pod	Moderate	25	4	Pest control and pruning
	Osun	Back pod	moderate	20	100,000	Use of fungicides

6.0 USE OF IMPROVED FARM INPUTS

Farm inputs are essential for farm production. Agricultural inputs often include improved seeds, seedlings, cuttings, agrochemicals, fertilizer and farm implements. These inputs are critical to the success of crop production and inevitably, farm production and productivity.

Seeds and Seedlings Procured and Distributed - States and Zones

Table 6.1 shows the seeds, cuttings and seedlings procured and distributed by states in all the zones. Some States in the North-Central zone (FCT, Kogi, Kwara, Nasarawa, Niger, Plateau) procured and distributed seeds and seedlings in 2024. Seeds distributed included rice, cowpea and maize; the seedlings distributed were citrus, mango, palm seedlings, cashew and vegetables while the cuttings distributed was cassava. The result also showed that most of the seeds and seedlings were accessible and affordable. In FCT, Kwara, Nasarawa, Niger, Plateau States, the major source of seeds was from the State Government. However, in Kogi State, certified seeds were sourced from other sources.

In the North-East zone, certified seeds were also procured and distributed. There was procurement and distribution of certified seeds in Gombe State. In the State, NG-cares were the sources of the inputs. The seeds distributed were Maize and Rice seeds. The seeds provided were accessible and affordable.

Certified seeds were mainly procured and distributed in the North-West (Jigawa, Kano, Katsina, Sokoto and Zamfara states). There was also procurement of cuttings in Sokoto State. Katsina State distributed maize seeds while Zamfara State distributed rice and sorghum seeds. The seeds procured and distributed were accessible and affordable. The Federal Government, State governments and other non-governmental organizations were the main sources of seeds procured and distributed.

Table 6.1 also shows the certified seeds, cuttings and seedlings procured and distributed in the South-East zone. Abia State distributed some rice certified seeds and cassava cuttings. Also, Anambra State procured and distributed maize seeds, cassava cuttings, coconut and oil palm seedlings. From the table, the inputs procured in the South-East zone were provided by the federal government, state governments and other non-governmental organizations. Some of the inputs were accessible and the prices were affordable in some of the states.

In the South-South zone, six (6) States (Akwa Ibom, Bayelsa, Cross River, Edo, Delta and Rivers) procured and distributed certified seeds, seedlings and cuttings. The seeds procured and distributed include maize, rice and cowpea seeds while cassava cuttings were distributed. Also, coconut, pepper, oil palm, cocoa, cucumber, Amaranthus, okra, tomatoes, budded sweet orange, budded sweet grape, lemon, guava, shaddock, tangelo, plantain/banana and avocado seedlings were procured and distributed. Most of the seeds, seedlings and cuttings were sourced from the federal government, state government and other non-governmental organization and were accessible and affordable in most cases except in Akwa- Ibom and Delta where the seeds, cuttings and seedlings were expensive and not affordable and, in some cases, not accessible.

In the South West zone, Ekiti, Lagos, Ogun and Oyo States procured and distributed certified seeds, cuttings and seedlings. The seeds, seedlings and cuttings procured and distributed in the South-West zone included maize, rice, soybean, tomato, pepper, okra cassava, and potatoes. Most of these inputs were provided by the State Government, Federal government and non-governmental organizations. The inputs were accessible and affordable in most of the states in the zone.

Table 6.1a: Seeds and Seedlings Procured and Distributed North-Central Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
FCT	Certified Seeds	Rice	1 MT	1 MT	No		No	State Govt
		Maize	2.5 MT	2.5 MT	No		No	State Govt
		Cowpea	0.5 MT	0.5 MT	No		No	State Govt
	Seedlings	Cassava	1000 bundles	10000 bundles	No		No	State Govt
		Citrus	500 seedlings	500	Yes		Yes	Others
	Mango	500 seedlings	500	Yes		Yes	Others	
Kogi	Certified Seeds		10 MT	10 MT	Yes		Yes	Others
	Cuttings	Cassava	500000 Bundles	500000 Bundles	Yes		No	Others
Kwara	Certified Seeds		2.7 MT	2.7 MT	Yes		Yes	State Govt
Nasarawa	Certified Seeds	Maize	2 T		Yes		Yes	State Govt
		Rice	5 T		Yes		Yes	State Govt
	Seedlings	Palm Seedlings	10000		Yes		Yes	State Govt
		Cashew Seedling	10000		Yes		Yes	State Govt
Niger	Certified Seeds	Rice	25 MT	25 MT	Yes		Yes	State Govt
Plateau	Certified Seeds	Rice	87.75 MT	87.75 MT	Yes		Yes	State Govt
	Seedlings	Vegetables	770gms	770gms	Yes		Yes	State Govt

Table 6.1b: Seeds and Seedlings Procured and Distributed North-East Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Gombe	Certified Seeds	Maize		10 MT	Yes		Yes	
		Rice		10 MT	Yes		Yes	NG-Cares

Table 6.1c: Seeds and Seedlings Procured and Distributed North-West Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Jigawa	Certified Seeds		11.8 MT	11.8 MT	Yes		Yes	State Govt
Kano	Certified Seeds			33.7 MT	Yes		-	KSADP
Katsina	Certified Seeds	Maize	175.7 MT	175.7 MT	Yes		Yes	FG
Sokoto	Certified Seeds		2.5 MT	2.5 MT	Yes		Yes	FG
	Cuttings		0.5 MT	0.5 MT	Yes		Yes	FG
Zamfara	Certified Seeds	Rice		0.025 MT	Yes		Yes	FG
		Sorghum		5 MT	Yes		Yes	FG, FINDEF

Table 6.1d: Seeds and Seedlings Procured and Distributed South-East Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Abia	Certified Seeds	Rice		5.7 MT	Yes		Yes	NG-Cares
	Cuttings	Cassava		28.1 MT	Yes		Yes	NG-Cares
Anambra	Certified Seeds	Maize	280 MT	280 MT	Yes		No	FG, State Govt, Others
	Cuttings	Cassava	250 bundle	250 bundle	Yes		Yes	Others
	Seedlings	Palm Tree	2320 MT	2320 MT	Yes		Yes	FG, State Govt, Others
		Coconut	2030 MT	2030 MT	Yes		Yes	State Govt. Others
Ebonyi	Certified Seeds	Rice		7820 MT	Yes		Yes	FG, State Govt

Table 6.1e: Seeds and Seedlings Procured and Distributed South-South Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Akwa Ibom	Certified Seeds	Hybrid Maize	51 MT	51 MT	Yes		Yes	FG, State Govt
		Rice	22 MT	22 MT	No		No	FG, State Govt
	Cuttings	Cassava	100000 bundles	100000 bundles	Yes		No	State Govt, Others
	Seedlings	Coconut	150000 stands	150000 stands	-		-	State Govt
		Pepper	80000 stands	80000 stands	-		-	State Govt
		Oil Palm	70000 stands	70000 stands	No		No	State Govt, Others
		Cocoa	180000 stands	180000 stands	No		No	State Govt, Others
Bayelsa	Certified Seeds	Rice	7500	7500	Yes		Yes	FG
		Maize	7500	7500	Yes		Yes	FG
	Cuttings	Cassava	72700 Bundles	72700 Bundles	Yes		Yes	FG
Cross River	Certified Seeds	Maize	2 MT	2MT	Yes		Yes	FG

Table 6.1f: Seeds and Seedlings Procured and Distributed South-South Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Edo	Certified Seeds	Maize	12 MT	12 MT	Yes		Yes	State Govt
		Rice	8.7 MT	8.7 MT				State Govt
		Cowpea	0.025 MT	0.07 MT				State Govt
	Cuttings	Cassava	72259 Bundles	72259 Bundles	Yes		Yes	Others
	Seedlings	Cucumber	500g	500g				State Govt
		Amaranthus	5 kg	5 kg				State Govt
		Okra	8 kg	8 kg				State Govt
		Pepper	4 cups	4 cups				State Govt
		Tomatoes	4 cups	4 cups				State Govt
		Budded Sweet Orange	50	45				State Govt
		Budded sweet grape	30	16				State Govt
		Lemon	30	24				State Govt
		Guava	20	12				State Govt
		Shaddock	35	22				State Govt
		Tangelo	35	31				State Govt
Plantain/Banana		14165 bundles	14165 bundles				Others	
Avocado	30					State Govt		
Delta	Seedlings		7996.9kg	7996.9kg	Yes		No	State Govt
Rivers	Cuttings	Cassava		95.8 MT	Yes		Yes	FG, State Govt

Table 6.1g: Seeds and Seedlings Procured and Distributed South-West Zone

State	Seed Input Category	Crops	Quantity Procured (MT)	Quantity Distributed (MT)	Accessibility	Adequacy	Affordability	Source
Ekiti	Certified Seeds	Maize		7.9 MT	Yes		Yes	State Govt
		Rice		5.7 MT	Yes		Yes	State Govt
		Tomatoes		0.026 MT	Yes		Yes	State Govt
		Pepper		0.013 MT	Yes		Yes	State Govt
		Okra		0.023 MT	Yes		Yes	State Govt
	Cuttings	Cassava		29567 Bundles	Yes		Yes	State Govt
Lagos	Certified Seeds	Maize	12 MT	12 MT	Yes		Yes	FG, State Govt
		Rice	5 MT	5 MT	Yes		Yes	FG, State Govt
Ogun	Certified Seeds	Maize	8.15 MT	8.15 MT	Yes		Yes	Others
Oyo	Certified Seeds	Maize	46 MT	46 MT	Yes		Yes	State Govt
		Soybean	20 MT	20 MT	Yes		Yes	State Govt
	Cuttings	Cassava	65500 Bundles	65000 Bundles	Yes		Yes	State Govt
	Seedlings	OSFP Potatoes	100 bundles	-				Others

Improved Seed Requirement -States and Zones

Table 6.2 shows the improved seed in total estimated requirement for states in the 6 agroecological zones. All the states in the North-Central zone planted improved seeds. The improved seeds reported for the 8 states in this zone were maize, rice, cassava, soybean, sorghum, potato and millet. Farmers' awareness of the different seed varieties in this zone was ranked from 33 to 100 percent.

In the North-East zone four (4) states (Bauchi, Borno, Gombe and Yobe) reported the cultivation of improved seeds. The improved seed required in these states were maize, millet, soybean, sorghum, cassava and rice. Farmers indicated their interest to plant different varieties of these seeds. The awareness level for improved seeds was ranked from 5 to 90 percent.

In the North-West zone (Jigawa, Kano, Katsina, Kebbi, Sokoto and Zamfara) indicated their required improved seeds to cultivate in 2024. The improved seeds included maize, rice, millet, sesame, cassava, soybean, and sorghum. The level of farmer's awareness of the different varieties of improved seeds was ranked from 30 to 98 percent.

In the South-East zone, three (5) states indicated their interest and requirement to cultivate improved seeds in 2024. Major improved seeds required were maize, cassava and rice. The level of awareness for improved seeds ranges between 60 to 95 percent. This shows that there is high level of awareness on the improved varieties across the south-east zone.

Six (6) states in the South-South zone (Akwa-Ibom, Bayelsa, Cross-river, Edo, Delta and Rivers) indicated interest to cultivate improved seed requirement for the farming season in 2024. Maize, rice, cassava, Bennisseed were the major seeds required. The level of farmer’s awareness for these seed varieties was ranked from 40 to 100 percent.

In the South-West, six (6) States (Ekiti, Lagos, Ogun, Ondo, Osun and Oyo) indicated interest to cultivate improved seeds in 2024. The major seeds required for this year’s planting season were maize, cassava, rice, soybean, sorghum and millet. Farmers in these states had a high level of awareness for most of the improved seed varieties ranging from 50 to 100 percent.

Table 6.2a: Improved Seed Requirement (North-Central Zone)

State	Crops	Specify Variety name	Level of farmers’ awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Benue	Maize	Sax 15	80	
		SAMMAZ 52	80	
	Rice	FARO 44	80	
	Cassava	TME 419	85	
	Soybean	TGX 1951	75	
FCT	Maize	Oba Super	90	10 MT
		SAMMAZ 27	90	15 MT
		SAMMAZ 52	90	8 MT
	Rice	FARO 44	90	20 MT
		FARO 58	70	12 MT
		FARO 59	60	7 MT
	Cassava	TMS 30572	90	300,000 bundles
	Soybean	TGX 488-1	80	6.5 MT
Kogi	Maize	SAMMAZ 14	65	30 MT
	Rice	FARO 44	85	50 MT
	Cassava	TME 419	93	200000 Bundles
	Soybean	SAMSOY 1	60	10 MT
	Sorghum	SAMSORG 44	70	20 MT
Kwara	Maize	SAMMAZ 51	80	350 MT
		SAMMAZ 52	80	400 MT
	Rice	FARO 44	90	600 MT
		FARO	90	650 MT

Table 6.2b: Improved Seed Requirement (North-Central Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Nasarawa	Maize	SAMMAZ 15	70	
		SAMMAZ 34		
		SAMMAZ 17		
	Rice	FARO 44	90	
		FARO 52		
		FARO 54		
		FARO 60		
	Cassava	419	80	
		30752		
		Vit. A.		
Soybean	TGX 1448	50		
Niger	Maize	SAMMAZ 50	60	1000 MT
		SAMMAZ 52		
	Rice	FARO 44	100	400 MT
Soybean	TGX 1448-2E	80	950 MT	
Plateau	Maize	SEEDCO 719		7227 MT
		SEEDCO 618		
	Rice	FARO 44		17200 MT
		FARO 28		12240 MT
	Potato	CONNECT		258000 MT
		CARUSO		375000 MT
MARABEL		537500 MT		
Taraba	Maize	SAMMAZ 15	70	760 MT
	Rice	FARO 44	90	920 MT
		FARO 52	90	840 MT
		CD	52	200 MT
	Cassava	TME 419	82	2000 MT
		VIT A	36	340 MT
	Soybean	TMX 1448-2E	75	32 MT
		1445 & 148-1D	81	30 MT
	Millet	SOSCAT 88	33	5 MT
Sorghum	SAMSORG 47, 48 & 49	37	34 MT	

Table 6.2b: Improved Seed Requirement (North-East Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Bauchi	Maize	SAMMAZ 51	75	150000 MT
		SAMMAZ 52	70	
	Rice	FARO 44	80	200000 MT
		FARO 56	70	
		GAWAL 1	50	
	Cassava	TME 419	20	200000 Cuttings
	Soybean	TGX 1448 -2E	60	120000 MT
	Millet	SOSAT	85	125000 MT
		SUPER SOSAT	90	150000 MT
		JIRANI	40	50000 MT
	Sorghum	SAMSORG 46	80	70000 MT
SAMSORG 45		60	60000 MT	
CRS 01		30	50000 MT	
ICSV 12		70	40000 MT	
Borno	Maize	SAMMAZ 27	90	120 MT
	Rice	FARO 44	85	500 MT
	Soybean	TGX 1448	65	100 MT
	Millet	Super SOSAT	90	2 MT
		JIRANI	80	1.6 MT
		CHACTY	40	0.5 MT
	Sorghum	SAMSORG 45	80	8 MT
ICSV 111		90	10 MT	
Gombe	Maize	SAMMAZ 52, 51, 27, 15	70	265000 MT
	Rice	FARO 44, 47	70	200000 MT
	Soybean	TGX 146-1D	60	13000 MT
	Millet	JIRANI	30	240000 MT
	Sorghum	SAMSORG 57 and 56	90	260000 MT
Yobe	Maize	SAMMAZ 45	15	
		SAMMAZ 47		
		SAMMAZ 89		
	Rice	FARO 44, 45, 58	45	
	Cassava	Yarkasa	5	
	Millet	Super SOSAT	53	
	Sorghum	SAMSORG	42	

Table 6.2c: Improved Seed Requirement (North-West Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Jigawa	Maize	EVAT	65	4.5 MT
	Rice	FARO 44	80	50.75 MT
	Millet	Super SOSAT	70	65 MT
	Sesame	Sesame	80	8.5 MT
Kano	Maize	SAMMAZ	Moderate	250 MT
	Rice	FARO 44	High	150 MT
	Cassava	Local Var	High	100 MT
	Soybean	TGX 1448	High	100 MT
		TGX 1835		
	Millet	Super SOSAT	High	150 MT
		Jirane		
		Chakti		
Sorghum	SAMSORG 45, 46	Moderate	200 MT	
	CSR-01			
Katsina	Maize	SAMMAZ 15	70	20000 MT
		SAMMAZ 52		
	Rice	FARO 44	80	5000 MT
		JAMILA	75	
	Cassava	TME 419	60	5000 MT
	Soybean	TGX 1449 2E	75	5000 MT
	Millet	Super SOSAT	75	15000 MT
Sorghum	KSV 400	80	20000 MT	
Kebbi	Maize	SAMMAZ 15	40	200 MT
		SAMMAZ 27	50	100 MT
		SAMMAZ 40	55	70 MT
	Rice	FARO 44	98	500 MT
		FARO 52	80	400 MT
		FARO 61	65	300 MT
	Millet	SUPER SOSAT	90	250 MT
		SOSAT	95	200 MT
	Sorghum	SAMSORG 45	60	280 MT
		SAMSORG 47	60	165 MT
SAMSORG 49		45	140 MT	

Table 6.2d: Improved Seed Requirement (North-West Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Sokoto	Maize	SAMMAZ 59, 25,35, 33	60	95 MT
	Rice	FARO 44, 59, 60, 61, 69	80	200 MT
	Cassava	TME 419	50	100 MT
		TMS 98, 92		
	Soybean	TGX 1465 -1D	30	20 MT
		TGX 1935 – 10E		
	Millet	SOSAT	80	200 MT
SUPER SOSAT, Jirani				
Sorghum	SAMSORG 40, 45, 38, 41	80	200 MT	
Zamfara	Maize		70	30000 MT
	Rice		60	45000 MT
	Cassava		30	180000 MT
	Soybean		80	200000 MT
	Millet		80	60000 MT
	Sorghum		30	150000 MT

Table 6.2e: Improved Seed Requirement (South-East Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Abia	Maize	SAMMAZ 24	85	1 MT
	Rice	FARO 44	60	1 MT
	Cassava	TME 419	85	3 MT
Anambra	Maize	Oba Super 2 yellow	95	5 MT
		Oba Super 6 yellow	60	2 MT
	Rice	FARO 44	75	5 MT
		FARO 52	60	5 MT
	Cassava	TMS 419	90	8000 Bundles
Enugu	Maize	Oba Super	80	
	Rice	FARO 44	80	
	Cassava	TMS 419		
Ebonyi	Maize	Oba 2	90	1000MT
		Oba 6	90	1000MT
	Rice	FARO 44	90	1000MT
		FARO 55	100	2000MT
	Cassava	FARO 55	80	2000MT
		0581	90	160000MT
		Pro VIT A	90	160000MT
Imo	Maize	SAMMAZ 14	85	8MT
		SAMMAZ 15	80	8MT
		OBA SUPER	90	4MT
	Rice	FARO 44	90	5MT
		FARO 52	90	5MT
		NERICA	80	3MT
	Cassava	TMS 419	95	250000 Bundles
		TMS 3264 IMO BEST	95	
		TMS 8022	95	
UMUCASS 44		90		

Table 6.2f: Improved Seed Requirement (South- South-Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Akwa Ibom	Maize	SWANI-Y-SR	80	3.0 MT
	Rice	FARO 44, 56	85	75 MT
	Cassava	TME 419	80	30000000 bundles
		TMS 693	97	45000000 bundles
Bayelsa	Maize	VIT A Enriched	10	150000 bundles
	Maize	Oba Super 6 Yellow maize Vit K	100	10 MT
	Rice	FARO 44	90	105 MT
	Cassava	TME 419	100	240 MT
Cross River	Maize	OBA 98	65	6 MT
		SAMMAZ 52	50	5 MT
		OBA 6	45	2 MT
	Rice	FARO 44	70	10 MT
		FARO 52	55	5 MT
	Cassava	TME 419	80	50000 Bundles
		TMS 1368	42	15000 Bundles
Edo	Maize	SWAN 1	80	80 MT
		Oba Super 6	90	80 MT
		SAMMAZ 52	50	
		SAMMAZ 15	50	
		Yellow or White Maize (hybrid)	90	
	Rice	FARO 44	80	80 MT
		FARO 52	80	70 MT
		FARO 68	80	70 MT
	Cassava	TMS 30555	85	80 MT
		TME 419	85	180 MT
	Cowpea	Ife Brown		
Beniseed	NCRI BEN 04E	40	10 MT	
Delta	Maize	OPV	60	
Rivers	Maize	OBA 98	65	
	Rice	FARO 42, 52	65	
	Cassava	TMS 419	85	

Table 6.2g: Improved Seed Requirement (South-West-Zone)

State	Crops	Specify Variety name	Level of farmers' awareness in your state about the variety (%)	Total Estimated requirement for the state (MT)
Ekiti	Maize	DMR – White	98	200 MT
		DMR -Yellow	98	200 MT
	Rice	FARO 44 & 60	95	150 MT
		FARO 58, 59	95	250 MT
	Cassava	TMS 419	100	1000000 Bundles
		TME 5018	100	1000000 Bundles
Soybean	TGX 536-02D	86	6 MT	
	M-98	86	6 MT	
Lagos	Maize	Hybrid Cylobate	85	20 MT
		Open Pollinated	85	20 MT
	Rice	FARO 44	70	6 MT
Ogun	Maize	Oba Super 6 (Pro Vitamin A)	100	21 MT
		SAMMAZ 52		
Ondo	Maize	BP Premier	100	300 MT
	Rice	FARO 44,45,47,48	100	200 MT
	Cassava	White Lion	100	500 MT
	Soybean	Yellow Soybean High	100	100
	Millet	Little Millet	100	100
	Sorghum	Red, Orange	100	100
Osun	Maize	Oba Super	85	150 MT
		SeedCo	85	
		Premier Seed	85	
	Cassava	TME 419	90	60000 Bundles
		TMS 30572	90	
Oyo	Maize	TZPB LSR	65	
		DM-LSR	75	
	Rice	SWAMP	90	
		UPLAND	60	
	Cassava	TME 419	70	
		TMS 4 (25)	80	
	Soybean	TGX	50	
		SAMSOY	60	

Agrochemicals Procured and Distributed -States and Zones

Table 6.3 revealed the agrochemicals procured and distributed by states and zones. In the North-Central zone, Kogi State procured 300,000 litres of herbicides. It distributed 200,000 ltrs, Kwara State also distributed 4700 liters of herbicides, while Niger State procured 500 cartons of herbicides and distributed 15000 litres. The inputs were deemed to be accessible and affordable in Kwara and Niger State while in Kogi State, it was not cheap by farmers. Primary sources of the inputs were the federal government, state government and non-governmental organizations.

Borno State and Gombe State were the only states that procured and distributed agrochemicals in the North-East zone in 2024. Borno State distributed 10,000 cartons of herbicides while Gombe State distributed 20,000 litres of herbicides and 10,000 litres of insecticides to farmers. The agrochemicals were accessible and affordable to farmers.

In the North-West zone, four (4) states (Jigawa, Kano, Katsina and Sokoto) procured and distributed agrochemicals. The farmers reported that the agrochemicals procured and distributed were accessible and affordable. Jigawa State procured and distributed 4,910 litres of pesticides and 11,400 litres of herbicides; Kano State distributed 15,468 litres of agrochemicals. Katsina State also distributed 2250 liters of agrochemicals, while Sokoto State procured and distributed 1200 liters of agrochemicals. The major sources of the inputs were the State Government, the FGN, and the KSADP.

In the South-East zone, only Abia State procured and distributed agro-chemicals. The quantity of herbicides distributed by Abia State was 560 litres sourced by NG-Cares. Farmers reported that the amount distributed was accessible and affordable.

Akwa Ibom, Bayelsa and Cross River were the only states that procured and distributed agrochemicals in the South-South. Akwa Ibom State procured and distributed 4332 liters of pesticides and 6,032 liters of herbicides. Bayelsa State distributed 2434 liters of pesticides, while Cross River also procured and distributed 200 liters of pesticides. Farmers in Akwa Ibom reported that the quantity procured and distributed was inaccessible and unaffordable, whereas those from Bayelsa and Cross River States found it accessible and affordable. The primary sources of the inputs were the federal government, state government and other non-governmental organizations.

In the South-West zone, four (4) states (Ekiti, Lagos, Ogun and Oyo) procured and distributed herbicides, pesticides, fungicides and insecticides. Ekiti State procured and distributed 7,053.5 litres of herbicides, 1,239 liters of liquid insecticides, 123.32 kg of powdered insecticides, 119 litres of liquid fungicides, and 213.8 kg of powdered fungicides. Lagos State also procured and distributed 352,000 liters of herbicides and 25,000 liters of pesticides. Ogun State also distributed 591.92 liters and 44.54 kg of agrochemicals, while Oyo State procured and distributed 5,000 liters of agrochemicals. The inputs were deemed to be accessible and affordable by the farmers. The state government, FGN, and other non-governmental organizations were the primary sources of these inputs.

Table 6.3a: Agrochemicals Procured and Distributed (North-Central Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Kogi	Pesticides/Herbicides	300000 lts	200000 lts		Yes	No	FG, Others
Kwara	Roundoff	4700 lts	4700 lts		Yes	Yes	FG, Others
Niger	Herbicides	500 cartons	15000 lts		Yes	Yes	State Govt

Table 6.3b: Agrochemicals Procured and Distributed (North-East Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Gombe	Herbicides		20000lts		Yes	Yes	NG Cares
	Insecticides		10000lts		Yes	Yes	NG Cares

Table 6.3c: Agrochemicals Procured and Distributed (North-West Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Jigawa	Pesticides	4910lts	4910lts				State Govt
	Herbicides	11400 lts	11400lts		Yes	Yes	State Govt
Kano	Pesticides/Herbicides		15468lts		Yes	-	KSADP
Katsina	Pesticides/Herbicides	2550 lts	2550 lts		Yes	Yes	State Govt
Sokoto	Pesticides/Herbicides	1200 lts	1200 lts		Yes	Yes	FG

Table 6.3d: Agrochemicals Procured and Distributed (South-East Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Abia	Herbicides		560 lts		Yes	Yes	NG-Cares

Table 6.3e: Agrochemicals Procured and Distributed (South-East Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Akwa Ibom	Pesticides	4332lts	4332lts		No	No	FG, State Govt, Others
	Herbicides	6032lts	6032lts		No	No	FG, State Govt, Others
Bayelsa	Pesticides	2434 lts	2434 lts		Yes	Yes	FG
Cross River	Pesticides	200lt	200lt		Yes	Yes	FG

Table 6.3f: Agrochemicals Procured and Distributed (South-West Zone)

State	Agrochemical Class	Quantity Procured (Litres)	Quantity Distributed (Litres)	Adequacy	Accessibility	Affordability	Sources
Ekiti	Herbicides		10753.5 lts		Yes	Yes	State Govt
	Insecticides (Powder)		123.32 kg		Yes	Yes	State Govt
	Insecticides (Liquid)		1239 lts		Yes	Yes	State Govt
	Fungicides (Powder)		213.8kg		Yes	Yes	State Govt
	Fungicides (Liquid)		119lts		Yes	Yes	State Govt
Lagos	Herbicide	352000lt	352000lt		Yes	Yes	FG, State Govt
	Pesticide	125000lt	25000lt		Yes	Yes	FG, State Govt
Ogun	Pesticides/Herbicides	666lt	591.92lt		Yes	Yes	Others
		122.5kg	44.54kg		Yes	Yes	Others
Oyo	Pesticides/Herbicides	5000 lts	5000 lts		Yes	Yes	State Govt

Fertilizer Situation

The results from Table 6.4 show the overall quantity and types of fertilizer procured and distributed to farmers in the states and across all agricultural zones of Nigeria for the year 2024, along with their sources. The report reveals that only 19 states were able to procure and distribute fertilizer to farmers. Four (4) states (Kwara, Niger, Nasarawa and Plateau) procured and distributed fertilizers in the North-Central Zone the South-East zone consisted of three (3) states (Abia, Anambra and Enugu) that procured and distributed fertilizers. Only two (2) states procured and distributed fertilizers in the North-East and South-West. Also, while only 3 states in the South-South and North-West zone procured and distributed fertilizers. The type of fertilizers procured and distributed across the zones were NPK, Urea, SSP and Organic fertilizer.

In the North-Central zone, Kwara, Niger, Nasarawa and Plateau States were the states that procured and distributed fertilizers in 2024. The types of fertilizer procured were NPK and Urea. Kwara State distributed 60MT of NPK and 60MT of Urea, Niger State procured and distributed 4200MT of NPK and 1200MT of Urea. Nasarawa State procured and distributed 270.5 metric tons of NPK, 250 metric tons of urea, and 61.5 metric tons of SSP, while Plateau State distributed 30 metric tons of NPK and 5 metric tons of organic fertilizer. The source of the fertilizers was from the Federal government and the state government.

In the North-East zone, Bauchi and Gombe states procured and distributed fertilizer to farmers. NPK and SSP fertilizer was procured in the States. Bauchi State procured and distributed 3,120 MT of NPK and 300 MT of SSP, while Gombe State procured and distributed 4,950 MT. The fertilizer was procured and distributed mainly by the federal government, state government, and NG-Cares.

The fertilizer situation in the North-West zone showed that Jigawa, Katsina, and Kano states procured and distributed fertilizer to farmers. The fertilizer distributed was mainly NPK and Urea. Jigawa State procured and distributed 10.50MT of NPK and 420MT of Urea. Also, Kano State distributed 8905MT of NPK while Katsina State procured and distributed 281.13MT of NPK and 120.27MT of Urea. The federal government, state government and KSADP were the primary sources of the input.

Table 6.4 also indicated that the quantity and type of fertilizer procured and distributed by the states in the South-East zone were NPK, Urea and SSP. Abia, Anambra, Enugu and Ebonyi were the only states that procured and distributed fertilizer to the farmers in 2024. Abia procured and distributed NPK 10MT, Anambra State procured 15000MT of NPK and distributed 5000MT of NPK. The state also distributed 7000MT of Urea and 2000MT of SSP while Enugu State distributed 2.36MT of NPK to farmers. Ebonyi State procured 2300 MT of NPK, 2000MT of Urea and distributed 1600MT of NPK and 1100MT of Urea. The primary sources of the fertilizers were the federal government and state government.

The South-South zone showed that Akwa Ibom, Bayelsa, Cross River, and Delta states procured and distributed fertilizer. The fertilizers procured were NPK, Urea, MOP, and others. Akwa Ibom procured and distributed NPK 29.5MT, Bayelsa State also procured 7800 bags of NPK and 1200 bags of Urea, but none have been distributed yet, while Cross Rivers distributed 600MT of NPK and 600MT of Urea. Delta State procured NPK 480MT, 181.5MT Urea, 2.5MT MOP and 20kg of other fertilizers. The State distributed 30MT NPK, 31.5MT Urea, 2.5MT MOP and 20kg of different fertilizers. The primary sources of the inputs were the federal and state governments.

In the South-West zone, Lagos and Ogun states were the only states that procured and distributed fertilizer in the zone in 2024. The types of fertilizer procured and distributed were NPK and Urea. Lagos State procured and distributed 110MT of NPK, while Ogun State procured 30MT of NPK and distributed 1.65MT of NPK and 2.75MT of Urea, respectively. The Federal government, state government and other non-governmental organizations were the primary sources of the fertilizers procured and distributed.

Table 6.4a: Fertilizer Situation (North-Central Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Kwara	NPK	-	60 MT	FG
	Urea	-	60 MT	FG
Niger	NPK	4200 MT	4200 MT	State Govt
	Urea	1200 MT	1200 MT	State Govt
Nasarawa	NPK	270.5MT	270.5MT	FG, State Govt
	Urea	250MT	250MT	FG
	SSP	61.5MT	61.5MT	FG
Plateau	NPK	30 MT	30 MT	State Govt
	Organic	5 MT	5MT	State Govt

Table 6.4b: Fertilizer Situation (North-East Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Bauchi	NPK	3120 MT	3120 MT	FG, State Govt
	SSP	300 MT	300 MT	FG
Gombe	NPK	4950 MT	4950 MT	FG, State Govt, NG-Cares

Table 6.4c: Fertilizer Situation (North-West Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Jigawa	NPK	10.50 MT	10.50 MT	State Govt
	Urea	420 MT	420 MT	State Govt
Katsina	NPK	281.13 MT	281.13 MT	FG, State Govt
	Urea	120.27 MT	120.27 MT	FG, State Govt
Kano	NPK		8905 MT	KSADP

Table 6.4d: Fertilizer Situation (South-East Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Abia	NPK	10 MT	10 MT	FG
Anambra	NPK	15000	5000	FG, State Govt
	Urea	7000	7000	FG, State Govt
	SSP	2000	2000	FG
Enugu	NPK	2.36 MT	2.36 MT	State Govt
Ebonyi	NPK	2300MT	1600MT	State Govt
	Urea	2000MT	1100MT	State Govt

Table 6.4e: Fertilizer Situation (South-South Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Akwa Ibom	NPK	29.5 MT	29.5 MT	FG, State Govt
Bayelsa	NPK	7800		FG
	Urea	1200		FG
Cross Rivers	NPK		600 MT	FG
	Urea		600 MT	FG
Delta	NPK	480MT	30MT	FG, State Govt
	Urea	181.5MT	31.5MT	FG, State Govt
	MOP	2.5MT	2.5MT	State Govt
	Others	20 kg	20 kg	State Govt

Table 6.4f: Fertilizer Situation (South-West Zone)

State	Fertilizer Type	Quantity Procured (MT)	Quantity Distributed	Source
Lagos	NPK	110 MT	110 MT	FG, State Govt
Ogun	NPK	30 MT	1.65 MT	Others
	Urea		2.75 MT	Others

Farm Equipment Procured and Distributed - States and Zones

The overall quantity and types of farm equipment procured and distributed to farmers in Nigeria in 2024 are shown in Table 6.5. There was Farm equipment procurement and distribution in 10 states across the zones (FCT, Kwara, Nasarawa, Gombe, Jigawa, Katsina, Bayelsa, Edo, Cross River and Osun). Most of the States procured and distributed tractors, tractor equipment units, agro-processing equipment, work bulls, and combined harvesters. No state procured or distributed work bulls.

In the North Central zone, FCT, Kwara and Nasarawa were the only states that procured and distributed farm equipment. FCT procured 10 tractors and distributed 7. Kwara State distributed 10 combine harvesters and 17 tractor implements (9 harrows, 8 ridgers). Nasarawa State, on the other hand, procured and distributed 4 tractors, but none were distributed.

In the North East zone, Gombe procured and distributed farm equipment. The farm equipment procured and distributed included agro-processing equipment. Gombe State distributed 1000 grinders and 1000 sewing machines.

In the North-West zone, Jigawa and Katsina State procured and distributed a combine harvester, agro processing equipment, a tractor, and tractor implements. Jigawa State procured 10 combine harvesters and distributed 5 of them, along with 4,000 solar pumps. Katsina State distributed 186 combine harvesters, two tractors, 105 tractor implements (plough, harrow, ridger and sprayers). The state also procured and distributed agro processing equipment (millet, scale, presser, grinder, crusher, mixer, dryer, parboiler and polisher).

Bayelsa and Edo states were the only states in the South-South zone that procured and distributed different types of farm equipment, including tractor implements, work bulls, and agro-processing equipment. Bayelsa State procured and distributed 2334 sprayers. Edo State procured and distributed 23 work bulls, 3 different types of agro processing equipment (3 different types) which were given to beneficiaries. Cross River State also distributed two types of tractors and 80 knapsack sprayers to farmers.

Only Osun State in the South-West zone has procured and distributed farm equipment. The farm equipment procured and distributed were tractors and tractor implements. Osun State procured and distributed 31 tractors and 31 ploughs (tractors' implements).

Table 6.5a: Farm Equipment Procured and distributed (North-Central Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
FCT	Tractor	Massey Ferguson	10	7	Yes	500,000
Kwara	Combine Harvester	Massey	-	10	No	70
		Harrow	-	9	No	40
		Ridger	-	8	No	40
Nasarawa	Tractor	Mehindra	3	0	No	-
		Zoom Lion	1	0	No	-

Table 6.5b: Farm Equipment Procured and Distributed (North-East Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
Gombe	Agro Processing Equipment	Grinder		1000	Yes	1000
		Sewing Machine		1000	Yes	1000

Table 6.5c: Farm Equipment Procured and distributed (North-West Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
Jigawa	Combine Harvester	Combine Harvester	10	5	Yes	-
	Agro Processing Equipment	Solar Pump	-	4000	Yes	-
Katsina	Machine/Equipment	Combine Harvester Mahindra	185	185	Yes	185
		Combine Harvester URSUS	2	1	Yes	1
	Tractor	Belarus	3	2	Yes	2
	Tractor Implements	Plough	3	3	Yes	-
		Harrow	3	-	Yes	-

Table 6.5d: Farm Equipment Procured and distributed (North-West Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
Katsina	Agro-processing equipment	Ridger	3	-	Yes	-
		Sprayer	100	100	Yes	100
		Miller	350	350	Yes	350
		Scale	350	350	Yes	350
		Presser	75	75	Yes	75
		Grinder	1000	1000	Yes	1000
		Crusher	100	100	Yes	100
		Mixer	20	20	-	20
		Dryer	10	-	-	-
		Parboiler	50	50	-	50
Polisher	3	-	-	-		

Table 6.5e: Farm Equipment Procured and distributed (South-South Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
Bayelsa	Tractor Implements	Sprayers	2334	2334	Yes	2334
Edo	fWork Bulls	Work Bulls	23	23	Yes	27
	Agro-processing equipment	Miller	34	34	Yes	1096
		Presser	20	20	Yes	500
		Grinder	197	197	Yes	197
Cross River	Tractor	John Deeriz		10		
		Mini Tractors		108		
	Tractor Implements	Knapsack Sprayer	80	80	Yes	80

Table 6.5f: Farm Equipment Procured and distributed (South-West Zone)

State	Equipment	Equipment Name	Quantity Procured	Quantity Distributed	Accessibility Yes/No	Number of Beneficiaries
Osun	Tractor	Tractor 75hp	31	31	Yes	200000
	Tractor Implements	Plough	31	31	Yes	200000

7.0 AGRICULTURAL MECHANIZATION

Agricultural mechanization refers to the use of machinery and equipment in farming practices to improve efficiency, productivity, and overall effectiveness. This includes various tools and machines for tasks such as planting, tilling, harvesting, processing crops and post-harvest handling of crops and livestock. Mechanization helps reduce labour costs, increases the speed of farming operations, and often leads to higher yields and better crop management. It encompasses everything from simple tools to advanced technologies, such as tractors, combine harvesters, and precision farming equipment.

7.1 Government Tractor Availability and Functionality

North-Central Zone

Table 7.1 presents data on Government tractor availability and functionality in the North-Central Zone. The data showed that Plateau State recorded the highest number of both functional and non-functional tractors, as well as the largest cultivated hectares, in both 2023 and 2024, while the FCT was reported to have the lowest number. There was a significant increase in the number of functional tractors in the region, while the number of non-functional tractors decreased drastically. No information was provided from other states in the zone.

Table 7.1: Government Tractors in the North-Central Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares Cultivated	
		2023	2024	2023	2024	2023	2024
North-central							
FCT							
Massey Ferguson 375	75HP	1	1	1	1	56	68
New Holland	75Hp	-	-	-	-	-	-
Kogi State							
Massey Ferguson	75HP	100	100	30	30	-	-
Kwara State							
Massey Ferguson 375	75HP	15	7	-	8	530	629
Nasarawa State							
Mahindra	75Hp	-	16	-	-	-	12480
Zoom Lion	75Hp	-	10	-	-	-	9800
Niger State							
Massy Ferguson	75Hp	-	-	-	-	-	-
New Holland	75Hp	-	2	-	-	-	-
Plateau State							
New Holland	55	1	1	2	2	320	350
Massy Ferguson 375	75	85	130	46	1	5000	7800
Long Power	135	77	82	10	5	4620	4920
Long Power	150	35	42	13	5	3600	4440
Global 7860	100	61	74	18	5	15,640	20,030
Total	515	259	329	89	18	29180	37540
Zonal Total		372	465	119	57	29,766	59,888

North-East Zone

Available information on table 7.2 indicated that there was significant increase in the number of functional and non-functional tractors in the zone from 807 to 1735 and from 94 to 161 respectively between year 2023 to 2024 but there was no much information on hectares cultivated. Yobe State recorded the highest number of functional tractors this can be as a result of the Government agricultural empowerment program in the State. However, Gombe State was reported to have the least number of functional tractors in 2024.

Table 7.2a: Government Tractors in the North-East Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
Noth-East							
Bauchi State							
Ursus 5312	70 HP	0	0	4	4	-	-
Massey Ferguson 375e	70 HP	0	0	9	9	-	-
Massey Ferguson 375	70 HP	0	0	21	21	-	-
Massey Ferguson	75Hp	170	160	10	23	32,000	31,000
Steyer	75Hp	150	118	32	34	24,000	30,000
Total		320	278	76	91	56,000	61,000
Borno State							
Farm truck	80 Hp	315	70	3	30	34,300	-
YTO	80Hp	135	60	10	25	33,000	-
Total		450	130	13	55	67,000	-

Table 7.2b: Government Tractors in the North-East Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
Gombe State							
Massey Fergoson (MF) 375	75Hp	1	1	-	-	171	-
YPO	75Hp	10	10	-	-	171	-
URSUS	75Hp	2	2	-	-	171	-
Holton	70Hp	9	9	-	-	171	-
Total		22	22	-	-	684	-
Yobe State							
Massy Ferguson 375	75 HP	15	25	5	15	324	-
Zoom lion	75Hp	-	100	-	-	216	-
-	15Hp	-	1180	-	-	-	-
Total		15	1305	5	15	540	-
Zonal Total	807	1735	94	161	124,224	61,000	

North-West Zone

Data on Government tractors availability and functionality in the North-West Zone is depicted in Table 7.3. There was slight change in the number of functional and non-functional tractors in the zone with significant change in the number of hectares cultivated in the zone. Kebbi State with 50 tractors was reported to have the highest number of functional tractors in both 2023 and 2024 whereas Katsina State was reported to have the highest hectares cultivated. However, Kaduna State was reported to the least number of functional tractors while Kano State was having the highest number of non-functional tractors. No information was provided from Jigawa State.

Table 7.3: Government Tractors in the North-West Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
North-West							
Kaduna State							
Zoomlion	90Hp	-	1	-	-	-	-
Kano State							
Massy Ferguson 375	70Hp	-	-	2	2	-	-
Ursus (Styer)	65Hp	-	-	2	2	-	-
Fiat 8066	65Hp	-	-	1	2	-	-
New Holland 312	50Hp	-	-	1	2	-	-
Total				6	8		
Katsina State							
Massy Ferguson	70Hp	4	4	3	3	1550	3000
Mahindra	70Hp	1	1	-	-	2000	2500
Total		5	5	3	3	3550	5500
Kebbi State							
John Deere	-	50	50	-	-	-	-
Sokoto State							
Massy Ferguson	75Hp	6	6	7	7	300	256
Zamfara State							
HMZ TRACTORS	75Hp	2	-	-	-	100	-
Zonal Total		63	62	16	18	3,950	5,756

South-East Zone

Table 7.4 showed government tractor availability and functionality for South-East Zone there was significant increase in the number of functional and non-functional tractors as well as hectares cultivated in the zone from 69 to 74 functional tractors and from 12 to 22 non-functional tractors also from 3830 to 4560 hectares cultivated. Enugu State with 34 tractors was reported to have the highest number of functional tractors followed by Ebonyi State while Abia State was having the least.

Table 7.4: Government Tractors in the South-East Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
South-East							
Abia State							
New Holland	75Hp	0	0	2	2	-	-
Anambra State							
SWARAJ	75	4	2	3	8	550	1500
BOB TRACTOR	80	5	3	1	10	800	-
JOHN DECRE	90	-	-	-	-	1200	-
Total		9	5	4	18	2550	1500
Ebonyi State							
Massy Ferguson	75 Hp	13	30	-	-	1200	3000
John Deere	55 Hp	7	-	-	-	-	-
John Deere	75Hp	-	-	-	-	-	-
John Deere	65Hp	-	-	-	-	-	-
Origin	65Hp	-	-	-	-	-	-
Origin	75Hp	-	-	-	-	-	-
Origin	95Hp	-	-	-	-	-	-
Total		20	30	-	-	1200	3000
Enugu State							
New Holland	75Hp	2	2	-	-	50	60
Hand Tractor	-	34	34	-	-	-	-
Total		36	36	-	-	50	60
Imo State							
Swaraj	90Hp	4	0	6	0	30	-
Power Tractor 434	3Hp	0	3	0	2	-	-
Zonal total		69	74	12	22	3,830	4560

South-South Zone

Table 7.5 presents data on Government tractor availability and functionality in the South-South Zone. The information showed that there was significant increase in the number of functional tractors and the hectares cultivated in the year 2024 but there was decrease in the number of non-functional functional in 2024. Cross rivers State with 120 tractors was reported to have the highest number of functional tractors while Delta State was having the highest number of non-functional tractors.

Table 7.5a: Government Tractors in the South-South Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
South-South							
Akwa Ibom State							
Eicher	75Hp	8	-	2	-	280	-
John Deere 5075E	60Hp	2	2	-	-	315	320
Mahindra DI 506	70Hp	1	2	-	-	650	680
Massy Ferguson 4708	70Hp	1	1	1	-	650	755
Mulcher MM350/180	80Hp	1	1	-	-	550	575
Total		13	6	3	-	2,445	2,330
Bayelsa State							
Swaraj	75Hp	5	3	-	-	50	-
Bob Tractor SI 100	100Hp	4	5	1	-	50	-
John Deere	75Hp	3	4	-	-	-	-
Total		12	12	1	-	100	-
Cross River State							
John Deere	65Hp	7	12	0	0	460	1105
Mini Tractor (Hand held)	30Hp	0	108	0	0	0	1603
Total		7	120	-	-	460	2708
Delta State							
John Deere	75Hp	7	7	13	10	40	-
Edo State							
JOHN DEERE	75HP	10	2	-	-	4,00	720
JOHN DEERE	65HP	10	2	-	-	-	-
Total		20	4	-	-	400	720

Table 7.5b: Government Tractors in the South-South Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
Rivers State							
Swaraj	80Hp	4	1	3	3	75	40
Zonal Total	56	150	20	13	3520	5798	

South-West Zone

Data on the availability and functionality of government tractors in the South-West Zone is depicted in Table 7.6. Generally, there was a slight change in the number of functional and non-functional tractors in the zone, with a significant change in the number of hectares cultivated in the zone for the year 2024. Lagos State was reported to have the highest number of functional tractors in the zone, while Ogun State was reported to have the highest number of non-functional tractors. No information was provided from other States in the Zone.

Table 7.6a: Government Tractors in the South-West Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
South-West							
Ekiti State							
Massy Ferguson 275	60Hp	-	5	10	-	6	-
Massy Ferguson 375	60Hp	1	1	-	-	-	-
New Holland	60Hp	-	2	-	-	-	-
Mahindra	60Hp	-	1	-	-	-	-
Eicher	45Hp	-	1	-	-	-	-
Total		1	10	10	-	6	-
Lagos State							
John Deere	82	2	2	1	1	100	520
New holland	75	5	5	3	2	250	170
Massy Ferguson	75	3	3	2	1	400	200
Fendt	82	1	1	1	1	-	-
Case 1H	82	1	1	1	1	-	-
Total		12	12	8	6	750	890

Table 7.6b: Government Tractors in the South-West Zone

Name of Tractor	Capacity (HP)	Functional		Non-Functional		Hectares cultivated	
		2023	2024	2023	2024	2023	2024
Ogun State							
Massey Ferguson	75	-	-	25	25	-	-
New Holland	75	-	1	2	1	-	25
Ursus	75	1	1	-	-	130.2	168.4
Deutz-Fahr	75	-	-	1	1	-	-
Mahindra	62	1	-	1	2	50	-
Massey Ferguson 275	75	-	-	1	1	-	-
Total		2	30	30	180.2	193.4	-
Osun State							
Massey Ferguson 375	70Hp	3	-	-	-	-	-
Masey Ferguson 435	75Hp	-	-	10	10	-	-
Total		3	10	10	-	-	-
Zonal total		18	58	46	936.2	1083.4	-

7.2. Private Tractor Availability and Functionality

North-Central Zone

Plateau State with 216 registered tractor service providers was reported to be the highest in the zone, as shown in Table 7.7. However, Nasarawa State was reported to have the least number of registered tractor service providers. There was no information on private tractor availability from the remaining States in the zone.

Table 7.7: Private Tractors in the North-Central Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
North-central					
FCT					
1	Gwagwalada	5	4	1	New Holland TT5455(75Hp)
2	Kuje	4	4	-	John Deere 5503 (75Hp)

Table 7.7b: Private Tractors in the North-Central Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
FCT					
3	Kwali	4	4	-	Massy Ferguson 375 (95Hp) New Holland T175 (75Hp)
Total		13	12	1	
Nasarawa State					
1	Lafiya	1	1	-	MF 75Hp, Mahindra
2	Nasarawa	3	3	-	Massy Ferguson 75Hp
Total		4	4	-	
Plateau State					
1.	17 LGAs	96	96	0	Deutz Fahr (72HP)
2.	17 LGAs	19	15	4	Mahindra (70HP)
3.	17 LGAs	52	42	10	Sonalika International (80HP)
4.	17 LGAs	20	15	5	Fiat (60 HP)
5.	17 LGAs	29	21	8	Massy Ferguson(75Hp)
Total		216	189	27	
Taraba State					
Jalingo		2	2	0	John Deere / New Holland (75HP)
Gassol		2	2	0	John Deere/ New Holland (75HP)
Karim Lamido		2	2	0	John Deere/ New Holland (75HP)
Wukari		2	2	0	John Deere/ New Holland (75HP)
Total		8	8	0	
Zonal Total		241	213	28	

North-East Zone

Information presented on Table 7.8 indicated that Bauchi State, with 285 registered tractor service providers out of which 241 are still operational and 44 were non-operational, was reported to be the highest. Similarly, Gombe State was reported to have the least number of registered tractor service providers. Information from other States in the zone was not available at the time of the survey and up to the time of compiling the report.

Table 7.8: Private Tractors in the North-East Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
North-East					
Bauchi State					
1	Bauchi	200	170	30	Massy Ferguson (75HP)
2	Toro	40	34	6	Steyer (75HP)
3	Alkaleri	25	20	5	-
4	Ningi	20	17	3	-
Total		285	241	44	
Gombe State					
1	Gombe	5	5	-	John Deere (75HP) Mercy Ferguson (70Hp)
Zonal total		290	246	44	

North-West Zone

Data on private tractor availability and operability in the North-West zone in 2024 was presented in Table 7.9. The information reveals that Katsina State recorded the highest number with 180 operational tractors owned by private individuals, while Kano State was reported to have 27 functional tractors. Private tractor service providers such as TOHFAN and TOAN were reported to be operational in Kaduna State. Information from Jigawa, Kebbi, Sokoto and Zamfara States was not provided.

Table 7.9a: Private Tractors in the North-West Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
North-West					
Kaduna State					
1	23 LGAs	AMBEL Agric. Eng. Services	Yes	-	John Deere tractor (60Hp) Massey Ferguson (75Hp) Zoomlion (85Hp)
2	23 LGAs	TOHFAN	Yes	-	Mahindra XMF (75Hp)
Kano State					
1	Kumbotso	1	1	-	John Deere
2	Kano municipal council	1	1	-	Massey Ferguson
3	Kura	1	1	-	Massey Ferguson

Table 7.9b: Private Tractors in the North-West Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
Kano State					
4	Garun Mallam	1	1	-	Massey Ferguson
5	Ungogo	2	1	1	Ford/Massey Ferguson
6	Gezawa	1	1	0	Case IH International
7	Tsanyawa	1	1	0	Fiat 780/ Massey Ferguson
8	Danbatta	2	2	0	Massey Ferguson/Ford
9	Bagwai	1	1	0	Massey Ferguson
10	Kiru	3	2	1	Massey Ferguson/Mahindra
11	Bunkure	2	2	0	Massey/ Ford/ Mahindra
12	Wudil	3	2	1	Massey/ Ford/ Mahindra
13	Ajingi	1	1	0	Mahindra
14	Gabasawa	1	1	0	Massey 375
15	Gwarzo	2	1	0	Massey 375
16	Sumaila	1	1	0	Massey 375
17	Albasu	3	3	0	Massey 375
18	Bichi	1	1	0	Massey 375
19	Nasarawa	1	1	0	Massey 375
20	Dawakin Tofa	2	2	0	Massey 375
Total		31	27	3	
Katsina State					
1	Across LGAs	250	180	70	Mahindra and Massey Ferguson
Zonal Total		281	207	73	

South-East Zone

Anambra State was reported to have the highest number of registered tractor service providers in the zone as showed in table 7.10, while Ebonyi State was reported to have the least number of registered tractor service providers. There was no information on private tractor availability from other States in the zone.

Table 7.10: Private Tractors in the South-East Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
South-East					
Anambra State					
1	Anambra east	2	2	0	John Deere
2	Oyi	3	3	1	SWARAZ
Total		5	5	0	
Ebonyi State					
1	Izzi	1	1	0	-
Enugu State					
1	Uzo-Uwani	2	1	1	New Holland 75Hp
Zonal Total		8	7	1	

South-South Zone

Information on private tractors availability in the South-South Zone is presented in Table 7.11. Rivers State was reported to have the highest number of registered private tractor service providers, while Edo State had the lowest. However, there was no information from other States in the zone.

Table 7.11: Private Tractors in the South-South Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
South-South					
Edo State					
1.	Esan North-East	1	1	-	New Holland
2.	Esan West	1	1	-	Massy Ferguson (75HP)
3.	Oredo	1	1	-	Mahindra
Total		3	3	-	
Rivers State					
1	Obioakar	9	5	4	Massy Ferguson 80Hp
Zonal Total		12	8	4	

South-West Zone

Ogun State with 150 registered private tractor service providers was reported to be the highest in the zone as showed in table 7.12, while Lagos State was reported to have the least number of registered tractor service providers. There was no information on private tractor availability from other states in the zone.

Table 7.12: Private Tractors in the South-West Zone

S/No	Name of LGA	No. of registered Tractor service providers	No. of registered Tractor service providers		Popular brand & Capacity
			Still operational	Non-Operational	
South-West					
Ekiti State					
1	Ekiti north	1	1	0	Mahindra tractor (75hp)
2	Ekiti south	1	1	0	Mahindra tractor (75hp)
3	Ekiti central	1	1	0	Mahindra tractor (75hp)
Total		3	3	0	
Lagos State					
1.	Agbowo/Ikosi	1	1	0	Massy Ferguson (75hp)
Ogun State					
1	All LGAs	154	102	52	Massy Ferguson, Fiat, Sonalika, Case, John Deere
Zonal total		158	106	52	

7.4 Cost of Tillage Operations

Tillage refers to the agricultural preparation of soil through mechanical agitation, including digging, stirring, and overturning. It's a key practice for planting crops, as it helps to aerate the soil, manage weeds, and incorporate organic matter. There are two primary types of tillage: conventional and conservation tillage, each with distinct impacts on soil health and the environment.

However, the choice of tillage operation and its intensity can depend on various factors, including the type of crops being grown, soil conditions, climate, and the farmer's or agricultural system's goals. Therefore, farmers must carefully consider these factors to determine the most appropriate tillage practices for their specific circumstances, as excessive or improper tillage can lead to soil degradation, erosion, and environmental issues.

In addition, tillage operations are primarily performed with tractors equipped with disc/mouldboard ploughs, harrowers, and ridgers. The farm operations considered in the 2024 Agricultural Performance Survey were ploughing, harrowing, ridging, processing, spraying, harvesting, and haulage.

North-Central Zone

Table 7.13 shows the cost of tillage operation in the North-Central Zone. For the Government rate, Kogi State was reported to have the lowest cost, while Benue State was reported to have the highest rate. Similarly, for private rates, Nasarawa State was reported to have the highest cost of tillage operations, while Kogi State was reported to have the lowest cost. The cost of ploughing fadama and upland areas, as well as harrowing, ranges between ₦10,000 and ₦120,000. Riding costs range between ₦10,000 and ₦80,000, haulage costs range between ₦1,000 and ₦30,000, processing costs range between ₦7,000 and ₦25,000, spraying costs range between ₦10,000 and ₦70,000, and harvesting costs range between ₦10,000 and ₦100,000. In generally, there was increase in cost of tillage operations in the year 2024 when compared to 2023, this could be attributed to the removal of fuel subsidy.

Table 7.13: Cost of tillage operation in the North-Central Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
North-Central						
Benue State						
1. Ploughing of Fadama	40,000	50,000	25	45,000	70,000	56
2. Ploughing of Upland	35,000	40,000	14	45,000	60,000	33
3. Harrowing	25,000	50,000	100	40,000	60,000	50
4. Ridging	25,000	50,000	100	40,000	80,000	100
5. Haulage	-	-	-	2,000	4,000	100
5. Processing	2,000	-	-	10,000	15,000	50
6. Spraying	6,000	-	-	6,000	10,000	67
7. Harvesting	50,000	60,000	20	40,000	60,000	50
FCT						
1. Ploughing of Fadama	25000	35000	40	40000	50000	25
2. Ploughing of Upland	20000	25000	25	30000	40000	33
3. Harrowing	10000	15000	50	20000	30000	50
4. Ridging	10000	15000	50	20000	30000	50
5. Haulage (per day)	5000	10000	100	15000	25000	67
6. Processing	5000	10000	100	15000	20,000	33
7. Spraying	5000	10000	100	15000	15000	0
8. Harvesting	5000	10000	100	15000	20000	33
Kogi State						
1. Ploughing of Fadama	10,000	10,000	0	20,000	25,000	25
2. Ploughing of Upland	10,000	10,000	0	20,000	25,000	25
3. Harrowing	10,000	10,000	0	20,000	25,000	25
4. Ridging	10,000	10,000	0	20,000	25,000	25
5. Haulage (per day)	1,000	1,000	0	2,000	2,500	25
Kwara State						
1. Ploughing of Fadama	25,000	40,000	60	50,000	60,000	20
2. Ploughing of Upland	25,000	40,000	60	50,000	60,000	20
3. Harrowing	25,000	40,000	60	50,000	60,000	20

Table 7.13b: Cost of tillage operation in the North-Central Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Kwara State						
4. Ridging	25,000	40,000	60	50,000	60,000	20
5. Haulage (per day)	5000	10000	100	8,000	15,000	88
6. Processing	15,000	20,000	33	20,000	25,000	25
7. Spraying	10,000	15,000	50	15,000	20,000	33
8. Harvesting	15,000	20,000	33	15,000	20,000	33
Nasarawa State						
1. Ploughing of Fadama	60,000	80,000	33	80,000	120,000	50
2. Harrowing	35,000	50,000	43	80,000	120,000	50
3. Ridging	40,000	60,000	50	100,000	120,000	20
4. Haulage (per day)	2,000	3,000	50	5,000	10,000	100
5. Processing	-	-	-	15,000	30,000	100
6. Spraying	-	-	-	7,000	10,000	43
7. Harvesting	-	-	-	70,000	100,000	43
Niger State						
1. Ploughing of Fadama	50,000	60,000	20	90,000	100,000	11
2. Ploughing of Upland	50,000	50,000	0	70,000	80,000	14
3. Harrowing	40,000	40,000	0	70,000	80,000	14
4. Ridging	40,000	40,000	0	70,000	80,000	14
5. Haulage (per day)	10,000	10,000	0	7,000	7,000	0
6. Processing	10,000	10,000	0	6,000	7,000	17
7. Spraying	10,000	10,000	0	6,000	10,000	67
8. Harvesting	-	-	-	50,000	60,000	20
Plateau State						
1. Ploughing of Fadama	30,000	30,000	0	45,000	65,000	44
2. Ploughing of Upland	30,000	30,000	0	40,000	60,000	50
3. Harrowing	20,000	20,000	0	30,000	50,000	67
4. Ridging	20,000	20,000	0	30,000	50,000	67

Table 7.13c: Cost of tillage operation in the North-Central Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Plateau State						
5. Haulage (Per Day)	6,000	6,000	0	7,000	17,000	143
6. Spraying	15,000	15,000	0	25,000	25,000	0
7. Harvesting	60,000	60,000	0	70,000	70,000	0
Taraba State						
1. Ploughing of Fadama	40,000	60,000	50	75,000	85,000	13
2. Ploughing of Upland	30,000	60,000	100	70,000	80,000	14
3. Harrowing	30,000	50,000	67	60,000	75,000	25
4. Ridging	20,000	25,000	25	25,000	65,000	160
5. Haulage (per day)	15,000	20,000	33	25,000	30,000	20

North-East Zone

The available data on the rate of tillage operations for the Government and private sectors in the North-East zone is presented in Table 7.14. For the Government rate, Borno State was reported to have the lowest rate, while Adamawa State was reported to have the highest rate. Similarly, for private rate, Gombe State was reported to have the highest cost of tillage operation while Yobe State was reported to have the least cost. Generally, the price of tillage operations increased in 2024 compared to 2023, particularly for private rates, which can be attributed to the removal of fuel subsidies. In contrast, many States in the zone experience little or no change in the cost of operation for Government rates, which could be because some State governments are subsidizing the cost for farmers.

Table 7.14a: Cost of tillage operation in the North-East Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Adamawa State						
1. Ploughing of Fadama	35,000	45,000	29	40,000	60,000	50
2. Ploughing of Upland	35,000	45,000	29	40,000	60,000	50
3. Harrowing	25,000	35,000	40	40,000	45,000	13
4. Ridging	25,000	35,000	40	40,000	45,000	13
5. Haulage (per day)	20,000	27,000	35	38,000	42,000	11
6. Processing (per tonne)	32,000	35,000	9	35,000	41,000	17
7. Spraying	28,000	34,000	21	35,000	40,000	14
8. Harvesting	30,000	40,000	33	40,000	45,000	13

Table 7.14b: Cost of tillage operation in the North-East Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Bauchi State						
1. Ploughing of Fadama	30,000	30,000	0	51,000	80,000	57
2. Ploughing of Upland	30,000	30,000	0	51,000	80,000	57
3. Harrowing	30,000	30,000	0	50,000	80,000	60
4. Ridging	30,000	30,000	0	51,000	80,000	57
5. Haulage (per day)	15,000	15,000	0	38,000	42,000	11
Borno State						
1. Ploughing of Fadama	20,000	20,000	0	70,000	80,000	14
2. Ploughing of Upland	25,000	30,000	20	80,000	90,000	13
3. Ridging	25,000	25,000	0	70,000	80,000	14
4. Processing	2,000	2,500	25	7,000	7,000	0
Gombe State						
1. Ploughing of Fadama	30,000	50,000	67	75,000	100,000	33
2. Ploughing of Upland	30,000	50,000	67	75,000	100,000	33
3. Harrowing	36,000	50,000	39	75,000	100,000	33
4. Ridging	36,000	50,000	39	75,000	100,000	33
Yobe State						
1. Ploughing of Fadama	14,000	50,000	257	-	80,000	-
2. Ploughing of Upland	14,000	50,000	257	76,000	80,000	5
3. Harrowing	14,000	50,000	257	75,000	80,000	7
4. Harvesting	20,000	25,000	25	-	-	-

North-West Zone

Sokoto State was reported to have the highest cost of tillage operation for the Government rate (Table 7.15), while Kaduna State was reported to have the least cost. For the private rate, Kaduna State was reported to have the highest rate, while Kebbi State was reported to have the lowest rate. However, there was a great change in the cost of tillage operation in the year 2024 when compared to 2023, with some operations going as high as an above 100 percent increment. This can be attributed to the removal of fuel subsidy.

Table 7.15a: Cost of tillage operation in the North-West Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Jigawa State						
1. Ploughing of Fadama	30,000	-	-	42,000	55,000	31
2. Ploughing of Upland	-	-	-	42,000	60,000	43
3. Harrowing	30,000	-	-	37,000	45,000	22
4. Ridging	-	-	-	25,000	40,000	60
5. Haulage (per day)	-	-	-	30,000	40,000	33
6. Processing (per tonne)	-	-	-	30,000	40,000	33
7. Spraying	-	-	-	3,550	4,000	13
8. Harvesting	30,000	-	-	20,000	30,000	50
Kaduna State						
1. Ploughing of Fadama	30,000	35,000	17	45,000	65,000	44
2. Ploughing of Upland	25,000	30,000	20	50,000	70,000	40
3. Harrowing	25,000	30,000	20	30,000	50,000	67
4. Ridging	25,000	30,000	20	25,000	45,000	80
5. Haulage (per day)	-	-	-	1,000/bag	1,500/bag	50
6. Processing (per bag)	-	-	-	2,000	2,500	25
7. Spraying	-	-	-	3,000	3,200	7
8. Harvesting	-	-	-	120,000	140,000	17
Kano State						
1. Ploughing of Fadama	37,500	62,500	67	62,000	80,000	29
2. Ploughing of Upland	25,000	62,000	148	62,000	80,000	29
3. Harrowing	25,000	50,000	100	50,000	62,500	25
4. Ridging	20,000	37,000	85	37,500	50,000	33
5. Spraying	-	-	-	2,500	3,000	20
6. Harvesting	-	-	-	70,000	80,000	14

Table 7.15b: Cost of tillage operation in the North-West Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Katsina State						
1. Ploughing of Fadama	35,000	40,000	14	40,000	60,000	50
2. Ploughing of Upland	35,000	40,000	14	40,000	60,000	50
3. Harrowing	35,000	40,000	14	40,000	60,000	50
4. Ridging	35,000	40,000	14	40,000	60,000	50
5. Haulage (per day)	10,000	15,000	50	12,000	18,000	50
6. Processing	3,000	4,600	53	3,500	5,000	43
7. Spraying	5,000	10,000	100	10,000	15,000	50
8. Harvesting	25,000	30,000	20	35,000	40,000	14
Kebbi State						
1. Ploughing of Fadama	25,000	50,000	100	60,000	80,000	33
2. Ploughing of Upland	20,000	40,000	100	25,000	50,000	100
3. Harrowing	17,000	32,000	88	25,000	36,000	44
4. Ridging	25,000	50,000	100	25,000	50,000	100
Sokoto State						
1. Ploughing of Fadama	70,000	80,000	14	-	-	-
2. Ploughing of Upland	60,000	80,000	33	-	-	-
3. Harrowing	60,000	80,000	33	-	-	-
4. Ridging	60,000	80,000	33	-	-	-
5. Processing	25,000	30,000	20	-	-	-
6. Spraying	10,000	12,000	20	-	-	-
7. Harvesting	24,000	25,000	4	-	-	-

Table 7.15c: Cost of tillage operation in the North-West Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Zamfara State						
1. Ploughing of Fadama	35,000	60,000	71	40,000	60,000	50
2. Ploughing of Upland	30,000	40,000	33	35,000	50,000	42
3. Harrowing	30,000	30,000	0	30,000	40,000	33
4. Ridging	27,000	30,000	11	32,000	40,000	25
5. Processing	-	-	-	3,000	3,000	0
6. Spraying	-	-	-	3,000	3,000	0
7. Harvesting	-	-	-	70,000	70,000	0

South-East Zone

The information in Table 7.16 shows the cost of tillage operations in the South-East Zone. The data indicate that Anambra State reported the highest price of tillage operations for both government and private rates. Similarly, Imo State was reported to have the least price of tillage operation. However, the zone typically experienced an increase in the cost of farm operations in the year 2024 when compared to 2023, with some operations having above 100% increment. This could be attributed to the hard economic situation being experienced in the country.

Table 7.16a: Cost of tillage operation in the South-East Zone

Farm Operation	Government rate (₦/Ha)			Private rate (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change
Abia State						
1. Ploughing of Fadama	30,000	30,000	0	-	-	-
Anambra State						
1. Ploughing of Fadama	50000	50000	0	35,000	100,000	186
2. Ploughing of Upland	50000	50000	0	35,000	100,000	186
3. Harrowing	50000	50000	0	30,000	80000	167
4. Ridging	50000	50000	0	30,000	100,000	233
5. Haulage (per day)	30000	30000	0	-	50000	-
6. Harvesting	90000	90000	0	100,000	100,000	0
Ebonyi State						
1. Ploughing of Fadama	35,000	50,000	43	70,000	100,000	43
2. Ploughing of Upland	30,000	45,000	50	60,000	100,000	67
3. Harrowing	30,000	40,000	33	50,000	50,000	0
4. Ridging	30,000	35,000	17	40,000	80,000	100
5. Haulage (per day)	20,000	30,000	50	5,000	7,000	40
6. Processing (per tonne)	20,000	25,000	25	30,000	50,000	67
7. Spraying (per Ha)	20,000	25,000	25	30,000	40,000	33
8. Harvesting	20,000	25,000	25	-	-	-
Enugu State						
1. Ploughing of Fadama	25,000	40,000	60	40,000	68,000	70
2. Ploughing of Upland	25,000	40,000	60	40,000	68,000	70
3. Harrowing	20,000	35,000	75	35,000	46,000	31
4. Ridging	20,000	25,000	25	30,000	46,000	53
Imo State						
1. Ploughing of Upland	20,000	25,000.00	25	30,000	40,000	33
2. Harrowing	20,000	25,000.00	25	30,000	40,000	33
3. Ridging	20,000	25,000.00	25	30,000	40,000	33
4. Haulage (per day)	2,000	2,500	25	3,000	3,500	17
5. Harvesting	18,000	20,000	25	30,000	35,000	17

South-South Zone

Table 7.17 showed the cost of tillage operation in the South-South Zone, the data revealed that Cross Rivers State was reported to have the highest price of tillage operation for both Government and private rates. Similarly, Delta State was reported to have the lowest cost of tillage operation. However, the zone in general had experienced an increase in the cost of tillage operations in the year 2024 when compared to 2023, with some operations having above 100% increment. This could be attributed to the high inflation being experienced in the country. There was no information from Bayelsa State.

Table 7.17a: Cost of tillage operation in the South-South Zone

Farm Operation	Government rate (N/Ha)			Private rate (N/Ha)		
	2023	2024	% Change	2023	2024	% Change
Akwa Ibom State						
1. Ploughing of Fadama	35,000	45,000	29	45,000	60,000	33
2. Ploughing of Upland	35,000	45,000	29	45,000	60,000	33
3. Harrowing	35,000	45,000	29	45,000	50,000	11
4. Ridging	35,000	45,000	29	45,000	50,000	11
5. Haulage (per day)	22,000	32,000	45	25,000	35,000	40
6. Processing (per tonne)	4,500	10,500	133	6,000	12,500	108
7. Spraying	5000	7,000	40	10,000	10,000	0
8. Harvesting	4000	5,000	25	17,500	19,500	11
Cross Rivers State						
1. Ploughing of Fadama	70,000	90,000	29	85,000	123,000	45
2. Ploughing of Upland	53,000	60,000	13	70,000	81,000	16
3. Harrowing	60,000	70,000	17	70,000	85,000	21
4. Ridging	90,000	105,000	17	98,000	110,000	12
5. Processing (per tonne)	30,000	40,000	33	35,000	55,000	57
6. Spraying	6,000	7,500	25	10,000	15,000	50

Table 7.17b: Cost of tillage operation in the South-South Zone

Farm Operation	Government rate (N/Ha)			Private rate (N/Ha)		
	2023	2024	% Change	2023	2024	% Change
Delta State						
1. Ploughing of Upland	15,000	20,000	33	35,000	65,000	86
2. Harrowing	15,000	20,000	33	35,000	55,000	57
3. Ridging	15,000	20,000	33	35,000	45,000	29
4. Spraying	7,000	7,000	0	5,000	9,000	80
5. Others (Slashing)	35,000	72,000	106	35,000	92,000	163
Edo State						
1. Ploughing of Fadama	30,000	45,000	50	40,000	60,000	50
2. Ploughing of Upland	30,000	45,000	50	40,000	60,000	50
3. Harrowing	20,000	35,000	75	30,000	45,000	50
4. Ridging	-	45,000	-	-	60,000	-
5. Haulage (per day)	20,000	20,000	0	50,000	60,000	20
7. Spraying	15,000	15,000	0	-	17,000	-
8. Harvesting	55,000	80,000	45	85,000	110,000	29
Rivers State						
1. Ploughing of Fadama	170,000	190,000	12	190,000	200,000	5
2. Ploughing of Upland	150,000	175,000	17	160,000	220,000	38

South-West Zone

Ondo State was reported to have the highest cost of tillage operation in the South-West Zone for both Government and private rate as presented in Table 7.18. Similarly, Lagos State was reported to have the least cost of tillage operation. There was increase in cost of farm operations in the year 2024 when compared to 2023, in addition private cost of tillage operation was higher than that of Government, this could be attributed to the fact that some State Government are intervening in the agricultural sector.

Table 7.18a: Cost of tillage operation in the South-West Zone

Farm Operation	Government rate (N/Ha)			Private rate (N/Ha)		
	2023	2024		2023	2024	
Ekiti State						
1. Ploughing of Fadama	18,000	30,000	67	40,000	45,000	13
2. Ploughing of Upland	15,000	-	-	30,000	35,000	17
3. Harrowing	12,000	-	-	30,000	35,000	17
4. Ridging	12,000	-	-	30,000	35,000	17
5. Haulage (per day)	10,000	-	-	30,000	35,000	17
6. Processing	-	-	-	20,000	25,000	25
7. Spraying	-	-	-	7,500	10,000	33
8. Harvesting	-	-	-	5,000	7,500	50
Lagos State						
1. Ploughing of Fadama	40,000	-	-	30,000	45,000	50
2. Ploughing of Upland	30,000	40,000	33	30,000	45,000	50
3. Harrowing	20,000	40,000	100	30,000	45,000	50
4. Ridging	20,000	40,000	100	30,000	45,000	50
Ogun State						
1. Ploughing of Fadama	35,000	45,000	29	55,000	75,000	36
2. Ploughing of Upland	35,000	45,000	29	55,000	75,000	36
3. Harrowing	25,000	40,000	60	40,000	65,000	63
4. Ridging	25,000	45,000	80	40,000	65,000	63
5. Haulage (per day)	20,000	40,000	100	-	-	-
6. Processing	6,000	10,000/ton	67	-	-	-
7. Spraying	20,000	25,000	25	40,000	65,000	88

Table 7.18b: Cost of tillage operation in the South-West Zone

Farm Operation	Government rate (N/Ha)			Private rate (N/Ha)		
	2023	2024	% Change	2023	2024	% Change
Ondo State						
1. Ploughing of Fadama	45,000	77,000	71	50,000	80,000	60
2. Ploughing of Upland	40,000	65,000	63	45,000	70,000	56
3. Harrowing	40,000	65,000	63	45,000	65,000	44
4. Ridging	45,000	65,000	44	50,000	70,000	40
5. Haulage (per day)	60,000	90,000	50	80,000	100,000	25
6. Processing	10,000	10,000	0	10,000	10,000	0
7. Spraying	45,000	67,000	49	45,000	60,000	33
8. Harvesting	50,000	60,000	20	50,000	60,000	20
Osun State						
1. Ploughing of Fadama	15,000	-	-	37,500	62,500	67
2. Ploughing of Upland	15,000	-	-	35,000	62,000	77
3. Harrowing	11,000	-	-	35,000	62,000	77
4. Ridging	15,000	-	-	35,000	60,000	71
5. Spraying	10,000	-	-	10,000	10,000	0
6. Harvesting	14,000	-	-	18,000	18,000	0
Oyo State						
1. Ploughing of Fadama	-	-	-	37,500	75,000	
2. Ploughing of Upland	-	-	-	37,500	75,000	
3. Harrowing	-	-	-	37,500	75,000	
4. Ridging	-	-	-	37,500	75,000	

7.5 Animal Traction Situation

Animal traction refers to the use of animals, typically draft animals like horses, oxen, mules, or donkeys, to perform various tasks in agriculture and transportation. It is a traditional and widespread practice in many parts of the world, especially in rural and developing areas where mechanized equipment may be less accessible or affordable.

Additionally, animal traction plays a crucial role in the livelihoods of many rural communities worldwide, enabling them to cultivate crops, transport goods, and maintain their traditional farming practices. Efforts are made to improve the welfare of the animals involved and to promote sustainable and responsible animal traction practices.

Available data on animal traction in Nigeria indicate that Taraba State, in the North-Central zone, as presented in Table 7.19, reported a 41 percent increase in the use of draft animals; however, there is

no information available from other States in the zone. For the North-East zone, Adamawa State was reported to have the largest number of draft animals, which had decreased from 5,045,000 in 2023 to 3,893,000. Meanwhile, Gombe State was reported to have the least number, which had also reduced by 10 percent in 2024. Generally, there was a decrease in the number of draft animals in the North-East zone; no information was available from Borno and Yobe States. Similarly, for the North-West zone, Kebbi State was reported to have the largest number of draft animals, which had decreased from 255,000 in 2023 to 239,500, while Sokoto State was reported to have the least number. In general, there was a decrease in the number of draft animals in the zone, which could be attributed to cattle rustling and the problem of insecurity. However, there was no information from Jigawa and Kaduna States. On the other hand, no information was provided from all the States in South-East, South-South, and South-West. This could be attributed to the fact that there is a lack of usage of draft animals in these zones, as farmers mostly use mechanized equipment.

Table 7.19a: Animal Traction Situation in Nigeria

Local Government Areas	Number in 2023	Number in 2024	Percentage change
Taraba State			
Karim Lamido	210	370	76
Wukari	150	220	47
Ardo Kola	170	260	53
Gassol	220	300	36
Jalingo	190	230	21
Zing	130	160	23
Yoro	172	210	22
Total	1242	1750	41

Table 7.19b: Animal Traction Situation in Nigeria

Local Government Areas	Number in 2023	Number in 2024	Percentage change
Adamawa State			
Michika	15,000	23,000	53
Mubi N/S	800,000	940,000	18
Hong	50,000	60,000	20
Fofure	980,000	100,000	-90
Song	700,000	850,000	21
Ganye	830,000	900,000	8
Jada	800,000	100,000	-88
Gombi	870,000	920,000	6
Total	5,045,000	3,893,000	-23
Bauchi State			
Bauchi	5,000	6,000	20
Misau	5,500	6,300	15
Alkaleri	4,000	-	-
Gamawa	6,000	5820	-3
Katagum	6,000	5,600	-7
Dambam	5,000	5,000	0
Darazo	4,000	3,620	-10
Total	35,500	32,340	-9
Gombe State			
Kwami	550	360	-35
Kaltungo	350	405	16
Dukku	720	650	-10
Funa kaye	580	560	3
Total	2,200	1975	-10

Table 7.19c: Animal Traction Situation in Nigeria

Local Government Areas	Number in 2023	Number in 2024	Percentage change
Kano State			
Gwarzo	246	277	13
Rano	332	409	23
Gaya	252	501	99
Albasu	267	294	10
Takai	239	309	29
Danbatta	421	452	7
Minjibir	291	304	4
Total	2048	2546	24
Katsina State			
Dutsinma	20,000	9,000	-55
Malunfashi	18,000	7000	-61
Dan Musa	12,000	7000	-42
Kankia	10,000	5,000	-50
Musawa	25,000	7,000	-72
Matazu	22,000	6,000	-73
Charanci	15,000	8,000	-47
Total	122,000	49,000	-60
Zamfara State			
Across LGAs	15,000	15,000	0
Kebbi State			
Argungu	40,000	42,000	5
Birnin Kebbi	45,000	40,000	-11
Arewa	45,000	40,000	-11
Aleiro	40,000	41,500	4
Bunza	45,000	37,000	-18
Kalgo	40,000	39,000	-3
Total	255,000	239,500	-47

Table 7.19d: Animal Traction Situation in Nigeria

Local Government Areas	Number in 2023	Number in 2024	Percentage change
Sokoto State			
Tambuwal	700	600	-14
Shagari	406	500	23
Sabon Birnin	346	400	16
Total	1452	1500	3

7.6 Animal Traction Charges

North-Central Zone

Table 7.20 depicted data on animal traction charges in the North-Central zone, Taraba State was reported to have the highest cost of ploughing and ridging at NGN45,000 and NGN35,000 respectively, while Plateau State was reported to have the least cost of ploughing and ridging with a value of NGN10,000. Similarly, Kwara and Niger States were having the same rate of ridging. However, for haulage Kwara and Taraba States were reported to have the same rate while Niger State was having the least rate of NGN15,000. Generally, the animal traction charges have increased in 2024 when compared with 2023, this could be attributed to the high rate of inflation. No information from Benue, Kogi, and Nasarawa States.

Table 7.20: Animal Traction Charges in North-Central Zone

States	Ploughing (₦/Ha)			Ridging (₦/Ha)			Haulage (per day) (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change	2023	2024	% Change
FCT	-	-	-	20,000	-	-	-	-	-
Kwara	25,000	30,000	20	25,000	30,000	20	20,000	30,000	50
Niger	15,000	25,000	67	17,000	30,000	76	13,000	15,000	15
Plateau	10,000	10,000	0	10,000	10,000	0	-	-	-
Taraba	30,000	45,000	50	30,000	35,000	17	18000	30000	67
Average	16,000	22,000	27.4	20,400	21,000	22.6	10,200	15,500	26.4

North-East Zone

Adamawa State was reported to have the highest cost of ploughing, ridging and haulage with a value of ₦45,000, ₦35,000 and ₦27,000 respectively as showed on Table 7.21. Conversely Borno State was reported to have least cost of ploughing, while Gombe State was reported to have the least cost ridging with a value of ₦15,000. Similarly, Bauchi State was reported to have the least cost haulage with a value of ₦15,000. Overall, the animal traction charges in the zone have increase in 2024 when compared with 2023, this could be attribute to banditry and cattle rustling which cause shortage of these animals.

Table 7.21: Animal Traction Charges in North-East Zone

States	Ploughing (₦/Ha)			Ridging (₦/Ha)			Haulage (per day) (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change	2023	2024	% Change
Adamawa	35,000	45,000	29	25,000	35,000	40	20,000	27,000	35
Bauchi	25,000	30,000	20	15,000	20,000	33	12,000	15,000	25
Borno	12000	20,000	67	15,000	18,000	20	-	-	-
Gombe	22,500	-	-	10,000	15,000	50	-	-	-
Yobe	15,000	25,000	67	15,000	30,000	100	20,000	25,000	25
Average	21,900	24,000	36.6	16,000	23,600	49	10,400	13,400	17

North-West Zone

Information on animal traction charges in the North-West zone is presented in Table 7.22; the data indicate that Zamfara State was reported to have the highest cost of ploughing and ridging operation at the rate of ₦45,000 and ₦40,000, respectively, while Kano State was reported to have the highest cost of haulage at a rate of ₦25,000. Similarly, Kaduna State was reported to have the lowest price for ploughing and ridging operations, at ₦20,000 for both, while Sokoto State was reported to have the lowest cost of haulage, at ₦8,000. Typically, animal traction charges increased in 2024 compared to 2023, which could be attributed to the high rate of inflation. Information was not provided from the South-East, South-South, and South-West Zones of the country. This could be attributed to the use of mechanized equipment, such as power tillage, in these zones.

Table 7.22: Animal Traction Charges in North-West Zone

States	Ploughing (₦/Ha)			Ridging (₦/Ha)			Haulage (per day) (₦/Ha)		
	2023	2024	% Change	2023	2024	% Change	2023	2024	% Change
Jigawa	15,000	30,000	100	20,000	25,000	25	8000	10,000	25
Kaduna	17,000	20,000	18	17,000	20,000	18	-	-	-
Kano	20,000	22,000	10	18,000	21,000	17	4,000	25,000	525
Katsina	25,000	40,000	60	-	-	-	-	-	-
Kebbi	25,000	30,000	20	25,000	30,000	20	10,000	15,000	50
Sokoto	28,000	35,000	25	28,000	35,000	25	6000	8000	33
Zamfara	30,000	45,000	50	30,000	40,000	33	-	-	-
Average	22,857	31714	40.4	19,714	24,429	20	4000	8,286	90

7.7 GRAIN RESERVES

Grains are generally stored in both traditional and modern storage structures which include Rhombus, barns and silos. A strategic grain reserve is a Federal Government program that encourages grain reserves to be utilized during periods of scarcity when supplies are scarce. Silos of varying storage capacities have been constructed across the country in various location. Apart from the silo complexes and their capacities provided by the Food and Strategic Reserves Department of the Federal Government, some states as well have some silos where grains are reserved in their states to compliment the effort of federal government.

7.7.1 Quantity of grains stored and distributed

North-Central Zone

Data on the grain reserve situation in the North-Central region of the country is presented in Table 7.23; the information shows that the FCT reported an increase in the quantity of grain stored and distributed in 2024 compared to 2023. Other States in the zone did not provide information on the quantity of grain stored and the quantity distributed. Similarly, information on grain reserve situation in Nasarawa and Niger State was not provided.

Table 7.23: Capacity and the quantity of grains stored and distributed in North-Central Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/ Commodity (MT)		Quantity distributed / Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Benue State									
Strategic	Makurdi	25,000	FGN	Y	Soya bean, maize	-	-	-	-
FCT									
Warehouse	Gwagwalada	1000	FCT	Y	Maize	240	1000	200	760
Warehouse	T/Maje	1000	FCT	Y	Corn	100	-	80	-
-	Bwari	210	FCT	Y	-	-	-	-	-
-	Kwali	210	FCT	Y	-	-	-	-	-
-	Abaji	210	FCT	Y	-	-	-	-	-
-	Kuje	210	FCT	Y	-	-	-	-	-
Kogi State									
FGN	Adavi	15,000	FG	Y	-	-	-	-	-
FGN	Ankpa	3,000	State	Y	-	-	-	-	-
FGN	Kabba	3,000	State	N	-	-	-	-	-
FGN	Okene	3,000	State	Y	-	-	-	-	-
FGN	Ida	3,000	State	Y	-	-	-	-	-
FGN	Lokoja	3,000	State	Y	-	-	-	-	-
Kwara State									
Silo	Ilorin East	10,000	FG	YES	Maize/ Soya	500	-	-	-
Concrete Store	Ilorin East	2,000	STATE	YES	Maize/ Soya	500	-	-	-
Cooncrete Rock	Omuaran(Irrepodun)	120T	STATE	YES	Maize/ Soya	500	-	-	-
Concrete Block	Bode-saadu (Moro)	500T	STATE	YES	Maize/ Soya	500	-	-	-
Concrete Block	Share (Ifelodun)	1000T	STATE	NO	--	--	--	--	---
Concrete Block	Kaiama	180T	STATE	NO	---	--	--	--	--
Plateau State									
Federal Govt	Jos South	24,000	FG	N	-	-	-	-	-
Grand cereal	Jos South	18,000	Private	Y	-	-	-	-	-
Taraba State									
Kormo	Gassol	4.5	State	-	-	-	-	-	-
K/Lamido	K/Lamido	4.5	State	-	-	-	-	-	-
Wukari	Wukari	2.5	State	-	-	-	-	-	-
Bali	Bali	2.5	State	-	-	-	-	-	-
Takun	Takun	2.5	State	-	-	-	-	-	-
Jalingo	Jalingo	2.5	State	-	-	-	-	-	-

North-East Zone

Table 7.24 showed the grain reserve situation in the North-East of the country; Gombe State was reported to have the same quantity of grain stored and quantity distributed in both 2023 and 2024. However, other States in the zone did not provide information on the quantity of grain stored and the quantity distributed. Similarly, information on the grain reserve situation in Adamawa and Yobe states was not provided.

Table 7.24: Capacity and the quantity of grains stored and distributed in North-East Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/Commodity (MT)		Quantity distributed /Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Bauchi State									
Silo	Bauchi	4000	State	Yes	-	-	-	-	-
Silo	Azare	4000	State	Yes	-	-	-	-	-
Silo	Boto	4000	State	Yes	-	-	-	-	-
Borno State									
Farm centre	Jere	5000	BOSG	Y	Maize Cowpea Millet	-	-	-	-
Munguno	Munguno	5000	BOSG	Y	Cowpea Millet	-	-	-	-
Biu	Biu	5,000	BOSG	Y	Maize Sorghum	-	-	-	-
Chibok	Chibok	4,000	BOSG	Y	G/Nut Maize	-	-	-	-
Bama	Bama	2,000	BOSG	Y	Millet	-	-	-	-
MOLAI	M.M.L	100,000	FG	Y	-	-	-	-	-
Gombe State									
Ware house	Gombe	35	State	-	-	30	30	30	30

North-West Zone

Information on the grain reserve situation in the North-West zone of the country is presented in Table 7.25. The data show that Zamfara State reported the highest quantity of grain stored, while Kebbi State reported the highest quantity of grain distributed. However, information on the grain reserve situation in Jigawa State was not provided.

Table 7.25: Capacity and the quantity of grains stored and distributed in North-West Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/Commodity (MT)		Quantity distributed /Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Kaduna State									
Saminaka Silo	Lere	5,000	State	N	-	-	-	-	-
Giwa Silo	Giwa	5,000	State	-	-	-	-	-	-
Zaria Silo	Zaria	5,000	State	-	-	-	-	-	-
Kafanchan silo	Jema'a	5,000	State	-	-	-	-	-	-
Birnin Gwari	Birnin Gwari	5,000	State	-	-	-	-	-	-
Kano State									
Maganda	Nasarawa	180	State	Y	Rice	-	30	-	-
Kwana dangora	Tofa	150	State	Y	-	-	-	-	-
Gezawa	Gezawa	150	State	Y	-	-	-	-	-
Getso	Gwarzo	150	State	Y	-	-	-	-	-
Tsakuwa	Dawakin kudu	210	FCT	Y	-	-	-	-	-
Katsina State									
Silo	Katsina	5,000	State	Y	-	-	-	-	-
Silo	Dutsinma	5,000	State	Y	-	-	-	-	-
Kebbi State									
State Govt	Birnin Kebbi	1685	State	-	Rice	33695	-	33695	-
State Govt	Birnin Kebbi	2036.5	State	-	Maize	20365	-	20365	-
State Govt	Birnin Kebbi	1686.7	State	-	Millet	16867	16867	-	16867
State Govt	Birnin Kebbi	600	FG	-	Rice	-	12,000	-	12000
Sokoto State									
State Gov	Kasorawa	10,000	State	Yes	Maize Millet Sorghum	3000 130 150	- - -	- - -	- - -
Zamfara State									
Gidan Dawa	Gusau	70,000	State	Yes	Rice Maize Millet Beans Sorghum	64,816 37223 25910 15,217 14,121	- - - - -	- - - - -	- - - - -

South-East Zone

Anambra State was reported to have one privately owned grain reserve. In 2024, over 400 MT of grain were stored in the facility, with 400 MT distributed in 2024. The volume of grain stored in the facility in 2024 was 20% lower than that stored in 2023. In 2024, the state received over 48000MT of rice, cowpea, and maize grain from the Federal Government. Similarly, some quantities were also obtained from the state government and private individuals by Coscharis Grain Reserve. On the other hand, Ebonyi State was reported to have one grain reserve named Ezillo, but information on the quantity of grain stored and distributed was not provided. Additionally, no information was provided by other States in the zone.

Table 7.26: Capacity and the quantity of grains stored and distributed in South-East Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/Commodity (MT)		Quantity distributed /Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Anambra State									
Coscharis	Anambra ESAs	500	private	Y	Maize, rice	50000	40000	2000	4000
Ebonyi State									
Ezillo Grain Reserve	Ohaukwu	-	FG	N	-	-	-	-	-

South-South Zone

Available data on the grain reserve situation in the South-South zone of the country is presented in Table 7.27; the information shows that Akwa Ibom was reported to have the highest installed grain reserve, followed by Rivers, then Edo State, but information on the quantity of grain stored and the quantity distributed in these States was not provided. Similarly, information on the grain reserve situation in Bayelsa, Cross Rivers, and Delta States was not provided.

Table 7.27: Capacity and the quantity of grains stored and distributed in South-South Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/Commodity (MT)		Quantity distributed /Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Akwa Ibom State									
AKS Grain Reserve	Ibiono Ibom	25,000	State/FG	N	Maize	-	-	-	-
Edo State									
Edo State grain Reserves	Ikpoba-okha	1000	State	N	-	-	-	-	-
Federal grain Reserves	Esan Central	75	FG	N	-	-	-	-	-
Rivers State									
Pabod supply Ltd	Obio-Akpor	19,000	Under lease to Ministry of Commerce & Industry	Y	Manufactured consumer good	-	-	-	-

South-West Zone

Information on the grain reserve situation in the South-West zone of the country is presented in Table 7.28. Ogun State was reported to have increased the quantity of grain distributed from 20,000 MT in 2023 to 25,000 MT in 2024. Similarly, Osun State was reported to have a non-functional strategic grain reserve in Ilesa West owned by the Federal Government. However, other States in the zone did not provide information on the grain reserve situation in their areas.

Table 7.28: Capacity and the quantity of grains stored and distributed in South-West Zone

Name of Grain reserve	Location (LGA)	Installed capacity (MT)	Ownership (FG, State or private)	Functional (Y/N)	Grains stored	Quantity of Grains stored/ Commodity (MT)		Quantity distributed /Commodity (MT)	
						2023/2024	2023/2024	2023	2024
Ogun State									
Asero Warehouse	Abk South	90mT	FG	Y	Maize	-	45,000	20,000	25,000
Osun State									
Strategic grain reserve	Ilesa west	-	FG	N	-	—	—	—	—

7.7.2 Grains Received Across Various Zones

North-Central Zone

Table 7.29 showed the quantity of grains received from FG, the State government, and private individuals in the North-Central Zone. FCT was reported to have the highest amount of grain received from the FGN, while Benue State was reported to have the least quantity. However, there was no information from other States in the zone.

Table 7.29: Grains received from FG, State Govt and private individuals in North-Central Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Benue State								
SEMA Warehouse	Makurdi	Maize Garri	-	897 108	-	-	-	-
FCT								
Specialized ware house	Gwagwalada	Rice Maize	-	599.9 1000	-	-	-	-

North-East Zone

Information on the quantity of grains received from FG, the State government, and private individuals in the North-East Zone is presented in Table 7.30. Adamawa and Borno States were reported to have received grains, which are mostly cereals, but no information on the quantity and the source. However, there was no information from other States in the zone.

Table 7.30: Grains received from FG, State government and private individuals in North-East Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Adamawa State								
Federal grain reserve	Yola South	Rice, Maize, Sorghum	-	-	-	-	-	-
Borno State								
Farm centre	Jere	Maize	-	-	-	-	-	-
Munguno	Munguno	Cowpea Millet	-	-	-	-	-	-
Biu	Biu	Maize Sorghum	-	-	-	-	-	-
Bama	Bama	Millet Rice	-	-	-	-	-	-

North-West Zone

Available data on the quantity of grains received from FG, State government, and private individuals in the North-West Zone is shown in Table 7.31. Sokoto State was reported to receive the highest quantity of grain from the FG and the State Government, which are mostly cereals, while Kano State was

reported to receive the lowest quantity of cereal grains. However, there was no information from other States in the zone.

Table 7.31: Grains received from FG, State government and private individuals in North-West Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Kano State								
Maganda	Nasarawa	Rice	30	-	-	40	-	-
		Maize	40	-	-	30	-	-
Sokoto State								
Sokoto State Govt	Sokoto	Maize	-	5060	-	4800	-	-
		Sorghum	-	5800	-	-	-	-
		Millet	-	216.29	-	2600	-	-
		Rice	-	1273.4	-	6900	-	-

South-East Zone

Anambra State was the only state reported to have received grain in the South-East zone, as depicted in Table 7.32; it received 48,000 MT of grain from the FG, 900 MT from the State, and 2,200 MT from private individuals. These grains are mostly cereals.

Table 7.32: Grains received from FG, State government and private individuals in South-East Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Anambra State								
COSCHARIS	Awka south	Rice	20000	20000	100	200	2000	800
	Awka south	Cowpea	30000	15000	800	300	5000	900
	Awka south	Maize	10000	13000	500	400	1800	500

South-South Zone

Table 7.33 shows the quantity of grain received from FG, the State government, and private individuals in the South-South Zone. Delta State was the only State in the zone that was reported to have received grain in the zone. It received 1,112.5 MT of grain from FG and 600MT from State these grains are mostly cereals.

Table 7.33: Grains received from FG, State government and private individuals in South-South Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Delta State								
-	-	Rice	870	20	-	-	-	600
		Maize	2000	975	-	-	-	-
		Garri	-	117.5	-	-	-	-

South-West Zone

Information on the quantity of grain received from FG, State government and private individuals in South-West Zone is presented on Table 7.34 showed. Ogun State was reported to received rice but no information regarding the quantity and source of the grain. However, there was no information from other States in the zone.

Table 7.34: Grains received from FG, State government and private individuals in South-West Zone

Name of Grain reserve	Location (LGA)	Type of Grain	Quantity (MT)					
			FG		SG		Private	
			2023	2024	2023	2024	2023	2024
Osun State								
Warehouse	Ede North	Rice	___	___	___	___	___	___

7.7 Farm Machinery/Equipment Situation

Table 7.22 presents information regarding farm machinery and equipment procured and distributed across the six geopolitical zones in the 2023 and 2024 farming seasons. In the north central region, a total of 228 tractors were procured and distributed, including 3 Mahindra tractors in Nasarawa, 10 Massey Ferguson tractors in the FCT, 15 Baldam tractors, and 200 Massey Ferguson tractors in Kwara. Apart from tractors, 29000 and 33000 CP15 sprayers were distributed in Nasarawa State. Little information is provided for comparing the 2023 and 2024 farming seasons. Other states in the zone did not report any information on farm machinery and equipment in their State.

In the northeast zone, Borno State consistently increased the number of tractors in the state. In 2023, 300 tractors were supplied, and 270 YTO tractors were also procured and distributed during the 2024 farming season. In Gombe State, NG-Care distributed 1,000 vegetable grinders to farmers in 2024. Other states in the zone did not report any intervention in farm machinery or equipment procurement and distribution in either 2023 or 2024.

In the northwest zone, a significant quantity of tractors and other farm equipment was procured and distributed in 2024. The major ones are 188 tractors, 100 sprayers, 1000 grinders, and 100 crushers in Katsina state. Two UMZ tractors and 250 sprayers in Zamfara state, and 10 combined harvesters and 60 MF tractors in Jigawa. In Kano, 690 solar and manual sprayers, 1200 handheld planters, and 56 threshers were distributed. In comparison to 2023, when little intervention was made, a tremendous improvement has been observed in the northwest in 2024.

Machinery and equipment procured and distributed in the South-South include 3 John Deere tractors and their implements in Bayelsa in 2023 and 2024, 80 Knapsack sprayers in Cross River in 2024, and 23 work bulls in Edo in 2023. Most of the small interventions in this zone are scheduled for either 2023 or 2024, so there is no basis for comparison.

In the five states of the South-East, only one solar system was reported to have been procured and distributed by the federal government in Abia state. So, there were no reported interventions by the state government.

Lastly, in the Southwest region, the following significant items were procured and distributed in 2023: 86 Knapsack sprayers and 35 pumping machines in Ogun, and 1250 sprayers in Ekiti. In 2024, Osun State distributed 31 tractors, 31 ploughs, and 31 harrows through LGA/PPP.

Table 7.22a: Farm machineries/equipment procured and distributed

Types of Machineries/ Equipment provided	Specification/ brand	Quantity Procured by Government		Quantity distributed by Government		Channel of dist. e.g. State
		2023	2024	2023	2024	
North-Central						
Nasarawa State						
Tractor	Mahindra	-	3	-	-	-
Sprayers	CP15	29,000	33,000	-	-	-
FCT						
Tractors	Massey Ferguson	-	10	-	7	-
Kwara						
Tractors	Baldam 75HP	-	15	-	15	-
	MF 75HP	200	200	200	200	-
North-East						
Borno State						
Tractor	farm truck and YTO	300	270	120	270	LGA
Gombe						
Vegetable grinder	-	-	1000	-	1000	NG-Care
North-West						
Katsina						
Tractors	Mahindra	-	185	-	185	-
	Ursus	-	1	-	1	-
	Belarus	-	2	-	2	-
Plough	-	-	3	-	3	-
Harrow	-	-	3	-	3	-
Ridger	-	-	3	-	3	-
Sprayer	-	-	100	-	100	-
Miller	-	-	350	-	350	-
Scale	-	-	350	-	350	-
Presser	-	-	75	-	75	-

Table 7.22b: Farm machineries/equipment procured and distributed

Types of Machineries/ Equipment provided	Specification/ brand	Quantity Procured by Government		Quantity distributed by Government		Channel of dist. e.g. State
		2023	2024	2023	2024	
North-West						
Katsina State						
Grinder	-	-	1000	-	1000	-
Crusher	-	-	100	-	100	-
Mixer	-	-	20	-	20	-
Dryer	-	-	10	-	-	-
Parboiler	-	-	50	-	50	-
Polisher	-	-	3	-	-	-
Zamfara State						
Tractor	UMZ 75HP	-	2	-	-	-
Plough	-	-	1	-	-	-
Harrow	-	-	2	-	-	-
Ridger	-	-	1	-	-	-
Sprayer	-	-	250	-	-	-
Sokoto State						
Sprayers	15 litres	800	150	150	150	FG
Storage equipment	Aggregation centres	10	22	-	-	-
Jigawa						
Combine harvester	-	-	10	-	5	-
Tractor	Massey Ferguson	-	60	-	27	LGAs
Kano						
Sprayers	Solar and manual sprayers	-	690	-	-	KSADP
Handheld planters	-	-	1200	-	-	SAA/KSADP
Threshers	-	15	56	-	-	KNARDA/SAA/KSADP
Groundnut lifters	-	-	10	-	-	KNARDA/KSADP
Groundnut oil extractor	-	-	10	-	-	KNARDA/KSADP

Table 7.22c: Farm machineries/equipment procured and distributed

Types of Machineries/ Equipment provided	Specification/ brand	Quantity Procured by Government		Quantity distributed by Government		Channel of dist. e.g. State
		2023	2024	2023	2024	
South-South						
Bayelsa						
Tractor	John Deere	3	3	-	3	-
Tractor implement	John Deere	6	6	-	6	-
Sprayer	John Deere	3	3	-	3	-
Cross Rivers						
Knapsack sprayer	Weishi 16L	-	80	-	80	State
Multi grain grinding mill for wet and dry operation	-	15	-	-	15	State
Edo State						
Work bulls	Work bulls	23	--	23	-	-
Miller	-	34	-	34	-	-
Presser	-	20	-	20	-	-
Grinder	-	197	-	197	-	-
South-West						
Ogun State						
Processing equipment	Processing equipment	18	26	18	26	OG CARES
Sprayer	Knapsack sprayer	86	-	86	-	-
	Motorized sprayer	3	-	3	-	-
Others	Maize sheller	2	-	2	-	-
	Cassava grater with hydraulic press	2	-	2	-	-
	Pumping machine	35	-	35	-	-
	Mechanical weeder	1	-	1	-	-
	Sealing machine	2	-	2	-	-

Table 7.22c: Farm machineries/equipment procured and distributed

Types of Machineries/ Equipment provided	Specification/ brand	Quantity Procured by Government		Quantity distributed by Government		Channel of dist. e.g. State
		2023	2024	2023	2024	
South-West						
Ekiti State						
Sprayer	-	1250	-	1250	-	-
Osun State						
Tractor	75 HP	-	31	-	31	LGA/PPP
Plough	-	-	31	-	31	LGA/PPP
Harrow	-	-	31	-	31	LGA/PPP
South-East						
Abia State						
Dryer	Solar dryer	1	1	1	1	FG

On a general note, out of the 36 states and FCT, only Nasarawa, Kwara, Borno, Katsina, Zamfara, Jigawa, Osun, and the FCT were able to procure and distribute tractors in 2024. In total, 576 tractors were supplied to the country, with Borno state having the highest number, at 270, followed by Katsina with 185 tractors, and Jigawa with 60 tractors. Apart from tractors, Katsina, Zamfara, Bayelsa, and Osun states procured and distributed small quantities of harrows, ploughs, and ridgers. A significant number of sprayers were also distributed in the 2024 farming season, 33000 in Nasarawa state, 1250 in Ekiti, and 690 in Kano and Sokoto, respectively. A significant quantity of processing equipment was also distributed in some states, including 1000 multi-grain grinders in Katsina, 1000 vegetable grinders in Gombe, 10 groundnut oil extractors in Kano, 15 multi-grain grinding mills for wet and dry operation in Cross River, and 197 grinders in Edo. Other equipment procured and distributed by State, Federal, and private organizations includes a crusher, a parboiler, and storage equipment. As reported in Table 7.22, apart from one solar dryer in Abia and 150 15-litre sprayers in Sokoto, which were provided by the federal government, and the 1,000 vegetable grinders in Gombe and the 26 food processing machines in Ogun, which were provided by private organizations, all other interventions

were from state and local governments. From the table, data for comparison between 2023 and 2024 farming season is too little. Also considering the size of the country, and population of farmers, the intervention from government is very low, it must be improved.

8.0 POSTHARVEST LOSSES

Postharvest losses are losses incurred on agricultural produce through its various handling stages. Such losses could be due to poor processing, transportation, and even storage, and can occur at varying stages of the produce. Postharvest losses are captured in this survey to quantify some associated losses incurred by farmers and processors concerning the volume of crop produced for the year under survey (2024).

8.1 Crop Postharvest Losses

Postharvest crop losses refer to the losses incurred by farmers who cultivate crops. All categories of crops, including cereals, legumes, fruits, vegetables, and root and tuber crops, were considered in this category. The causes and stages of such losses were also captured. Most importantly, the percentage loss recorded at various stages of crop production was also captured.

North-Central Zone

Postharvest losses of crops were reported in five (5) states namely, Plateau, Nasarawa, FCT, Niger and Taraba states. Most of the crops reported to have prominent losses were yams, maize, rice, cassava, cowpea, and soya bean. The average volume of postharvest losses reported within the zone was 45% with Niger state having the highest volume of losses. Maize and yams were crops reported to have the highest postharvest losses within the North Central Zone. Losses of these crops were generally attributed to postharvest handling, that is, harvesting, processing (threshing, shelling) and storage operations.

Table 8.1a: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
North-Central Zone					
Plateau State					
Maize	Pest/diseases, theft	Maturity stage	Field, mechanical damage	40%	Prosecute the thieves
Sweet potato	Theft	Maturity stage	drying	35%	Harvest timely
Potato	Pest/disease	Storage	Harvesting	20%	Use of good stores when fully matured
Niger State					
Rice	Grains	Harvest, threshing	Gbaiko village	40%	Sensitization of post-harvest mgt.
Maize	Grains	Drought stress at period stage	Across 25 LGA	70%	Adopt climate smart practice
Yam	Yam tuber	Vegetative stage		30%	Adopt climate smart practice
Soybean	Seeds	Drying	Across state	70%	Plant center native crop

Table 8.1b: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
Nasarawa State					
Rice	Rain/Erosion flood	Maturity	Farm	15%	Use of resistance specie
FCT					
Maize	Mechanical damage	processing	Harvesting	20%	Good threshing machine
Cassava	Theft	Harvesting	Drying	10%	Employ vigilante
Cowpea	Pest/diseases	Processing	harvesting	10%	Use of insecticide
Taraba State					
Yam	Pest/diseases, theft	Harvesting, storage	Harvesting, drying	50%	
Maize	Pest/diseases, theft	Harvesting, storage	drying	40%	Provision of a watchman

North-East

Gombe, Yobe, Bauchi, and Adamawa were the states that reported crop postharvest losses in the North-East zone of Nigeria for the 2024 annual agricultural performance survey. The average zonal postharvest losses were estimated at 20%, with Yobe State reporting the highest losses within the zone. These losses were mainly attributed to harvesting, drying, and transportation of the farm produce.

Table 8.1c: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
North-East Zone					
Gombe State					
Maize	Thieves	Before & After harvest	On farm	10%	Farmers vigilance
Millet	Birds	Maturity	On farm	5%	Early harvesting
Sesame	Thieves	Drying	On Farm	20%	Farmers vigilance
Yobe State					
Millet		Booting	All LGAs	50%	
Sorghum		Booting		50%	Seed
Cowpea		Flowering		50%	Dressing
G/Nut		Podding		30%	Chemical
Sesame		Flowering		40%	

Table 8.1d: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
Bauchi State					
Rice	Pest/disease, mechanical damage, Accident	Drying, transport, processing	Drying	15%	Use of machinery
Maize	Pest/disease, mechanical damage	Harvesting, Transportation	Drying	10%	Use of machinery
Sorghum	Pest/disease, mechanical damage, Accident	Drying, transport, processing	Harvesting	10%	Use of machinery
Cowpea	Pest/disease, mechanical damage	Harvesting, drying, transportation	Harvesting	20%	Use of machinery
Soybean	Mechanical Damage	Harvesting, transportation	Harvesting	20%	Use of machinery
Adamawa State					
Maize	Pest	Vegetative	Farm	40%	Pesticide
Rice	Diseases	Vegetative	Farm	20%	Pesticide

North-West

The North-West zone states that reported postharvest losses were Jigawa and Kano states, with an average percentage loss of 30%. Tomato was reported to have the highest loss within the zone, with a 60% loss, out of crops like millet, cowpea, rice, and maize, which are reported to have postharvest losses. The main postharvest losses occurred during harvesting and storage.

Table 8.1e: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
North-West Zone					
Jigawa State					
Millet	Insects	Light	Malawama Taura	10%	Control Measure
Cowpea	Insects	Light	"	10%	Control Measure
Kano State					
Rice	Poor drying	Storage	At home	15%	
Tomato	Pest & diseases	At harvesting, transportation	Farm	60%	
Maize	Pest & diseases	Storage, theft	Farm	50%	

South-East

Akwa Ibom and Enugu states from the South-East zones reported postharvest losses of some crops. Crops reported were rice, maize and cassava with respective average percentage losses of 15%, 10% and 17%. These losses were reported to occur at storage and marketing stages.

Table 8.1f: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
South-East Zone					
Akwa Ibom State					
Maize	Pest	Storage & Sales	Stores & Market	30%	Effective & timely use of pesticides
Telferia	Leaf Rotting	Marketing	Market	15%	Use of organic fertilizer than inorganic
Cucumber	Pest & Diseases	During sales	Point of Sale	20%	Use of organic fertilizer than inorganic
Rice	Pest	Storage & sales	Stores & Market	10%	Effective & timely use of pesticides
Cassava	Theft	Processing & Sales	Mill & Stores	25%	Provision of security
Enugu State					
Maize	Insufficient drying	-	Farm	20%	Dry well with equipment
Cassava	Moulds	During storage	Dry environment	20%	
Rice	Birds	At the farm	Farm	20%	On farm protection

South-South

States that reported postharvest losses for some crops in the south-south are Rivers, Bayelsa and Edo states. The crops reported to be significantly affected are maize, okra and pumpkin placed at an average of 45%. Stages of postharvest losses were recorded mainly at harvesting stage with a mean zonal loss of 25%.

Table 8.1g: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
South-South Zone					
Rivers State					
Maize	Comb	1 month after planting	leaf	65%	Treat seeds before planting
Bayelsa State					
Cassava	Pest/disease, mechanical damage, theft	Harvesting, drying, transport,	---	3 – 10%	Proper
Yam	Pest/disease, mechanical damage, theft	Harvesting, drying, transport,	---	5 – 10%	Handling
Rice	Pest/disease, mechanical damage, theft	Harvesting, drying, transport,	---	5 – 10%	-
Plantain	Pest/disease, mechanical damage, theft	---	---	10%	Pest disease
Sweet Potato	Pest/disease, mechanical damage, theft	---	---	6%	Control
Edo State					
Okra	Disease	Harvesting	Farm	60%	---
Water melon	Disease	Fruiting	Farm	30%	---
Cucumber	Disease	Harvesting	Farm	20%	---
Pumpkin	Disease	Fruiting	Farm	45%	---

South-West

The South-West zonal postharvest losses of crops were reported by Ondo, Oyo, Lagos, Ekiti and Ogun states. A zonal average post-harvest loss of 23% from crops such as rice, maize, cassava, and yam. Most of the losses were reported to occur during harvesting, processing, and storage due to pest or disease infestation.

Table 8.1h: Crop Postharvest Losses

Crop with significant losses	Major harvest loss type	Activity stage loss	Place of Occurrence	Estimated loss (%)	Suggestion on reduction
South-West Zone					
Ondo State					
Maize	Fall Army worm,	Tarselling stage	State wide	10%	—
Yam	Yam seed	Lodging rotten	State wide	10%	—
Tomato	Fruits	Rotten	State wide	10%	—
Cassava	Tubers	Rotten	State wide	10%	—
Rice	Ripen stage	Harvesting Milling	State Wide	10%	—
Oyo State					
Maize	Pest/diseases, mechanical damage	Harvesting, processing	Farm, Home, Market	25%	Good post-harvest handling
Cassava	Poor drying, Glut	Harvesting	Farm, Market	20%	Good post-harvest handling, value addition
Tomato	Glut	Harvesting	Farm, Market	10%	value addition
Yam	mechanical damage	Harvesting	Market	10%	Proper handling
Cowpea	Pest infestation	Storage	Home	10%	Proper drying, storage chemicals
Lagos State					
Maize	Pest/diseases	—	Drying	60%	Early planting
Rice	Rain/erosion	—	Drying	40%	“
Cassava	Rain/erosion	—	Drying	50%	“
Tomatoes	Pest/diseases	—	Drying	40%	“
Ekiti State					
Tomatoes	Insect/pest attack	fruiting	Farm	20%	GAP
Maize	Drought, fall army worm	Vegetative stage	Farm	45%	Timely planting, use of insecticides
Cocoa	Insect/disease attack	Fruiting stage	Farm	15%	Timely spraying against black pod
Ogun State					
Rice	Pest/disease	Storage	Harvesting	20%	Improve technology on drying
Tomato	Pest/disease	Storage	Harvesting, drying, transport	40%	Modern storage facilities
Yam	Pest/disease, Mechanical damage	Harvesting, Storage	Harvesting, drying	30%	Research to investigate it
Cassava	Mechanical damage	Harvesting	Drying	10%	Improve harvesting technology

8.2 Livestock Postharvest Losses

These are losses incurred or experienced by farmers who produce livestock. The categories of losses registered in this survey are milk, eggs, sheep, goat, cow, broiler and layer.

North-Central

The livestock postharvest losses reported for North central were for Plateau and Niger states. The highest losses for the zone were reported for layer birds, at 15% loss due to pests and/or diseases. The average livestock postharvest losses for this zone were 8%, with causative losses resulting from pests and or diseases and cases of poor handling (heat and accidents) for eggs.

Table 8.2a: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
North-Central Zone				
Plateau State				
Eggs	Accident	Transportation	12%	Proper care
Sheep	Pest/diseases		3%	Vaccination
Goat	Pest/diseases		4%	Sanitation should be adhered to
Cow	theft	Transportation	1%	-
Broiler	Pest/diseases	-	10%	Sanitation, vaccination
Layer	Pest/diseases	-	15%	Sanitation, vaccination
Niger State				
Eggs	Heat stress	-	5%	High cost of production
Sheep	IPR	-	2%	“
Goat	Vaccine rector	-	3%	“
Broiler	Heat stress	-	3%	“
Layer	Heat stress	-	3%	“

North-East

Taraba, Yobe, Bauchi and Adamawa were states that reported livestock postharvest losses in the North-East zone of Nigeria. The zonal average of these losses was 30%, with Yobe and Adamawa states experiencing the highest losses, particularly in milk and eggs (averaging 20% and 50%, respectively), due to spoilage and breakage.

Table 8.2b: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
North-East Zone				
Taraba State				
Eggs	breakage	Transport	5%	-
Broiler	Death	Early stage	4.3%	-
Layer	Death	debeaking	2.5%	-
Yobe State				
Milk	Diseases	Carrying	30%	Nutritional Abuses
Eggs		Laying	70%	Anti-biotic
Sheep	PPR		50%	Systemic
Bauchi State				
Milk	Pest/diseases, accident, communal conflict, glut	Transportation	5%	Marketing
Eggs	Pest/diseases, accident, communal conflict, glut	-	7%	Marketing
Sheep	Pest/diseases, accident, communal conflict, glut	Pest/Diseases, Transportation	10%	Vaccination & Marketing
Goat	Pest/diseases, accident, communal conflict, glut	Pest/Diseases, Transportation	10%	Vaccination & Marketing
Cow	Pest/diseases, accident, communal conflict, glut	Pest/Diseases, Transportation	10%	Vaccination & Marketing
Broiler	Pest/diseases, accident, communal conflict, glut	Transportation, Threshing	10%	Vaccination & Marketing
Layer	Pest/diseases, accident, communal conflict, glut	Transportation, Threshing	10%	Vaccination & Marketing

Table 8.2c: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
Adamawa State				
Milk	Spoilage	Transportation	20%	Collection cans
Eggs	Breakage	Transportation	30%	Good vaccine
Sheep	Disease	Diseases	30%	Vaccinations
Goat	Theft	Farm	10%	Good housing
Cow	Theft	Communal Conflict	10%	Good security
Broiler	Disease	Diseases	30%	Heat
Layer	Egg breakage	Accidents	10%	Good management

North-West

Sokoto state was the only state that reported livestock postharvest losses within the North-West zone. A zonal average of 65% with cows having the highest postharvest losses due to theft at storage, followed by eggs with 70% caused by accident during transportation, and sheep with 60% as a result of disease/theft within the community.

Table 8.2d: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
Sokoto State				
Milk	Glut	transportation	50%	Stop once supply
Eggs	Accident	transportation	70%	Providing good roads
Sheep	Disease/theft	communal	60%	Provide security
Goat	Disease/theft	transportation	30%	Prevention
Cow	Theft	storage	100%	Provide security
Broiler	Disease	Processing	35%	Prevention/medication
Layer	Insecurity	transportation	40%	Provide security

South-East

Akwa Ibom state in the South-East zone reported slightly low livestock postharvest losses that mostly resulted from transportation and few cases of diseases. An average zonal loss of 2.5% was reported, and it was suggested that timely vaccination and adequate transport mechanisms be put in place to avert such losses.

Table 8.2e: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
South-East Zone				
Akwa Ibom State				
Eggs	Glut	Transportation	5%	Timely disposal
Sheep	Diseases	Transportation/storage	2%	Vaccination
Goat	Diseases	Transportation/storage	2%	Vaccination
Cow	Diseases	Transportation/storage	2%	Vaccination
Broiler	Diseases	Transportation	5%	Vaccination
Layer	Diseases	Transportation	2%	Vaccination

South-South

Bayelsa and Rivers states reported cases of livestock postharvest losses within the South-South zone, with Bayelsa reporting the highest loss in cow (50%) and sheep (30%) as a result of theft. An average zonal postharvest loss of 50% was reported.

Table 8.2f: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
South-South Zone				
Bayelsa State				
Eggs	Pest/Disease, Theft, Accident	Harvesting, Transportation	10%	Careful Handling
Broiler	Pest/Disease, Theft, Accident, communal conflict	Harvesting, Transportation	10%	Pest and Diseases control measure & careful handling
Layer	Pest/Disease, Theft, Accident, communal conflict	Harvesting, Transportation	10%	–
Rivers State				
Sheep	Theft	Grazing	30%	Home feeding
Cow	Theft	Maturity	50%	Sold out at maturity

South-West

Oyo, Lagos, Ekiti and Ogun states reported livestock postharvest losses for the South-West zone. The highest loss of the zone was reported for eggs at 30% due to glut. An average zonal postharvest loss of 18% was reported for the zone.

Table 8.2g: Livestock Postharvest Losses

Product with significant losses	Major harvest loss type	Activity stage loss	Estimated loss (%)	Suggestion on reduction
South- West Zone				
Oyo State				
Eggs	Glut	Harvesting	30%	Ready made market
Sheep	Glut, theft	Harvesting	20%	Produce towards festive period
Goat	Glut, theft	Harvesting	10%	Produce towards festive period
Broiler	Glut	Harvesting	25%	Ready made market
Layer	Glut	Harvesting	20%	Ready made market
Lagos State				
Eggs	Theft	-	30%	–
Ekiti State				
Goat	Diarrhea, cold & catarrh	During rearing	10%	Consult Vert. Doctor
Broiler	Newcastle, Gumboro, bird flu, Coccidiosis	Management stage	12%	Vaccine
Layer	Newcastle, Gumboro, bird flu, Coccidiosis	Management stage	12%	Vaccine
Ogun State				
Milk	Accident	Storage	5%	
Eggs	Glut	Transportation	10%	Access to motor above road
Sheep	Pest/disease	Processing	20%	Biosecurity, vaccination & good management
Goat	Pest/disease	Processing	10%	Drugs & vaccine administration
Cow	Flood, Fire, Pest/disease	Processing	10%	–
Broiler	Theft	Processing, pest/disease, Theft	10%	Good management, vaccine & drugs administration
Layer	Pest/disease	Theft, pest/diseases	20%	

8.3 Processing Plants

These are locations set up to convert agricultural produce from its primary or original form into other products that are beneficial in a secondary or tertiary form. Converting agricultural produce from its original form to a secondary or tertiary product is necessary to reduce postharvest losses, ease storage and preservation, and add additional value to the produce.

North-Central

Taraba and Kwara states reported having some agricultural produce processing plants within the North-Central zone. Rice, Cassava, and Maize were produced and reported to be processed at some private companies in these states. The operating capacities of these plants ranged from 10,000 to 25,000 tons and were reported to be functional.

Table 8.3a: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
North-Central Zone										
Taraba State										
Alganzaki	Ardo		Private	Rice				25,000	-	-
Al-Umma	Jalingo		Private	Rice				20,000	-	-
Fik-Flower			Private	Rice				10,000	-	-
Uten flower	Wuk		Private	Cassava				15,000	-	-
Tifa kare	Jalingo		Private	Cassava				25,000	-	-
Kwara State										
Kam Barawa processing plant	Baruten		Private	Maize					Functional	-
Mangal (Darma Rice)	Baruten		Private	Rice					Functional	-
ALDUSAR			Private	Tomato					Functional	-

North-East

Bauchi and Adamawa states of the North-East zone reported some agricultural produce processing plants within the North-East zone. These plants were reported to process rice, maize, sorghum for crop-based produce and cattle for livestock products (Adamawa state). Processing plants reported were privately owned and functional as at the time of this report.

Table 8.3b: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
NORTH EAST ZONE										
Bauchi State										
Zungur Rice	Bauchi		Private	Rice				300	Functional	_
Mustapha Katagum	Katagum		Private	Rice				500-8000	Functional	_
Burga Farm	Tafawa Balewa		Private	Rice				1000	Functional	_
Bauchi meat company	Bauchi	Govt.			Cattle			250	Functional	_
Galboki ventures	Bauchi		Private	Rice				1000	Functional	_
Al-Bint food ventures	Bauchi		Private	Soy, maize, rice, sorghum				10	Functional	_
Chime food	Bauchi		Private	Soy, maize, Rice, Sorghum, Fonio				0.5	Functional	_
Flourish food	Bauchi		Private	Soy, maize, Rice, Sorghum,				1.5	Functional	_
Sauki Food	Bauchi		Private				Poultry feed	2.0	Functional	_
Green Tech	Bauchi		Private	Soy, Maize, Rice, Sorghum				1.0	Functional	_
Datoyi Place	Bauchi		Private	Soy, Maize, Rice, Sorghum				0.5	Functional	_
Kainuwa Rice	Azare		Private	Rice				50	Functional	_

Table 8.3b: Processing Plants(cont)

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
NORTH EAST ZONE										
Bauchi State										
Goria Farm	Shira		Private	Rice				32	Functional	_
Alheri	Katagum		Private	Wheat				1.0	Functional	_
Tsangaya	Misau		Private	Rice				2.0	Functional	_
Adamawa State										
G.Nut processing	Hong		Private		Cattle				Functional	_
Rice processing	Demsa		Private		Cattle				Functional	_
Cattle	Ganye		Private		Cattle				Functional	_

North-West

Jigawa, Kano, Katsina, Kebbi and Sokoto states reported some processing plants available within the North-West zone. Major crops processed are rice and maize, mostly owned by private individual, except for Kano state that reported a non-functional seed processing complex in Garin Mallam of Kadawa owned by the Government. The operating capacities of these plants are between 5 – 60 metric tons per day and are fully functional.

Table 8.3c: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
North-West Zone										
Jigawa State										
Jifatu Rice Mill	Dutse		Private	Rice	–	–	–	–	X	
Majesty Rice Mill	Birnin Kudu		Private	Rice	–	–	–	–	X	
Kano State										
Kadawa seed processing complex	Garin Mallam	Govt.			–	–	–	–	–	–
L&Z	Kuboto		Private		Yoghurt	–	–	–	X	
Mix condiment	Faraun		Private		–	–	–	–	X	
Dangote	G/Malam		Private	Tomato	–	–	–	–	X	
Katsina State										
Kam Barawa	Batagarawa		Private	Maize	–	–	X	–	–	–
Mangal (Darma Rice)	Batagarawa		Private	Rice	–	–	X	–	–	–
AlDusar	Katsina		Private	Tomato	–	–	X	–	–	–
Kebbi State										
WACOT RICE	Argungu		Private	Rice	–	–	–	50MT/Hr	Functional	
LABANA	Birnin Kebbi		Private	Rice	–	–	–	36MT/Hr	Functional	

Table 8.3c: Processing Plants (cont)

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
Kebbi State										
LOLO RICE	Dandi		Private	Rice	–	–	–	8MT/Hr	Functional	
SAJO RICE	Birnin Kebbi		Private	Rice	–	–	–	5MT/Hr	Functional	
SANO RICE	Birnin Kebbi		Private	Rice	–	–	–	6MT/Hr	Functional	
Sokoto State										
Hikima Rice	Silame rood		Private	Rice	–	–	–	30tons/day	Functional	
Ahajiri Rice	Kalam Dram		Private	Rice	–	–	–	60tons/day	Functional	

South-East

Akwa Ibom and Ebonyi states in the South-East zone reported quite a few processing plants that process crops like rice, and cassava. Cassava is processed into garri, starch and flour. Interestingly, these plants are functional and owned by Government of Akwa Ibom state. The processing plants reported in Akwa Ibom have an operating capacity that ranges between 5 – 200 metric tons in a day. Rice is mainly processed in Ebonyi state by Government owned plants, except for a rice mill in Izza South that is privately owned and process cassava.

Table 8.3d: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity (MT)	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
South-East Zone										
Akwa Ibom State										
Cassava processing center	Afia Nsit, Nsit Ibom	X		Garri, Starch, Flour	-	-	-	10		X
Cassava processing center	Ikot Ekang, Abak	X		Garri, Starch, Flour	-	-	-	5		X
Cassava processing center	Ikot Ekpene Udo, Eket	X		Garri, Starch, Flour	-	-	-	5		X
Cassava processing center	Nung Udoe, Ibiesikpo Asutan	X		Garri, Starch, Flour	-	-	-	5		X
Cassava processing center	Odoro Ikpe Ini	X		Garri, Starch, Flour	-	-	-	5		X
Rice Processing Mill	Mbiabet pe Ini	X		Rice	-	-	-	200	X	
Ebonyi State										
Abakaliki	Abakaliki	Govt.		Rice	-	-	-	-	Functional	
Rice Mill	Izzi	Govt.		Rice	-	-	-	-	Functional	

Table 8.3d: Processing Plants (cont)

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity (MT)	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
Ebonyi State										
Rice Mill	Ikwo	Govt.		Rice	-	-	-	-	Functional	
Rice Mill	Edda	Govt.		Rice	-	-	-	-	Functional	
Cassava	Ohawa	Govt.		Rice	-	-	-	-	Functional	
Rice Mill	Izza South		Private	Cassava	-	-	-	-	Functional	

South-South

Cross river state is the only state in South-South that reported a functional processing centre with 1,000 metric tons capacity that is owned by the Government and processed rice.

Table 8.3e: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity (MT)	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
South-South Zone										
Cross River State										
Rice processing factory	Ogoja	X		Rice	-	-	-	1000	X	

South-West

Ondo, Oyo, Ogun and Ekiti states in the South-West zone reported quite a few agricultural produce processing plants. Major crops processed by these plants are rice, cassava, oil palm, and few shea nuts.

Most of these plants are functional, private owned with operating capacities between 250 – 3,000 liters per day for oil palm and 0.5 – 2 metric tons per day.

Table 8.3f: Processing Plants

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity (MT)	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
South -West Zone										
Ondo State										
Okitipupa	–	–	X	Cassava	–	–	–	–	X	
Odigbo			X	“	–	–	–	–	X	
Oyin	Akoko North West		X	“	–	–	–	–	X	
Okeluse	OSE		X	“	–	–	–	–	X	
Oba Akoko	Akoko south west		X	“	–	–	–	–	X	
Oyo State										
Stop hunger	Akinyele		X	Cassava	–	–	–	–	X	
FF Processing	Akinyele		X	“	–	–	–	–	X	
Jibumoye	Oluyole		X	“	–	–	–	–	X	
Ifesowapo	Oluyole		X	“	–	–	–	–	X	
Baba Oba	Lagelu		X	“	–	–	–	–	X	
Shea butter	Saki west		X	Shea butter	–	–	–	–	X	
Ifedawapo	Iseyin		X	Cassava	–	–	–	–	X	
Ogun State										
Mastol Agro	Obafemi Owode	–	–	X	Cassava	–	–	2Ton/day	X	
Debour faith Agro allied	Obafemi owode	–	–	X	“	–	–	2Ton/day	X	
Hebron Ltd	Ewekoro	–	–	X	“	–	–	2Ton/day	X	
Ojigun cassava processing	Ijebu Ode	–	–	X	“	–	–	2Ton/day	X	
Eltec farms		–	–	X	“	–	–	2Ton/day	X	
Premium cassava	Odogbolu	–	–	X	“	–	–		X	
Irede agro allied	Obafemi owode			X	“				X	
Harvest feed PLC	Obafemi owode			X	“				X	
Olumosi Farms Ent. Gufanti Rounder				X	“				X	
Cele Cluster				X	“				X	
Barracks plant				X	“				X	
Balare plant				X	“				X	
Obada Oko plant				X	“				X	
Akunlerogba village plant				X	“				X	
Alamala Village plant				X	“				X	
SKO Foods				X	“				X	

Name of Processing Center	Location (LGA)	Ownership		Type				Operating Capacity (MT)	Functionality	
		Govt	Private	Crop	Livestock	Fish	Feed Mill		Functional	Non-Functional
South -West Zone (cont'd)										
Ekiti State										
NPFS Cassava processing center	Gbonyin, & Ikole		X	Cassava				0.5MT/day	X	
Ekinmogun Cassava processing	Ado		Private	o				0.5MT/day	Functional	
RTEP (ASEJERE) Cassava processing center	Oye		o	cassava				0.5MT/day	Functional	
Irewole Cassava Processing Center, Omuo Ekiti	Ekiti East		private	cassava				0.5MT/Day	Functional	
Ekiti Anglican Diocese Rice processing center, Omuo-Ekiti	Ijero		Private	Cassava				0.5MT/day	Functional	
Crystal Gold Rice processing centre, Ado-Ekiti	Ado		Private	Rice				1.5MT/day	Functional	
Igbemo Rice Processing	Irepodun/I felodun		Private	Rice				0.8MT/day	Functional	
Rice processing center, Aisegba-Ekiti	Oye		Private	Rice				1.5MT/day	Functional	
Aanu Oluwapo Rice processing center,	Gbonyin		Private	Rice				1.5MT/day	Functional	
Oil palm processing centre, Ilupeju-Ekiti	Oye		Private	Oil Palm				250litres/day	Functional	
Oil palm processing centre, Iluomo	Gbonyin		Private	Oil palm				250litres/day	Functional	
Oil palm processing centre, Oloko Nla, Ikole-Ekiti	Ikole		Private	Oil palm				3000litres/day	functional	

9.0 FARMERS' ASSESSMENT OF CROP PERFORMANCE

9.1 Demographic Characteristics of the Respondents

Age and sex of the respondents

Most farmers (69%) were male, while 31% were female (Figure 9.1). The results showed a significant increase (21.17%) in female participation in the field exercise, while male participation decreased by 7.27% in 2024 compared to the 2023 wet cropping season. The mean age of farmers across the country was 47 years. However, male farmers had a mean age of 48 years, while female farmers had a mean age of 45 (Figure 9.2). This indicates that Nigerian farmers are within their economically active age group, necessary for agricultural production activities. It significantly influences their decision-making processes regarding the adoption of technologies and farm operations.

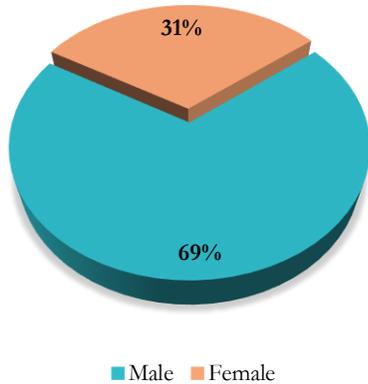


Figure 9.1: Gender Distribution of Farmers

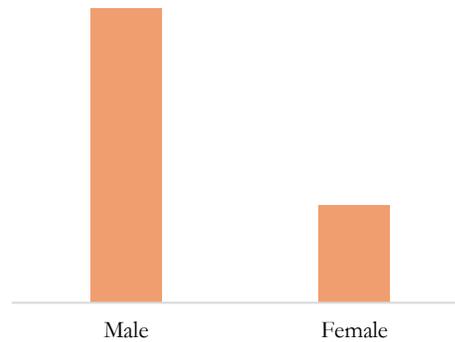


Figure 9.2: Mean Age of farmers

The mean household size in Nigeria is 9 persons. On average, households in the Northern states have 12 people, while those in the South have 7. Jigawa State has the highest household size of 16 people (Figure 9.3).

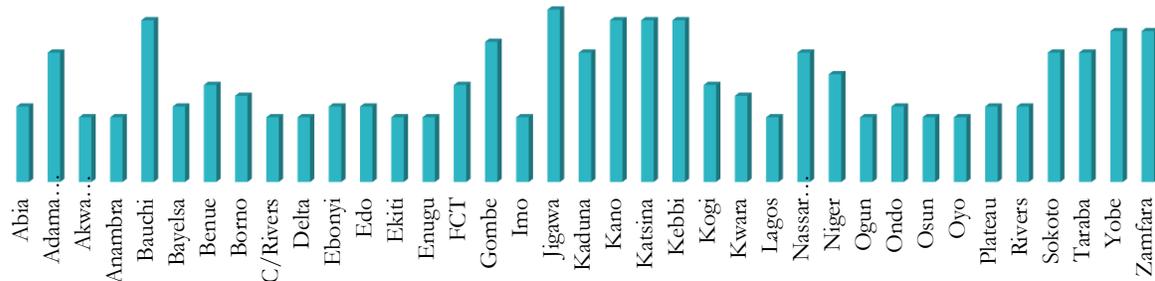


Figure 9.3: Average household size

The average landholding by farmers is approximately 1.5 hectares. About 44 percent of farmers acquired their land through inheritance and purchase (Figure 9.4). Land fragmentation remains a common practice in Nigeria and is recognized as a critical issue among farming households. Although

most farmers interviewed cultivated land areas between 0.5 and 2.5 hectares in 2024, many managed more than one plot of land. Several farmers had between two and five separate plots of farmland.

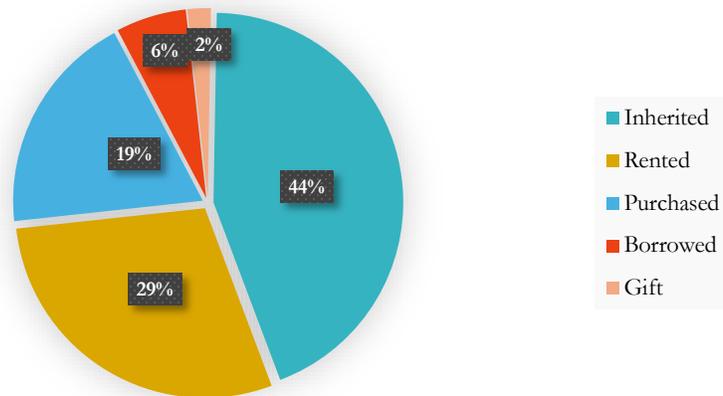


Figure 9.4: Proportion of farmers by land tenure status

9.2 Crop Production

Smallholder farmers have continued to dominate the Nigerian agricultural production system. Results indicate that the major staple crops cultivated across the states include maize, rice, sorghum, cowpea, and cassava, with average cultivated areas of 2.5, 2.25, 1.5, 2.0, and 2.0 hectares, respectively. Other crops grown in varying proportions include millet, yam, sweet potatoes, groundnuts, and soybeans (Figure 9.5). These crops are primarily produced under a mixed cropping system. Notably, 60% of farmers expect the 2024 output to be at least 25% higher than 2023 (Figure 9.6). Furthermore, Figure 7 shows that most farmers (88%) are engaged in crop production, while only about 10% are involved in livestock farming. This indicates that the contribution of the livestock sector to agriculture remains underdeveloped. Compared to 2023, crop production decreased by approximately 8.69%, while livestock production declined by about 69%. The sharp decrease in the livestock sector could be attributed to livestock rustling in the northern part of the country.

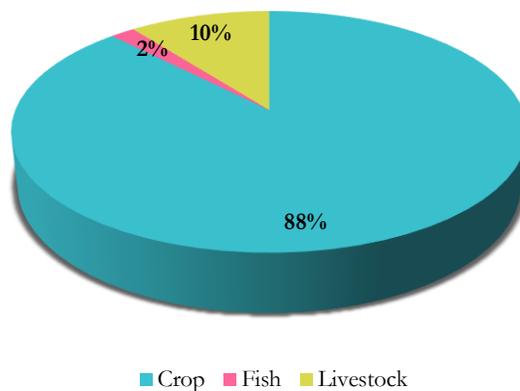


Figure 9.5: Farmer Production System

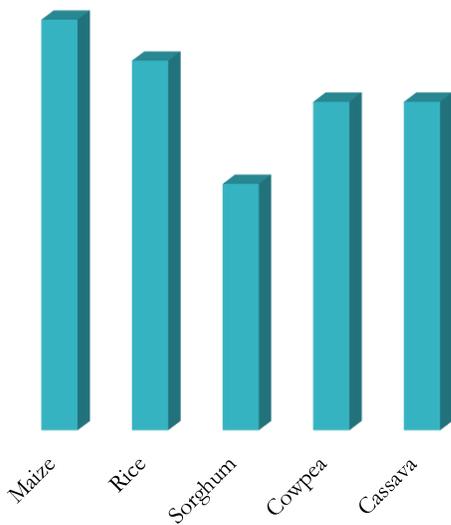


Figure 9.6: Average land area (ha) cultivated

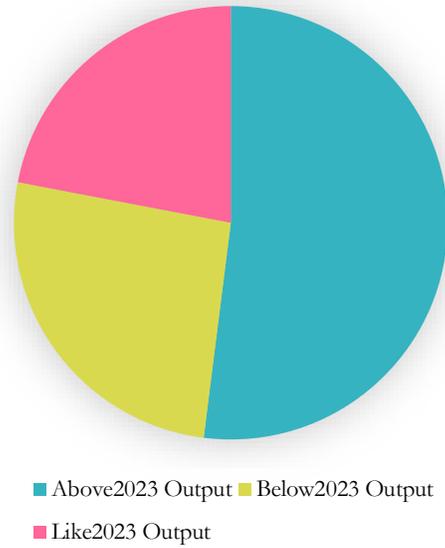


Figure 9.7: Expected output for 2024

9.3 Livestock Production

Goats are the most kept livestock by farmers (45%). This is because they require low initial capital, are easy to manage, adapt well to various environments, and need minimal housing space. Additionally, goats provide multiple benefits, including meat, milk, and manure, making them an asset for smallholder farmers. Other commonly kept livestock include poultry (7%), cattle (23%), sheep (3%), and pigs (22%). Cattle are more common in the northern states due to the availability of grazing land, while poultry farming is widespread across the country (Figure 9.8).

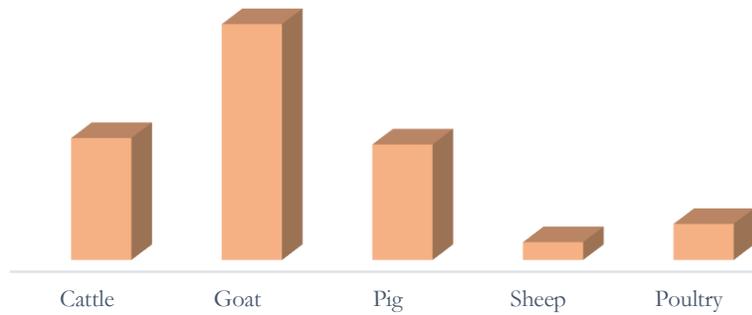


Figure 9.5: Livestock type produced by farmers

9.4 Fish Production

About 53 percent of respondents reported tilapia as the most produced fish species (Figure 9.9). The average stocking density is approximately **1,090**, while around **980** fish are harvested per production cycle. The most preferred pond system in the country is the **concrete pond system**, used by **47%** of respondents (Figure 9.10). Notably, the fish industry is more prominent in the **southern** part of the country.

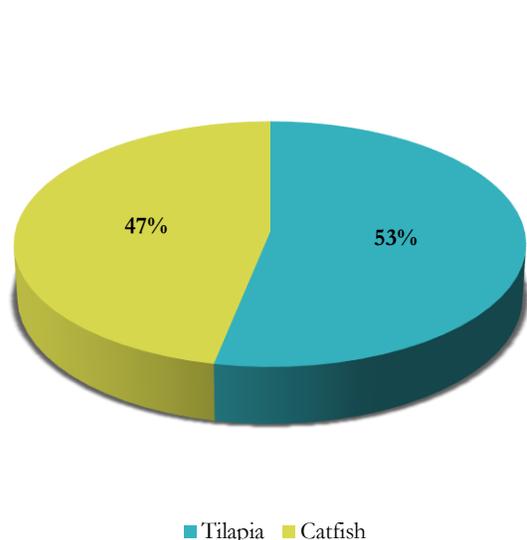


Figure 9.6: Fish species

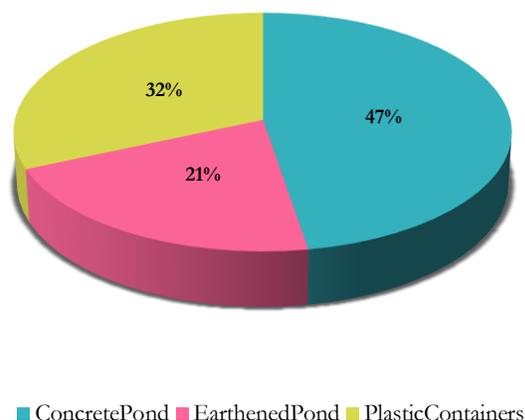


Figure 9.7: Fish production system

9.5 Crop and Livestock Pests and Diseases

In 2024, Nigeria's agricultural sector faced notable challenges due to pest infestations and disease outbreaks affecting crops and livestock. Approximately 62 percent of farmers reported crop-related issues, with maize being the most severely impacted by pests such as the Fall Army Worm (FAW). Rice crops suffered from bacterial blight and bird damage, mosaic disease affected cassava, and yams experienced nematode attacks and rotting (Figure 9.11 and 9.12). In the livestock sector, 13 percent of farmers reported disease outbreaks. Ruminants were affected by foot-and-mouth disease (FMD), a highly contagious viral illness causing significant economic losses globally. Poultry farmers faced challenges with Newcastle Disease (NCD), a highly contagious avian disease. The Nigerian Veterinary Medical Association (NVMA) reported that inadequate veterinary services contribute to annual losses. Despite these challenges, the overall impact on livestock was moderate, with no significant animal losses reported. However, these incidents underscore the need for improved disease management and veterinary services to mitigate future outbreaks and economic losses in Nigeria's agricultural sector.

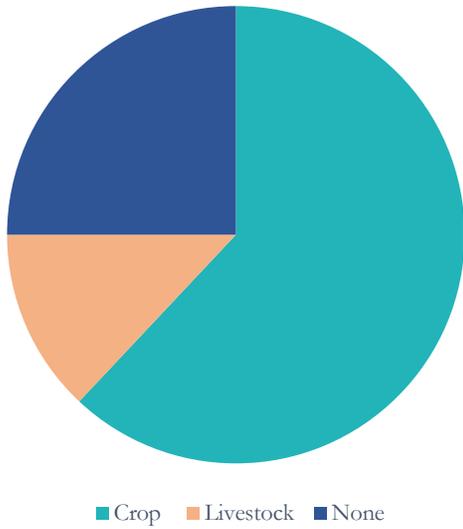


Figure 9.8: Reported cases of infestation

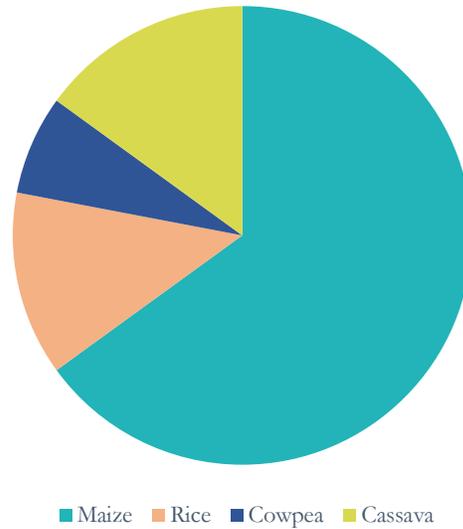


Figure 9.9: Affected crops

9.6 Sources of Inputs and Access

The main source of fertilizer and seeds for the farmers is the open market (90% and 37%), as shown in Figure 9. and 9.14.

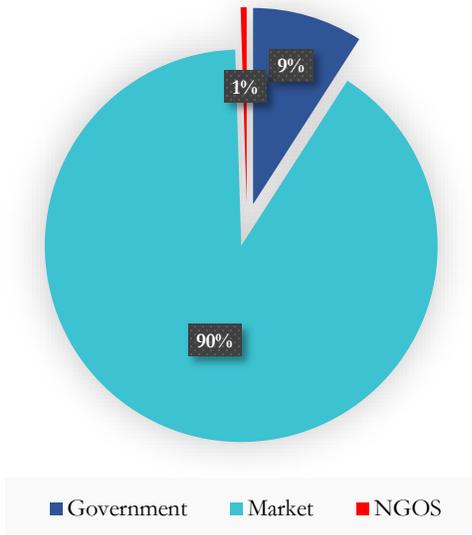


Figure 9.13: Sources of fertilizer

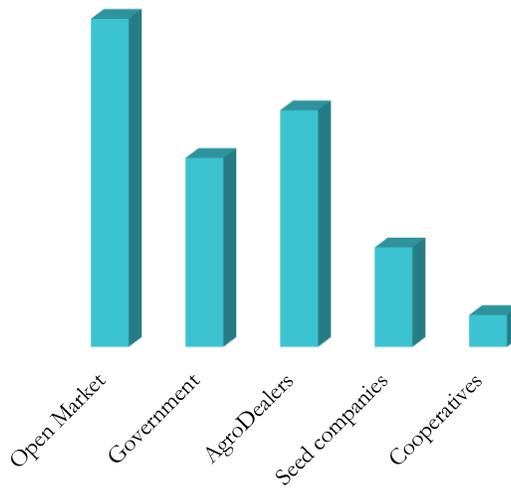


Figure 9.10: Sources of seeds

Farmers have called on the government to subsidize inputs and ensure they reach genuine farmers only. They also emphasized that the timely availability of these inputs is crucial for the subsidies to have a meaningful impact on agricultural production.

Most respondents across all 36 states and the FCT did not receive government intervention or support for agricultural inputs. In 2024, only 18% of farmers received support for fertilizers, 11% for seeds, 8% for agrochemicals, and 4% for credit (Figure 9.15).

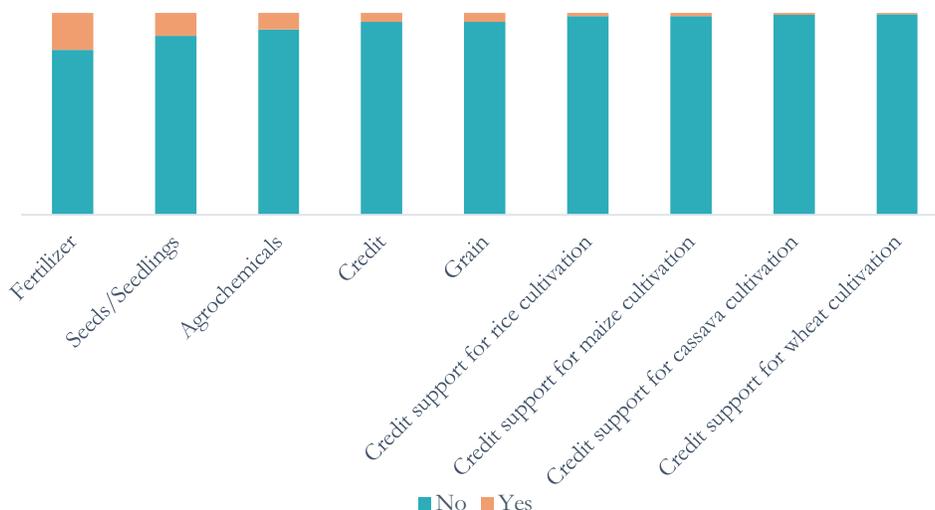


Figure 9.11: Areas benefited by farmers from federal government intervention

9.7 Improved Seeds

About 65 percent of farmers indicated awareness of improved and certified seeds, with 62% having planted them (Figure 9.16). They further affirmed that most respondents purchased sealed, labeled, and certified seeds, indicating a moderate level of improved seed usage among farmers. However, the major challenges associated with using improved seeds include high prices and limited availability in their localities. The quantity of seeds purchased varied between 1 kg and 25 kg, with the average cost of improved seeds in the open market being approximately ₦2,800 per kilogram.

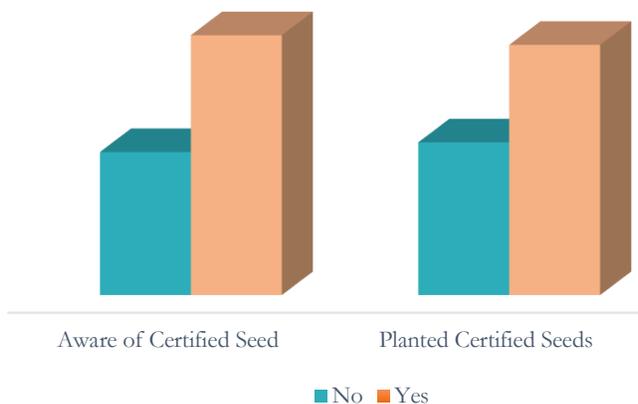


Figure 9.16: Awareness and use of certified seeds in 2024

9.8 Fertilizer Use

The 2024 cropping season has been marked by the notably low use of inorganic fertilizers across all states. This low usage can be attributed to the farmers' low-income levels, further exacerbated by the high market prices of fertilizers. About 81% of farmers used NPK fertilizer, while only 18% used Urea (Figure 9.17).

Fertilizer Prices by Region:

- Northern States:
 - NPK Fertilizer: ₦40,000 (open market) | ₦23,000 (government-subsidized)
 - Urea: ₦36,000 (open market) | ₦20,000 (government-subsidized).
- Southern States:
 - NPK Fertilizer: ₦39,500 (open market) | ₦24,000 (government-subsidized)
 - Urea: ₦39,000 (open market) | ₦20,000 (government-subsidized).

The high cost and limited affordability of fertilizers continue to pose a significant challenge to farmers, negatively impacting crop productivity nationwide.

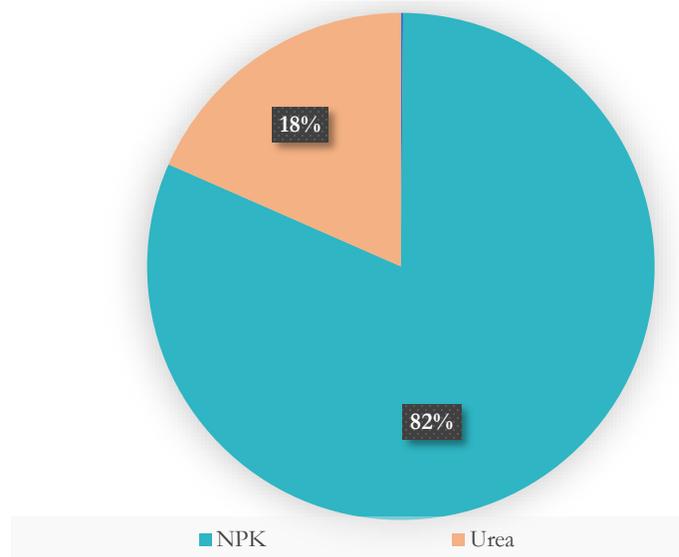


Figure 9.17: Type of fertilizer used by farmers 2024

9.9 Farm operation

Agricultural production in Nigeria remains rudimentary. Manual operation (78%) is the main source of farm operations (Figure 9.12). The average cost of farm operation on a hectare of land is about ₦243,000/ha.

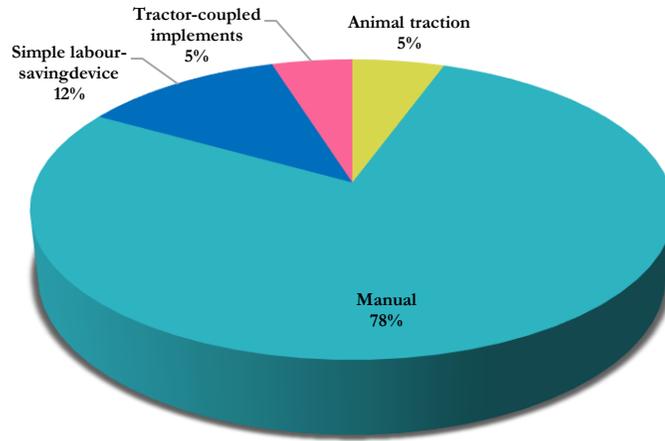


Figure 9.12: Source of farm power

9.10 Farm mechanization

About 22 percent of respondents used **tractors** during the 2024 production cycle, primarily sourcing them from the open market (Figure 9.19). The use of animal traction was also relatively low, with only 32 percent of respondents having access to it (Figure 9.20), also mainly sourced from the market. Most farmers reported that tractors and animal traction were unaffordable and unavailable, posing significant challenges to mechanized farming.

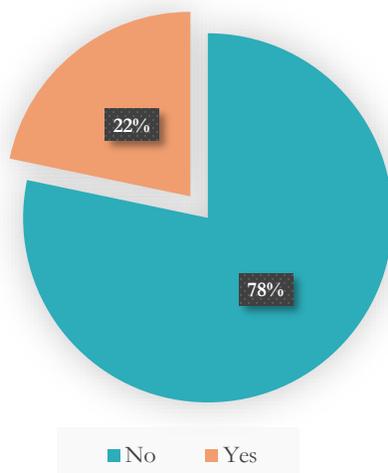


Figure 9.19: Use of tractor by the farmers in 2024

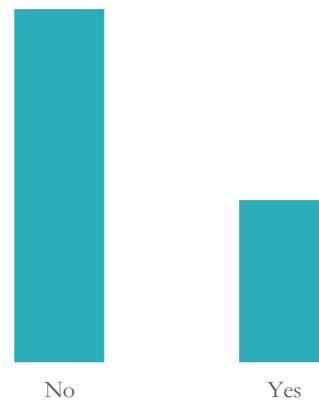


Figure 9.20: Use of animal traction

9.11 Crop Production Prospect

Climate change remains a significant challenge, with this year’s dry spell being particularly severe (41%), affecting major crops such as rice and maize (Figure 9.21). Although the incidence of pests and diseases was high, the damage was less severe compared to 2023. However, the impact is expected to reduce crop output by approximately 25%. As a mitigation strategy, farmers have adopted early

planting to counter the effects of climate change. Additionally, reports indicate that 40% of farming communities experienced security challenges, though their impact on agricultural production was moderate (36%) (Figure 9.22). The major security threats affecting farmers include farmer-herder conflicts and banditry, which have led to moderate losses in expected output. Despite these challenges, farmers expect the 2024 output to be 25% higher than in 2023. The average production output for cereals in the 2024 cropping season is projected to be 1,500 kg/ha.

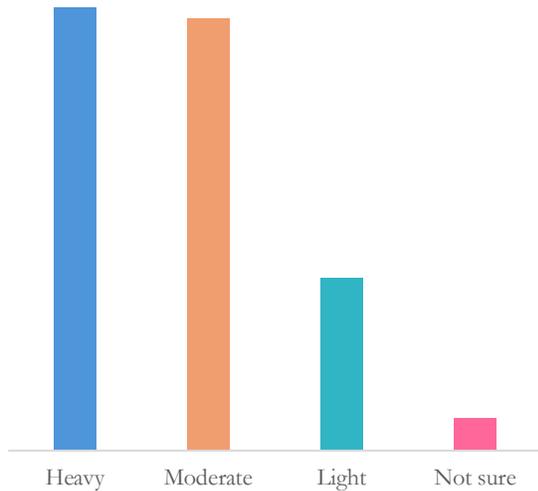


Figure 9.21: Proportion of farmers that experienced dry spell

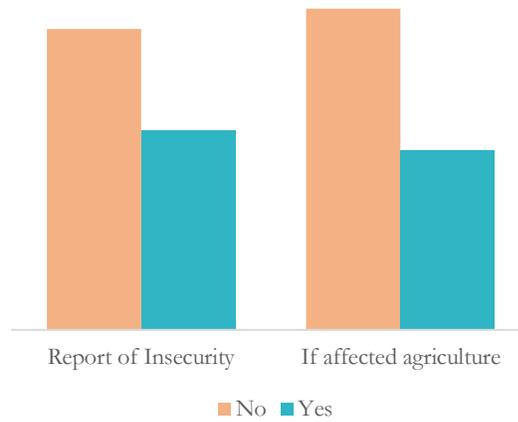


Figure 9.22: Report of insecurity and

9.12 Sources and Types of Extension Services

Extension service delivery remains a critical yet neglected aspect of agricultural productivity in Nigeria. Results from Figure 9.23 indicate that farmers prefer to access information from extension agents (47%), with 65% rating the information received as good and relevant (Figure 9.24). Other important sources of extension advice include family and friends (27%) and radio programs (19%).

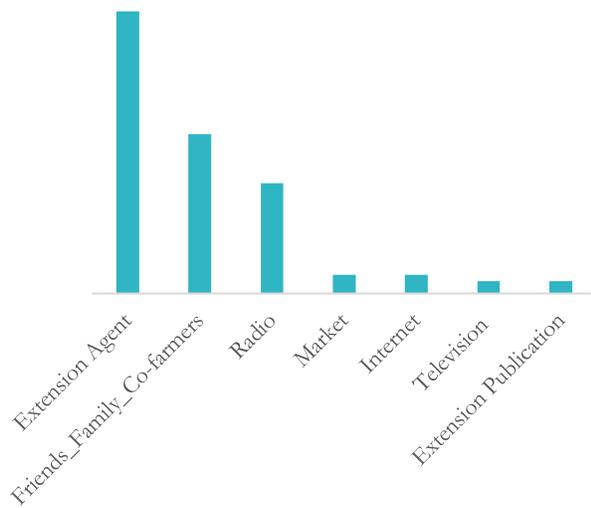


Figure 9.23: Sources of extension

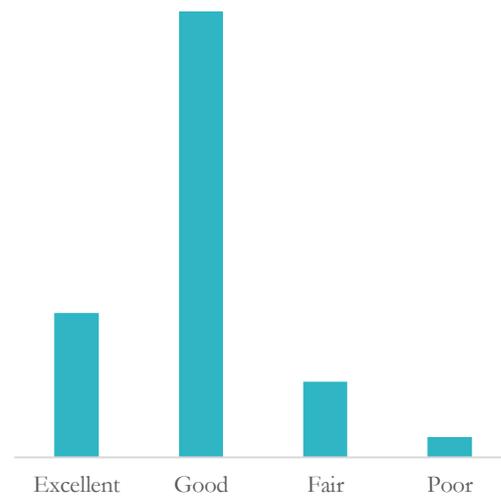


Figure 9.24: Extension source rating

9.13 Constraints to Electronic Media Use by Farmers

Electricity supply and timing are the main constraints limiting farmers' use of electronic media, as reported by 44% and 28% of respondents, respectively (Figure 9.25). Some farmers stated that their communities are not connected to the national grid, while those with access to electricity face an unreliable supply. Consequently, most farmers depend on dry cell batteries to power their radios to access agricultural information.

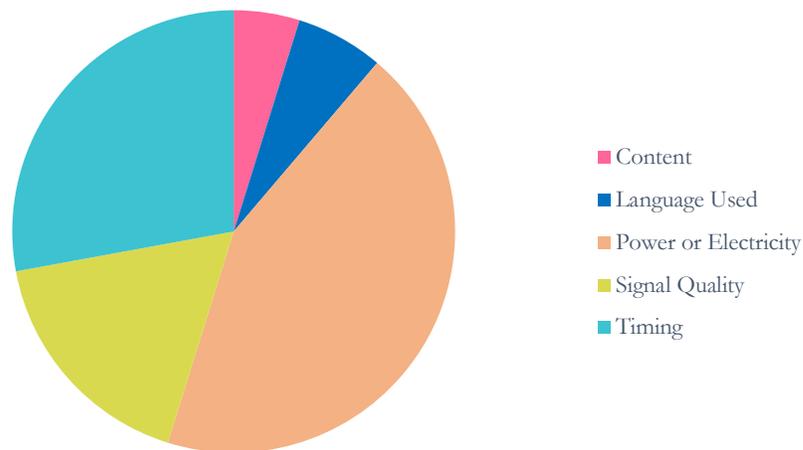


Figure 9.2513: Constraint to electric media use

9.14 Food Consumption Pattern and Household Dietary Diversity Score (HDDS)

The results indicate that staple cereals are the most frequently consumed foods among farm households in Nigeria. Approximately 93% of these households consumed cereals, and 92% consumed vegetables in the past 24 hours. Conversely, milk, eggs, meat, and fruits were the least consumed foods nationwide. Notably, 64% of respondents had a dietary diversity score greater than

5 (Figure 9.26). These align with previous studies highlighting the prominence of cereals and vegetables in Nigerian diets, while the consumption of animal-source foods such as milk and eggs remains low. This dietary pattern underscores the need for interventions to enhance access to diverse and nutrient-rich foods among farming households.

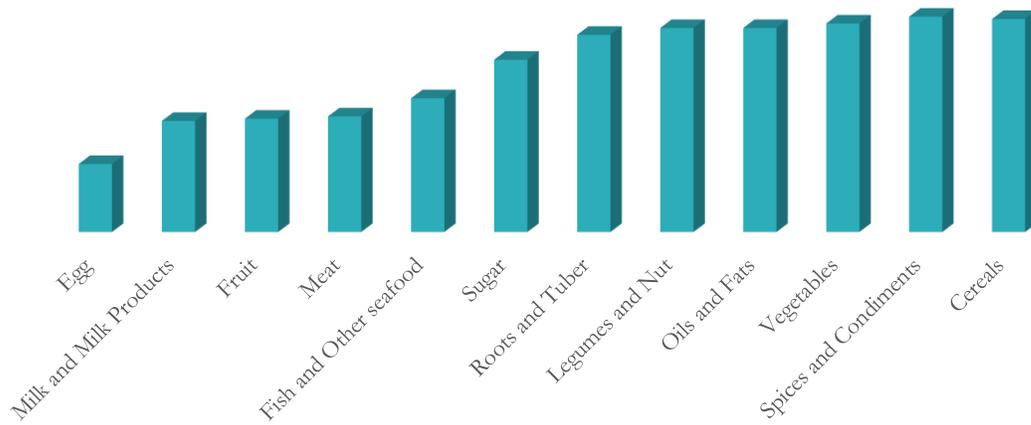


Figure 9.26: Proportion of households consuming different food groups

10.0 COST OF PRODUCTION FOR MAJOR CROPS

The 2024 agricultural performance survey adequately captured the production costs of major crops per hectare in various states. The multiple crops were grouped into different crop classes. The corresponding production cost data are shown hierarchically from state to zone, to region and finally, to the national level. The regional data were the pool of state data, and the national data were the pool of the zonal or regional data. In situations of deficit data, the flow stopped at the stop of data and discussions were limited to the available data. In 2024, production cost data were inclusive. A comparison was made between the years 2023 and 2024 production cost data to evaluate the percentage of change in the cost of production. There was an increase in production costs for all crops across all states of the country; this means a positive change. As much as it was desired, no negative change was recorded between production costs for 2023 and 2024. The essence of the comparison was to determine agricultural production cost progression in Nigeria. The progress was expected to be determined by the corresponding rise or reduction in input costs and farm operations. The costs of production of major crops in Nigeria are presented in the following sub-headings.

10.1 Cost of Production for Cereals and Legumes

The production costs of major cereals and legumes are presented in this section. The presentation captures the zonal data reflecting corresponding states of each zone. The states are embedded in their respective zones. Production cost for a region is presented after the corresponding zones and those for national production cost after the region. At state level, the six zones and national level, the production cost of major crops are presented as follows.

North-Cent Zone

In the North-Central zone, 4 cereal crops (maize, millet, rice, sorghum) and 3 legume crops (cowpea groundnut, soybean) were reported (Table 10.1a and b). For all the crops, the production cost differed from each state for 2023 and 2024. There was a rise in production cost in year 2024 over those of year 2023 (a positive percentage change). Among the cereal crops, the highest change (96%) was reported for millet in Plateau. For the legumes, the highest change (123%) was recorded for Soyabeans in Plateau. The zonal production cost was highest for Groundnut among the legumes and Rice among the cereals in 2024. The rise in prices of farm inputs like fertilizer and agrochemicals was evident this year; this may be the reason for the alarming increase in cost of production.

North-East Zone

The cereals and legumes crops reported in the North-East zone are on Table 10.2a and b. The production cost differed in various states even for the same crop in 2023 and 2024. The change in production cost in 2023 and 2024 were positive for all cases. These differences could be attributed to differences in farm labor and operation costs. For zonal production, the cereals and legumes that have highest cost of production in 2024 are rice (₦670,000) and Groundnut (₦444,500). This report is like those in the North-Central zone. The results indicate there are similar agricultural practices in both zones.

Table 10.1a: Cost of production for cereals and legumes in North-Central Zone and states

State	Maize			Millet			Rice			Sorghum		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Benue	491,000	727,100	48	-	-	-	480,000	684,475	43	370,000	536,000	45
FCT	450,000	520,450	15	-	-	-	580,000	600,730	4	480,000	520,000	8
Nasarawa	338,000	450,000	33	-	-	-	472,000	800,000	69	250,000	350,000	40
Niger	280,000	450,000	60	-	-	-	480,000	550,000	15	250,000	380,000	52
Plateau	450,000	850,000	88	145,000	285,000	96	340,000	544,000	60	-	-	-
Taraba	400,000	420,000	5	-	-	-	370,000	400,000	8	-	-	-
Zonal Mean	401,500	494,591	42	145,000	285,000	96	453,666	596,534	33	337,500	446,500	36

Table 10.1b: Cost of production for cereals and legumes in North-Central Zone and states (Cont'd)

	Cowpea			Groundnut			Soyabean		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Benue	-	-	-	390,000	645,200	65	415,000	666,500	60
FCT	-	-	-	420,000	480,000	14	495,000	540,000	9
Nasarawa	-	-	-	179,000	300,000	67	182,000	230,000	26
Niger	350,000	450,000	28	-	-	-	-	-	-
Plateau	150,000	288,000	92	-	-	-	120,000	268,000	123
Taraba	360,000	390,000	8	450,000	470,000	4	300,000	330,000	10
Zonal Mean	286,666	376,000	43	359,750	473,800	37	302,400	406,900	228

Table 10.2a: Cost of production for cereals and legumes in North-East Zone and states

State	Rice			Sorghum			Maize			Millet		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Adamawa	-	-	-	-	-	-	-	-	-	-	-	-
Bauchi	374,850	879,500	134	300,309	579,450	93	358,470	736,000	105	295,680	5,752,000	95
Bornu	450,120	680,500	51	290,500	420,050	44	385,500	550,250	43	250,000	419,500	68
Gombe	300,000	450,000	50	165,000	270,000	63	360,000	500,000	39	200,000	300,000	50
Yobe	-	-	-	250,000	250,000	0	300,000	500,000	67	250,000	450,000	80
Zonal Mean	374,990	670,000	78	251,452	379,875	50	350,992	571,562	64	248,920	436,175	73

Table 10.2b: Cost of production for cereals and legumes in North-East Zone and states (Cont'd)

State	Cowpea			Groundnut			Soyabean		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Bauchi	203,962	335,000	64	-	463,500	-	267,450	338,800	27
Bornu	285,500	412,500	44	285,000	420,000	47	-	-	-
Gombe	-	-	-	-	-	-	150,000	200,000	33
Yobe	250,000	450,000	80	250,000	450,000	80	-	-	-
Zonal Mean	246,487	399,166	63	267,500	444,500	154,542	208,725	269,400	30

10.1.3 North-West Zone

The major cereals and legumes produced in this zone were also produced in the two northern zones (Table 10.3a and b). It is safe to admit that this set of cereals and legumes are the major crops produced in Northern Nigeria. There was no reduction in production cost for these crops in 2024 when compared with the 2023 production cost, the percentage change was positive. The zonal mean production cost was the highest for maize (₦990,666) and cowpea (₦460,000) for cereals and legumes respectively. This is a little deviation from the zonal production cost from the preceding zones where rice and groundnut were highest. The prices of inputs, especially fertilizers were presently higher and that could account for the increase in production cost. Production duration for groundnut was longer compared to other legume; that could also be a reason for the rise in production cost over other legumes.

10.1.4 Regional production cost for cereals and legumes (Northern region)

The production cost distribution of cereals and legumes in the northern region is shown in Table 10.4. Maize, rice and groundnut had higher production cost in the region. Comparing the production cost changes of the crops across the two years in the northern region. There was an increase in the cost of production in 2024. This could be interpreted as a high cost of production for 2024.

Table 10.3a: Cost of production for cereals and legumes in North-West Zone and states

State	Rice			Sorghum			Maize			Millet		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Jigawa	700,000	850,000	21	450,000	550,000	22	-	-	-	450,000	550,000	22
Kano	324,000	847,000	161	200,000	450,000	125	307,000	722,000	135	160,000	230,000	44
Katsina	-	-	-	833,300	1,200,000	44	1,003,300	1,800,000	79	823,300	1,100,000	34
Kebbi	250,000	300,000	20	200,000	200,000	0	-	-	-	150,000	200,000	33
Zamfara	350,000	400,000	14	350,000	400,000	14	400,000	450,000	13	350,000	400,000	14
Zonal Mean	406,000	599,250	54	406,660	560,000	41	269,100	990,666	76	386,660	496,000	29

Table 10.3b: Cost of production for cereals and legumes in North-West Zone and states (Cont'd)

State	Cowpea			Groundnut			Soyabean		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Jigawa	200,000	300,000	50	400,000	500,000	25	-	-	-
Kano	170,000	400,000	135	170,000	410,000	141	170,000	350,000	105
Katsina	886,800	1,150,000	30	-	-	-	-	-	-
Kebbi	180,000	200,000	11	-	-	-	-	-	-
Zamfara	200,000	250,000	25	200,000	250,000	25	200,000	250,000	25
Mean	327,360	460,000	50	256,666	386,666	64	185,000	300,000	65

Table 10.4: Regional production cost for cereals and legumes (Northern Region)

Crop			Mean Cost of Production (₦)			Northern Region Mean Production Cost (₦)
			North-Central zone	North-East zone	North-West zone	
Maize	Cost of Production (N) For Year	2023	401,500	350,992	269,100	340,530
		2024	494,591	571,562	990,666	685,606
		% Change	42	64	76	61
Millet	Cost of Production (N) For Year	2023	145,000	248,920	386,660	260,193
		2024	285,000	436,175	496,000	405,725
		% Change	96	73	29	66
Cowpea	Cost of Production (N) For Year	2023	286,666	246,437	327,360	286,821
		2024	376,000	399,166	460,000	411,722
		%Change	43	63	50	52
Groundnut	Cost of Production (N) For Year	2023	359,750	267,500	256,666	294,638
		2024	473,800	444,500	386,666	434,988
		%Change	37	66	64	56
Rice	Cost of Production (N) For Year	2023	453,666	374,990	406,000	411,552
		2024	596,534	670,000	599,250	621,261
		%Change	33	78	54	55
Sorghum	Cost of Production (N) For Year	2023	337,500	251,452	406,660	331,870
		2024	446,500	375,875	560,000	460,791
		%Change	36	50	41	42
Soybean	Cost of Production (N) For Year	2023	302,400	208,725	185,000	232,041
		2024	406,900	269,400	300,000	325,433
		%Change	228	30	65	107

10.1.6 Cost of production for cereals and legumes in South-South Zone and states

The cereals and legumes reported for this zone are maize, rice and cowpea, and soybeans. While many states produced cowpeas (Table 10.6). All the states experienced increased production costs. The zonal production costs for rice and soybean were ₦645,000 and ₦510,000 respectively.

10.1.7 Cost of production for cereals and legumes in South-West Zone and states

The cereals and the legumes crop reported for South-West zone are also reported for this zone (Table 10.7). The cost of production increased in all states and for all the crops in 2024. The zonal mean production costs for rice were higher among the cereals (₦542,500); although, the rate of increment was higher in maize (53%). For legumes, cowpea have a higher production cost (₦386,250).

10.1.8 Regional production cost comparison for cereals and legumes (Southern region)

The cost of production for cereals and legumes in the entire southern region is shown in Table 10.8. Rice has the highest production cost among cereals, and groundnut have the highest production cost among legumes. The percentage change factor is highest for maize and cowpea.

10.1.9 National production cost for cereals and legumes

The production cost data at the national level is shown on Table 10.9. The crops with complete entry, having both the southern and northern regions reported were emphasized. These results indicate that rice and maize were produced in every zone; as such both regions of the country in 2024. They also mean that rice has the highest cost of production among the cereals. The legumes produced in all part of Nigeria were cowpea, groundnut, and soybean in 2024. Among these, so groundnut has the highest cost of production. This result clearly indicates that irrespective of the zone or region of Nigeria where rice was farmed in 2024, the production was the highest for cereals while groundnut was highest for legumes production. The cost of production in 2024 was higher for all the crops. The cost of inputs could have influenced the high cost. The margin of this change in cost over the two years is expressed in percentage change. Groundnut had the highest increase in cost as indicated in the highest percentage change of about 25,790%, it was followed by soyabeans and millet (Table 10.9). Invariably, the selling price of agricultural produce may increase in 2024/2025.

Table 10.5: Cost of production for cereals and legumes in South-East Zone and states

State	Cowpea			Groundnut			Maize			Rice		
	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Abia	-	-	-	-	-	-	250,000	350,000	40	240,000	350,000	45
Anambra	-	-	-	-	-	-	140,000	150,000	7	-	-	-
Ebonyi	-	-	-	450,000	600,000	33	450,000	600,000	33	700,000	900,000	28
Enugu	33,741	99,000	193	-	-	-	96,958	207,000	113	122,988	369,000	200
Imo	-	-	-	-	-	-	100,000	130,000	30	150,000	180,000	20
Zonal Mean	33,741	99,000	193	450,000	600,000	33	207,391	287,400	45	303,247	449,750	73

Table 10.6: Cost of production for cereals and legumes in South-South Zone and states

State	Cowpea			Maize			Rice			Soybean		
	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change	Cost of Production (₦) For Year		%Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Akwa Ibom	-	-	-	570,000	580,000	2	520,000	550,000	6	-	-	-
Bayelsa	305,000	415,000	36	310,000	330,000	6	345,000	455,000	32	-	-	-
Cross river	-	-	-	520,600	657,500	26	700,000	875,000	25	-	-	-
Delta	101,700	101,800	0	94,880	259,750	173	-	-	-	-	-	-
Edo	568,400	650,000	14	450,000	550,000	22	650,000	700,000	7	420,000	510,000	21
Rivers	-	-	-	425,000	550,000	29	-	-	-	-	-	-
Zonal Mean	325,033	388,933	17	395,080	487,875	43	553,750	645,000	17	420,000	510,000	21

Table 10.7: Cost of production for cereals and legumes in South-West Zone and states

State	Cowpea			Maize			Rice			Soybean		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2,024		2,023	2,024		2023	2024		2,023	20244	
Ekiti	320,000	345,000	8	450,000	650,000	44	380,000	450,000	18	-	-	-
Lagos	-	-	-	350,000	650,000	86	-	-	-	-	-	-
Ogun	400,000	600,000	50	458,000	612,000	34	615,000	720,000	17	-	-	-
Ondo	150,000	200,000	33	300,000	350,000	17	350,000	400,000	14	155,000	200,000	29
Osun	-	-	-	200,000	400,000	100	-	-	-	-	-	-
Oyo	280,000	400,000	43	400,000	550,000	37	450,000	600,000	33	360,000	420,000	17
Zonal Mean	287,500	386,250	34	359,666	535,333	53	448,750	542,500	20	257,500	310,000	23

Table 10.8: Regional production cost for cereals and legumes (Southern region)

Crops			Mean Cost of Production (N)			southern Region Mean Production Cost (N)
			South-East zone	South-south zone	South-West zone	
Cowpea	Cost of Production (N) For Year	2023	33,741	325,033	287,500	215,424
		2024	99,000	388,933	386,250	291,394
	%Change		193	17	34	81
Groundnut	Cost of Production (N) For Year	2023	450,000	-	-	450,000
		2024	600,000	-	-	600,000
	%Change		33	-	-	33
Maize	Cost of Production (N) For Year	2023	207,391	395,080	359,666	320,712
		2024	287,400	487,875	535,333	436,869
	%Change		45	43	53	47
Rice	Cost of Production (N) For Year	2023	303,247	553,750	448,750	435,249
		2024	449,750	645,000	542,500	545,750
	%Change		73	37	20	43
Soybean	Cost of Production (N) For Year	2023	-	420,000	257,500	338,750
		2024	-	510,000	310,000	410,000
	%Change		-	21	23	22

Table 10.9: National mean production cost for cereals and legumes

Crop			Mean Cost of Production (₦)		National Mean Production Cost (₦)
			Northern Region	southern Region	
Cowpea	Cost of Production (N) For Year	2023	286,821	215,424	251,122
		2024	411,722	291,394	351,558
		%Change	52	81	66
Groundnut	Cost of Production (N) For Year	2023	294,638	450,000	372,319
		2024	434,988	600,000	517,494
		%Change	48	33	39
Maize	Cost of Production (N) For Year	2023	340,530	320,712	330,621
		2024	685,606	436,869	561,237
		%Change	61	47	54
Millet	Cost of Production (N) For Year	2023	260,193	–	260,193
		2024	405,725	–	405,725
		%Change	66	–	66
Rice	Cost of Production (N) For Year	2023	411,552	435,249	423,400
		2024	621,261	545,750	583,505
		%Change	55	43	49
Sorghum	Cost of Production (N) For Year	2023	331,870	–	331,870
		2024	460,791	–	460,791
		%Change	42	–	42
Soybean	Cost of Production (N) For Year	2023	232,041	338,750	285,395
		2024	325,433	410,000	367,716
		%Change	107	22	129

10.2 Cost of Production for Tuber Crops

Root and tuber crops are principal components of the nation's agricultural production. There are numerous and various types produced in different parts of Nigeria. The production costs for major tuber crops per hectare in 2024 are presented in this section. There are no reported production data for the north-east and north-west zones in 2024. There was no considerable data to compute information for zonal production costs.

10.2.1 Cost of production for tuber crops in North-Central Zone and states

There were 4 major tuber crops cultivated in North-Central states in 2024: they are cassava, Irish potato, sweet potato and yam (Table 10.10). Irish potato was cultivated only in Plateau State, and this was due to its typical climatic requirement which is highly favorable in the state. The production cost for tuber crops increased in 2024 in this zone. In the zone, the highest cost of production was recorded for Irish potato. Comparatively, Irish requires more production activities; this might account for the high cost of production.

Table 10.10: Cost of production for tuber crop in North-Central Zone and states

State	Cassava			Irish Potato			Sweet potato			Yam		
	Cost of Production (₦) For Year		%	Cost of Production (₦) For Year		%	Cost of Production (₦) For Year		%	Cost of Production (₦) For Year		%
	2023	2024	Change	2023	2024	Change	2023	2024	Change	2023	2024	Change
Benue	560,000	889,200	58	–	–	–	–	–	–	810,000	899,400	11
FCT	502,000	530,000	6	–	–	–	–	–	–	550,000	580,000	5
Kogi	–	–	–	–	–	–	–	–	–	–	–	–
Kwara	–	–	–	–	–	–	–	–	–	–	–	–
Nasarawa	265,000	350,000	32	–	–	–	320,000	400,000	25	1,300,000	1,500,000	15
Niger	–	–	–	–	–	–	–	–	–	500,000	750,000	50
Plateau	–	–	–	750,000	1,036,000	38	–	–	–	–	–	–
Taraba	350,000	390,000	11	–	–	–	–	–	–	400,000	500,000	25
Mean	419,250	539,800	26	750,000	1,036,000	38	320,000	400,000	25	712,000	845,880	21

10.2.2 Cost of production for tuber in South-East Zone and states

Four types of tuber crops were cultivated in this zone in 2024. The crops were cassava, cocoyam, sweet potato and yam. Cocoyam and sweet potato were not produced as much as the other two tuber crops (Table 10.11) in 2024. The cost of production generally increased in 2024. For all the crops and across the states; the highest cost of tuber production in this zone was found in Edo for cocoyam (₦2,300,000). The mean production value for 2024 for cocoyam was (₦2,500,000).

10.2.3 Cost of production for tuber crops in South-South Zone and states

Four tuber crops were cultivated in this zone in 2024. Among them, cassava and yam were cultivated in all the states while cocoyam and sweet potato was cultivated in only five states. The cost of production increased for all crops in 2024. The mean zonal production cost was higher for cocoyam than the other tuber crops in this zone in 2024.

10.2.4 Cost of production for tuber crops in South-West Zone and States

Three tuber crops were the major cultivation in this region but two (cassava and yam) were prevalent (Table 10.13). There are no reported production data for sweet potato for south-west zone in 2024. Production cost increased for all the crops across the states in 2024. In this zone, the mean production cost for cocoyam was the highest just as observed in the previous zones.

10.2.5 Zonal production cost comparison for tuber crops (Southern Region)

Overview of production cost for tuber crops shows cocoyam has the highest production cost across the zones in 2024. The production cost increased in 2024 for all tuber crops across the zones. The percentage change in production cost for cassava was the highest across the 3 zones in 2024. Cocoyam has the highest production cost, followed by yam, cassava and sweet potato. For the two years in consideration, cost of production is remarkably high for all the crops except sweet potato. The corresponding level of cost change was also the highest for cocoyam. The production cost and the percentage changes are shown on Table 10.14.

Table 10.11: Cost of production for tuber in South-East Zone and states

State	Cassava			Cocoyam			Sweet potato			Yam		
	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Abia	300,000	400,000	33	-	-	-	-	-	-	350,000	400,000	14
Anambra	190,000	190,000	0	-	-	-	120,000	140,000	17	180,000	200,000	11
Ebonyi	500,000	750,000	50	350,000	450,000	28	300,000	450,000	50	1,000,000	2,000,000	100
Enugu	36,864	116,000	214	-	-	-	95,594	288,000	201	94,129	372,000	295
Imo	180,000	210,000	16	100,000	120,000	20	-	-	-	150,000	200,000	33
Zonal Mean	241,372	333,200	63	2,250,000	285,000	24	171,864	292,666	89	354,825	634,400	90

Table 10.12: Cost of production for tuber in South-South Zone and states

State	Cassava			Cocoyam			Yam			Sweet potato		
	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change
	2023	2024		2023	2024		2023	2024		2023	2024	
AkwIbom	450,000	600,000	33	-	-	-	450,000	500,000	11	-	-	-
Bayelsa	310,000	400,000	29	-	-	-	355,000	415,000	17	-	-	-
Crossriver	789,200	1,025,900	29	-	-	-	732,400	952,100	30	450,500	549,000	22
Delta	97,250	490,720	404	-	-	-	350,400	600,220	71	108,240	108,395	0
Edo	573,546	630,000	9	2,230,345	2,500,000	12	2,100,345	2,300,000	9	-	-	-
Rivers	880,000	980,000	11	-	-	-	880,000	880,000	0	-	-	-
Mean	516,666	687,770	86	2,230,345	2,500,000	12	811,357	941,220	23	279,370	328,697	11

Table 10.13: Cost of production for tuber crops in South-West Zone and states

State	Cassava			Cocoyam			Sweet potato			Yam		
	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change	Cost of Production (₦) For Year		% Change
	2023	2024		2023	2024		2023	2024		2023	2024	
Ekiti	340,000	380,000	12	500,000	530,000	6	-	-	-	1,450,000	1,800,000	24
Lagos	406,000	490,000	20	-	-	-	-	-	-	480,000	650,000	35
Ogun	490,000	752,000	53	400,000	700,000	75	-	-	-	1,000,000	1,800,000	80
Ondo	350,000	450,000	28	-	-	-	-	-	-	450,000	550,000	22
Osun	200,000	400,000	100	-	-	-	-	-	-	-	-	-
Oyo	350,000	400,000	14	-	-	-	-	-	-	620,000	650,000	5
Zonal Mean	356,000	478,666	37	450,000	615,000	40	-	-	-	800,000	1,090,000	33

Table 10.14: Regional production cost for root and tuber (Southern region)

Crops			Mean Production Cost (₦)			Southern Region Mean Production Cost (₦)
			South-East zone	South-south zone	South-West zone	
Cassava	Cost of Production (N) For Year	2023	241,372	516,666	356,000	428,380
		2024	333,200	687,770	478,666	499,878
	%Change	63	86	37	186	
Cocoyam	Cost of Production (N) For Year	2023	225,000	2,230,345	450,000	968,448
		2024	285,000	2,500,000	615,000	1,133,333
	%Change	28	12	40	27	
Sweet Potato	Cost of Production (N) For Year	2023	171,864	279,370	-	225,617
		2024	292,666	328,697	-	310,681
	%Change	89	11	-	50	
Yam	Cost of Production (N) For Year	2023	354,825	811,357	800,000	655,394
		2024	634,400	941,220	1,090,000	888,540
	%Change	90	23	33	49	

10.3 Cost of Production for Fruit and Vegetable Crops

Large scale production of fruits and vegetables take place in some states in Nigeria. There was no reported data for North-Central, North-East, North-West and South-East zones in 2023. Their costs of production are presented as follows:

10.3.1 Cost of production for fruit and vegetables in South-South Zone and states

Six fruit and vegetable crops were cultivated in south-south states. They were banana/plantain, okra, pepper, tomato, garden egg and pumpkin. Banana/plantain was produced in almost all the states in this zone, garden egg was reported only in Cross River State while pumpkin has no reported production data for the south-south zones in 2024. The other 3 crops were produced in few states. The cost of producing these crops in 2023 and 2024 are on Tables 10.15a and b.

The cost of production for all the crops increased in 2024 leading to a positive percentage change. Increase in the price of inputs in 2024 might be responsible for this observation. The change in cost of production for pepper was highest (65%) in cross River State. The zonal mean production cost in 2024 was highest for Banana/plantain (₦701,250). Banana and plantain are long-term crop with higher establishment; this peculiarity may justify its relatively high cost of production.

10.3.2 Cost of production for fruit and vegetables in South-West Zone and states

Six fruit and vegetable crops were produced in this zone (Table 10.16a and b) in 2023. The six crops were not produced in large quantity. The crops are banana/plantain, cucumber, pepper, tomato, leafy vegetables and watermelon. Most crops were reported only in few states each. In terms of yearly production cost, the south-west zone experienced higher production cost in 2024 for all the crops. The mean production cost was the highest for banana/plantain (₦1,191,700) in 2024.

10.3.3 Production cost for fruit and vegetable crops (Southern region)

Banana was the most expensive to produce among the reported fruits and vegetables crops in this zone in 2024. For these crops, the regional production cost for 2023 and 2024 were different. The yearly production cost and the changes are shown together in Table 10.17.

Table 10.15a: Cost of production for fruit and vegetables (banana/plantain, okra and pepper) in South-South Zone and states

State	Banana/Plantain			Okra			Pepper		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Akwa Ibom	450,000	450,000	0	-	-	-	-	-	-
Bayelsa	315,000	375,000	19	-	-	-	-	-	-
Cross river	-	-	-	-	-	-	425,000	977,500	130
Delta	-	-	-	101,150	101,250	0	97,650	97,680	0
Edo	970,000	1,100,000	13	500,000	550,000	10	-	-	-
Rivers	880,000	880,000	0	-	-	-	-	-	-
Zonal Mean	653,750	701,250	8	300,575	325,575	5	261,325	537,590	65

Table 10.15b: Cost of production for fruit and vegetables (tomatoes, garden egg and pumpkin) in South-South Zone and states

State	Tomato			Garden Egg			Pumpkin		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Cross river	-	-		300,100	375,100	25	-	-	-
Delta	143,100	143,200	0	-	-	-	-	-	-
Zonal Mean	143,100	143,200	0	300,100	375,100	25	-	-	-

Table 10.16a: Cost of production for fruit and vegetables in South-West Zone and states

State	Banana/Plantain			Cucumber			Leafy vegetables		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Ekiti	450,000	600,000	33	-	-	-	-	-	-
Ogun	1,346,900	1,783,400	32	-	-	-	300,000	500,000	66
Ondo	-	-	-	150,000	200,000	33	-	-	-
Zonal Mean	898,450	1,191,700	32	150,000	200,000	33	300,000	500,000	66

Table 10.16b: Cost of production for fruit and vegetables in South-West Zone and states (Cont'd)

State	Pepper			Tomato			Water Mellon		
	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024		2023	2024		2023	2024	
Lagos	-	-	-	580,000	900,000	55	-	-	-
Ondo	270,000	300,000	11	600,000	650,000	8	20,000	150,000	650
Zonal Mean	270,000	300,000	11	590,000	775,000	32	20,000	150,000	650

Table 10.17: Regional production cost for fruit and vegetable crops (Southern region)

Crops	Cost of production Year	Mean Production Cost (N)		Southern Region Mean Production Cost (N)
		South-South Zone	South-West Zone	
Banana/Plantain	2023	653,750	898,450	776,100
	2024	701,250	1,191,700	946,475
	%Change	8	32	20
Garden Egg	2023	300,100	–	300,100
	2024	375,100	–	375,100
	%Change	25	–	25
Okra	2023	300,575	–	300,575
	2024	325,575	–	325,575
	%Change	5	–	5
Pumpkin	2023	–	–	–
	2024	–	–	–
	%Change	–	–	–
Pepper	2023	261,325	270,000	265,662
	2024	537,590	300,000	418,795
	%Change	65	11	38

Table 10.17: Regional production cost for fruit and vegetable crops (Southern region) (Cont'd)

Crops	Cost of production (Year)	Mean Production Cost (N)		Southern Region Mean Production Cost (N)
		South-South Zone	South-West Zone	
Tomato	2023	143,100	590,000	366,550
	2024	143,200	775,000	459,100
	%Change	0	32	32
Cucumber	2023	–	150,000	150,000
	2024	–	200,000	200,000
	%Change	–	33	33
Leafy vegetables	2023	–	300,000	300,000
	2024	–	500,000	500,000
	%Change	–	66	66
Watermelon	2023	–	20,000	20,000
	2024	–	150,000	150,000
	%Change	–	650	650

10.4 Cost of Production for Tree Crops

Output of tree crops are of immense contribution to total agricultural production in Nigeria. There are no data in north-central, north-east, north-west south-south and south-east zones for 2024. The costs of production are reported and 144 relative changes in cost between year 2023 and 2024 were observed. No report for regional production cost for tree crops in 2024.

10.4.1 Cost of production for tree crops in South-West Zone and states.

In the South-West zone, only Ekiti State reported cocoa production. Cocoa and citrus are representative tree crops in this zone; but reports on citrus production cost (₦500,000) in this zone in 2024. Oil palm is a major tree crop in the south-south zone; but there was no report for 2024. Comparing production costs of years 2023 and 2024, there was an increase in the cost of cocoa production (15%) in Ekiti State. The price increase in agricultural inputs might have caused the increased cost of production.

Table 10.18: Cost of production for tree crops in South-South and South-West Zone and states

South-South				South-West						
State	Oil palm			State	Cocoa			Citrus		
	Cost of Production (N) For Year		%Change		Cost of Production (N) For Year		%Change	Cost of Production (N) For Year		%Change
	2023	2024			2023	2024		2023	2024	
Akwa Ibom	-	-	-	Ekiti	950,000	1,100,000	15	-	-	-
Cross River	-	-	-	Ogun	-	-	-	300,000	500,000	66
Zonal Mean	-	-	-	Zonal Mean	950,000	1,100,000	15	300,000	500,000	66

10.5 Cost of Production of oil and aromatic crops

It is important to state that not much information was available on some of the crops placed together in this subheading. Oil crops remain one of the prime crops in Nigeria. Aromatic crop like ginger has been a good export commodity for the country. Corresponding records of the cost of production for 2023 and 2024 are presented below. The regional production cost was not computed due lack of data.

10.5.1 Cost of production of oil crops in North-Central Zone and states

Melon and Bennisseed (oil crops) were cultivated in few north-central states (Table 10.19). The production cost of these crops increased in 2024.

10.5.2 Cost of production of oil and aromatic crop in North-West Zone and states

Bennisseed and ginger were the oil and aromatic crops, respectively cultivated in this zone in 2024. The production cost of bennisseed increased in 2024. Bennisseed and melon was among the oil crop reported in the North-East and North-West.

Table 10.19: Cost of production of oil in North-Central and North-East Zones and states

North Central						
	Melon			Benniseed (Sesame)		
	Cost of Production (N) For Year			Cost of Production (N) For Year		
State	2023	2024	%Change	2023	2024	%Change
Benue	-	-	-	-	-	-
Kwara	-	-	-	-	-	-
Nasarawa	190,000	250,000	32	170,000	250,000	47
Zonal Mean	190,000	250,000	32	170,000	250,000	47

Table 10.20: Cost of production of oil in North-East and North-West Zones and states

North_East				North_West						
	Benniseed (Sesame)				Benniseed (Sesame)			Ginger		
	Cost of Production (N) For Year				Cost of Production (N) For Year			Cost of Production (N) For Year		
State	2023	2024	%Change	State	2023	2024	%Change	2023	2024	%Change
Bauchi	273,325	481,800	76	Jigawa	400,000	500,000	25	-	-	-
Gombe	80,000	150,000	87	Kaduna	-	-	-	-	-	-
Yobe	250,000	450,000	80	Katsina	-	-	-	-	-	-
Zonal Mean	201,108	360,600	81	Zonal mean	400,000	500,000	25	-	-	-

11.0: FOOD COMMODITY PRICES

11.1: Price Changes for Food Commodities

In 2024, Nigeria experienced significant increases in food commodity prices compared to 2023, with notable variations across different zones of the country. The significant price hikes can be attributed to the inelastic demand for essential food items. Households continue to rely heavily on maize, millet, and sorghum, maintaining steady demand despite rising prices. These persistent demand and supply constraints have contributed to substantial price escalations. The increases in food prices are also driven by other factors including insecurity, climate change, inflation, disruptions in the agricultural value chain, and the depreciation of the Naira, impacting production, distribution, and affordability.

Maize (White):

- January 2024: The average price per kilogram was ₦555, a 106% increase from ₦269 in January 2023.
- July 2024: The average price per kilogram rose to ₦961, a 112% increase from ₦452 in July 2023.

Sorghum (Brown):

- January 2024: The average price per kilogram was ₦581, an 85% increase from ₦314 in January 2023.
- July 2024: The average price per kilogram rose to ₦988, a 118% increase from ₦452 in July 2023.

Millet:

- January 2024: The average price per kilogram was ₦573, an 89% increase from ₦303 in January 2023.
- July 2024: The average price per kilogram rose to ₦964, a 114% increase from ₦451 in July 2023.

Rice (Local):

- January 2024: The average price per kilogram was ₦905, a 41% increase from ₦639 in January 2023.
- July 2024: The average price per kilogram increased to ₦1,501, a 102% rise from ₦742 in July 2023.

Cowpea (Brown):

- January 2024: The average price per kilogram was ₦908, a 46% increase from ₦624 in January 2023.
- July 2024: The average price per kilogram reached ₦2,035, a 174% increase from ₦742 in July 2023.

Yam (Tuber):

- January 2024: The average price per kilogram was ₦543, a 54% increase from ₦351 in January 2023.
- July 2024: The average price per kilogram reached ₦1,050, a 96% increase from ₦535 in July 2023.

These figures highlight the substantial inflation in food commodity prices in Nigeria during 2024. However, detailed zonal data for these commodities in January and July for 2023 and 2024 are given in the Tables 11.1 – 11.5 below.

Table 11.1. Prices (₦/Kg) of Maize and Millet

Zone	Maize												Millet					
	Yellow						White						Pearl					
	January Price			July Price			January Price			July Price			January Price			July Price		
	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C
North-Central	257	515	100	439	883	101	242	496	105	396	848	114	288	558	93	468	964	106
North-East	272	540	99	464	977	111	262	534	104	449	972	117	268	514	92	443	931	110
North-West	246	485	97	421	858	104	226	480	112	386	821	113	249	485	95	410	837	104
South-East	324	622	92	500	1045	109	298	594	99	468	989	111	322	638	99	454	999	120
South-South	349	637	83	605	1269	110	322	669	108	556	1154	107	365	664	82	486	1059	118
South-West	294	590	100	483	1029	113	267	557	109	460	983	114	323	579	79	447	992	122
National Mean	290	565	94	486	1010	108	269	555	106	452	961	112	303	573	89	451	964	114

Table 11.2. Prices (₦/Kg) of Sorghum and Groundnut

Zone	Sorghum												Groundnut					
	Brown						White						Shelled					
	January Price			July Price			January Price			July Price			January Price			July Price		
	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C
North-Central	284	531	87	413	894	116	272	509	88	403	874	117	556	732	32	673	1567	133
North-East	262	494	89	441	928	110	252	480	90	432	923	114	650	909	40	723	1667	130
North-West	226	432	91	408	845	107	231	430	86	382	832	118	586	852	45	698	1640	135
South-East	351	663	89	480	1084	126	341	661	94	475	1065	124	788	1199	52	915	2253	146
South-South	398	744	87	494	1125	128	388	782	101	476	1088	129	855	1250	46	929	2283	146
South-West	363	624	72	478	1053	120	297	528	78	442	967	119	739	1158	57	909	2196	142
National Mean	314	581	85	452	988	118	297	565	90	435	958	120	696	1017	46	808	1934	139

Table 11.3. Prices (₦/Kg) of Rice and Yam

Zone	Rice												Yam					
	Local						Imported											
	January Price			July Price			January Price			July Price			January Price			July Price		
	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C
North-Central	559	737	32	653	1270	95	734	1047	43	802	1605	100	293	423	44	477	910	91
North-East	641	863	35	729	1489	104	884	1352	53	902	1842	104	426	669	57	659	1287	95
North-West	588	804	37	690	1433	108	790	1164	47	838	1701	103	396	624	58	596	1203	102
South-East	648	920	42	787	1572	100	829	1271	53	828	1758	112	312	481	54	487	928	91
South-South	765	1202	57	899	1899	111	1078	1495	39	949	1993	110	349	533	53	499	986	98
South-West	635	902	42	693	1344	94	777	1169	50	742	1577	112	331	525	59	493	988	101
National Mean	639	905	41	742	1501	102	849	1250	47	844	1746	107	351	543	54	535	1050	96

Table 11.4. Prices (₦/Kg) of Cowpea and Palm Oil (₦/litre)

Zone	Cowpea												Palm Oil					
	Brown						White						Refined					
	January Price			July Price			January Price			July Price			January Price			July Price		
	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C
North-Central	521	739	42	700	1866	167	482	675	40	617	1669	170	1150	1320	15	1250	1680	34
North-East	570	856	50	722	1983	175	543	808	49	673	1926	186	1200	1330	11	1300	1740	34
North-West	489	680	39	680	1755	158	464	653	41	602	1639	172	1100	1230	12	1220	1660	36
South-East	634	987	56	786	2167	176	619	931	50	697	2067	197	1050	1180	12	1150	1530	33
South-South	893	1206	35	825	2345	184	738	1100	49	781	2241	187	950	1060	12	990	1300	31
South-West	638	983	54	741	2097	183	615	900	46	690	2036	195	1050	1200	14	1170	1540	32
National Mean	624	908	46	742	2035	174	577	845	46	677	1930	185	1083	1220	13	1180	1575	33

Table 11.5. Prices (₦/Kg) of Cassava Garri and Cassava Flour

Zone	Cassava											
	Garri						Flour					
	January Price			July Price			January Price			July Price		
	2023	2024	% C	2023	2024	% C	2023	2024	% C	2023	2024	% C
North-Central	460	658	43	577	1151	100	412	550	33	521	1058	103
North-East	500	693	39	683	1401	105	400	583	46	585	1211	107
North-West	474	670	41	583	1185	103	431	575	34	540	1112	106
South-East	372	573	54	522	1077	106	353	528	50	480	969	102
South-South	505	682	35	544	1087	100	372	560	50	520	1079	107
South-West	445	652	46	569	1106	94	406	545	34	517	1085	110
National Mean	459	655	42	579	1168	102	396	557	41	527	1086	106

11.2: Comparing Prices for July 2023 and July 2024

Between July 2023 and July 2024, Nigeria experienced substantial increases in the prices of staple food items, reflecting significant inflationary pressures. These sharp price increases have significantly impacted household budgets, reducing purchasing power and heightening food insecurity across the country. Here's a comparative overview of select commodities during this period

Maize Price Increases:

- **South-South Zone:** The South-South region observed a substantial increase in maize prices, with a 107% rise from July 2023 to July 2024.
- **North-West Zone:** In contrast, the North-West region experienced the lowest maize price increases, recording a 113% rise from July 2023 to July 2024.

Yam and Palm oil Price Increases:

- **North-East Zone:** The North-East region recorded the highest price hikes for yam and palm oil. Yam prices escalated to 95% from July 2023 to July 2024 and palm oil prices surged 34% from July 2023 to July 2024.
- **South-East Zone:** Conversely, the South-East region experienced the most modest increases in yam while the South-South region saw the lowest palm oil price increases during these periods.

These zonal disparities underscore the complex interplay of factors influencing commodity prices across Nigeria, including local demand-supply dynamics, transportation costs, and regional agricultural productivity.

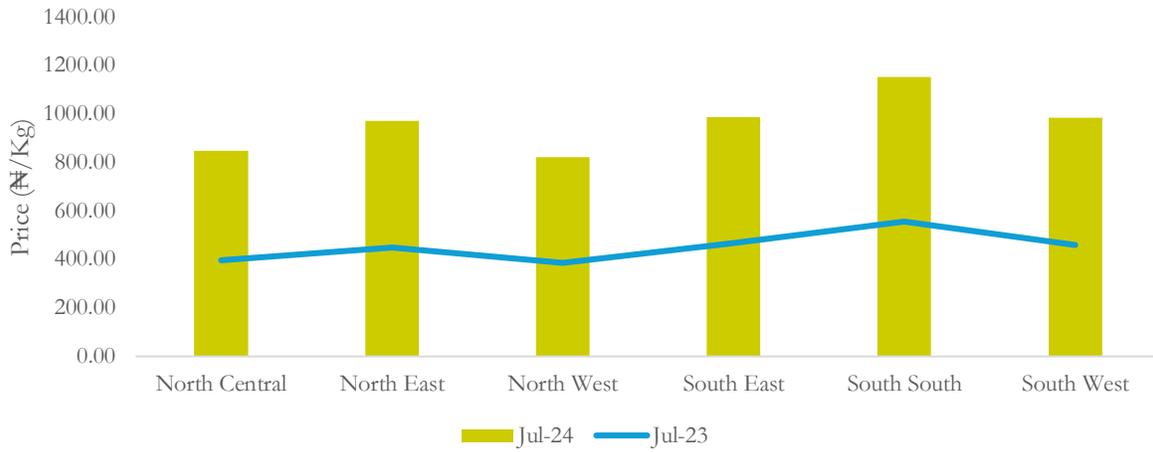


Figure 11.1: Price Trends for Maize (White), July 2024 Compared with July 2023

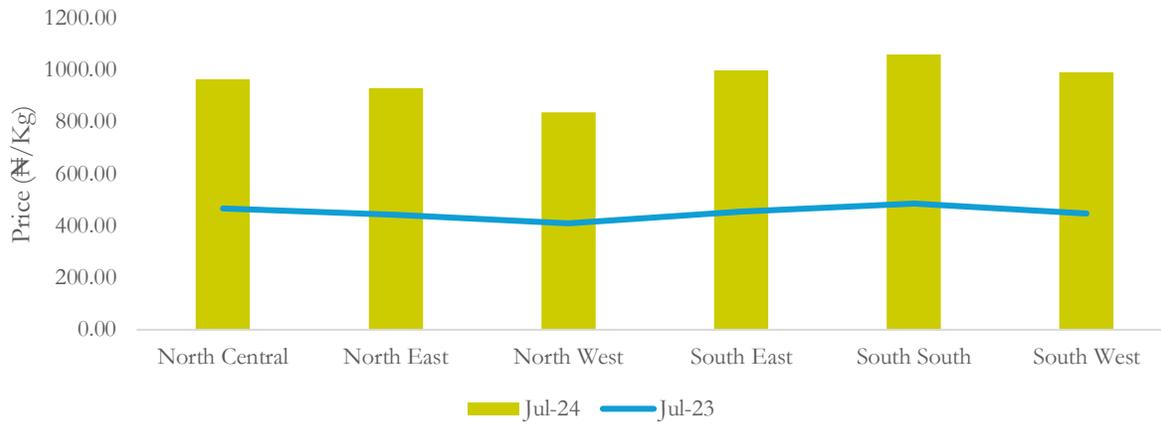


Figure 11.2: Price Trends for Millet (Pearl), July 2024 Compared with July 2023

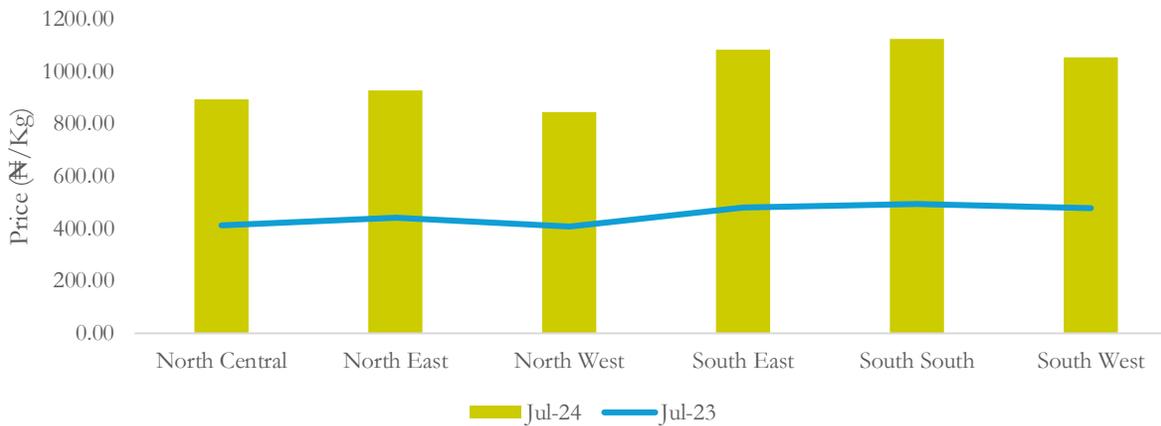


Figure 11.3: Price Trends for Sorghum (Brown), July 2024 Compared with July 2023

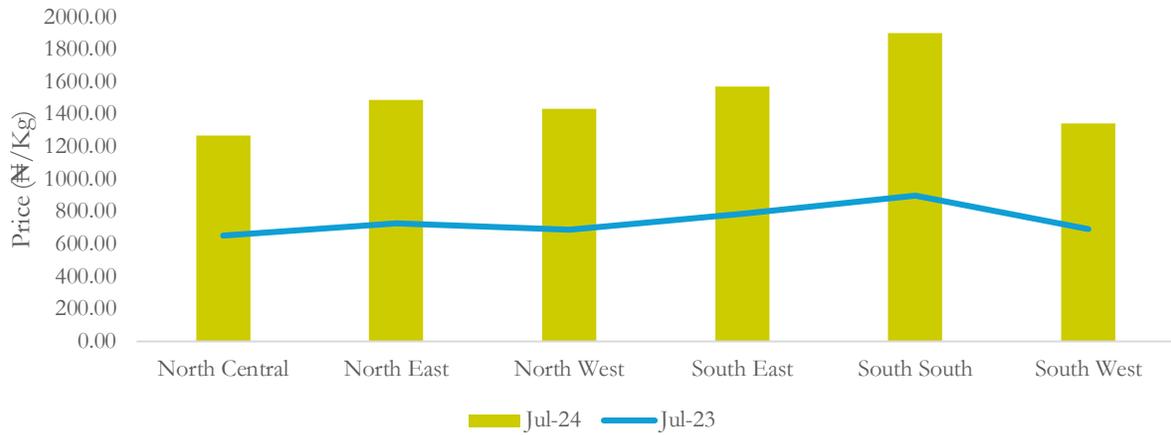


Figure 11.4: Price Trends for Rice (Local), July 2024 Compared with July 2023

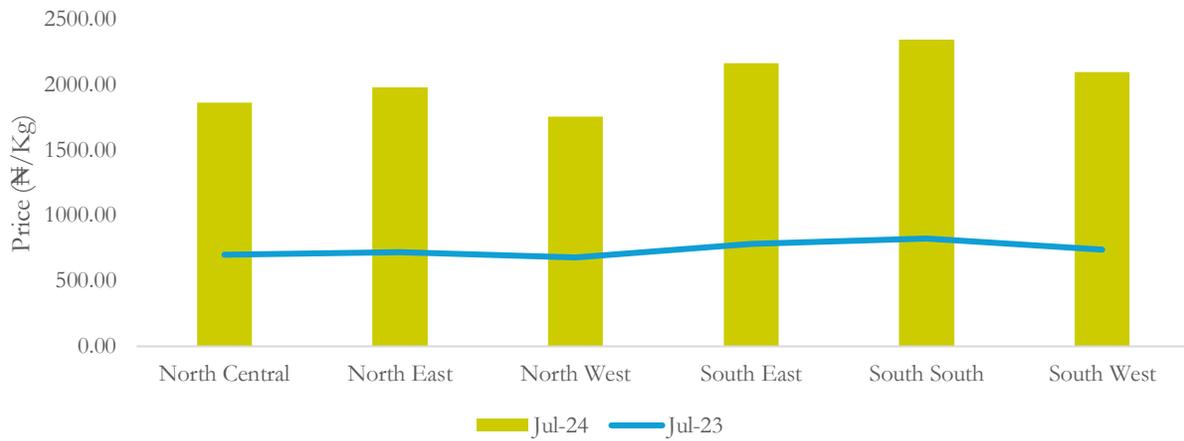


Figure 11.5: Price Trends for Conpea (Brown), July 2024 Compared with July 2023

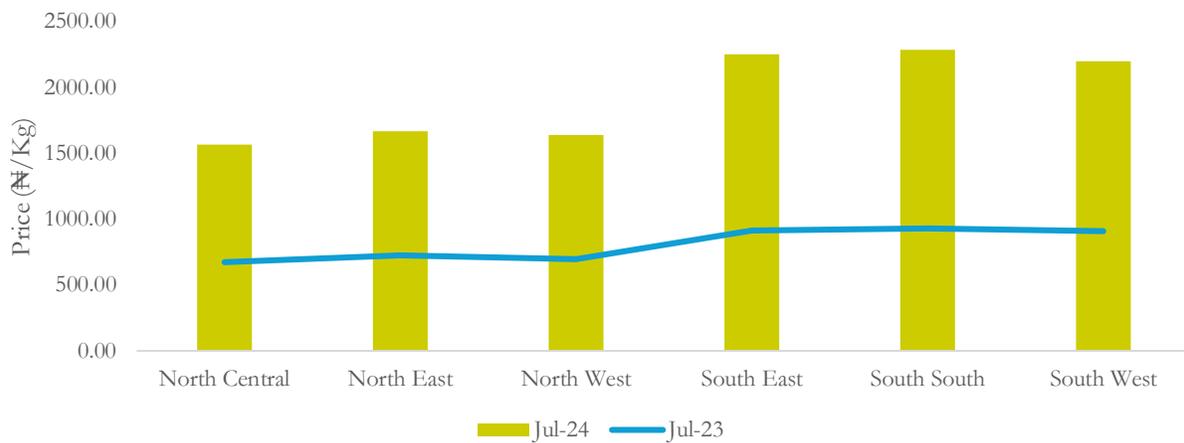


Figure 11.6: Price Trends for Groundnut (Shelled), July 2024 Compared with July 2023

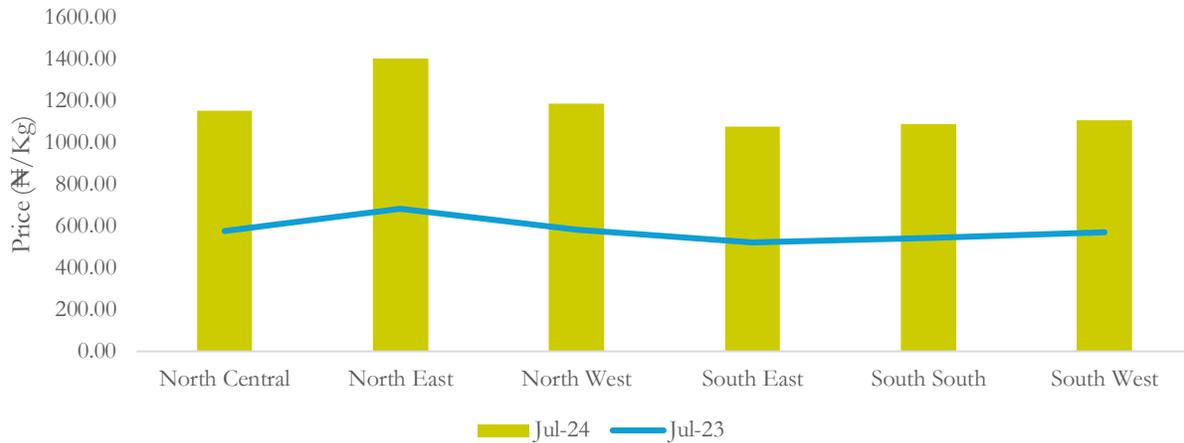


Figure 11.7: Price Trends for Cassava (Garri), July 2024 Compared with July 2023

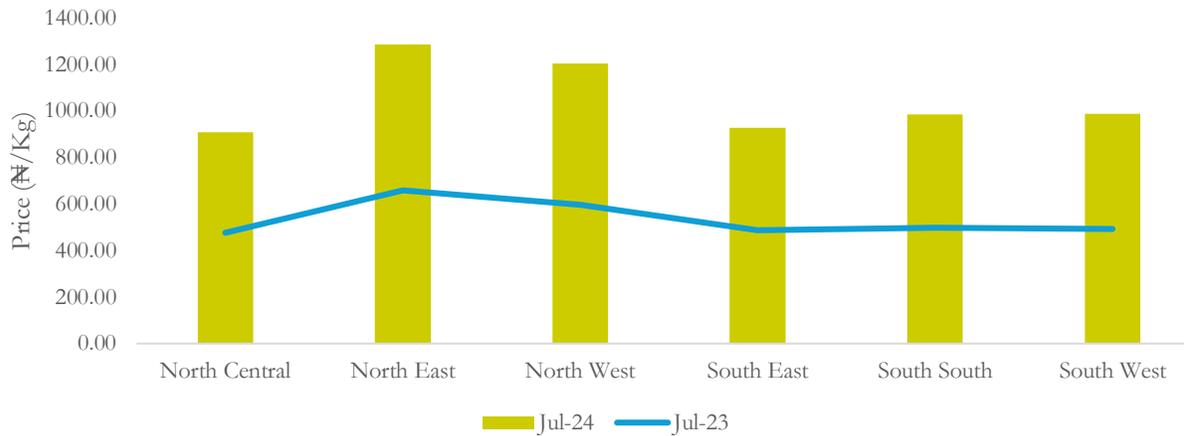


Figure 11.8: Price Trends for Yam, July 2024 Compared with July 2023

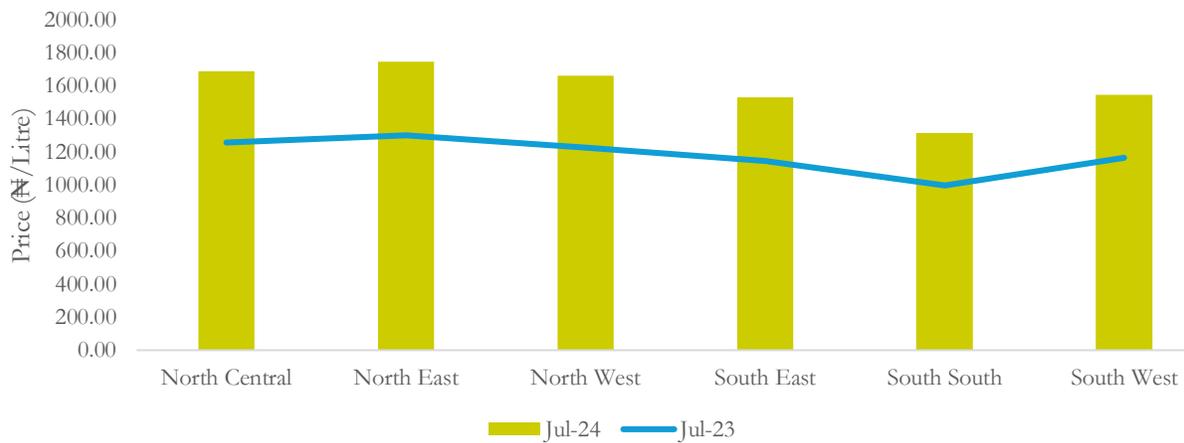


Figure 11.9: Price Trends for Palm Oil, July 2024 Compared with July 2023

12.0 CROP PRODUCTION ESTIMATES

The agricultural sector's performance in 2024 was influenced by several factors, including favourable weather conditions, shifts in crop preferences due to market prices, and institutional support for certain crops. However, pest infestations, diseases, and post-harvest losses continue to affect production. Additionally, economic hardships stemming from austerity measures, currency devaluation, and the removal of fuel subsidies have led to high inflation and increased food prices, exacerbating food insecurity. A joint report by Nigeria's government and the United Nations projected that more than 33 million people will face food insecurity in the coming year, a significant increase from the current year.

12.1 Rice

Rice is Nigeria's second-most consumed cereal crop after maize, exhibiting an upward trend in cultivated land, production, and yield per hectare from 2023 to 2024. The area under rice production increased from 4,509,840.95 hectares in 2023 to 4,572,945.27 hectares in 2024 (Table 12.1). This expansion is attributed to farmers shifting their focus from millet to rice in 2024, incentivized by favourable rice prices. Consequently, rice production rose from 8,902,225.99 metric tons in 2023 to 9,129,907.68 metric tons in 2024, partly due to favourable rainfall, especially in the northwest. Rice cultivation in Nigeria is primarily rainfed, encompassing upland and lowland systems, with a small percentage grown under irrigation schemes. The increase in rice consumption is driven by population growth, particularly in urban areas, leading to expanded cultivation. States like Kano, Niger, and Cross River have demonstrated high efficiency by combining extensive cultivation with superior yields. However, some states, such as Borno, have faced setbacks, indicating challenges that may require targeted interventions. In several regions, yields remain below 2.0 metric tons per hectare, highlighting areas for agricultural improvement and investment. The consistent increase in cultivated land and production underscores Nigeria's progress toward self-sufficiency in rice production and potential export capacity. Continued support for rice farmers, including access to improved seed varieties, modern farming techniques, and infrastructure development, is essential to sustain this positive trajectory.

12.2 Maize

Maize is Nigeria's most widely produced staple crop, consumed extensively by urban and rural households. In 2024, the area dedicated to maize cultivation declined slightly to 5,063,032.44 hectares from 5,100,160.80 hectares in 2023, primarily due to a shift towards rice production. Despite this reduction in cultivated area, maize production increased from 11,052,893.28 metric tons in 2023 to 11,216,837.37 metric tons in 2024 (Table 12.2), indicating improved agricultural efficiency. The national average yield per hectare marginally increased from 2.17 to 2.22 metric tons. States such as Niger and Kano demonstrated notable efficiency where Niger state yield increased from 3.51 to 3.59 metric tons per hectare, with total production reaching 637,568.95 metric tons in 2024 while Kano state yield improved to 3.08 metric tons per hectare, resulting in a production of 330,533.47 metric tons in 2024. These improvements suggest better farming practices or enhanced access to quality inputs in these regions. However, declining production in states like Borno and Katsina highlights areas where targeted interventions may be necessary to address underlying challenges. Overall, the increase in maize production despite a reduction in cultivation area underscores advancements in agricultural productivity in Nigeria. Continued support for farmers through access to improved seeds, fertilizers, and modern farming techniques is essential to sustain and further enhance maize yields in Nigeria.

Table 12.1: Land Area and Production Estimates for Rice

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	271,295.27	275,229.05	541,754.60	559,090.75	2.00	2.03
FCT	207,645.87	210,656.74	435,248.13	451,352.31	2.10	2.14
Kogi	288,287.43	292,467.59	547,749.05	566,920.27	1.90	1.94
Kwara	218,227.93	221,392.23	465,343.33	482,561.03	2.13	2.18
Nasarawa	194,266.15	197,083.00	453,641.35	464,075.10	2.34	2.35
Niger	278,284.54	281,902.23	691,175.17	707,072.20	2.48	2.51
Plateau	137,929.94	139,929.93	268,561.50	274,738.41	1.95	1.96
Adamawa	183,566.29	186,228.00	303,206.33	311,392.90	1.65	1.67
Borno	164,718.84	167,107.27	276,871.75	236,448.47	1.68	1.41
Bauchi	125,060.67	126,874.05	207,090.23	214,752.57	1.66	1.69
Gombe	179,934.23	182,543.28	241,827.29	250,774.90	1.34	1.37
Taraba	211,857.10	214,929.02	433,331.95	449,365.24	2.05	2.09
Yobe	92,568.46	93,910.70	176,964.29	183,511.97	1.91	1.95
Jigawa	131,941.95	133,855.11	210,522.95	218,312.30	1.60	1.63
Kaduna	164,915.17	167,306.44	389,997.73	397,797.69	2.36	2.38
Kano	134,759.25	136,106.85	469,421.60	486,790.20	3.48	3.58
Katsina	134,307.70	135,650.78	221,353.94	226,445.08	1.65	1.67
Kebbi	234,169.73	237,565.19	389,157.49	403,556.31	1.66	1.70
Sokoto	84,303.06	85,230.40	176,472.44	178,237.16	2.09	2.09
Zamfara	104,308.85	105,456.24	207,746.03	209,823.49	1.99	1.99
Abia	61,322.92	62,212.10	61,891.39	64,181.37	1.01	1.03
Anambra	46,706.33	47,383.57	104,139.44	107,263.62	2.23	2.26
Ebonyi	64,964.80	65,906.79	152,668.84	157,248.91	2.35	2.39
Enugu	58,034.43	58,875.93	97,355.98	100,276.66	1.68	1.70
Imo	50,142.07	50,869.13	89,004.74	92,297.91	1.78	1.81
Akwa Ibom	12,751.48	12,936.37	25,566.06	26,512.01	2.00	2.05
Bayelsa	48,816.85	49,524.70	97,991.29	101,616.96	2.01	2.05
Delta	79,237.81	80,386.76	170,990.34	177,316.98	2.16	2.21
Edo	33,022.30	33,501.12	54,698.05	56,721.88	1.66	1.69
C/Rivers	61,460.35	62,351.53	145,649.71	151,038.74	2.37	2.42
Rivers	43,771.24	44,405.92	83,194.73	86,272.94	1.90	1.94
Ekiti	86,845.51	88,104.77	152,802.05	158,455.73	1.76	1.80
Ogun	66,535.42	67,500.18	102,100.30	105,878.01	1.53	1.57
Ondo	53,567.98	54,344.72	120,821.42	125,291.81	2.26	2.31
Osun	74,967.69	76,054.72	129,029.20	133,803.28	1.72	1.76
Oyo	68,636.12	69,631.35	114,222.41	116,621.08	1.66	1.67
Lagos	56,709.22	57,531.51	92,662.89	96,091.41	1.63	1.67
National	4,509,840.95	4,572,945.27	8,902,225.99	9,129,907.68	1.97	2.00

Table 12.2: Land Area and Production Estimates for Maize

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	131,147.78	133,115.00	331,630.05	345,226.88	2.53	2.59
FCT	155,906.26	158,244.86	394,791.07	410,977.50	2.53	2.60
Kogi	137,454.04	139,515.85	374,797.98	389,040.30	2.73	2.79
Kwara	136,167.99	138,210.51	290,667.06	301,712.40	2.13	2.18
Nasarawa	96,473.75	97,920.85	272,900.49	283,270.70	2.83	2.89
Niger	175,163.07	177,790.51	614,228.28	637,568.95	3.51	3.59
Plateau	246,017.46	249,707.72	563,074.11	584,470.93	2.29	2.34
Adamawa	166,130.45	168,622.40	384,187.99	401,476.45	2.31	2.38
Borno	259,860.79	260,120.65	496,870.20	424,327.15	1.91	1.63
Bauchi	348,910.05	354,143.70	544,380.90	565,067.37	1.56	1.60
Gombe	311,766.82	316,443.32	561,630.44	586,903.81	1.80	1.85
Taraba	118,935.53	120,719.56	260,206.77	270,875.25	2.19	2.24
Yobe	312,494.25	313,119.24	530,771.72	506,886.99	1.70	1.62
Jigawa	147,264.19	149,473.15	290,674.69	303,755.05	1.97	2.03
Kaduna	308,100.60	275,750.04	857,280.86	867,568.23	2.78	3.15
Kano	105,891.85	107,480.23	316,299.97	330,533.47	2.99	3.08
Katsina	134,747.88	113,727.21	304,468.03	277,674.84	2.26	2.44
Kebbi	137,360.44	137,909.88	295,817.10	297,000.37	2.15	2.15
Sokoto	95,526.31	79,955.52	224,832.80	192,007.21	2.35	2.40
Zamfara	141,245.79	115,962.80	216,832.27	185,174.76	1.54	1.60
Abia	61,980.16	62,909.86	85,412.35	89,170.49	1.38	1.42
Anambra	44,069.70	44,730.74	95,493.57	99,695.29	2.17	2.23
Ebonyi	79,302.38	80,491.92	140,856.51	147,054.20	1.78	1.83
Enugu	77,415.60	78,576.83	164,423.32	171,657.94	2.12	2.18
Imo	47,631.35	48,345.82	114,716.57	119,764.10	2.41	2.48
Akwa Ibom	65,215.28	66,193.51	80,804.57	84,359.97	1.24	1.27
Bayelsa	47,177.89	47,885.56	76,416.71	79,779.04	1.62	1.67
Delta	47,971.15	48,690.72	97,272.92	101,552.93	2.03	2.09
Edo	62,352.28	63,287.56	143,574.50	149,891.78	2.30	2.37
C/Rivers	86,178.32	87,471.00	141,933.23	148,178.29	1.65	1.69
Rivers	49,845.09	50,592.77	114,834.42	119,887.14	2.30	2.37
Ekiti	128,798.29	130,730.27	257,635.79	268,971.77	2.00	2.06
Ogun	106,574.53	108,173.15	246,052.57	256,878.88	2.31	2.37
Ondo	125,574.76	127,458.38	339,882.66	354,837.50	2.71	2.78
Osun	139,912.98	142,011.68	334,532.59	349,252.03	2.39	2.46
Oyo	134,783.33	136,805.08	278,769.78	291,035.65	2.07	2.13
Lagos	128,812.40	130,744.59	213,938.47	223,351.77	1.66	1.71
National	5,100,160.80	5,063,032.44	11,052,893.28	11,216,837.37	2.17	2.22

12.3 Sorghum

Sorghum is cultivated in Nigeria's semi-arid northern regions, characterized by low and erratic rainfall and high temperatures. While it ranks behind staple cereals like maize and rice in national importance, sorghum remains a vital crop, serving as a staple food, animal feed, and a key ingredient in brewing. In 2024, sorghum production increased slightly by 0.24 percent, from 6,401,598.75 metric tons in 2023 to 6,416,975.27 metric tons. The area under cultivation also grew marginally by 0.22 percent, from 5,235,088.80 hectares in 2023 to 5,246,411.95 hectares in 2024 (Table 12.3). The average yield per hectare remained constant at 1.22 metric tons for both years, indicating stable productivity nationwide. Notably, Kebbi State demonstrated significant improvement in yield, increasing from 1.27 to 1.40 metric tons per hectare, with total production reaching 393,351.53 metric tons in 2024. The Northwest region continues to dominate sorghum production, with states like Kano and Kebbi leading in efficiency and output. Conversely, states such as Borno and Zamfara faced declines in both production and yield, suggesting challenges like adverse weather conditions, pest infestations, or reduced use of agricultural inputs. Although the national average yield has remained steady, regional disparities highlight opportunities for targeted interventions to enhance efficiency and productivity in sorghum cultivation across Nigeria.

Table 12.3: Land Area and Production Estimates for Sorghum

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	172,626.34	178,668.26	198,485.62	206,822.02	1.15	1.16
FCT	97,707.63	101,127.40	129,647.84	135,093.05	1.33	1.34
Kogi	90,276.31	93,435.98	125,470.77	130,740.54	1.39	1.40
Kwara	98,895.40	102,356.74	151,441.75	157,802.31	1.53	1.54
Nasarawa	391,577.03	408,806.42	500,240.28	521,250.37	1.28	1.28
Niger	80,335.47	83,870.23	159,944.47	166,662.14	1.99	1.99
Plateau	177,207.61	185,004.75	305,028.32	317,839.51	1.72	1.72
Adamawa	241,231.13	253,775.15	279,913.66	291,670.03	1.16	1.15
Borno	314,315.53	314,629.85	338,708.28	318,724.50	1.08	1.01
Bauchi	382,448.58	402,335.91	438,735.68	457,162.57	1.15	1.14
Gombe	289,234.95	304,275.17	325,619.26	339,295.27	1.13	1.12
Taraba	289,552.26	304,608.98	327,219.40	340,962.62	1.13	1.12
Yobe	217,891.92	218,109.82	260,906.34	261,428.15	1.20	1.20
Jigawa	270,187.82	284,237.59	332,122.66	346,071.81	1.23	1.22
Kaduna	379,321.53	344,044.63	439,549.69	405,704.36	1.16	1.18
Kano	524,678.79	551,962.09	594,407.71	619,372.84	1.13	1.12
Katsina	267,868.06	243,492.07	293,485.36	266,778.19	1.10	1.10
Kebbi	308,847.96	280,742.79	391,005.50	393,351.53	1.27	1.40
Sokoto	239,755.92	217,938.13	365,144.62	328,958.78	1.52	1.51
Zamfara	339,171.79	308,307.16	364,152.17	327,700.54	1.07	1.06
Enugu	13,354.76	13,942.37	13,806.75	14,359.02	1.03	1.03
Oyo	48,601.98	50,740.47	66,562.62	69,225.12	1.37	1.36
National	5,235,088.80	5,246,411.95	6,401,598.75	6,416,975.27	1.22	1.22

12.4 Millet

The area dedicated to millet cultivation in Niger, Kaduna, Katsina, Sokoto, and Zamfara states has gradually decreased, even though there is increased productivity in some states. This trend may be attributed to farmers shifting focus to more lucrative crops like rice. Millet production declined from 1,549,044.93 metric tons in 2023 to 1,546,293.37 metric tons in 2024 with an increase in area under production from 1,542,875.22 hectares in 2023 to 1,547,775.81 hectares in 2024 as less farmers are currently growing the crop (Table 12.4). In 2024, Yobe State led Nigeria in millet production, achieving 203,845.51 metric tons, with a slight yield improvement from 1.15 to 1.16 metric tons per hectare. Conversely, states such as Borno, Sokoto, and Zamfara experienced declines in production. Borno saw a decrease in yield from 0.75 to 0.67 metric tons per hectare, indicating potential challenges like adverse weather conditions, pest infestations, or reduced input usage. These issues may be exacerbated by persistent insecurity and armed conflict in the region. Despite millet's nutritional benefits and resilience in arid conditions, its consumption in Nigeria remains lower compared to staples like rice and maize. This trend is influenced by changing consumer preferences and the perception of millet as a subsistence crop. Addressing these challenges through targeted interventions, such as promoting the nutritional value of millet, improving processing technologies, and providing support to farmers, could revitalize millet production and consumption in Nigeria.

Table 12.4: Land Area and Production Estimates for Millet

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	112,131.14	115,831.46	73,277.91	75,256.41	0.65	0.65
FCI	38,099.87	39,357.17	42,265.33	43,406.49	1.11	1.10
Kogi	33,969.17	35,090.16	27,550.67	28,294.54	0.81	0.81
Kwara	30,424.45	31,428.46	25,249.05	25,930.78	0.83	0.83
Nasarawa	22,078.66	22,807.26	25,835.52	26,533.08	1.17	1.16
Niger	83,467.24	86,221.65	92,017.25	94,501.72	1.10	1.10
Plateau	71,611.80	73,974.99	59,903.35	61,520.75	0.84	0.83
Adamawa	117,971.97	121,865.05	136,181.35	139,858.25	1.15	1.15
Borno	85,953.54	86,383.31	64,575.20	58,053.11	0.75	0.67
Bauchi	80,534.26	83,191.89	62,265.74	63,946.91	0.77	0.77
Gombe	109,128.71	112,729.96	99,608.26	102,297.68	0.91	0.91
Taraba	100,384.63	103,697.32	72,775.08	74,740.00	0.72	0.72
Yobe	180,220.04	181,481.58	199,848.54	203,845.51	1.11	1.12
Jigawa	82,032.64	84,739.72	53,711.16	54,785.38	0.65	0.65
Kaduna	59,094.48	55,548.81	38,401.02	38,823.43	0.65	0.70
Kano	46,167.90	47,691.44	72,678.54	74,640.86	1.57	1.57
Katsina	105,400.54	100,130.51	115,614.20	118,042.10	1.10	1.18
Kebbi	78,240.41	78,396.90	60,727.13	61,395.12	0.78	0.78
Sokoto	68,443.98	56,329.39	155,780.14	140,046.34	2.28	2.49
Zamfara	37,519.78	30,878.78	70,779.49	60,374.91	1.89	1.96
National	1,542,875.22	1,547,775.81	1,549,044.93	1,546,293.37	1.00	1.00

12.5 Cowpea

Cowpea, commonly known as beans in Nigeria, is the country's most extensively cultivated and traded legume, serving as a major plant-based protein source for many households. Over the past five years, cowpea production has faced challenges due to drought and excessive rainfall, leading to reduced domestic stocks and increased prices in 2024 compared to long-term averages. In 2024, the area under cowpea cultivation expanded by 0.35 percent, from 4,817,578.94 hectares in 2023 to 4,834,377.23 hectares. This expansion and enhanced rainfall boosted production from 3,924,974.44 metric tons in 2023 to 4,093,945.27 metric tons in 2024 (Table 12.5). Notably, Gombe State led national production with 619,372.84 metric tons in 2024, achieving a yield improvement from 0.90 to 0.95 metric tons per hectare. Conversely, states like Sokoto and Zamfara experienced declines in both production and yield, due to adverse weather conditions, pest infestations, or reduced input use. Despite its economic significance, cowpea yields in Nigeria have slightly improved over the past two decades. One major constraint is the pod-borer insect (*Maruca vitrata*), which can cause up to 80 percent damage to crops. Efforts to enhance cowpea production include adopting improved technologies that have positively impacted farmers' livelihoods in regions like Shongom Local Government Area of Gombe State. Additionally, initiatives such as the Feed the Future Nigeria Integrated Agriculture Activity, implemented in states including Gombe, aim to support community-based seed entrepreneurs in promoting improved cowpea varieties. Addressing challenges like pest infestations and environmental stresses is crucial for sustaining and enhancing cowpea production in Nigeria. Implementing integrated pest management strategies, adopting resilient cowpea varieties, and providing targeted support to affected areas can help stabilize and boost cowpea yields, ensuring food security and economic stability for Nigerian households.

12.6 Groundnut

Groundnut cultivation in Nigeria is undertaken by small-scale farmers in the northern regions, particularly in states such as Bauchi, Kano, Kaduna, Kebbi, Adamawa, Borno, Niger, Taraba, and Plateau. The crop thrives in arid and semi-arid regions, with an average farm size of 0.75 hectares per farmer. The area under groundnut production increased from 4,426,839.97 hectares in 2023 to 4,400,927.30 hectares in 2024, resulting in an increase in production from 4,965,239.84 metric tons in 2023 to 5,084,548.59 metric tons in 2024 (Table 12.6). Bauchi State led national production with 652,756.82 metric tons in 2024, achieving a yield improvement from 1.23 to 1.28 metric tons per hectare. However, Sokoto and Zamfara experienced declines in both production and yield. Groundnut production in Nigeria has evolved from a traditional subsistence crop into a commercially viable and economically significant agricultural activity. Export opportunities and demand from international markets, including India and the Middle East, have prompted farmers to expand their groundnut cultivation to meet the growing market needs. Despite this growth, groundnut productivity remains low, averaging 1.16 metric tons per hectare. Contributing factors include the widespread recycling of groundnut seeds for planting, poor agronomic practices, and lack of farm mechanization, resulting in high production costs. Efforts to enhance groundnut productivity are essential to meet both domestic and international demand. Implementing improved farming techniques, providing access to quality seeds, and promoting mechanization could significantly boost yields and profitability for Nigerian groundnut farmers.

Table 12.5: Land Area and Production Estimates for Cowpea

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	108,799.49	109,887.49	126,854.19	134,972.85	1.17	1.23
FCT	135,944.87	137,304.32	110,816.59	117,908.85	0.82	0.86
Kogi	353,010.92	356,541.03	156,627.41	166,651.57	0.44	0.47
Kwara	227,905.29	230,184.34	190,574.10	202,770.84	0.84	0.88
Nasarawa	69,731.00	70,428.31	82,637.54	87,926.34	1.19	1.25
Niger	80,847.73	81,656.21	119,241.26	126,872.70	1.47	1.55
Plateau	165,933.95	167,593.29	98,050.93	104,326.19	0.59	0.62
Adamawa	189,021.18	190,911.39	203,000.74	215,992.78	1.07	1.13
Borno	197,042.85	186,796.63	161,388.05	150,897.82	0.82	0.81
Bauchi	212,476.60	214,601.37	174,970.08	186,168.17	0.82	0.87
Gombe	322,807.92	326,036.00	290,665.72	309,268.32	0.90	0.95
Taraba	253,464.62	255,999.26	240,007.22	255,367.69	0.95	1.00
Yobe	108,964.09	107,656.52	223,309.77	223,533.08	2.05	2.08
Jigawa	109,748.29	110,845.77	177,639.28	189,008.20	1.62	1.71
Kaduna	167,942.13	166,094.77	140,353.36	140,914.77	0.84	0.85
Kano	185,794.76	187,281.12	155,998.75	165,982.67	0.84	0.89
Katsina	107,923.33	102,311.32	98,733.22	97,548.42	0.91	0.95
Kebbi	99,580.88	94,402.67	80,744.12	81,147.84	0.81	0.86
Sokoto	129,074.19	130,364.93	98,934.91	92,998.82	0.77	0.71
Zamfara	110,825.46	111,933.71	63,744.78	59,537.62	0.58	0.53
Abia	40,120.00	40,521.20	44,278.50	47,112.32	1.10	1.16
Anambra	129,662.92	130,959.55	53,313.96	56,726.05	0.41	0.43
Ebonyi	64,028.93	64,669.22	36,997.47	39,365.31	0.58	0.61
Enugu	112,809.03	113,937.12	78,903.99	83,953.85	0.70	0.74
Imo	97,003.67	97,973.71	59,126.67	62,910.78	0.61	0.64
Akwa Ibom	28,237.07	28,519.44	39,199.71	41,708.50	1.39	1.46
Bayelsa	29,834.81	30,133.15	26,022.16	27,687.58	0.87	0.92
Delta	23,016.26	23,246.43	21,110.34	22,461.40	0.92	0.97
Edo	51,647.54	52,164.01	40,001.71	42,561.82	0.77	0.82
C/Rivers	5,286.83	5,339.70	5,185.19	5,517.05	0.98	1.03
Rivers	90,362.48	91,266.10	42,141.33	44,838.37	0.47	0.49
Ekiti	164,042.47	165,682.89	91,602.06	97,464.59	0.56	0.59
Ogun	82,612.93	83,439.06	49,394.64	52,555.90	0.60	0.63
Ondo	135,687.50	137,044.37	106,216.96	113,014.84	0.78	0.82
Osun	196,054.86	198,015.41	81,779.15	87,013.02	0.42	0.44
Oyo	117,557.17	118,732.74	98,328.64	98,525.30	0.84	0.83
Lagos	112,774.92	113,902.67	57,079.91	60,733.03	0.51	0.53
National	4,817,578.94	4,834,377.23	3,924,974.44	4,093,945.27	0.81	0.85

Table 12.6: Land Area and Production Estimates for Groundnut

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Adamawa	72,187.05	73,053.29	152,152.89	160,064.84	2.11	2.19
Bauchi	502,602.63	508,633.86	620,491.27	652,756.82	1.23	1.28
Bayelsa	30,921.77	31,292.83	29,171.91	30,688.85	0.94	0.98
Benue	330,533.07	334,499.46	313,925.45	330,249.57	0.95	0.99
Borno	195,137.04	195,332.17	221,147.88	191,735.21	1.13	0.98
C/Rivers	16,651.11	16,850.93	21,140.07	22,239.36	1.27	1.32
Ebonyi	6,380.11	6,456.67	6,189.03	6,510.86	0.97	1.01
Edo	12,023.12	12,167.40	7,533.47	7,925.21	0.63	0.65
Enugu	6,041.77	6,114.27	7,718.91	8,120.29	1.28	1.33
FCI	218,784.52	221,409.93	159,037.32	167,307.27	0.73	0.76
Gombe	145,606.62	147,353.90	156,812.05	164,966.28	1.08	1.12
Imo	10,863.10	10,993.46	9,074.93	9,546.83	0.84	0.87
Jigawa	184,298.10	186,509.68	278,645.63	293,135.20	1.51	1.57
Kaduna	250,080.88	247,079.91	326,465.77	332,995.09	1.31	1.35
Kano	263,505.69	266,667.76	172,910.50	181,901.84	0.66	0.68
Katsina	167,695.32	154,279.70	151,851.55	152,762.66	0.91	0.99
Kebbi	179,452.61	180,529.32	216,430.77	225,737.29	1.21	1.25
Kogi	163,309.00	165,268.71	197,330.53	207,591.71	1.21	1.26
Kwara	234,601.87	237,417.09	292,576.75	307,790.75	1.25	1.30
Nasarawa	113,947.75	115,315.13	243,226.74	255,874.53	2.13	2.22
Niger	260,484.80	263,610.62	317,309.71	330,954.03	1.22	1.26
Ogun	22,970.80	23,246.45	45,015.37	47,356.17	1.96	2.04
Osun	48,454.98	49,036.44	61,994.65	65,218.38	1.28	1.33
Oyo	59,064.33	59,773.10	68,253.23	71,802.40	1.16	1.20
Plateau	177,881.75	180,016.33	241,071.01	253,606.70	1.36	1.41
Sokoto	237,695.25	216,778.07	116,084.96	105,637.31	0.49	0.49
Taraba	266,019.06	269,211.29	276,374.00	290,745.45	1.04	1.08
Yobe	55,898.44	56,569.22	69,551.30	70,942.33	1.24	1.25
Zamfara	193,747.43	165,460.30	185,752.16	138,385.36	0.96	0.84
National	4,426,839.97	4,400,927.30	4,965,239.84	5,084,548.59	1.12	1.16

12.7 Soybean

Nigeria's soybean production has experienced a significant increase across the country. This growth is driven by rising demand in the industrial sector for oil production and animal feed. Additionally, efforts by research institutes like the International Institute for Tropical Agriculture (IITA) have contributed to increased soybean cultivation, particularly in the southern regions. In 2024, there was an increase of 0.97 percent in the area cultivated for soybeans from 983,136.89 hectares in 2023 to 992,633.58 hectares. The increase in acreage resulted in an increase in production from 945,870.10 metric tons in 2023 to 947,952.08 metric tons in 2024 as shown in Table 12.7 This is due to small-scale farmers increasingly embracing soybean production across legumes-producing states. The increase in acreage has been reported in Northcentral and Northwest regions. Similarly, increased production has been attributed to the high demand for high-quality soybean oil and increased demand for edible oils. Soybean cake, a by-product of oil extraction, is in high demand for livestock feed formulation due to its substantial protein content. The crop is gaining fame among maize farmers as a rotational crop as it improves soil health thus contributing to improved yields in the next crop cycle.

Table 12.7: Land Area and Production Estimates for Soybean

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	82,351.47	83,751.45	202,665.67	205,300.33	2.46	2.45
FCT	49,589.96	50,432.99	28,692.91	29,065.91	0.58	0.58
Kogi	48,153.15	48,971.76	40,204.54	40,727.20	0.83	0.83
Kwara	61,268.70	62,310.27	55,005.40	55,720.47	0.90	0.89
Nasarawa	31,008.05	31,535.19	24,800.07	25,122.47	0.80	0.80
Niger	100,353.66	102,059.68	53,818.71	54,087.81	0.54	0.53
Plateau	37,530.20	38,168.21	24,849.70	25,172.74	0.66	0.66
Adamawa	54,682.70	55,612.30	43,904.50	44,475.26	0.80	0.80
Bauchi	34,559.66	35,147.18	22,444.17	22,735.94	0.65	0.65
Borno	23,313.24	23,336.55	17,058.65	14,039.27	0.73	0.60
Gombe	61,851.66	62,903.14	52,017.75	52,693.98	0.84	0.84
Taraba	41,956.33	42,669.58	59,265.99	60,036.45	1.41	1.41
Jigawa	37,123.77	37,754.87	30,551.46	30,948.63	0.82	0.82
Kaduna	87,412.96	88,287.08	92,538.85	93,741.86	1.06	1.06
Kano	56,121.25	57,075.31	66,057.21	66,915.95	1.18	1.17
Katsina	45,126.14	45,035.89	34,031.94	34,202.10	0.75	0.76
Kebbi	38,541.12	39,042.15	35,049.41	35,294.76	0.91	0.90
Sokoto	36,251.24	31,647.34	31,895.21	26,249.75	0.88	0.83
Ekiti	22,034.77	22,409.36	7,213.42	7,307.20	0.33	0.33
Oyo	33,906.86	34,483.27	23,804.54	24,114.00	0.70	0.70
National	983,136.89	992,633.58	945,870.10	947,952.08	0.96	0.95

12.8 Benniseed

Sesame cultivation in Nigeria is concentrated in the central and northern regions, with major producing states including Nasarawa, Kogi, Benue, Niger, Jigawa, Kano, Yobe, Gombe, Bauchi, Borno, and Taraba. Other important producing areas are Katsina, Plateau, and the FCT. The primary varieties cultivated are white and golden sesame seeds. In the year under review, the area under production increased from 531,355.58 hectares in 2023 to 535,417.97 hectares in 2024. Production also increased from 482,913.61 metric tons in 2023 to 508,920.60 metric tons, a 5.4 percent increase (Table 12.8). Benue State led national production with 89,255.85 metric tons in 2024, achieving a yield improvement from 1.12 to 1.18 metric tons per hectare. This was a result of adequate rains across the growing areas. Jigawa state is one the largest producer of benniseed due to the fertile soil, favourable climate, and WACOT Out-Grower initiative programme which encouraged farmers to expand their farmlands. Benniseed production continued to gain popularity among small-scale farmers and the crop is mainly grown under rain-fed conditions with minimal inputs. The successes realized from this crop in these states have stimulated interest in other states due to its demand and good prices. The grain is mainly grown for sale, but some is retained in the households for domestic consumption.

Table 12.8: Land Area and Production Estimates for Benniseed

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Adamawa	10,324.17	10,479.03	15,881.30	16,913.58	1.54	1.61
Bauchi	13,790.01	13,996.86	8,935.81	9,516.64	0.65	0.68
Benue	74,549.20	75,667.44	83,808.31	89,255.85	1.12	1.18
Borno	11,161.60	10,547.71	7,308.86	7,783.94	0.65	0.74
FCT	53,845.84	54,653.53	49,031.33	52,218.37	0.91	0.96
Gombe	23,991.93	24,351.81	9,464.36	10,079.54	0.39	0.41
Jigawa	12,286.31	12,470.61	20,200.55	21,513.58	1.64	1.73
Kano	14,511.30	14,728.97	19,333.39	20,590.06	1.33	1.40
Katsina	32,818.52	32,096.51	15,038.92	14,241.86	0.46	0.44
Kebbi	6,968.36	6,975.33	6,499.52	6,551.52	0.93	0.94
Kogi	56,248.09	57,091.81	58,223.16	62,007.66	1.04	1.09
Kwara	23,649.63	24,004.37	14,080.92	14,996.18	0.60	0.62
Nasarawa	39,218.40	39,806.68	54,482.01	58,023.34	1.39	1.46
Niger	46,675.77	47,142.53	23,016.73	23,707.23	0.49	0.50
Plateau	40,929.93	41,543.88	31,812.14	33,879.93	0.78	0.82
Sokoto	19,016.28	18,274.65	13,420.23	12,682.12	0.71	0.69
Taraba	38,380.98	38,956.69	43,275.08	46,087.97	1.13	1.18
Yobe	10,421.97	10,578.30	2,783.15	2,964.05	0.27	0.28
Zamfara	2,567.29	2,051.26	6,317.83	5,907.17	2.46	2.88
National	531,355.58	535,417.97	482,913.61	508,920.60	0.91	0.95

12.9 Yam

Nigeria is regarded as the largest producer of yam both in Africa and globally. According to the International Institute of Tropical Agriculture (IITA), Nigeria accounts for about 70 percent of the world's production. Yam is a highly productive food crop giving it the potential to play a greater role in Nigerian food security. However, its production is constrained by the high costs and limited availability of yam seeds. Yam production increased from 53,398,019.83 metric tons in 2023 to 54,577,973.19 metric tons in 2024, with the area under cultivation expanding from 6,224,714.18 hectares in 2023 to 6,335,594.68 hectares in 2024. (Table 12.9). Nasarawa had the highest production nationally, with 3,889,809.04 metric tons in 2024, with a slight yield improvement from 19.70 to 19.74 metric tons per hectare. These trends underscore the growing importance of yam in Nigeria's agricultural landscape and its potential role in bolstering national food security.

Table 12.9: Land Area and Production Estimates for Yam

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Abia	313,604.08	319,248.95	2,106,040.13	2,154,479.05	6.72	6.75
Akwa Ibom	248,969.99	253,451.45	2,225,874.15	2,277,069.25	8.94	8.98
Anambra	135,102.52	137,534.37	759,768.14	774,963.50	5.62	5.63
Bayelsa	278,736.55	283,753.80	1,084,634.40	1,109,580.99	3.89	3.91
Benue	175,706.61	178,869.33	2,773,201.50	2,828,665.53	15.78	15.81
C/Rivers	277,155.73	282,144.53	2,603,172.05	2,663,045.01	9.39	9.44
Delta	133,546.15	135,949.98	1,207,430.12	1,235,201.01	9.04	9.09
Ebonyi	288,319.21	293,508.95	2,729,305.03	2,783,891.14	9.47	9.48
Edo	379,533.78	386,365.39	2,966,668.56	3,034,901.94	7.82	7.86
Ekiti	190,618.41	194,049.54	1,502,150.10	1,536,699.55	7.88	7.92
Enugu	226,765.26	230,847.04	3,030,597.11	3,100,300.84	13.36	13.43
FCT	612,060.05	623,077.13	2,563,534.65	2,622,495.94	4.19	4.21
Imo	81,860.07	83,333.55	292,526.44	299,254.55	3.57	3.59
Kaduna	163,907.55	166,202.26	2,326,871.00	2,380,389.04	14.20	14.32
Kebbi	127,182.16	128,962.71	830,243.17	849,338.76	6.53	6.59
Kogi	159,344.38	162,212.58	1,508,500.28	1,543,195.78	9.47	9.51
Kwara	209,734.85	213,510.07	1,893,496.92	1,937,047.35	9.03	9.07
Nasarawa	193,568.18	197,052.40	3,813,538.28	3,889,809.04	19.70	19.74
Niger	299,262.68	304,649.40	5,048,741.89	5,149,716.73	16.87	16.90
Ogun	137,930.06	140,412.80	890,117.50	910,590.20	6.45	6.49
Ondo	202,996.02	206,649.95	1,962,136.89	2,007,266.04	9.67	9.71
Osun	179,919.40	183,157.95	2,173,425.43	2,223,414.21	12.08	12.14
Oyo	306,685.98	312,206.33	1,413,717.04	1,443,405.09	4.61	4.62
Plateau	112,099.24	114,117.02	1,490,473.96	1,524,754.87	13.30	13.36
Rivers	506,300.36	515,413.77	1,177,625.25	1,204,710.63	2.33	2.34
Taraba	283,804.93	288,913.42	3,024,229.86	3,093,787.15	10.66	10.71
National	6,224,714.18	6,335,594.68	53,398,019.83	54,577,973.19	8.58	8.61

12.10 Cassava

Cassava is one of the key staple crops in Nigeria, thriving across diverse environmental conditions. In recent years, the country has maintained its position as the world's largest cassava producer, with production levels reaching approximately 63 million metric tons in 2023. In 2024, cassava production in Nigeria was projected to reach 64,361,224.58 metric tons, a 2.0 percent increase over the previous year. This upward trend is anticipated to continue, with forecasts suggesting that production will rise to approximately 65.6 million metric tons in 2024, representing a 4.0 percent increase from 2023. Similarly, the area cultivated increased from 9,153,846.83 hectares in 2023 to 9,281,806.83 hectares in 2024 (Table 12.10). Benue had the highest production nationally, with 4204773.47 metric tons in 2024, with a slight yield improvement from 9.99 to 10.04 metric tons per hectare. These developments underscore cassava's critical role in Nigeria's agricultural sector and its potential to enhance food security and economic growth. This increase in production has been attributed to enhanced rainfall, the promotion of the cassava value chain through various programs, improved access to seeds, the introduction of higher-yielding varieties, the expansion of cultivated land, and favourable market prices.

12.11 Cocoyam

In 2024, Nigeria's Southern agroecological zones saw a modest increase in cocoyam cultivation, with the area under cultivation rising from 821,880.00 hectares in 2023 to 826,537.87 hectares. Despite this expansion, production remained relatively stable, recording 3,213,120.65 metric tons in 2023 and 3,213,281.95 metric tons in 2024 (Table 12.11). Despite the increase in cultivated area, this stability in production suggests that factors other than cultivation area, such as yield per hectare, may have influenced overall output. Cocoyam is a versatile crop that thrives in fertile soils and can be cultivated with minimal inputs, even on marginal lands. It is predominantly grown and utilized across all states in Nigeria's Southern region, serving as a significant food source and income generator for many households. The crop's resilience and adaptability are valuable to the region's agricultural landscape. Despite its importance, cocoyam has historically been considered a low-priority crop, primarily cultivated by small-scale farmers within subsistence farming systems. However, its nutritional superiority compared to other root and tuber crops has led to increased recognition of its value. Cocoyam has high nutritional values compared to other crops like cassava and yam, with substantial vitamin, mineral, and protein content. Nigeria is the largest producer of cocoyam globally, with an annual production of 3.25 million metric tons. Continued support for cocoyam cultivation in the region could further enhance food security and economic stability. Efforts to improve yield per hectare, by introducing improved varieties and better farming practices, may help increase overall production in the future.

Table 12.10: Land Area and Production Estimates for Cassava

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	411,615.30	418,612.76	4,110,238.00	4,204,773.47	9.99	10.04
FCT	350,818.48	356,782.40	2,002,035.43	2,048,082.25	5.71	5.74
Kogi	363,128.74	369,301.93	3,885,681.64	3,975,052.32	10.70	10.76
Kwara	384,502.17	391,038.71	1,631,749.77	1,669,280.02	4.24	4.27
Nasarawa	289,152.59	294,068.18	1,968,815.54	2,014,098.30	6.81	6.85
Niger	345,011.94	348,462.06	1,848,488.39	1,866,973.27	5.36	5.36
Plateau	305,817.75	311,016.66	1,179,565.02	1,206,695.01	3.86	3.88
Taraba	190,087.96	193,319.45	1,594,598.99	1,631,274.76	8.39	8.44
Bauchi	131,363.54	133,596.72	545,645.30	558,195.15	4.15	4.18
Gombe	119,922.35	121,961.03	833,690.53	852,865.41	6.95	6.99
Yobe	176,622.12	179,624.70	544,191.86	549,633.78	3.08	3.06
Jigawa	117,515.69	119,513.46	1,151,817.54	1,178,309.34	9.80	9.86
Kaduna	189,849.20	190,228.90	2,168,586.35	2,190,272.22	11.42	11.51
Katsina	155,879.00	152,449.66	426,595.42	421,476.27	2.74	2.76
Kebbi	129,214.73	129,473.16	686,838.11	693,706.49	5.32	5.36
Sokoto	82,638.22	78,093.12	355,751.27	341,521.22	4.30	4.37
Zamfara	109,417.09	102,852.06	245,675.27	234,128.53	2.25	2.28
Abia	253,979.06	258,296.70	2,055,262.14	2,102,533.17	8.09	8.14
Anambra	254,819.48	259,151.41	2,419,436.75	2,475,083.79	9.49	9.55
Ebonyi	811,111.35	824,900.25	29,322.03	29,908.48	0.04	0.04
Enugu	233,474.69	237,443.76	2,406,311.75	2,454,437.99	10.31	10.34
Imo	315,014.64	320,369.88	3,771,928.00	3,858,682.34	11.97	12.04
Akwa Ibom	290,919.38	295,865.01	2,194,693.21	2,245,171.15	7.54	7.59
Bayelsa	360,378.27	366,504.70	1,610,377.61	1,647,416.30	4.47	4.49
Cross River	414,298.92	421,342.00	2,802,351.92	2,866,806.01	6.76	6.80
Delta	231,669.70	235,608.08	2,014,543.82	2,060,878.33	8.70	8.75
Edo	296,515.82	301,556.59	1,640,767.70	1,673,583.06	5.53	5.55
Rivers	608,951.89	619,304.07	3,588,299.17	3,670,830.05	5.89	5.93
Ekiti	235,776.30	239,784.50	2,030,388.51	2,077,087.45	8.61	8.66
Lagos	246,778.18	250,973.41	1,581,991.50	1,618,377.31	6.41	6.45
Ogun	162,841.13	165,609.43	1,926,005.15	1,962,599.25	11.83	11.85
Ondo	215,988.21	219,660.01	3,736,428.85	3,811,157.42	17.30	17.35
Osun	182,075.31	185,170.59	2,078,957.60	2,126,773.63	11.42	11.49
Oyo	186,697.62	189,871.48	2,001,528.93	2,043,561.04	10.72	10.76
National	9,153,846.83	9,281,806.83	63,068,559.09	64,361,224.58	6.89	6.93

Table 12.11: Land Area and Production Estimates for Cocoyam

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Abia	31,139.11	31,316.60	160,799.11	160,874.68	5.16	5.14
Akwa Ibom	28,330.93	28,492.41	152,013.39	152,084.84	5.37	5.34
Anambra	75,832.22	76,264.47	262,616.31	262,739.74	3.46	3.45
Bayelsa	61,423.31	61,773.42	270,648.17	270,775.38	4.41	4.38
Benue	17,200.11	17,298.15	50,204.09	50,227.68	2.92	2.90
Borno	3,085.60	3,076.35	7,195.13	5,849.64	2.33	1.90
Cross River	20,240.42	20,355.79	171,242.50	171,322.99	8.46	8.42
Delta	23,484.55	23,618.41	81,636.89	81,675.26	3.48	3.46
Ebonyi	74,648.94	75,074.44	133,889.40	133,952.33	1.79	1.78
Edo	35,385.35	35,587.05	128,205.92	128,266.18	3.62	3.60
Ekiti	25,534.07	25,679.61	189,729.60	189,818.78	7.43	7.39
Enugu	46,114.19	46,377.04	207,372.08	207,469.54	4.50	4.47
FCT	8,730.27	8,780.04	29,581.73	29,595.63	3.39	3.37
Imo	66,439.54	66,818.24	241,184.85	241,298.20	3.63	3.61
Kogi	12,280.13	12,350.13	84,502.32	84,542.03	6.88	6.85
Kwara	33,777.44	33,969.97	61,894.69	61,923.78	1.83	1.82
Lagos	26,405.97	26,556.48	58,484.60	58,512.09	2.21	2.20
Nasarawa	17,103.86	17,201.36	81,830.29	81,868.75	4.78	4.76
Niger	15,450.66	15,538.73	106,095.60	106,145.46	6.87	6.83
Ogun	18,230.53	18,334.45	119,136.03	119,192.02	6.53	6.50
Ondo	20,580.12	20,697.43	198,558.74	198,652.06	9.65	9.60
Osun	27,068.38	27,222.67	139,028.22	139,093.56	5.14	5.11
Oyo	29,378.33	29,545.79	51,814.40	51,838.76	1.76	1.75
Plateau	10,966.63	11,029.14	37,187.33	37,204.81	3.39	3.37
Rivers	21,095.33	21,215.57	108,518.97	108,569.98	5.14	5.12
Taraba	71,953.99	72,364.13	79,750.29	79,787.78	1.11	1.10
National	821,880.00	826,537.87	3,213,120.65	3,213,281.95	3.91	3.89

12.12 Cotton

Cotton is a drought-tolerant crop, grown in arid and semi-arid lands (ASALs). Currently, there are fifteen states with suitable agroecological zones for cotton production. The cotton-growing region is the Northern region, with Katsina State being the largest producer of the commodity, producing between 40,000 and 45,000 metric tons of cotton over the last three years. In 2024, Nigeria's cotton cultivation area declined by 0.39 percent to 381,398.68 thousand hectares. A total of 304,177.80 metric tons of seed cotton was produced in 2024 compared to 298,666.33 metric tons in the previous season, an increase of 1.85 percent (Table 12.12). The average yield in 2024 was 0.80 tonnes per hectare compared to 0.78 tonnes per hectare in 2023. Katsina reported yield growth of 1.06 metric tons per hectare, with production increasing to 44,597.30 metric tons. The increase was attributed to the government's collaborative effort to revitalize cotton.

Table 12.12: Land Area and Production Estimates for Cotton

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Plateau	7,377.32	7,451.09	8,273.34	8,844.20	1.12	1.19
Taraba	17,071.92	17,242.64	6,108.00	6,529.46	0.36	0.38
Adamawa	19,092.90	19,283.83	15,382.66	16,444.06	0.81	0.85
Bauchi	73,978.33	74,718.12	37,236.29	39,805.59	0.50	0.53
Borno	35,032.77	35,137.87	17,497.93	10,848.71	0.50	0.31
Gombe	25,186.21	25,438.08	14,544.06	15,547.60	0.58	0.61
Yobe	25,117.84	25,369.01	16,872.11	18,036.28	0.67	0.71
Jigawa	27,389.53	27,663.43	10,100.73	10,797.69	0.37	0.39
Kaduna	7,027.83	7,098.11	27,648.73	29,556.49	3.93	4.16
Kano	37,950.27	38,329.77	36,560.40	39,083.07	0.96	1.02
Katsina	42,022.61	41,938.57	43,594.62	44,597.30	1.04	1.06
Kebbi	29,729.61	29,795.02	21,703.44	23,200.97	0.73	0.78
Sokoto	28,924.26	25,742.59	34,132.22	32,254.95	1.18	1.25
Zamfara	5,067.63	4,256.81	5,895.22	5,299.81	1.16	1.25
Oyo	1,914.61	1,933.75	3,116.58	3,331.63	1.63	1.72
National	382,883.65	381,398.68	298,666.33	304,177.80	0.78	0.80

12.13 Ginger

In 2024, Nigeria's ginger cultivation area expanded to 89,751.79 hectares, a 0.75 percent increase from 89,081.83 hectares in 2023. Production reached 727,633.16 metric tons, a significant rise of 84 percent from the 395,249.53 metric tons produced in 2023. Kaduna State led national production with 542,385.39 metric tons in 2024, achieving a yield improvement from 5.24 to 13.32 metric tons per hectare (Table 12.13). This substantial increase is primarily attributed to the absence of the fungal disease that devastated approximately 60 percent of ginger farms in Kaduna State in 2023, leading to losses exceeding N10 billion. Efforts to support affected farmers have been initiated, including establishing the Ginger Recovery Advancement and Transformation for Economic Empowerment (GRATE). While the 2024 season shows promising recovery, ongoing support and preventive measures are essential to sustain and enhance ginger production in Nigeria.

Table 12.13: Land Area and Production Estimates for Ginger

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	8,535.00	8,645.95	70,663.99	71,935.95	8.28	8.32
Nasarawa	29,443.96	29,826.74	74,172.21	75,507.31	2.52	2.53
Bauchi	10,427.70	10,563.26	37,136.07	37,804.52	3.56	3.58
Kaduna	40,675.17	40,715.84	213,277.26	542,385.39	5.24	13.32
National	89,081.83	89,751.79	395,249.53	727,633.16	4.44	8.11

12.14 Tomato

In 2024, Nigeria's tomato cultivation area expanded to 824,035.17 hectares, a 0.6 percent increase from 814,809.54 hectares in 2023. Production rose from 3,679,109.10 tonnes in 2023 to 3,738,255.65 tonnes in 2024, attributed to favourable weather conditions. Gombe State led national production

with 348,694.97 metric tons in 2024, achieving a yield improvement from 20.83 to 21.03 metric tons per hectare. Kano State also saw a yield increase from 6.30 to 6.37 metric tons per hectare, with production reaching 307,238.72 metric tons in 2024 (Table 12.14). Small-scale farmers dominate the sector, accounting for 98 percent of the total cultivation area, highlighting their significant role in Nigeria's tomato production. Despite these gains, challenges persist. Gombe farmers face substantial post-harvest losses due to inadequate storage facilities, jeopardizing the rainy and dry season harvests. In Kano, since February 2024, tomato farmers have contended with pest infestations, particularly the resurgence of *Tuta absoluta*, leading to crop destruction across key irrigation sites. Additionally, the absence of storage facilities has resulted in significant post-harvest losses, with reports indicating that over half of the harvested tomatoes are lost annually. To address these issues, the Dangote Group inaugurated Africa's largest tomato processing facility in Kano in late 2024 aiming to reduce import dependence and mitigate post-harvest losses by processing a significant portion of the local harvest. While these developments are promising, the sector continues to face environmental challenges, including heavy rainfall and dam water releases, which have adversely impacted production in several northern

12.15 Onion

Nigeria's onion cultivation area increased slightly from 537,319.16 hectares in 2023 to 539,291.19 hectares in 2024. Production saw a marginal rise of 0.04 percent, from 1,366,482.33 metric tons in 2023 to 1,367,044.16 metric tons in 2024. This modest growth is attributed to increased harvests in non-traditional growing regions. Notably, Kano State led national production with 128,471.27 metric tons in 2024, with a slight yield improvement from 2.57 to 2.58 metric tons per hectare (Table 12.15). Despite the industry's potential, several challenges persist such as international price fluctuations, immature harvesting, and insect damage. Additionally, onion farmers face significant post-harvest losses, with reports indicating over 50 percent losses due to inadequate storage facilities and handling practices. Rising production costs, driven by inflation and increased prices for fertilizers, pesticides, fuel, and labour, further strain the industry. Environmental challenges, such as heavy rainfall and dam water releases, have also adversely impacted onion production in several northern states, contributing to price surges. Addressing these issues is crucial for enhancing the sustainability and profitability of Nigeria's onion industry.

12.16 Okra

In 2024, Nigeria's okra cultivation area increased by 8,101.02 hectares, totalling 1,529,401.86 hectares, up from 1,521,300.84 hectares in 2023. Correspondingly, production rose from 1,707,615.09 metric tons in 2023 to 1,717,146.62 metric tons in 2024 (Table 12.16). Nigeria is a major global producer of okra, ranking first in Africa and second worldwide after India, with an annual production of approximately 1,911,819 tonnes, accounting for about 17.02 percent of the global total. Cross River had the highest production nationally, with 619,372.84 metric tons in 2024 maintaining a stable yield of 0.93 metric tons per hectare. The National Horticultural Research Institute (NIHORT) has proactively enhanced okra production by developing new varieties to improve yield and resilience. Despite these advancements, challenges such as pest infestations, diseases, and post-harvest losses continue to affect okra production. Addressing these issues is crucial for sustaining and increasing okra yields in Nigeria.

Table 12.14: Land Area and Production Estimates for Tomato

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	16,943.21	17,214.30	97,639.72	100,178.35	5.76	5.82
FCT	29,293.71	29,762.41	84,166.93	86,355.27	2.87	2.90
Kogi	27,805.45	28,250.34	91,105.92	93,474.68	3.28	3.31
Kwara	28,283.58	28,736.12	72,770.78	74,662.82	2.57	2.60
Nasarawa	43,913.63	44,616.24	145,934.09	149,728.37	3.32	3.36
Niger	19,865.85	20,183.70	145,744.15	149,533.50	7.34	7.41
Plateau	32,761.81	33,286.00	81,254.58	83,367.20	2.48	2.50
Taraba	27,004.08	27,436.15	152,518.53	156,484.01	5.65	5.70
Adamawa	20,539.27	20,867.89	112,897.90	115,833.25	5.50	5.55
Bauchi	26,600.03	27,025.63	239,572.49	245,801.37	9.01	9.10
Borno	14,094.65	14,108.75	200,698.94	186,047.92	14.24	13.19
Gombe	16,316.93	16,578.00	339,858.64	348,694.97	20.83	21.03
Yobe	15,050.91	15,291.72	225,643.85	231,510.59	14.99	15.14
Jigawa	27,138.77	27,572.99	126,636.60	129,929.15	4.67	4.71
Kaduna	31,482.32	31,986.04	251,171.24	257,701.69	7.98	8.06
Kano	47,496.21	48,256.15	299,452.95	307,238.72	6.30	6.37
Katsina	37,630.63	37,668.26	171,752.71	173,470.23	4.56	4.61
Kebbi	39,482.53	39,679.94	54,169.72	55,253.11	1.37	1.39
Sokoto	15,576.17	15,264.65	92,068.26	89,490.35	5.91	5.86
Zamfara	24,882.82	23,240.55	153,506.20	148,901.01	6.17	6.41
Abia	20,963.52	21,298.94	23,602.70	24,216.37	1.13	1.14
Anambra	14,296.68	14,525.42	28,566.36	29,309.09	2.00	2.02
Ebonyi	32,586.72	33,108.11	64,071.71	65,737.58	1.97	1.99
Enugu	25,078.11	25,479.36	23,450.75	24,060.47	0.94	0.94
Imo	7,663.50	7,786.12	18,512.42	18,993.74	2.42	2.44
Cross River	13,252.88	13,464.92	82,710.75	84,861.23	6.24	6.30
Delta	14,458.30	14,689.63	34,112.49	34,999.41	2.36	2.38
Edo	34,479.03	35,030.70	41,532.65	42,612.50	1.20	1.22
Ekiti	22,923.17	23,289.94	26,147.84	26,827.69	1.14	1.15
Lagos	18,889.39	19,191.62	31,516.70	32,336.13	1.67	1.68
Ogun	8,855.45	8,997.14	65,477.24	67,179.65	7.39	7.47
Ondo	14,343.82	14,573.32	39,519.33	40,546.83	2.76	2.78
Osun	20,694.15	21,025.26	20,019.24	20,539.74	0.97	0.98
Oyo	24,162.26	24,548.85	41,304.73	42,378.65	1.71	1.73
National	814,809.54	824,035.17	3,679,109.10	3,738,255.65	4.52	4.54

Table 12.15: Land Area and Production Estimates for Onion

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	27,221.85	27,548.51	43,555.42	44,208.75	1.60	1.60
Plateau	41,818.95	42,320.78	55,169.03	55,996.56	1.32	1.32
Taraba	35,274.42	35,697.71	77,399.19	78,560.18	2.19	2.20
Adamawa	16,035.91	16,228.34	62,374.29	63,309.91	3.89	3.90
Bauchi	47,378.60	47,947.14	92,251.80	93,635.57	1.95	1.95
Borno	18,763.36	18,594.49	67,904.19	63,829.94	3.62	3.43
Gombe	41,848.59	42,350.77	91,625.58	92,999.97	2.19	2.20
Yobe	52,032.21	52,656.60	97,427.41	98,888.82	1.87	1.88
Jigawa	32,474.03	32,863.72	79,341.95	80,532.08	2.44	2.45
Kaduna	32,634.84	33,026.46	108,323.78	109,948.63	3.32	3.33
Kano	49,283.29	49,874.69	126,572.68	128,471.27	2.57	2.58
Katsina	36,603.91	37,043.16	120,709.90	122,520.55	3.30	3.31
Kebbi	45,333.48	45,877.48	121,938.50	123,767.58	2.69	2.70
Sokoto	31,395.33	30,013.93	117,568.75	112,278.15	3.74	3.74
Zamfara	19,691.82	17,604.49	91,628.96	85,214.93	4.65	4.84
Lagos	9,528.58	9,642.92	12,690.89	12,881.26	1.33	1.34
National	537,319.16	539,291.19	1,366,482.33	1,367,044.16	2.54	2.53

Table 12.16: Land Area and Production Estimates for Okra

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Benue	37,830.03	38,132.67	56,717.67	57,568.44	1.50	1.51
FCT	94,662.49	95,419.79	71,440.29	72,511.89	0.75	0.76
Kogi	48,356.79	48,743.64	99,373.65	100,864.25	2.06	2.07
Kwara	12,754.46	12,856.50	99,479.75	100,971.94	7.80	7.85
Nasarawa	26,881.43	27,096.48	31,041.90	31,507.52	1.15	1.16
Niger	4,886.96	4,926.05	15,847.94	16,085.66	3.24	3.27
Plateau	33,222.76	33,488.55	52,046.93	52,827.64	1.57	1.58
Taraba	26,508.15	26,720.21	50,326.18	51,081.07	1.90	1.91
Adamawa	34,874.00	35,152.99	21,571.87	21,895.45	0.62	0.62
Bauchi	33,729.78	33,999.62	27,020.97	27,426.28	0.80	0.81
Borno	35,443.27	35,549.60	29,529.11	24,627.28	0.83	0.69
Gombe	35,542.25	35,826.58	26,950.77	27,355.04	0.76	0.76
Yobe	22,602.92	22,783.74	52,335.98	53,121.02	2.32	2.33
Jigawa	22,124.74	22,301.74	31,803.32	32,280.37	1.44	1.45
Kaduna	25,661.82	25,738.80	55,825.05	56,662.42	2.18	2.20
Kano	49,311.08	49,705.57	32,063.28	32,544.23	0.65	0.65
Katsina	18,840.23	18,802.55	18,455.98	18,640.54	0.98	0.99
Kebbi	33,928.39	34,199.82	32,857.10	33,349.95	0.97	0.98
Sokoto	14,151.10	13,019.02	19,090.35	15,711.36	1.35	1.21
Zamfara	16,885.28	14,690.20	32,930.59	26,739.64	1.95	1.82
Abia	24,303.88	24,498.31	25,139.54	25,516.63	1.03	1.04
Anambra	27,565.37	27,785.90	20,907.09	21,220.70	0.76	0.76
Ebonyi	16,605.71	16,738.55	18,199.41	18,472.40	1.10	1.10
Enugu	29,329.03	29,563.67	23,356.47	23,706.82	0.80	0.80
Imo	90,155.87	90,877.12	33,546.07	34,049.26	0.37	0.37
Akwa Ibom	122,570.63	123,551.19	100,330.72	101,835.68	0.82	0.82
Bayelsa	87,383.15	88,082.21	65,522.12	66,504.95	0.75	0.76
Cross River	155,176.11	156,417.52	143,906.88	146,065.48	0.93	0.93
Delta	29,452.33	29,687.95	66,596.75	67,595.70	2.26	2.28
Edo	53,795.88	54,226.25	96,235.60	97,486.66	1.79	1.80
Rivers	113,468.26	114,376.01	75,620.25	76,754.55	0.67	0.67
Ekiti	22,371.87	22,550.85	12,538.16	12,726.23	0.56	0.56
Lagos	7,507.56	7,567.62	60,327.00	61,231.90	8.04	8.09
Ogun	14,344.86	14,459.62	41,367.89	41,988.41	2.88	2.90
Ondo	43,115.50	43,460.42	14,536.52	14,725.50	0.34	0.34
Osun	48,027.29	48,411.50	15,855.47	16,093.31	0.33	0.33
Oyo	7,929.59	7,993.03	36,920.48	37,400.45	4.66	4.68
National	1,521,300.84	1,529,401.86	1,707,615.09	1,717,146.62	1.12	1.12

12.17 Plantain/Banana

Nigeria's plantain cultivation area expanded by 1.2 percent, from 504,378.83 hectares in 2023 to 510,431.37 hectares in 2024. This growth is attributed to initiatives by institutions such as the National Horticultural Research Institute (NIHORT) and the International Institute for Tropical Agriculture (IITA), which have been instrumental in revitalizing the plantain sector. These organizations have collaborated to distribute high-quality plantain seedlings to farmers in key production zones, encouraging adoption and promoting cultivation beyond traditional areas. As a result of these efforts, plantain farming has expanded, increasing production from 3,252,884.69 metric tons in 2023 to 3,366,735.66 metric tons in 2024 (Table 12.17). This upward trend underscores the effectiveness of targeted interventions in enhancing agricultural productivity and supporting livelihoods in Nigeria's southern coastal regions. Ebonyi had the highest production nationally, with 1,139,684.61 metric tons in 2024, with yield rising from 26.32 to 26.92 metric tons per hectare. Akwa Ibom showed significant improvement in yield, rising from 14.62 to 14.95 metric tons per hectare, with production reaching 817,149.62 metric tons in 2024.

Table 12.17: Land Area and Production Estimates for Plantain/Banana

State	Land Area (Ha)		Production (MT)		Yield (MT/Ha)	
	2023	2024	2023	2024	2023	2024
Kwara	138,055.46	139,712.12	170,413.38	176,377.85	1.23	1.26
Abia	20,274.95	20,518.25	57,745.36	59,766.44	2.85	2.91
Ebonyi	41,831.10	42,333.07	1,101,144.55	1,139,684.61	26.32	26.92
Imo	54,827.39	55,485.32	231,833.71	239,947.89	4.23	4.32
Akwa Ibom	53,998.46	54,646.44	789,516.54	817,149.62	14.62	14.95
Bayelsa	88,659.31	89,723.22	247,608.72	256,275.03	2.79	2.86
Edo	97,223.78	98,390.46	644,197.46	666,744.37	6.63	6.78
Lagos	9,508.38	9,622.48	10,424.98	10,789.86	1.10	1.12
National	504,378.83	510,431.37	3,252,884.69	3,366,735.66	6.45	6.60

12.18 Summary of Food and Cash Crop Production for 2023-2024

In 2024, Nigeria's agricultural sector exhibited a mix of growth and challenges across various food and cash crops. The National Bureau of Statistics reported that crop production contributed approximately 19.27 percent to the country's overall GDP, underscoring its significance in the national economy.

These advancements underscore Nigeria's commitment to bolstering food security and enhancing the livelihoods of its farming communities through strategic interventions and support.

Overall, while there have been positive developments in certain crop productions, Nigeria's agricultural sector faces ongoing challenges that require comprehensive strategies to enhance food security and economic stability.

Table 12.18: Summary of Food and Cash Crop Production for 2023-2024

Crop	Land Area (Ha)	Production (MT)	Land Area (Ha)	Production (MT)	Yield (MT/Ha)	
					2023	2024
		2023		2024		
Rice	4,509,840.95	8,902,225.99	4,572,945.27	9,129,907.68	1.97	2.0
Maize	5,100,160.80	11,052,893.28	5,063,032.44	11,216,837.37	2.17	2.22
Sorghum	5,235,088.80	6,401,598.75	5,246,411.95	6,416,975.27	1.22	1.22
Millet	1,542,875.22	1,549,044.93	1,547,775.81	1,546,293.37	1.0	1.0
Cowpea	4,817,578.94	3,924,974.44	4,834,377.23	4,093,945.27	0.81	0.85
Groundnut	4,426,839.97	4,965,239.84	4,400,927.30	5,084,548.59	1.12	1.16
Soybean	983,136.89	945,870.10	992,633.58	947,952.08	0.96	0.95
Benniseed	531,355.58	482,913.61	535,417.97	508,920.60	0.91	0.95
Yam	6,224,714.18	53,398,019.83	6,335,594.68	54,577,973.19	8.58	8.61
Cassava	9,153,846.83	63,068,559.09	9,281,806.83	64,361,224.58	6.89	6.93
Cocoyam	821,880.00	3,213,120.65	826,537.87	3,213,281.95	3.91	3.89
Cotton	382,883.65	298,666.33	381,398.68	304,177.80	0.78	0.8
Ginger	89,081.83	395,249.53	89,751.79	727,633.16	4.44	8.11
Tomato	814,809.54	3,679,109.10	824,035.17	3,738,255.65	4.52	4.54
Onion	537,319.16	1,366,482.33	539,291.19	1,367,044.16	2.54	2.53
Okra	1,521,300.84	1,707,615.09	1,529,401.86	1,717,146.62	1.12	1.12
Plantain/Banana	504,378.83	3,252,884.69	510,431.37	3,366,735.66	6.45	6.6

13.0 LIVESTOCK PRODUCTION SITUATION

Nigeria's livestock sector plays a critical role in the nation's agricultural landscape, contributing approximately 7% to the GDP while serving as a vital source of protein, income, and livelihood for millions of Nigerians. The sector encompasses cattle, sheep, goats, pigs, and poultry production across diverse geographical zones, from the arid Northern regions to the humid South. Despite its significance, the industry faces substantial challenges that have impeded its growth potential.

Currently, the Nigerian livestock sector is characterized by a predominance of traditional, extensive production systems, particularly in ruminant production. Most cattle, estimated at over 64 million head, are managed under the pastoralist system by nomadic and semi-nomadic herders. While culturally entrenched, this system yields relatively low productivity compared to intensive management practices. Poultry production presents a more mixed picture, with traditional backyard operations and modern commercial enterprises contributing to an annual production of approximately 700,000 metric tons of meat and 650,000 metric tons of eggs.

A defining challenge of the current landscape is the persistent farmer-herder conflict, which has escalated in recent years due to climate change, land degradation, and population growth. These conflicts have resulted in significant economic losses and social instability across multiple states. Additionally, the sector grapples with inadequate access to quality feed, limited veterinary services, outdated processing infrastructure, and vulnerability to transboundary animal diseases such as foot-and-mouth disease and avian influenza.

The Nigerian government has responded with several policy initiatives to transform the sector. The National Livestock Transformation Plan (NLTP) is the most comprehensive, seeking to modernize production through ranching and decentralization of herders. This plan emphasizes value chain development, conflict resolution, and improved market access. Complementing this, the Central Bank of Nigeria's Livestock Productivity and Resilience Support Project (L-PRES) provides financing options for commercial production and processing facilities.

To address the security dimensions, the government has established grazing reserves and stock routes in several states. These designated areas aim to provide secure access to grazing land while minimizing encroachment into farmlands. The Nigerian Animal Disease Control Act has also been strengthened to improve surveillance and response to disease outbreaks, protecting animal and human health through a One Health approach.

Forward-looking policies that promise sector advancement include implementing the National Agricultural Technology and Innovation Policy (NATIP), which emphasizes modernization through technology adoption. Livestock identification and traceability systems being piloted represent another critical innovation, potentially opening export markets previously inaccessible due to quality and safety concerns. Public-private partnerships focused on developing specialized feed production and cold chain infrastructure are also emerging as vital components of sectoral transformation.

Climate-smart livestock policies represent the most crucial frontier for sustainable development. These include breeding programs for heat-tolerant and disease-resistant livestock varieties, silvopastoral systems that integrate livestock with forestry, and biogas production from animal waste. Such approaches adapt to climate realities and potentially position Nigeria's livestock sector as environmentally responsible.

The transformative potential of these policies hinges on practical implementation, stakeholder engagement, and adequate financing. If executed with fidelity to their design, they could address the fundamental challenges of productivity, sustainability, and conflict that have long constrained Nigeria's livestock sector, ultimately transforming it into a modern, competitive industry that significantly contributes to food security and economic growth.

13.1 Livestock Population

All the data of livestock population were provided by the Department of Animal Husbandry Services of the Federal Ministry of Agriculture and Food Security.

13.1.1 Cattle Population

The data shows a highly skewed distribution with extreme outliers. Kogi State leads significantly with 10,520,062 cattle, representing the maximum value and a significant outlier that sits far above the rest of the distribution (Figure 13.1). Taraba follows as the second highest, with 6,788,141 cattle. The upper quartile (Q3) would fall around 3 million cattle, with states like Niger (3,117,608) and Katsina (3,081,939) near this mark. The median (Q2) is approximately 1.4 million cattle, near where states like Gombe (1,433,250) and Kebbi (1,430,131) are positioned. The lower quartile (Q1) would be around 325,000 cattle, close to Delta State's population (326,950). The whiskers of the distribution extend down to extremely low values, with states like Enugu having just 3,610 cattle. Three states (Bayelsa, Cross River, and Imo) have no reported cattle population data.

The interquartile range (IQR) represents the middle 50% of states, spanning from approximately 325,000 to 3 million cattle, revealing considerable variation even among the more typical values. The distribution shows a pronounced positive skew, with the bulk of states having relatively lower populations while a few northern and central states having significantly higher numbers. This distribution aligns with what was likely shown in the original chart, where the brown box probably represented this interquartile range, with specific markers for maximum values (Kogi), upper quartile, median, and minimum values. The total population of cattle in 2024 is 64,800,807. The geographic pattern suggests that Northern and Central Nigerian states generally maintain larger cattle populations. In contrast, southeastern states have substantially smaller herds, with some reporting no significant cattle populations.

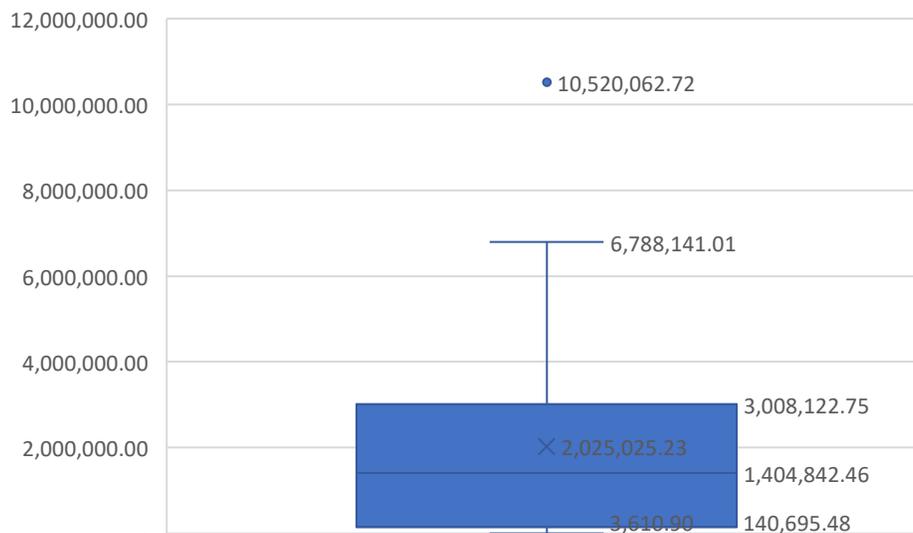


Figure 13.1: Cattle population

13.1.2 Sheep Population

Zamfara State leads significantly with 8,603,646 sheep, representing the maximum value and standing as a clear outlier. Jigawa follows as the second-highest, with 6,415,148 sheep. The distribution's upper quartile (Q3) falls around 2.8 million sheep, near where states like Plateau (2,874,992) are positioned. The median (Q2) is approximately 1.2 million sheep, similar to the populations in states like Lagos (1,294,987) and Nasarawa (1,235,400). The lower quartile (Q1) sits around 270,000 sheep, close to Delta State's population (270,466).

The lower whisker extends to minimal values, with Rivers having just 38,145 sheep, while Bayelsa appears to have no reported sheep population. The total sheep population across Nigeria stands at 63,955,767 animals. The interquartile range (IQR), representing the middle 50% of states, spans approximately 270,000 to 2.8 million sheep, showing substantial variation even among the more typical values. This wide IQR indicates a significant disparity in sheep farming across different states.

The distribution shows a clear pattern: Northern Nigerian states (Zamfara, Jigawa, Kano, Katsina) maintain significantly larger sheep populations than Southern states. The top five sheep-producing states collectively account for nearly 45% of Nigeria's total sheep population, which is 63,955,767 in 2024.

North-Central states show moderate sheep populations, while most Southeastern states have comparatively smaller numbers. This distribution likely reflects differences in climate, available grazing land, cultural practices, and economic focus across Nigeria's diverse regions.

Unlike some livestock distributions, sheep populations appear more widespread across the country, with only one state reporting no significant sheep population.



Figure 13.2: Sheep population

13.1.3 Goats Population

The data reveals a relatively balanced but still positively skewed distribution. Zamfara State leads with 8,603,040 goats, representing the maximum value, though it's less of an extreme outlier than seen with cattle populations. Katsina (7,417,381), Benue (7,372,819), and Jigawa (7,222,225) follow closely behind with similarly high populations. The distribution's upper quartile (Q3) falls around 4.3 million goats, near where states like Sokoto (4,317,572) are positioned. The median (Q2) is approximately 2.5 million goats, similar to the populations in states like Niger (2,495,255) and Delta (2,460,221). The lower quartile (Q1) sits around 1.3 million goats, close to Ebonyi State's population (1,313,388). The lower whisker extends to small values, with Cross River having 293,409 goats. The interquartile range (IQR), representing the middle 50% of states, spans from approximately 1.3 million to 4.3 million goats, showing more moderate variation than other livestock distributions.

The total goat population in Nigeria stands at 114,312,555 animals. They substantially outnumber both cattle and sheep. Unlike cattle distribution, goat farming appears more evenly spread across Nigeria's regions, with significant populations in both northern states (Zamfara, Katsina) and southern states (Benue, Osun). This broader distribution likely reflects the adaptability of goats to various climates and terrain, their lower maintenance requirements compared to cattle, and their cultural and economic importance across diverse Nigerian communities.

The data shows that 14 states have goat populations exceeding 3 million, demonstrating the widespread importance of goat farming across Nigeria. The distribution suggests goat rearing is a fundamental agricultural activity throughout most of the country, with only a few states reporting particularly low numbers.

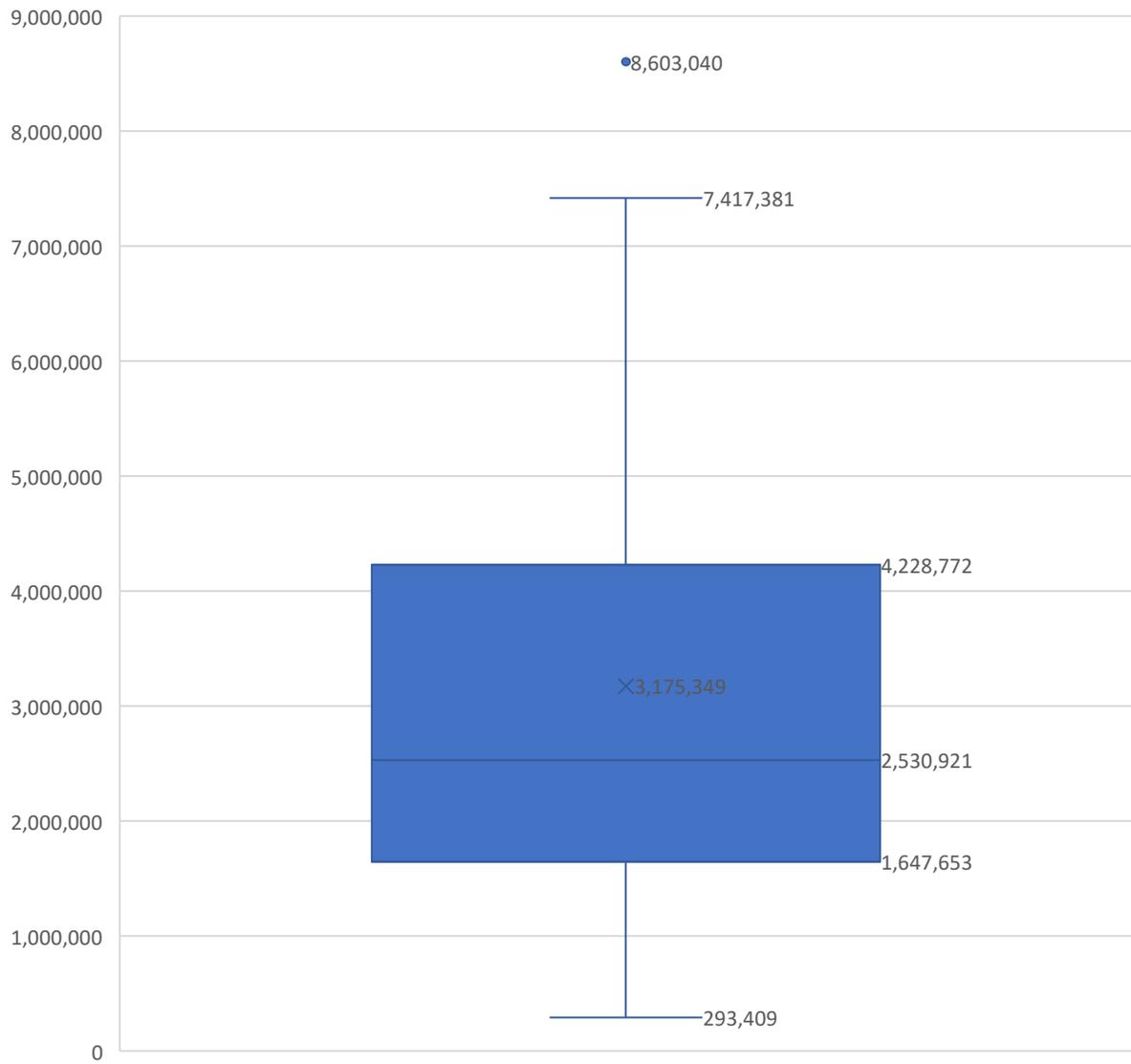


Figure 13.3: Goats population

13.1.4 Pigs Population

The data shows a strongly positively skewed distribution with clear outliers at the upper end. Taraba State leads significantly with 3,676,217 pigs, representing the maximum value and a notable outlier (Figure 13.4). Benue is the second-highest with 2,601,617 pigs, while Akwa-Ibom (2,185,019) and Plateau (2,036,412) also maintain substantial populations. The distribution's upper quartile (Q3) falls around 813,000 pigs, near where Kaduna State (813,314) is positioned. The median (Q2) is approximately 129,000 pigs, similar to Gombe's population (129,267). The lower quartile (Q1) sits around 43,000 pigs, close to Niger State's population (43,286). The lower whisker extends to very small populations, with Kwara having just 15,913 pigs. Notably, seven states (Bauchi, Bayelsa, Borno, Ebonyi, Jigawa, Kano, Katsina, Sokoto, and Zamfara) have no reported pig population data, likely reflecting cultural and religious factors that limit pig farming in predominantly Muslim Northern states. The interquartile range (IQR), representing the middle 50% of states, spans approximately 43,000 to 813,000 pigs, revealing significant variation even among the more typical values.

The total pig population across Nigeria stands at 17,662,362 animals. The distribution shows a clear regional pattern, with central and southern Nigerian states dominating pig production while northern states have minimal or no pig farming. This distinct regional specialization reflects religious practices, cultural preferences, and possibly climate suitability. The top four pig-producing states (Taraba, Benue, Akwa-Ibom, and Plateau) collectively account for nearly 60% of Nigeria's total pig population, indicating a high concentration of this livestock type in specific regions rather than the more widespread distribution seen with goats.

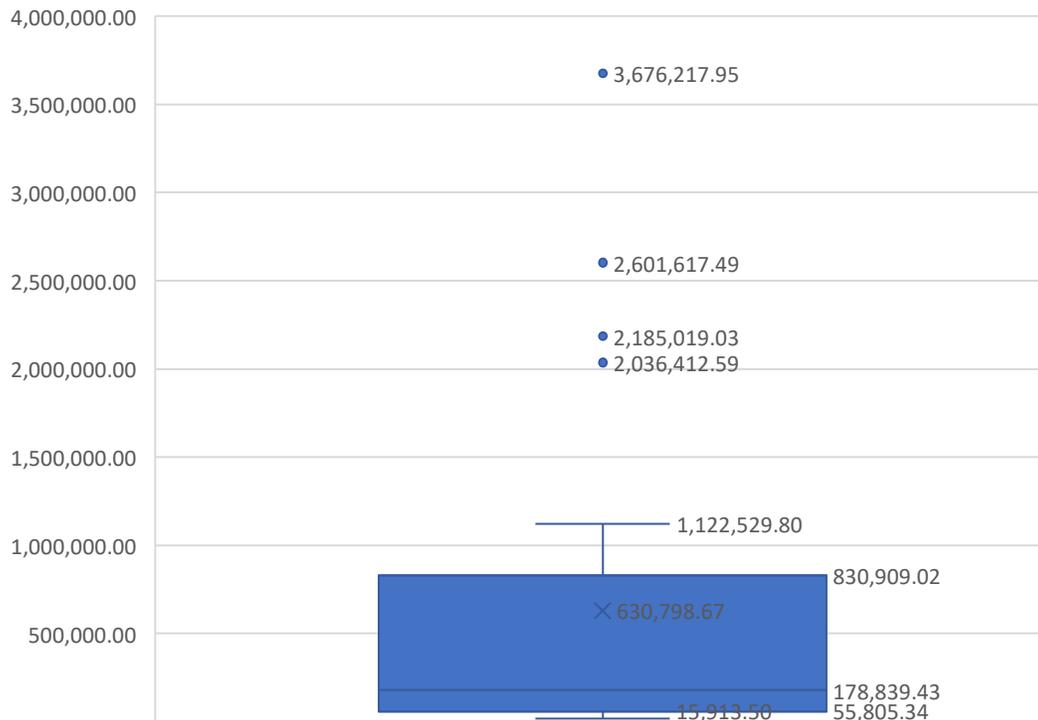


Figure 13.4: Pig Population

13.1.5 Chicken Population

The data reveals a substantial national poultry sector with a relatively balanced state distribution. Kano State leads with an impressive 52,297,775 chickens, representing the maximum value. Oyo follows closely with 48,539,029 chickens, and Zamfara ranks third with 43,650,787 chickens. The distribution's upper quartile (Q3) is around 34.6 million chickens near Plateau State (34,666,917). The median (Q2) is approximately 22 million chickens, similar to Sokoto's population (22,043,476). The lower quartile (Q1) is around 10.9 million chickens, close to Cross River State's population (10,902,031). The lower whisker extends to relatively small populations, with Ekiti having just 483,527 chickens, while Bayelsa appears to have no reported chicken population data. The interquartile range (IQR), representing the middle 50% of states, spans from approximately 10.9 million to 34.6 million chickens, showing substantial but not extreme variation among the typical values. The total chicken population across Nigeria is an enormous 809,846,165 birds. This makes chickens the most numerous livestock in Nigeria, with a population more than seven times that of goats, the second most numerous livestock type.

Unlike other livestock distributions, chicken farming appears relatively well distributed across Nigeria's regions, with northern states (Kano, Zamfara) and southern states (Oyo, Imo) prominently in the top rankings. This widespread distribution likely reflects the adaptability of poultry farming to various environments, lower land requirements compared to ruminants, cultural acceptance across different regions, and the universal importance of chickens for meat and egg production.

The data shows that 19 states have chicken populations exceeding 20 million, demonstrating the national significance of poultry farming as a key component of Nigeria's livestock sector and food security strategy.

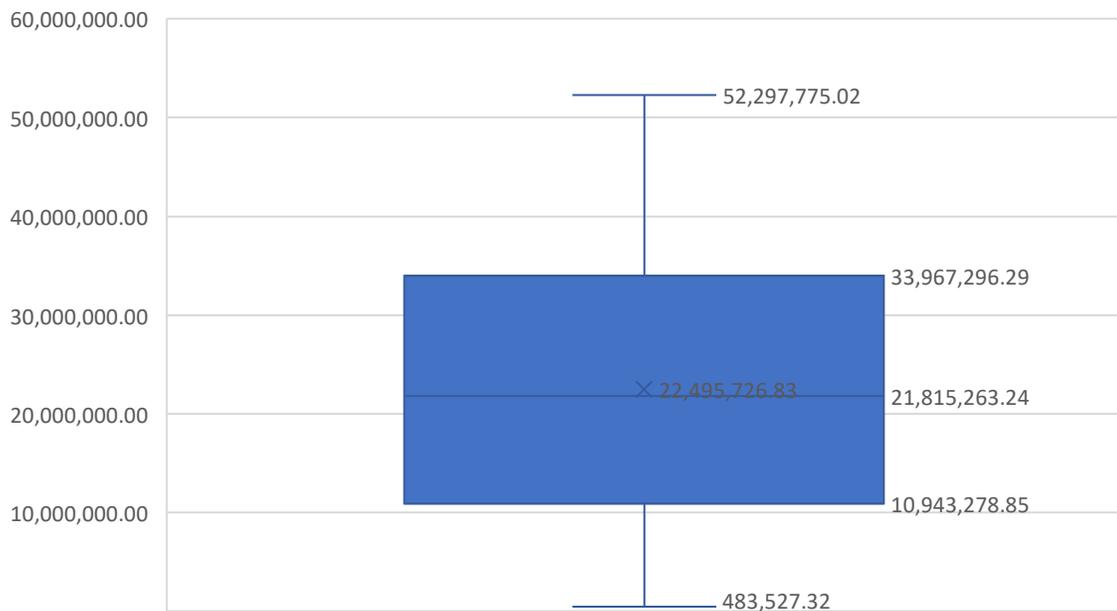


Figure 13.5: Chicken population

13.1.6 Guinea Fowl Population

The 2024 Guinea fowl population data across Nigerian states reveals significant disparities in distribution, with some states hosting substantial populations while others report minimal or no data. Nigeria's total Guinea fowl population for the year stands at 112,926,071.82, reflecting the species' widespread presence, albeit unevenly. The smallest recorded population is in Ekiti State (2,554), while Zamfara State dominates with a staggering 21,966,544 Guinea fowl, making it a clear outlier. This extreme difference suggests variations in ecological suitability and agricultural practices. Other states with notably high populations include Yobe (12,765,705.07), Kebbi (11,371,764.61), and Kano (10,161,237.14), all located in the Northern region, which may indicate favourable conditions for Guinea fowl rearing.

The median population (1,323,535.26, Plateau State) divides the dataset into two halves, with 50% of states falling above or below this value. The interquartile range (IQR), representing the middle 50% of states, spans from approximately 258,826.81 (Q1) to 5,461,300.72 (Q3), illustrating a widespread in mid-tier populations. The data is right-skewed, as most states report populations below 5 million, while a few Northern states push the average upward. This skewness underscores the concentration of Guinea fowl in specific regions, likely due to climatic or economic factors. Several states lack reported figures, including Anambra, Bayelsa, Cross River, Delta, Ebonyi, Ondo, Osun, and Rivers. This absence could stem from negligible populations, unreported data, or administrative oversights. The analysis highlights the Northern states' dominance in Guinea fowl production, possibly linked to arid savannah conditions that suit the species' habitat. Meanwhile, Southern states show markedly lower numbers, with some entirely unaccounted for.

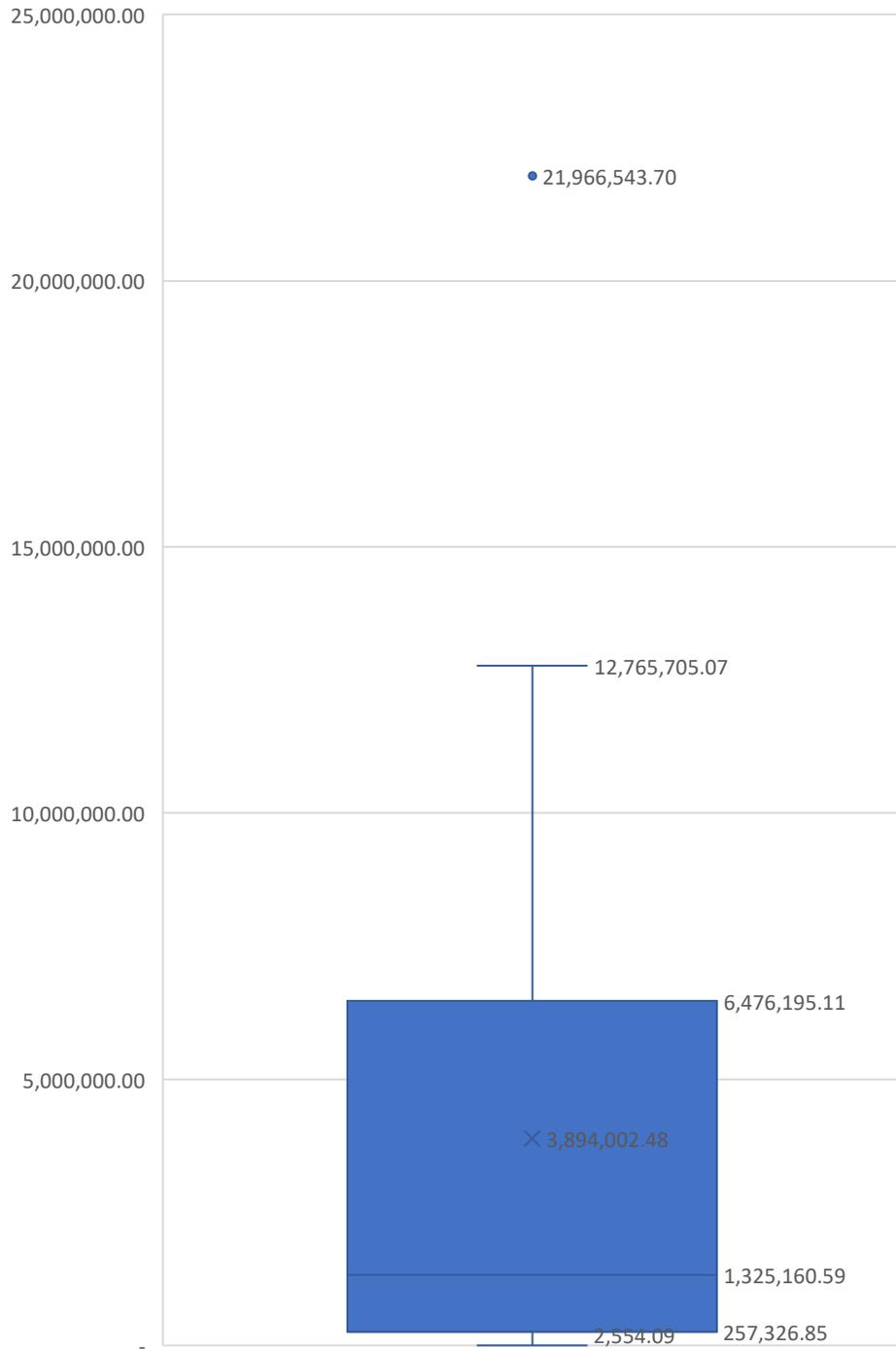


Figure 13.6: Guinea fowl population

13.1.7 Turkey Population

The 2024 turkey population data across Nigerian states reveals a distinct distribution pattern, with notable concentrations in specific regions and minimal or missing data in others. The total turkey population in Nigeria for the year is 6,071,305.29, reflecting moderate but uneven distribution. The highest turkey population is recorded in Kano State (1,090,149), followed by Lagos (660,055) and Taraba (583,846). These states stand out as the primary hubs for turkey production. The lowest reported population is in Ekiti State (238.15), with several states like Niger, Bauchi, Borno, and others lacking data entirely.

The median population (approximately 313,342.95, Plateau State) divides the dataset into two halves. This indicates that half of the states with data have turkey populations above this value and half fall below it. The interquartile range (IQR), representing the middle 50% of states, spans from around 144,426.65 (Q1, Jigawa State) to 556,628.92 (Q3, Nasarawa State). This range highlights the variability in turkey populations among the mid-tier states.

The data is right-skewed, as most states report populations below 600,000, while a few states, like Kano, Lagos, and Taraba, have significantly higher numbers. This skewness suggests that turkey farming is concentrated in specific regions, possibly due to favorable conditions or higher demand. States such as Niger, Bauchi, Borno, Cross River, Ebonyi, Gombe, Kaduna, Katsina, Kebbi, Kwara, Oyo, and Zamfara have no reported turkey populations. This could indicate negligible activity in turkey farming, data gaps, or reporting inconsistencies.

The analysis underscores the regional disparities in turkey production, with Northern and Central states like Kano, Taraba, and Nasarawa leading in population numbers. The absence of data for many states, particularly in the Northeast and North-West, may reflect a lack of focus on turkey farming or gaps in data collection.

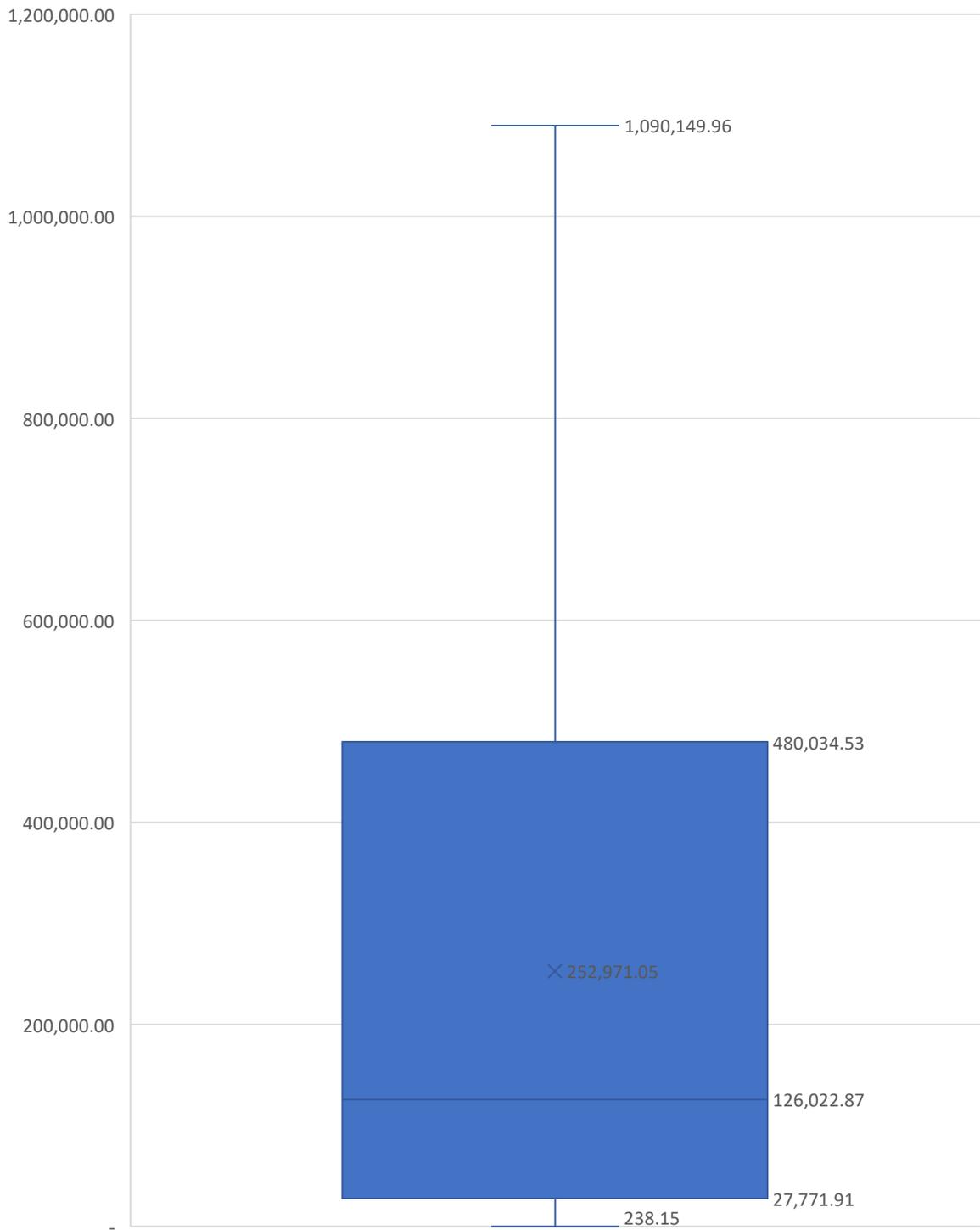


Figure 13.7: Turkey Population

13.1.8 Donkey Population

Nigeria's donkey population distribution in 2024 presents a fascinating case of extreme regional concentration. The Northern states dominate the landscape, while much of the southern region shows minimal presence. The total national donkey population is 1,772,694, which masks dramatic state disparities. A closer examination reveals that just three northern states - Zamfara (470,145), Taraba (378,216), and Sokoto (217,829) - collectively account for over 60% of Nigeria's entire donkey population. This remarkable concentration suggests these regions have developed favorable conditions for donkey rearing or strong cultural-economic dependencies on these animals. The dominance of these states creates a striking right-skew in the national distribution, where most states report populations under 2,000 donkeys. In contrast, these northern giants report figures in the hundreds of thousands.

The median state population of approximately 1,456 donkeys (represented by Kaduna State) starkly contrasts with these northern powerhouses, highlighting how most Nigerian states maintain minimal donkey populations (Figure 13.8). The interquartile range from about 126 (FCT Abuja) to 20,188 (Gombe) further demonstrates this disparity, showing that even among the middle 50% of states, there's a hundred-fold difference in population sizes.

Southern states present a different picture, with many reporting negligible numbers or no data. Anambra's 14 donkeys, Ebonyi's 10, and FCT Abuja's 126 represent the lower extreme, while populous southern states like Lagos and Rivers show no reported donkey populations. This complete absence in major southern regions suggests a genuine lack of donkey farming activity or significant gaps in data collection that warrant investigation.

The distribution pattern raises essential questions about regional agricultural practices and economic dependencies. The heavy concentration in the north likely reflects the continued use of donkeys for transportation and agricultural work in these regions, possibly combined with cultural factors that sustain their population. Meanwhile, the near-absence in the south may indicate greater mechanization or different farming traditions that don't utilize donkeys.

These findings suggest several important directions for policymakers and agricultural researchers. The northern concentration presents opportunities for targeted programs to improve donkey welfare and productivity. At the same time, the southern absence may warrant investigation into whether this represents an untapped potential or reflects different economic realities. The data gaps in many states also highlight the need for improved livestock census methods to ensure accurate nationwide tracking of these important animals.

While substantial, the total figure of 1,772,694 donkeys tells only part of the story. The true significance lies in understanding why these animals have thrived in some regions while remaining virtually absent in others and what this means for Nigeria's agricultural economy and transportation infrastructure development. Future research might explore donkeys' specific roles in northern economies, whether similar applications could benefit southern regions, or if the south model represents a more modernized approach to agriculture that has moved beyond animal traction.

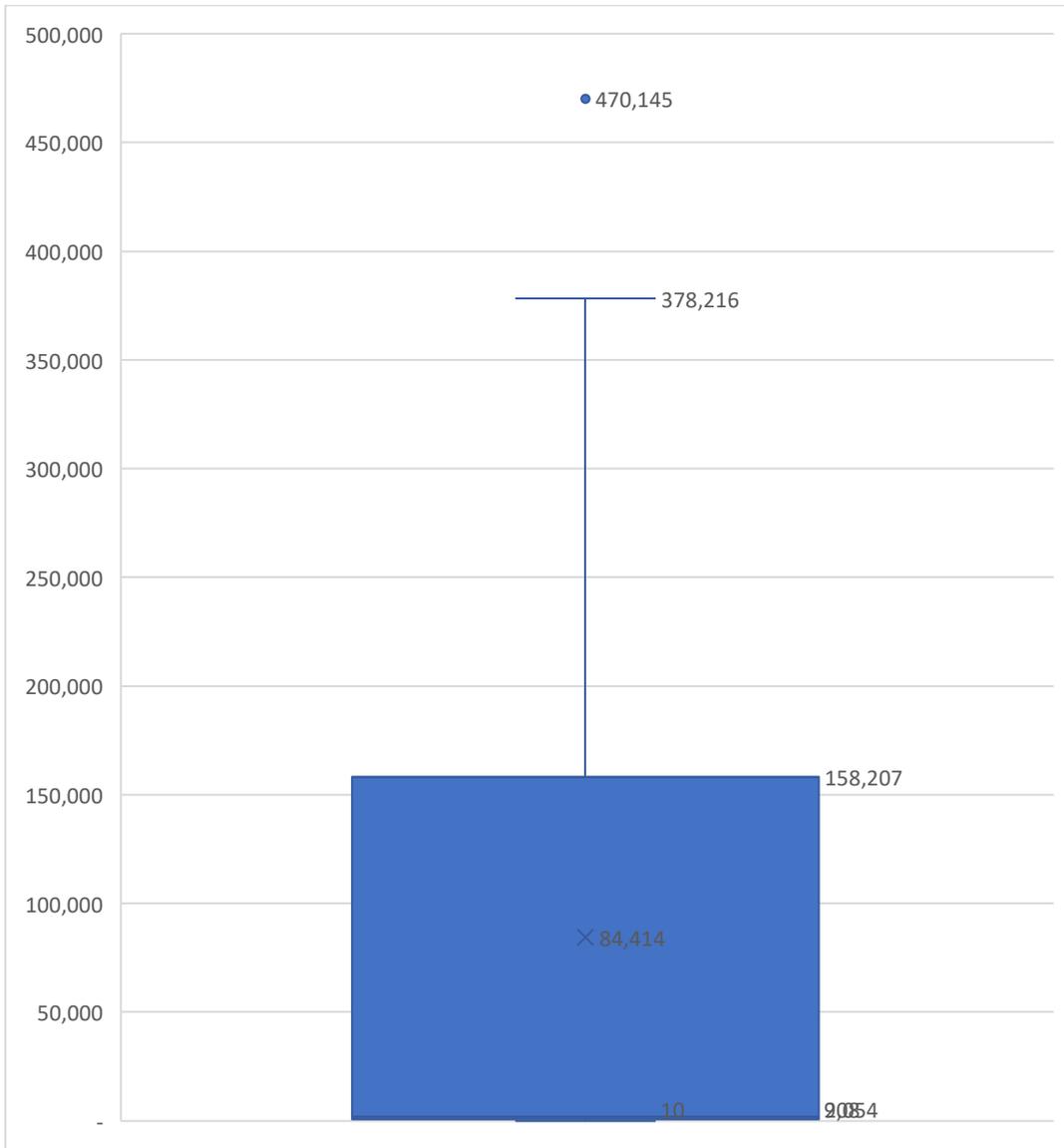


Figure 13.8: Donkey population

13.1.9 Donkey Population

Nigeria's camel population presents one of the most geographically concentrated distributions among livestock species, with an overwhelming presence in northern states and near-total absence elsewhere. The national camel population stands at 398,733, almost exclusively reflecting the husbandry practices of a handful of Northern states.

The distribution reveals Kano State as the undisputed epicenter of camel rearing, boasting 181,604 camels—representing 45.5% of Nigeria's total camel population. This dominance is followed by Sokoto (85,549) and Kebbi (71,566), which, together with Kano, account for 85% of the nation's camels (Figure 13.9). Such extreme concentration suggests these states have developed specialized pastoral systems adapted to camel husbandry, likely tied to their arid environments and cultural traditions of nomadic pastoralism.

Beyond these three northern strongholds, camel populations drop dramatically. Jigawa (18,218.39), Katsina (13,582.66), and Bauchi (13,431.79) maintain modest but significant numbers, while the remaining states show either negligible populations or no reported camels at all. The presence of just 1,460.16 camels in Lagos – Nigeria's most populous state and commercial hub – highlights how sharply camel distribution contrasts with human population patterns.

The statistical distribution is profoundly right-skewed, with a median value that would likely fall between Jigawa's 18,218 and Katsina's 13,583, dramatically lower than the mean due to Kano's overwhelming influence. The interquartile range would show that the middle 50% of camel-keeping states maintain populations between approximately 4,636 (Niger) and 71,567 (Kebbi), demonstrating that even among states with camels, there exists a 15-fold difference in typical population sizes.

Notably, 25 of Nigeria's 36 states report no camel populations, including all southern states except Lagos. This complete absence across vast swaths of the country underscores how camel husbandry remains an exclusive feature of specific northern ecosystems and cultures. The few camels reported in southern states like Lagos likely serve niche purposes rather than representing established breeding populations.

The total of 398,733 camels, while modest compared to other livestock species, holds particular significance for Nigeria's northern pastoral economies. These animals likely play crucial roles in transportation, milk production, and cultural practices within their limited range. The extreme geographic concentration suggests camel husbandry remains tightly linked to specific environmental conditions and traditional knowledge systems that have not transferred to other regions.

For policymakers and development practitioners, this distribution presents both challenges and opportunities. The concentrated nature of camel populations allows for targeted interventions in a few key states, but also creates vulnerability to regional shocks like drought or conflict. The complete absence in southern states may represent either a missed economic opportunity or a rational adaptation to different ecological conditions. Future research might investigate whether controlled expansion of camel husbandry to other arid zones could benefit food security, or if the current pattern represents the natural limit of viable camel habitats in Nigeria.

The data also raises important questions about census methodology, as some northern states with similar ecological conditions to camel-rearing areas report no populations. This could indicate genuine absence, or potential undercounting in certain regions. Either way, the camel population distribution stands as one of the most geographically specialized among Nigeria's livestock resources, offering a clear example of how ecological factors can shape agricultural practices across the country's diverse regions.



Figure 13.9: Camel population

13.1.10 Rabbit Population

Nigeria's rabbit population distribution presents a fascinating case of concentrated agricultural production, with two southern states dominating the national landscape. In contrast, most northern states show minimal or no rabbit farming activity. **The total rabbit population across Nigeria is 11,871,045**, a figure heavily influenced by extraordinary numbers from Delta and Akwa-Ibom states. The distribution reveals an extraordinary concentration in Nigeria's southern coastal states, with Delta State leading at 4,702,726.50 rabbits and Akwa-Ibom following closely with 4,666,882 rabbits. These two states account for approximately 79% of Nigeria's total rabbit population, indicating they have developed specialized rabbit farming systems that far surpass other regions. Lagos State, third with 1,166,990 rabbits, represents less than 10% of the top state's population, demonstrating how dramatically the production drops after the leading two states.

Beyond these three southern states, rabbit populations decline sharply. Niger State shows the next highest population at 343,671 rabbits, followed by Ondo with 248,882 - both representing less than 3% of Delta's numbers. Most other states maintain populations below 100,000 rabbits, with figures gradually decreasing to minimal in states like Kwara (4,031) and Ebonyi (6,234.23). Notably, 18 states - predominantly in northern Nigeria - report no rabbit populations, creating a stark geographical divide in rabbit farming activity.

The statistical distribution is profoundly right-skewed, with the median state population likely falling between Ogun's 63,236 and Taraba's 59,681 - a tiny fraction of the leading states' numbers. The interquartile range would show that the middle 50% of rabbit-keeping states maintain populations between approximately 25,740 (Oyo) and 90,767 (Edo), demonstrating that even among states with established rabbit farming, there exists nearly a four-fold difference in typical population sizes.

The complete absence of reported rabbit populations across all of Nigeria's far northern states - including major agricultural regions like Kano, Kaduna, and Borno - suggests cultural preferences against rabbit husbandry, ecological unsuitability, or potential data collection gaps. This contrasts sharply with the southern concentration, particularly in the Niger Delta region, where Delta and Akwa-Ibom have embraced rabbit farming at an industrial scale.

The total of 11,871,046 rabbits represents significant economic potential, particularly given the concentration in southern states. This distribution pattern suggests rabbit farming has become a specialized agricultural enterprise in specific regions rather than a widespread subsistence activity. The extreme disparity between top-producing states and the rest of the country indicates superior production systems, better market access, or more favorable policies in the leading regions.

For agricultural policymakers, this distribution presents both opportunities and challenges. The success in Delta and Akwa-Ibom could be a model for other states, particularly given rabbits' potential for rapid reproduction and high-quality protein production. However, the absence in northern states warrants investigation into whether this represents an untapped potential or reflects rational economic choices based on regional comparative advantages.

The data also raises important questions about the drivers behind this unusual distribution. Factors such as climate suitability, feed availability, cultural acceptance of rabbit meat, and existing market infrastructure may all contribute to the current pattern. Future research might examine why rabbit farming has flourished so dramatically in certain southern states while failing to take root elsewhere and whether this model could be successfully replicated in other regions to enhance Nigeria's protein security.

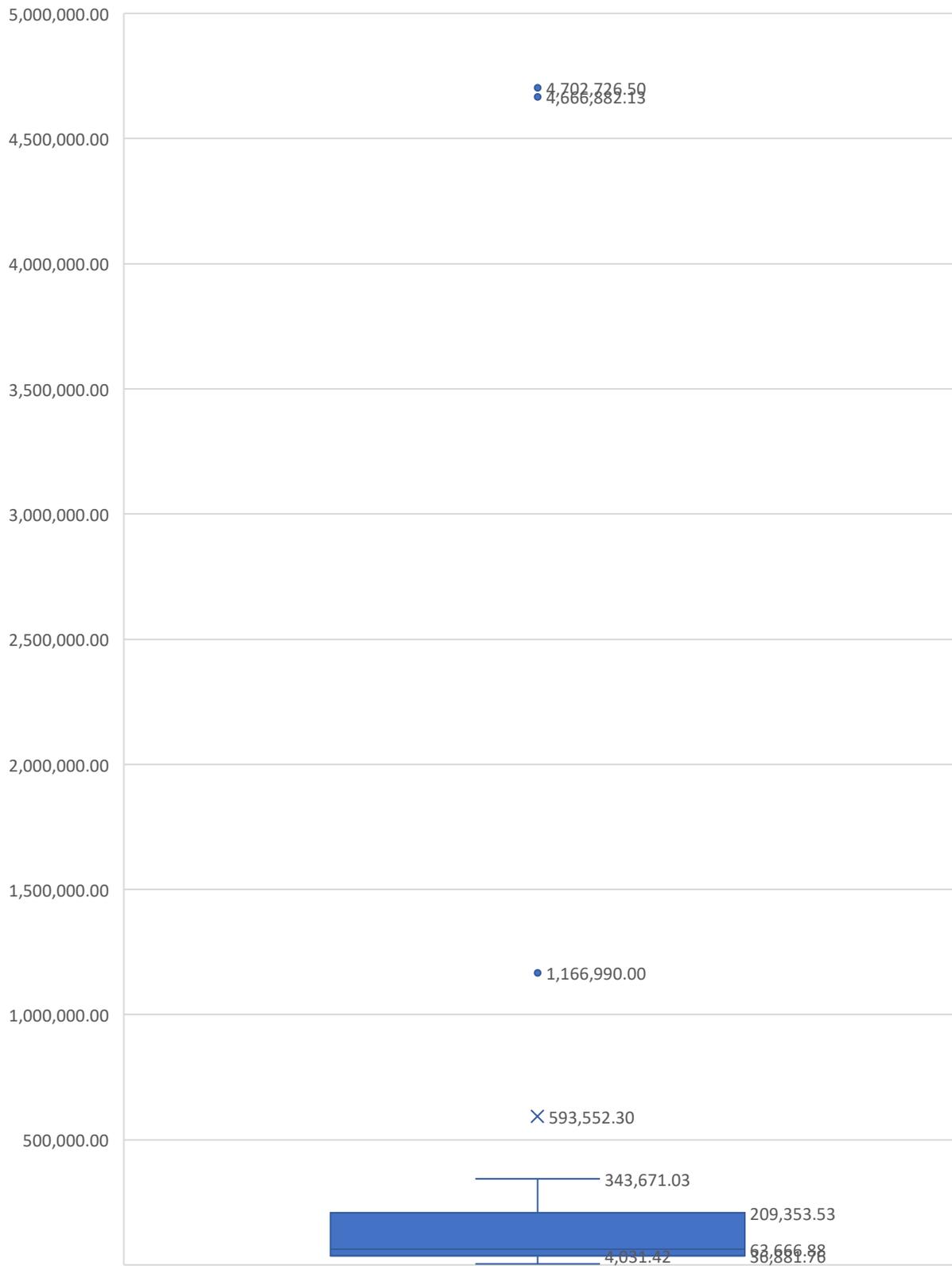


Figure 13.10: Rabbit population

13.1.11 Livestock Production Inputs

Table 13.1 below summarizes the livestock production inputs acquired and distributed across the agro-ecological zones stating their accessibility and affordability.

Niger State distributed 50,000 MT of livestock feed and 200,000 doses of anthrax vaccine, which were accessible and affordable to the beneficiaries. Gombe State distributed day-old chicks, vaccines such as Lasota and PPR, and poultry feeds to 20 farm families, with all inputs deemed accessible and affordable. Katsina supplied 69,230 units of livestock feed and Kebbi distributed 12,000-day-old chicks along with 5,000 bags of poultry feed. Both states confirmed the accessibility and affordability of these inputs.

100,000 doses of anthrax vaccine were distributed in Ebonyi State with additional PPR and Lasota vaccines, ensuring it was accessible and affordable to farmers across the local government areas. In the South-South region, Akwa Ibom and Rivers States provided day-old chicks, poultry feeds, and vaccines. While inputs were accessible as well affordable to farmers in Rivers. Akwa Ibom faced challenges in affordability despite good accessibility.

Farm inputs such as pullets, broilers, turkeys, feeds, and veterinary medicines were distributed in Ogun State. Most inputs were accessible and affordable, except for turkey feed and specific supplements like sodium bicarbonate and ascorbic acid. Ekiti State successfully distributed 40,000-day-old chicks and 134 tons of poultry feed, maintaining accessibility and affordability.

Table 13.1a: Livestock Production Inputs

States	Inputs	Quantity provided			Quantity Distributed	No of the farm families benefited	Is it considered accessible by farmers?		Is it considered affordable by farmers?		Total Estimated requirement for your State
		FG	State	Others			Yes	No	Yes	No	
North-Central											
Niger	Livestock Feeds			Fadama N Care 50000MT	1000 MT	50	Yes		Yes		
	Gumboro Vaccines		State	20000 Mil	400 mil	50	Yes		Yes		50000 Mils
	Grower Mash	1000 Bags			1000 Bags	All LGAs	Yes		Yes		
	Livestock feed ingredients	150 Bags			150 Bags	50	Yes		Yes		
	Anthrax Vaccine	200000 Doses			200000 Doses	17	Yes		Yes		1.1 million Doses
North East											
Gombe	Day old chicks		State		1000	20	Yes		Yes		100,000
	Lasota Vaccine		State		10,000 Doses	20	Yes		Yes		50,000 Doses
	Poultry Feeds		State		100 Bags	20	Yes		Yes		50000 Bags
	PPR vaccine		State		200000		Yes		Yes		600,000
	CBPP VAC		State		2250600		Yes		Yes		500,000
	Anthrax		State		400000		Yes		Yes		600,000
North West											
Katsina	Livestock feed	400	69,230		69,230		Yes		Yes		100,000 bags
Kebbi	Day Old Chicks	12000			12000	150	Yes		Yes		300000
	Poultry Feeds	5000 Bags			5000 Bags	150	Yes		Yes		140000 Bags
South East											
Ebonyi	Anthrax Vaccine	100000 Doses			100000 Doses			Yes		Yes	500000 Doses
	PPR	15000 Doses			15000 Doses	All LGAs					500,000 Doses
	Lasota Vaccine	15,000 Doses			15,000 doses	30					100,000 doses
	Anthrax Vaccine			100000 Doses	100000 Doses		Yes		Yes		
South East											
Akwa-Ibom	Day old chicks' broilers	30000			30000	300	Yes			No	10000000
	Poultry feeds	30000 Bags			30000 Bags	300		Yes		No	
Rivers	Day Old chicks	2000			2000	40	Yes		Yes		500000
	Poultry feeds	16 Metric tons			16 Metric tons	40	Yes		yes		500 Metric Tons
	Anthrax Vaccine	100000 Doses			100000 Doses		Yes		Yes		
Edo	Newcastle Disease Vaccine	27000 Doses			27000 Doses	110	Yes		Yes		2.3 million
	CBPP Vaccine	47800 Doses			47800 Doses	800	Yes			No	220000 Doses
	Anthrax Vaccine	196000 Doses			196000 Doses	1200	Yes			No	600000 Doses

Table 13.1b: Livestock Production Inputs

States	Inputs	Quantity provided			Quantity Distributed	No of the farm families benefited	Is it considered accessible by farmers?		Is it considered affordable by farmers?		Total Estimated requirement for your State
		FG	State	Others			Yes	No	Yes	No	
South West											
Ogun	Pullets	764870			688383	76487	Yes		Yes		
	Broilers	424615			382154	42462	Yes		Yes		
	Turkey	4560			1404	156	Yes		Yes		
	Newcastle Disease Vaccine	7000 Doses			5000 Doses	175					
	Broiler's feed		67938 Bags		67938 Bags	42462	Yes		Yes		
	Layer feeds		214164 Bags		214164 Bags	76487	Yes		Yes		
	Turkey feed		2184 Bags		2184 Bags	156		No		No	
	Poultry Growth enhancer	350 Bags			350 Bags	175					5000 Bags
	Sodium Bicarbonate (bags)	20 Bags			20 Bags	6		No		No	1000 Bags
	Ascorbic acid (bottles)	20			20	6		No		No	1000
	Sodium Salt (bags)	20			20	6		No		No	1000
	Anti Rabies Vaccine (doses)	8821			8530		Yes		Yes		20000
	Anthrax Vaccine (doses)	40800					Yes		Yes		
	Procaine Penicillin (bottles)	10			10		Yes		Yes		
	Ivermectin (bottles)	3			3		Yes		Yes		
	Albendazole (packs)	300			300		Yes		Yes		
	Multivite (sachets)	90			90		Yes		Yes		
Enrofloxacin (Litrs)	20			20		Yes		Yes			
Worm Care (litrs)	40			40		Yes		Yes			
Ekiti	Day old chicks		40000		40000	130	Yes		Yes		
	Poultry feeds		134 tons		134 tons	130	Yes		Yes		

13.2 Livestock Pest and Diseases

Table 13.2 shows the situation of livestock pest and diseases that affect various livestock across various states in Nigeria.

Livestock diseases in Nigeria show regional variations with certain diseases being prevalent in specific zones. In the North-Central region, cattle diseases like Contagious Bovine Pleuropneumonia (CBPP), Foot and Mouth Disease (FMD), and Tuberculosis (TB) dominate, particularly in Kogi and Nasarawa, while small ruminants face outbreaks of Peste des Petits Ruminantium (PPR) and helminthosis. Poultry diseases such as Newcastle Disease (NCD) and Highly Pathogenic Avian Influenza (HPAI) are also common, alongside swine diseases like African Swine Fever (ASF). The North-East experiences widespread CBPP in cattle, PPR in small ruminants, and significant cases of NCD and Fowl Cholera in poultry. Swine diseases and parasitic infections are also prevalent. In the North-West, CBPP and PPR are the most reported cattle and small ruminant diseases, especially in Kano and Sokoto, while poultry farmers face recurrent outbreaks of NCD, Infectious Bursal Disease (IBD), and Fowl Typhoid. The South-East reports FMD and Trypanosomiasis in cattle, while the South-South deals with CBPP, pneumonia, and severe poultry diseases like HPAI and NCD, affecting large bird populations. In the South-West, cattle are affected by diseases like Anthrax, CBPP, and foot rot, while poultry suffers from NCD and Chronic Respiratory Disease (CRD). Vaccination and medication remain the primary interventions across all regions.

Table 13.2a: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of cases reported	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
North-Central								
Kogi	Cattle-CBPP	4	2000	20000	Nil	500	Nil	Nil
	-TB	21	20000	100000	Nil	1500	Nil	Nil
	-FMD	10	200000	400000	Nil	5000	Nil	Nil
	Sheep-PPR	21	10000	10000	10000	8000	5000	Nil
	-Helminthosis	21	20000	20000	15000	Nil	1000	Nil
	-Ectoparasite	21	10000	10000	10000	Nil	1000	Nil
	Goats-PPR	21	10000	10000	5000	7000	5000	Nil
	-Helminthosis	21	20000	20000	8000	7000	1000	Nil
	-Vulvovaginitis	10	10000	10000	1000	100	Nil	Nil
	Poultry -NCD	21	200000	200000	5000	7000	5000	Nil
-FC	21	100000	100000	8000	7000	1000	Nil	
-HPAI	10	50000	100000	1000	100	Nil	Nil	
Swine -Helminthosis	10	20000	30000	Nil	1000	Nil	Nil	
Kwara	Cattle- FMD	Ilorin	-	-	-	-	-	Medication
	-Trypanosomiasis							
	Sheep- FMD	Ilorin	17	308	301	6	1	Treatment
	-PPR	Asa	23	35	50	1	1	
	Goat- PPR	Asa	14	54	201	5	2	Treatment
Poultry- NCD	Ilorin	5	2227	2227	-	15	Vaccination	
Swine- ASF	Ilorin	4	6	-	1	6	Treatment	
Nasarawa	Cattle- Foot rot	Across the state	Moderate	30%	30%	-	-	Vaccination
	-CBPP							
	Sheep and goat	Across the state	Moderate	30%	30%	-	-	Vaccination
Niger	Cattle- Foot rot	Gurugu Bosso	-	-	-	-	-	Vaccination
	-FMD	Chanchaga	Light	Very mild			Light	
	-PPR	Kuchi	Light	Very mild			Light	Dewormers
	-Worn insecticide		Moderate	Very mild			Moderate	
Plateau	Cattle-CBPP	Wase	249	249	Treated	780	Light	Vaccination
		Mangu	182	182	Treated	562		Vaccination
		B/ladi	220	220	Treated	660		Vaccination
	Sheep-PPR	Wase	461	461	Treated	1011		Vaccination
		Kanan	373	373	Treated	824		Vaccination
		Mangu	250	250	Treated	1201		Vaccination
	Goats-PPR	Wase	310	310	Treated	670		Vaccination
		L/North	146	146	Treated	412		Vaccination
		Kanam	220	220	Treated	772		Vaccination

Table 13.2b: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of cases reported	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
North-Central								
Plateau	Poultry-NCD -Fowl pox -Marek	J/South J/North B/Iadi	20100 16021 11020	20100 16021 11020	Treated Treated Treated	36000 29221 19301		Vaccination Vaccination Vaccination
	Swine-Swine brucellosia -ASF -Piglet sour	Q-Pan L/North Shendam	20 67 72	20 67 72	Treated Treated Treated	94 126 215		Vaccination Vaccination Vaccination
FCT	Cattle- Tuberculosis -CBPP	FCT FCT	126 110	Nil Nil	Nil Nil	Nil Nil	Moderate	Nil Nil
	-Dermatophilosis - Fasioliasis	FCT FCT	92 448	Nil Nil	Nil Nil	Nil Nil		Nil Nil
	Sheep- Mange -Taeniasis	FCT FCT	54 504	Nil Nil	Nil Nil	Nil Nil		Nil Nil
	Goats – Taeniasis -Mange	FCT FCT	627 120	Nil Nil	Nil Nil	Nil Nil		Nil Nil
	-Tuberculosis - Fasioliasis	FCT FCT	15 30	Nil Nil	Nil Nil	Nil Nil		Nil Nil
	Poultry -Avian influenza	FCT	1792	1792	Nil	1500		Decontamination
	Swine- Swine fever	FCT	350	350	Nil	Nil		None
	Benue	Cattle – Foot rot Chicken- Coccidiosis Goat-PPR Sheep-Helminthosis	Across the state Across the state Across the state	Light Light		15% 25% 5%		
North East								
Gombe	Cattle- CBPP Kirchi Helminths	All LGAs 11 All LGAs 11 All LGAs 11	290 400 406000	290 400 406000	102000 102000 102000	207 102 102	-	Vaccination Treatment Treatment
	Sheep- PPR Cheaper Helminthosis	All LGAs 11 All LGAs 11 All LGAs 11	20000 10200 54000	20000 10200 54000	15000 5000 30000	5000 2000 -	07 06 -	Isolation Treatment Treatment
	Goats-PPR -Goat pox - Helminthosis	All LGAs 11 All LGAs 11 All LGAs 11	32000 15000 60000	32500 15400 60000	21000 16000 51000	7000 8000 -	11 12 -	Isolation/Vaccination Treatment Treatment
	Poultry- NCD - F/Cholera - Coccidiosis	All LGAs 11 All LGAs 11 All LGAs 11	3000 2000 4000	50000 32000 42000	40000 20000 43000	6000 5000 7000	1000 500 2500	Vaccination Vaccination Medication

Table 13.2c: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of reported cases	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
North-East								
Gombe	Swine- ASF	All LGAs 11	52	1500	-	200	04	Medication
	-FMD	All LGAs 11	71	2500	-	150	-	Medication
	-Helminths	All LGAs 11	24	20000	-	70	-	Medication
	Donkey	-	-	-	-	-	-	Medication
	Camel – Helminths	02	40	12	01	-	-	
	Horses- Colic	03	20	05	-	-	-	Medication
-Helminths	03	07	02	-	-	-	Medication	
- Lameness	04	25	03	-	-	-	Medication	
Bauchi	Cattle- CBPP	Bauchi	73000	72870	130	10	-	-
	-Trypanomiasis	Katagum	1003	902	13	9	-	-
	Sheep-PPR	Kirfi	9400	9102	298	14	-	-
	-helminths	Darazo	1030	1010	20	-	-	-
	Goats- Mange	Giade	1430	1430	1010	30	-	-
	-PPR	Ganjuwa	4900	4900	4700	175	-	-
	Poultry-NCD	Bauchi	16000	16000	15231	769	180	-
	-Coccidiosis	Dass	13600	13600	10928	2072	894	-
Swine-helminths	Bogoro	2400	2400	2320	60	14	-	
Camels-Drmatitis	Zalci	280	280	260	20	-	-	
-Septicemia	Gamawa	310	310	296	14	-	-	
Horses- Colic	Bauchi	800	800	8	8	-	-	
-Tick	Misau	970	970	-	-	-	-	
Taraba	Cattle -.H.S	Sardauna	10	2000	18000	150	800	Vaccination
	-CBPP	Ibi	7	3500	10000	136	700	
	-TB	Gssol	4	475	1000	14	28	
	-TB	Sardauna	15	500	400	-	18	
	Goat-PPR	Endemic in all state	960	48000	192000	29200	12000	-
-Helminths	LGA							
Swine -Porse wing	Jalingo	3	45	60	10	20	-	
Borno	Cattle-CBPP	Shani	128	130	-	-		Treatment
	-Foot rot							
North West								
Kaduna	CBPP	23	7	200	17,400	-	400	Vaccination
Kano	Cattle-CBPP	State wide	170	560	1225000	-	-	300000
	FMD	State wide	68	430	430	-	-	-
	LSD	State wide	53	279	279	-	-	-

Table 13.2d: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of reported cases	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
North West								
Kano	Sheep- PPR -Foot rot	184 147	207 63	-	-	-	-	-
	Goat- PPR	114	236	750000	-	-	-	134000
Zamfara	Poultry- NCD -IBD -F/typhoid		562 499 613	20500 27000 41000	-	-	-	-
	CBPP	14 LGAs	-	-	-	-	-	-
	Tuberculosis	14 LGAs	-	-	-	-	-	-
	Helminthosis	Statewide	-	-	-	-	-	Deworming
Jigawa	Cattle- Foot rot	Dutse	Moderate	-	-	-	3%	Vaccination
Sokoto	Cattle- CBPP -TB	Sokoto	900 cases	800 cases	9000	1000	800	Vaccination
	Sheep- PPR -Helminthosis	Sokoto	120000 cases	200 cases				Deworming
	Goat- PPR -Helminthosis	Sokoto	12000 cases	12000 cases	70,000 cases	1800 cases	4000	Vaccination Deworming
	Poultry- NCD - IBD - Pox	Sokoto	5000	10000	500000	5000	10000	Vaccination Deworming
South -East								
Abia	FMD	Umuhia-South	4	4	-	-	1	-
Enugu	Cattle-foot rot Poultry-hepatitis Goat -goat pox Sheep-FMD Pig-ulcer Rabbit-foot sores	Across the state	-	-	-	-		Antibiotic Vaccines Use of antibiotic drugs to decrease it occurrence
Ebonyi	FMD	Abakaliki	7	100	80	-	-	-
	CBPP	Izzi	2	50	50	-	5	
	Trypanosomiasis	Ebonyi	2	20	-	-	-	
South -South								
Bayelsa	Dermatophilosis	Yenagoa	3	105	105	None	None	-
	Tick infestation	Yenagoa	3	105	105	None	None	

Table 13.2e: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of cases reported	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
South-South								
Delta	Cattle- CBPP	5	200	91	1600	67	38	Free Vaccination
	Goats-PPR	72	247	247	22150	187	60	Free Vaccination
	Poultry-NCD	30	151600	151600	151600	2050	1420	Free Vaccination
	-IBD -FOWL POX	28 26	30000 42520	30000 42520	30000 42520	2000 2900	3080 990	Free Vaccination Free Vaccination
Rivers	Cattle- Pneumonia -Fasciola -FMD	PHALGA OBLAKPO	134	-	-	-	-	-
Edo	Cattle-Mange	All LGAs	100	6000	6000	0	0	
	-Helminthosis	All LGAs	40	4000	4000	350	21	
	-Hemonchus	All LGAs	50	5000	5000	400	20	
	Sheep-PPR	All LGAs	500	10000	10000	750	5	
	-Mange	All LGAs	100	6000	6000	0	0	
	-Helminthosis	All LGAs	40	4000	4000	350	21	
	-Hemonchus	All LGAs	60	5000	5000	400	20	
	Goat—PPR	All LGAs	700	12000	12000	760	5	
	-Mange	All LGAs	100	6000	6000	0	0	
	-Helminthosis	All LGAs	40	3000	3000	200	12	
	-Hemonchus	All LGAs	50	5000	5000	350	11	
	Poultry-PPR	All LGAs	300	75000	1000	10	-	
-HPAI	All LGAs	300	200000	2000	20	-		
-Coccidiosis	All LGAs	500	250000	5000	45	-		
-lice infestation	All LGAs	200	150000	0	0	-		
Akwa Ibom	Cattle- Ticks	Uyo Itu Eket	280 162 86	280 162 86	278 152 79	1 10 7	1 2	Contact Vet. Vaccination Routine Vaccination
	Sheep- PPR	Oron Ibesikpo Asutan	310 1575	310 1575	310 1575	-	-	Vaccination
	Goat- PPR	Statewide	30665	30600	30600	60	5	-Vaccination -Supply of young does & bucks to farmers Routine Vaccination
	Poultry-NCD	Statewide	100250	100250	100250	6250	3500	Vaccination
	Swine- Swine fever	Ikot Abasi Ibiono Ibom Ukanafun	10110 23000 29300	10110 23000 29300	10110 23000 29300	10 3000 20	-	Vaccination

Table 13.2f: Livestock Pests and Diseases

State	Disease or Pest	Location	Total number of cases reported	The number of animals affected	Number vaccinated or treated	Number culled due to infection	Mortality	Intervention
South- West								
Ekiti	Helminthosis	Ado LGA	30	30	30	-	-	Procurement of drugs for treatment
	Mastitis	Ado LGA	10	10	10	10	-	
	Foot rot	Ado LGA	5	5	5	5	-	
Lagos	Anthrax	-	-	-	-	-	10%	Vaccination
Ogun	Sheep and goat- Foot rot	20 LGA	Moderate	10%	-	-	-	Construction of raised platform, good management and hygiene
Oyo	Cattle-CBPP		1780	1780	1780	-		Vaccination
	Sheep-PPR		2655	2655	2655			Vaccination
	Goat- PPR		2655	2655	2655			Vaccination
Ondo	Cattle- foot rot	Across the state	-	-	-		10%	
	Broiler- NCD Noiler-CRD	Across the state					10%	

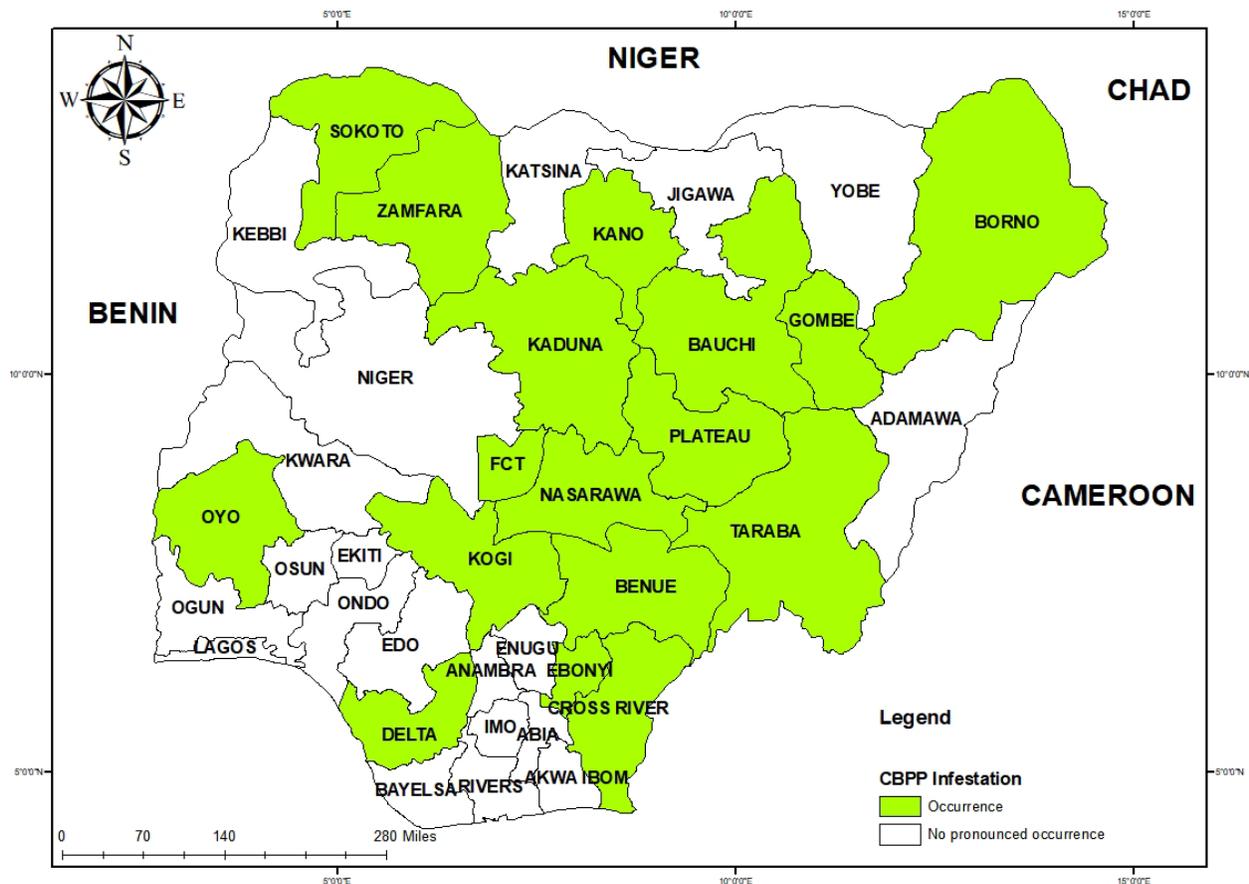


Figure 13.1: States with incidences of Contagious Bovine Pleuropneumonia (CBPP) in 2024

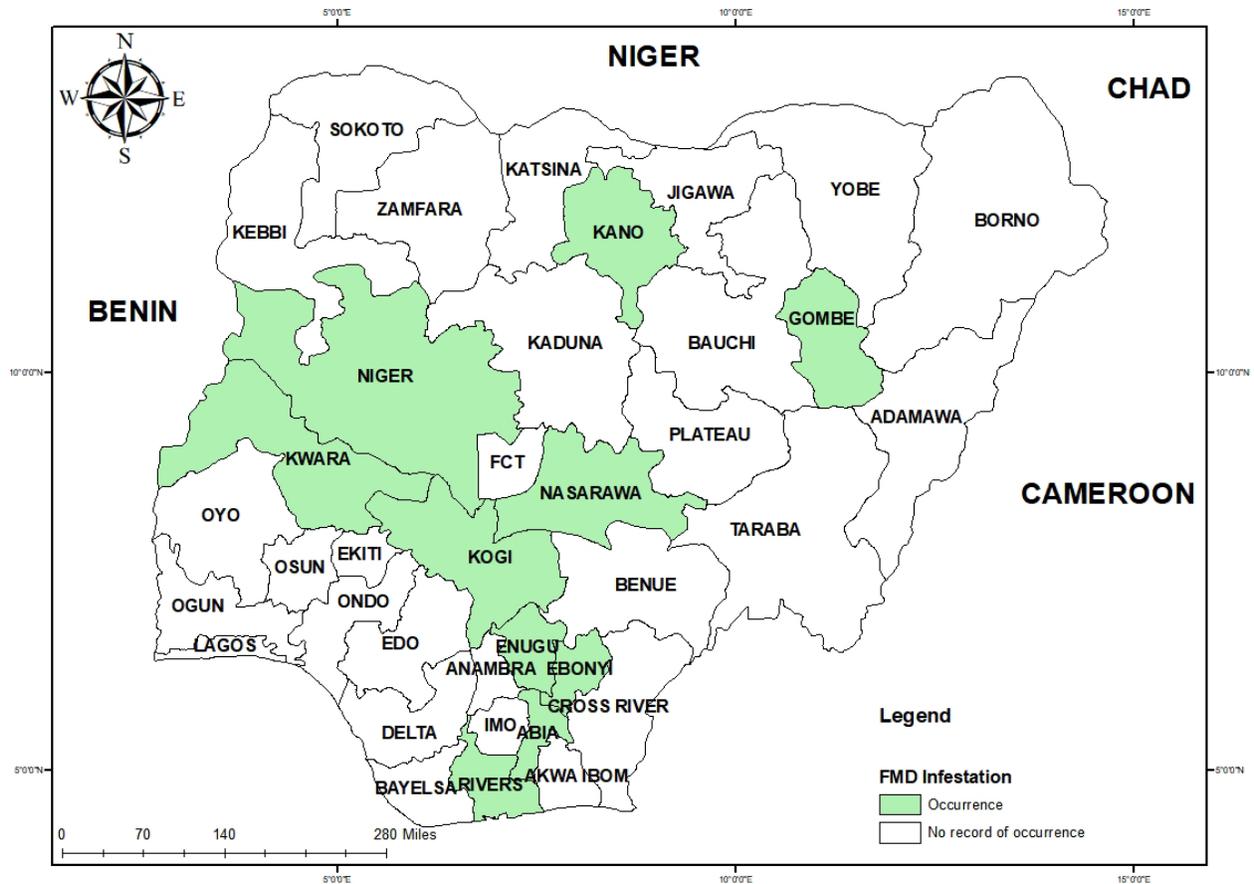


Figure 13.2: States with incidences of Foot and Mouth Disease (FMD) in 2024

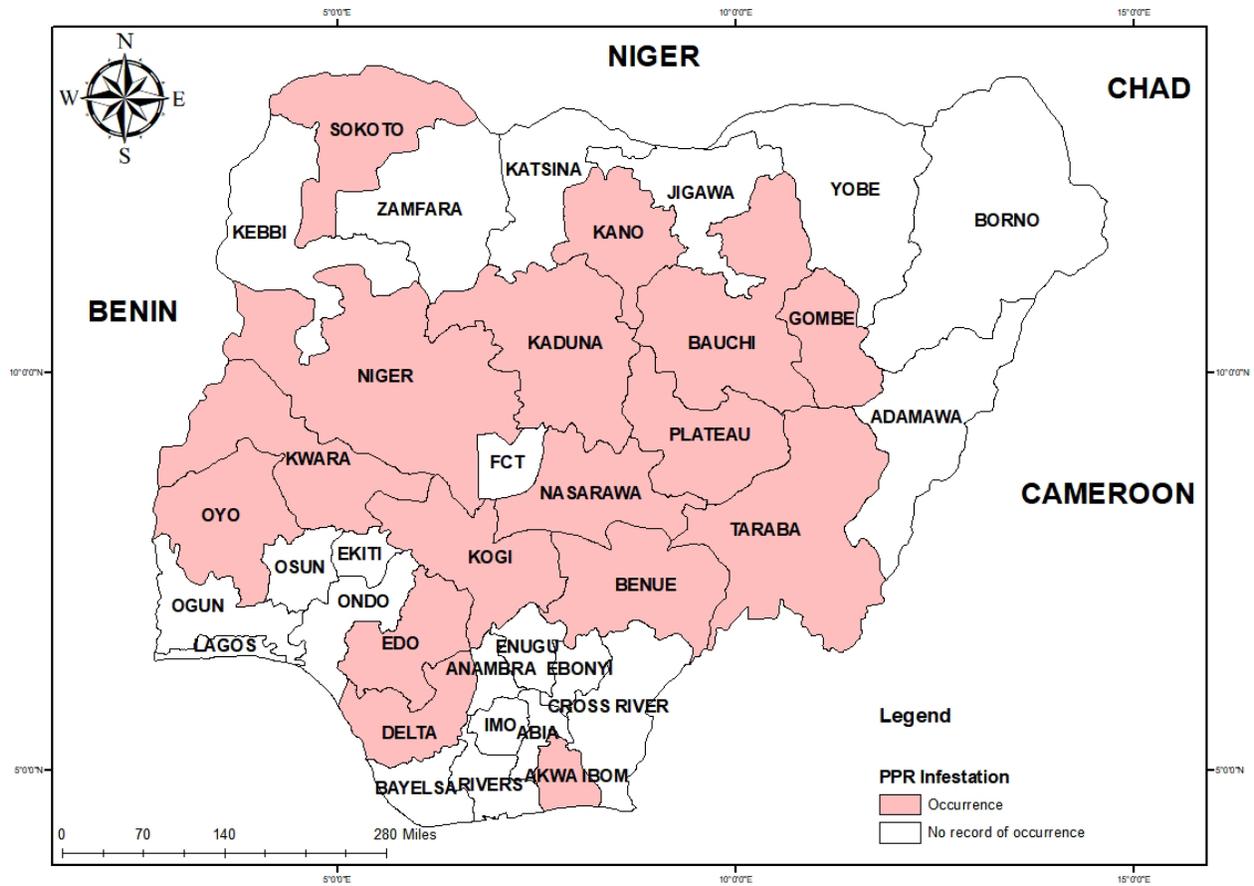


Figure 13.3: States with incidences of PPR in 2024

13.3 Livestock Related Facilities

Table 13.3a shows the tanneries available, highlighting their distribution and functionality across different regions. Most of the tanneries shown in Table 13.3a are concentrated in the North-Central, North-West, and North-East. Nasarawa has six tanneries with only one functional facility. Kwara has two tanneries in Ilorin West, with no known operational status. In the North-West, Kano has the highest (12) number of tanneries with three operational in 2023 and nine functional by 2024. In Jigawa, 10 fully functional tanneries operate across 10 LGAs, while Zamfara saw an increase in tanneries from three to 23 between 2023 and 2024. In the North-East, Borno has one fully functional tannery, while Bauchi initially had two tanneries, but only one remained operational by 2024. In the South-West, Lagos and Ogun each have one tannery, but their status remains unclear.

Table 13.3b shows the information on ranges. Benue in the North-Central has only one non-functional range in Ushongo in 2023. Bauchi in the North-East has two ranges with no data on functionality. The South-East has more active ranges, with Ebonyi having 10 fully operational ones. In the South-South, Bayelsa and Cross River each have one functional range, while Ogun leads the South-West with 16 fully operational ranges. One of the challenges facing the ranches in the zones is encroachment.

Kwara in North-Central has one functional ranch in Kaima, with plans for expansion. Benue has two ranches, but only one was functional in 2023. Nasarawa has a single operational ranch. In the North-East, Adamawa had six ranches in Michika and Gombi, Borno had two ranches in 2023 with no updates for 2024. Taraba had nine, with four non-functional in 2023. In the North-West, Katsina had five ranches of which two were operational while Kaduna had one functional ranch. The South-East and South-South states, including Ebonyi, Bayelsa, and Cross River, each had one operational ranch. In the South-West, Ogun led with 10 ranches though two were non-functional (Table 13.3c).

Table 13.3d shown the grazing reserves across the regions. Kwara in the North-Central has 17 grazing reserves, with 15 functional. Niger has 25 but no information on its functionality. Nasarawa's eight reserves became non-functional by 2024. Adamawa in the North-East had 32 reserves, with 29 operational in both years, while Borno maintained all 56 functional reserves. The North-West had the largest reserves, with Kano having 334 functional reserves, and Kebbi followed with 341, though two were non-functional. Kaduna reported 12 non-functional reserves in 2024. The South-South had minimal reserves, with Ekiti having 1, Oyo; 2, and Ogun; 3, though the farmer-herder conflicts hindered functionality in Oyo. The non-functional reserves across the agro-ecological zones indicated that some of them have heavily encroached by crop farmers or abandoned. There is need for the various state government to bring these grazing reserves to a functional state so as to be able to control indiscriminate grazing by pastoralist on ranches in the zones.

Table 13.3a: Livestock-Related Facilities in Nigeria (Tanneries)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non-functional		
			2023	2024	2023	2024	
North-Central							
Nasarawa	6	Awe, Keana Lafia, Doma, Akwanga LGAs	1	1	5	5	
Kwara	2	Ilorin West					
North-West							
Kano	12	Across the State	3	9			
Jigawa	10	10 LGAs	10		0	0	
Zamfara	3	Gusau LGA	23		1		
Kebbi	1	Birnin Kebbi			1	1	
Sokoto	5	Sokoto					
North- East							
Borno	1	MMC	1	1	0	0	
Bauchi	2	Bauchi, Katagum	2	2	1	0	
South-West							
Lagos	1	-	-		1		
Ogun	1	-	-	-	1		-
Oyo	2	Ibadan and Oyo	1		1		Not well encouraged

Table 13.3b: Livestock Related Facilities in Nigeria (Ranges)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non functional		
			2023	2024	2023	2024	
North-Central							
Benue	1	Ushongo			1		
North-East							
Bauchi	2	-	-	-	-	-	-
South-East							
Ebonyi	10		10				
South-south							
Bayelsa	1		1	1			
Cross River	1		1	1			
South-West							
Ogun	16	Odeda, Yewa-South, Obafemi Owede, Ewekoro	16	16			

Table 13.3c: Livestock Related Facilities in Nigeria (Ranches)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non functional		
			2023	2024	2023	2024	
North-Central							
Kwara	1	Kaima	1	1			Prioritization of more ranches' establishment
Benue	2	Ikyogen, Makurdi	1		1		
Nasarawa	1	Awe	1	1	1		
North-East							
Adamawa	6	Michika, Gombi	1	1			
Borno	2		2	2			
Bauchi	2	-	-	-	-	-	-
Taraba	9	A/Kola, Donga, Bali	5		4		
North-West							
Katsina	5	Daura, Dutsin Ma, Batsari, Bakori, Kankia	2		3		
Kaduna	2	Ladduga, Damau	1				
South-East							
Ebonyi	1	Onicha LGA	1	1	0	0	
South-South							
Bayelsa	1	Yenagoa LGA	1	1			Dilapidated
Edo	3	State wide	3				
Cross River	1		1	1			
Akwa-Ibom	1	Adadia, Uruan LGAs	1	1	0	0	
Edo	3	Akko-Edo, Esan South, Estako East	3	3			
South-West							
Osun	3	Iwo, Ife, Osogbo					
Ondo	5	Akoko North-West, Akure South	1	1	4	4	
Oyo	5	Ibadan and Iseyin LGAs	5		-	-	-
Ogun	10	Odeda, Yewa-South, Obafemi Owede, Ijebu-Ode, Ewekoro	10	8		2	

Table 13.3d: Livestock Related Facilities in Nigeria (Grazing Reserves)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non functional		
			2023	2024	2023	2024	
North-Central							
Kwara	17	Kaima, Lata, Okuta	15	15	15	15	
Niger	25	Moya	-	-	-	-	
Nasarawa	8	Doma, Keana, Awe, Asakio, Gidata		8			
Kogi	3	Adavi, Omala, Kabba					
North-East							
Adamawa	32	17 LGAs	29	29	3	3	
Bauchi	80	7 LGAs	-	-	-	-	-
Borno	56	-	56	56	-	-	
Gombe	58	-	31		27		-
Taraba	9	9 LGAs	9				Most of the reserves are heavily encroached
Yobe	30	All LGAs	30	30			
North-West							
Katsina	1	Safana	1	1	0	0	
Kano	334	34 LGAs	334	334			Pasture establishment
Kaduna	17	17 LGAs	5		12		
Jigawa	451						
Zamfara	36	14	36	36			-
Kebbi	341	21 LGAs	341	341	2	2	
Sokoto	19	All LGAs					
South-South							
Bayelsa	1		1				
Cross River	1		1	1			
South-West							
Ekiti	1	Ikole	1		0	0	
Oyo	2	Ibarapa-North and Iwajowa LGAs	2		-	-	Farmer-herder dispute
Ogun	3	Abeokuta-North, Yewa-North			3	3	

Table 13.3e presents the veterinary clinics available across the regions. In North-Central, Benue has 30 clinics, but only 10 are functional. Nasarawa has seven fully operational clinics. In the North-East, Borno has 10 fully operational clinics, while Gombe increased her veterinary clinics from 12 to 25. Kano in the North-West has 27 clinics, while Kaduna has 24 clinics, but eight remain non-functional. In the South-East, Anambra has 41 veterinary clinics, but only 20 are fully operational. Akwa Ibom has 32 veterinary stations serving as clinics. In the South-South, Rivers has 85 veterinary clinics while Edo has 50 working clinics. Lagos in the South-West has 197 clinics, but 190 are privately owned. There is a need for the rehabilitation of the non-functional or dilapidated veterinary clinics which will help improve animal health and also animal production.

Table 13.3f shows the information on feed mills in the different agro-ecological zones. In Kwara (North-Central), there are 250 feed mills recorded, Nasarawa has nine fully functional feed mills, while Benue has three, but only two are functional. In the North-East, Bauchi had one non-functional feed mill in 2023, which became operational in 2024. Taraba has six feed mills. In the North-West, Kano has four functional feed mills while Kaduna and Zamfara have two functional ones each. In the South-East, Anambra has 15 feed mills, with 13 functional in 2023. Ebonyi has five fully functional feed mills in Abakaliki. Lagos has 157 feed mills, but only 45 were operational in 2024 due to the high cost of production. Ogun has 42 functional mills, while Ondo had 48 in 2023 with only 42 remained operational by 2024.

In Benue (North-Central), there are 50 functional slaughter slabs, but in need of an upgrade. Kogi has 19 functional slabs, while Nasarawa has 33 operational slabs. In the North-East, Adamawa leads with 126 fully functional slaughter slabs across all LGAs. Bauchi had 225 slabs, but only 150 remained functional by 2024. Gombe increased its number of operational slaughter slabs from 12 to 25. In the North-West Kano has 217 slaughter slabs, of which 209 remain functional. Zamfara has the highest number of slaughter slabs, with 1,371 recorded in 2023, though only 300 remain non-functional in 2024. In the South-East, Enugu has 30 fully functional slaughter slabs across 17 LGAs. In the South-South, Bayelsa has 11 slaughter slabs, but many are in poor condition. Cross River has 36 fully functional slabs, while Akwa Ibom has 63 slaughter slabs. Rivers has 85 slabs, but 37 remain non-functional. In the South-West, Osun has 300 slaughter slabs, of which 249 are functional. Lagos has 23 slabs, but three are still under construction (Table 13.3g).

Table 13.3h shows the hatcheries information across the states. In north central, Nasarawa hatcheries increased from seven in 2023 to ten in 2024, Kogi has one hatchery, while Kwara has three hatcheries located in Edu and Moro LGAs. In the North-East, Borno has three functional hatcheries, while Yobe has one hatchery in Potiskum, which is non-functional. In the North-West, Kano has two hatcheries, but both remain non-functional. Kaduna has one operational hatchery in Chikun, while Zamfara and Sokoto each have one hatchery, though their operational status is unknown. In the South-East, Anambra has two hatcheries, with one functional and the other non-functional. Enugu has three hatcheries, but only two are operational. In the South-South, Akwa-Ibom has two fully operational hatcheries, while Edo has two functional hatcheries in Ikpoba-Okha. Delta has three hatcheries, but they are all non-functional. In South-West, Osun had five hatcheries in 2023 which reduced to only three by 2024. Ondo increase from three to four functional hatcheries, while Ogun maintained six fully operational hatcheries.

Table 13.3e: Livestock Related Facilities in Nigeria (Veterinary Clinics)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non functional		
			2023	2024	2023	2024	
North-Central							
Benue	30	Across all LGAs	10		20		
Nasarawa	7	Lafia, Karu, Nasarawa, Keffi, Doma and Akwa LGAs	7	7	-	-	
North-East							
Adamawa	21	21 LGAs	-	-	-	-	
Bauchi	20	20 LGAs	22	22	-	-	
Borno	10		10	10	-	-	
Gombe	15	11 LGAs	12	25			
Taraba	16	16 LGAs	3		13	-	
North-West							
Jigawa	9	9 LGAs	7		2	-	
Kano	27	Across the State	25		2	-	
Kaduna	24	23 LGAs	16	16	8	8	
Jigawa	8	5 LGAs	8			-	
Zamfara	2	Gusau	2	2		-	
Kebbi	24	21 LGAs	15	15	9	9	
Sokoto	25	All LGAs					
South-East							
Abia	9	-	9	9	0	0	
Anambra	41	21 LGAs	20	20	21	21	
Ebonyi	4	Abakaliki,	4	4		-	
Enugu	18	17 LGAs	18	18		-	
South-South							
Bayelsa	1	Yenagoa	1	1	0	0	Dilapidated
Cross River	18	Across the State	18	18	-	-	-
Akwa-Ibom	32	31 LGAs	32	32		-	Veterinary stations across LGAs serve as clinics, with one clinic at the Ministry Headquarters, Uyo
Rivers	85	-	85	85	-	-	
Edo	50	All LGAs	50	50		-	
Delta	15		15	15		-	
South- West							
Ogun	11	Abeokuta North, Sagamu, Ijebu Ode, Ijebu North, Yewa South, Yewa North, Remo North, Imeko, Afon, Obafemi Owode, Ipokia, Ifo	10	11		-	
Lagos	197	Agege, Surulere, Ajah, Ikorodu, Badagry, Ojo, Epe	197			-	Out of the 197 clinics 190 are private veterinary clinics
Ekiti	16	15 LGAs	6	6	10	10	
Ondo	20	18 LGAs	15		5	-	
Osun	8	Across the States	7	7	1	1	
Oyo	73	33 LGAs	39		13	-	

Table 13.3f: Livestock Related Facilities in Nigeria (Feed Mills)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non functional		
			2023	2024	2023	2024	
North-Central							
Benue	3	Makurdi	2	2	1	1	
Kwara	250	All LGAs	-	-	-	-	Subsidization of feed ingredients
Niger	1	Bosso	-	-	-	-	
Nasarawa	9	Lafia, Keffi and Karu LGAs	9	9			-
North-East							
Bauchi	1	Bauchi		1	1		
Borno	1		-	-	1	1	-
Taraba	6	5 LGAs	4				
Yobe	1	Jakusko			1	1	
North-West							
Kano	4	Nasarawa and Gezawa	4	4	0	0	-
Kaduna	2		2	2			
Zamfara	2	Gusau	2	2			
Sokoto	6	Individual farms					
South-East							
Anambra	15	-	13		2		
Ebonyi	5	Abakaliki	5		0	0	
Enugu	Many	Across the state	-	-	-	-	-
South-West							
Lagos	157	Agege, Epe, Ikorodu, Ojo	123		45		High cost of feed ingredients
Osun		Osogbo, Olorunda, Ede, Ilesa East and Iwo LGAs	-	-			
Ogun	42	All LGAs	42	42			
Ekiti	5	Ado and Ijero	5		0	0	
Ondo	48	All LGAs	48	42	-	6	
South West							
Rivers	6	Obio Akpor					
Edo	9	Oredo	9	9			
Delta	2						

Table 13.3g: Livestock-Related Facilities in Nigeria (Slaughter Slab)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non-functional		
			2023	2024	2023	2024	
North-Central							
Benue	50	Across 23 LGAs	50	50	0	0	There is a need for upgrade
Kogi	19		19	19			
Nasarawa	33	All LGAs	33	33			-
Niger	35	19 LGAs					
North-East							
Adamawa	126	All LGAs	126	126			
Bauchi	225	20 LGAs	100	150	125	75	-
Gombe	25	11 LGAs	12	25	-	-	
Taraba	64	16 LGAs	19		9		
Borno	28		28	28			
North-West							
Kano	217	Across the State	209	209	8	8	-
Kaduna	23	All LGAs	23				
Jigawa	115		115		0	0	
Zamfara	1371	14 LGAs	1071	1071	300	300	
Kebbi	225	21 LGAs	225	225			
Sokoto	78	All LGAs					
South-East							
Ebonyi	87	All LGAs					-
Enugu	30	17 LGAs	30	30			
Abia	10						Need Renovation
Anambra	10		5	4	6	3	
South-South							
Bayelsa	11	Across the state	11	11		-	Not in good condition
Cross River	36	Across the State	36	36	-	-	
Akwa-Ibom	63	All 31 LGAs	63	63	0	0	Each of the LGAs has two slaughter slabs except Uyo LGA
Rivers	85	All LGAs	48	48	37	37	
Edo	88	All LGAs	88	88			
South-West							
Ogun	62	All LGAs	48	62			
Lagos	23	Agege, Ikorodu, Badagry, Epe, Alimosho, Surulere, Mushin, Etti-Osa, Lagos Island	20		3		Non-functional is still under construction
Ekiti	50	15 LGAs	32	47	18	3	
Ondo	54	Across the state	54		0	0	
Osun	300	State wide	249	249	51	51	
Oyo	29	33 LGAs	23		6		-

Table 13.3h: Livestock-Related Facilities in Nigeria (Hatcheries)

State	Total Number in state	Location (LGAs)	Status				Remarks
			Functional		Non-functional		
			2023	2024	2023	2024	
North-Central							
Kwara	3	Edu, Moro LGAs					
Nasarawa	10		7	10			
Kogi	1	Adavi					
North-East							
Borno	3	MMC	3	3	0	0	
Yobe	1	Potiskum			1	1	
North-West							
Kano	2	D/Tofa, Bebeji	0	0	2	2	
Kaduna	1	Chikun	1	1	-	-	-
Zamfara	1	Gusau			1	1	
Sokoto	1	Sokoto					
South-East							
Anambra	2	-	1	1	1	1	
Enugu	3		2	2			
South-South							
Akwa-Ibom	2	Use Offot, Mbiaya Uruan	2	2			
Rivers	5						
Cross River	1	Abi					
Edo	2	Ikpobaokha	2	2			
Delta	3	3 LGAs			3	3	
South-West							
Osun	5	Osogbo, Ede North, Isokan and Ayedire LGAs	4	3	1	2	
Ondo	4	Akure South, Ifedore, Ondo West, Ondo East	3	4			
Ogun	6	Odogbolu, Ewekoro, Obafemi, Odeda	6	6			

13.4 Major Livestock Markets in Nigeria

Table 13.4a summarizes trade volumes in major livestock markets across North-Central region from 2023 to 2024. Benue had a decline in cattle trades between 2023 and 2024. Taraba and Plateau had growth in cattle and sheep trading, with Iware Market's cattle trades rising from 600,000 to 700,000, and Marraban Kunini Market's sheep trades increasing from 719,000 to 930,000. Kara Market in Plateau also saw a rise in cattle trades from 560,000 to 710,000. Niger recorded millions trade in cattle and poultry.

Table 13.4b shows volume of trades of livestock in major livestock markets in North-East. Mubi Market in Adamawa had cattle trades growth from 7,233 in 2023 to 55,334 in 2024. Bama Market in Borno increased cattle trades from 380,883 to 399,927. Bauchi markets showed moderate growth in cattle and goat trades. Gombe experienced a decline in cattle trades but a rise in poultry trades from 84,571 to 848,321.

Table 13.4c summarizes the volume of trades of livestock in major livestock markets in North-West. The region reported some of the highest livestock trading volumes. Wudil Livestock Market in Kano had a slight decline in cattle trades but an increase in sheep and poultry trades. Kebbi and Sokoto experienced growth in cattle, goat, and poultry trades.

Table 13.4d shows volume of trades of livestock in major livestock markets in South-South. Gariki Abakaliki Market in Ebonyi showed an increase in cattle and goat trades. Enugu's cattle trades declined, but poultry trades remained stable.

Table 13.4e shows volume of trades of livestock in major livestock markets in South-East. Akwa Ibom had increased poultry trade while Rivers had a decline. Edo's cattle and goat trades saw slight declines. In the South-West, Oko Oba Market in Lagos recorded a decline in cattle and poultry trades. Ekiti and Oyo experienced a decrease in cattle trades. Swine trading in Ogun and Lagos also declined significantly, with Oke Aro Pig Estate dropping from 80,000 to 45,000 trades (Table 13.4f).

Table 13.4a: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (North Central)

State	Livestock Market	Livestock type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Benue	Markurdi	396879	-	218930		1002352				258169	-
	Katsina-Ala	109211	-								-
	Otukpo	114723	-								-
	New Garage, Otukpo	-	-	96215		435986					-
	Gboko main market	-	-	102163		503114		1131231			-
	Otukpo main market	-	-	-	-	-	-	796315			-
	Wurukum	-	-	-	-	-	-	1012151			-
	Tsar market	-	-	-	-	-	-			320000	-
FCT	Dei Dei market	16423	16253	79500	56240	298838	36805	114800	112900		-
	Kugbo	362	383	5288	8620	1448	868	-	-	-	-
	Kogo	6240	6650	4500	4100	8730	9895	-	-	-	-
Taraba	Iware	600000	700000	860000	930000	1340000	1243500	-	-	-	-
	Marraban Kunini	350000	490000	719000	628000	502430000	453329	-	-	-	-
	Garba Shede	213000	349000	190343	163450	-	-	-	-	-	-
	Tella	115000	119630	-	-	435620	363024244	-	-	-	-
	Zing	-	150000	-	-	-	-			26000	18000
	Jalingo	-	-	-	-	-	-	930000	46540		
	Wukari	-	-	-	-	-	-	894600	786000		
	Karim Lamido	-	-	-	-	-	-	-	-	43281	29643
Plateau	Kara	560000	710000	-	-	-	-	-	-	-	-
	Yan-Shanu	450000	515000	48000	56000	-	-	-	-	-	-
	Farin Gada	62000	78000	-	-	-	-	-	-	-	-
	Wase	74150	78610	-	-	-	-	-	-	-	-
	Dengi	93155	101647	-	-	-	-	-	-	-	-
	Yan-Awaki	-	-	86200	94300	314101	295207	-	-	-	-
	Kara	-	-	-	-	-	-	-	-	-	-
	Abattoir market	-	-	-	-	308000	287420	-	-	-	-
	Garkawa	-	-	-	-	153058	124260	-	-	-	-
	Yankaji	-	-	-	-	-	-	409233	361000	-	-
	Terminus	-	-	-	-	-	-	299101	348020	-	-
	Bukuru	-	-	-	-	-	-	155100	120408	-	-
	Namu	-	-	-	-	-	-	-	-	64202	50801
	Main Abattoir Jos	-	-	-	-	-	-	-	-	26411	14000
	Vom	-	-	-	-	-	-	-	-	4217	20510
Niger	Manga	2912596	2999974	-	-	-	-	-	-	-	-
	Kawo	2912596	2999944	-	-	-	-	-	-	-	-
	Tunga Mallam	-	-	1880060	1936462	-	-	-	-	-	-
	Wuya	-	-	-	-	2422578	2495255	-	-	-	-

	Kure	-	-	-	-	-	-	21511723	22157071	-	-
Kogi	Zango-Felele	12567	14348	-	-	-	-	-	-	-	-
	Oziototu	14468	16387	-	-	-	-	-	-	-	-
	Ode-Ere	9784	11639	-	-	-	-	-	-	-	-
	Abugi	11214	13411	-	-	-	-	-	-	-	-
	Iga/Ega	8364	7218	-	-	-	-	-	-	-	-
	Lokoja	-	-	8394	7668	-	-	20000	20000	-	-
	Anyigba	-	-	7231	4397	-	-	-	-	1000	1000
	Okene	-	-	6812	4918	-	-	15000	15500	-	-
	Sanawa	-	-	-	-	4314	3674	-	-	-	-
	Iyara	-	-	-	-	6478	2334	-	-	-	-
	Bagana-Omala	-	-	-	-	-	-	10000	10000	-	-
	Obajana	-	-	-	-	-	-	-	-	3000	3000
Kabba	-	-	-	-	-	-	-	-	2000	2000	
Kwara	Kaiama	150000	220000	50000	70000	-	-	-	-	-	-
	Patigi	60000	90000	40000	60000	-	-	-	-	-	-
	Ilesha-Baruba	190000	260000	60000	70000	-	-	-	-	-	-
	Ajase-Ipo	100000	130000	30000	40000	-	-	-	-	-	-
	Iyan-Share	100000	150000	20000	30000	-	-	-	-	-	-
	Yammfy	-	-	-	-	-	-	200000	220000	-	-
	Valentine	-	-	-	-	-	-	250000	300000	-	-

Table 13.4b: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (North-East)

State	Livestock Market	Livestock type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Adamawa	Mubi	7233	55334	56000	62000	-	-	-	-	-	-
	Song	13667	40334	2170	4560	3080	3200	-	-	-	-
	Ngurore	82000	133334	48000	56300	39200	2890	-	-	-	-
	Chigari	3666	37666	-	-	-	-	-	-	-	-
	Ganye	15666	30667	-	-	-	-	-	-	-	-
Borno	Bama	380883	39927	-	-	318631	-	-	-	-	-
	Biu	238499	250424	-	-	380135	-	428500	449925	-	-
	Gwoza	-	-	-	-	344345	361562	-	-	-	-
	Banki	380883	-	-	-	-	-	-	-	-	-
	Uba	-	-	283270	-	-	-	-	-	-	-
	Gubio	471182	-	347567	364945	-	-	-	-	-	-
	Bulumkutu	-	-	183802	-	-	-	-	-	-	-
	Kwaya Kusar	-	-	246214	-	-	-	367164	385522	-	-
	Monguno	600813	630854	-	-	-	-	-	-	-	-
	Maiduguri market	312740	-	-	-	-	-	417738	-	-	-
	Jere	-	-	-	-	-	-	332384	-	-	-
	Miringa	367164	-	-	-	-	-	-	-	-	-
	Askira Uba	213084	223738	-	-	-	-	-	-	-	-
	Dikwa	-	-	319736	335723	-	-	-	-	-	-
	Guzamala	-	-	-	-	502857	528000	-	-	-	-
Nganzi	-	-	-	-	806633	846965	-	-	-	-	
Adadam	-	-	390807	410347	-	-	-	-	-	-	
Bauchi	Alkaleri cattle market	11500	12500	-	-	-	-	-	-	-	-
	Soro cattle market	10100	10900	-	-	-	-	-	-	-	-
	Azare cattle market	13500	14300	-	-	9400	10500	8360	10100	-	-
	Gamawawa cattle market	11100	12500	12000	13700	10300	14300	-	-	-	-
	Maraban/Liman Katagun mkt	16900	18100	18000	20111	5900	9400	-	-	-	-
	Nabardo L/market	-	-	9000	10320	-	-	-	-	-	-
	Kafin Madaki	-	-	-	-	-	-	5300	8500	-	-
	Bogoro	-	-	-	-	-	-	-	-	70	97
	Boi	-	-	-	-	-	-	-	-	69	108
	Yelwa Bauchi	-	-	-	-	-	-	-	-	20	83
Toro	-	-	-	-	-	-	70000	90000	-	-	
Gombe	Gombe Livestock market	18961	12642	-	-	89556	80414	-	-	84571	848321
	Kumo	15071	14000	-	-	96966	80819	1229466	1198521	-	-
	Kuri	13772	13568	-	-	-	-	-	-	-	-
	Leggal	12247	11482	-	-	-	-	-	-	-	-
	Kashere	10204	7265	-	-	-	-	-	-	-	-
	Kwadon	-	-	92844	95921	-	-	1631366	1471207	-	-
	Dukku	-	-	33570	10423	133570	125630	-	-	-	-
	Bajoga	-	-	12663	12234	-	-	-	-	-	-
Dogon Ruwa	-	-	-	-	-	-	72142	682161	-	-	

	Billiri	-	-	-	-	-	-	-	-	2664	2578
	Shongom	-	-	-	-	-	-	-	-	2427	2410
	Kaltungo	-	-	-	-	-	-	-	-	1789	1546

Table 13.4c: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (North West)

State	Livestock Market	Livestock type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Sokoto	Tangaza	-	-	-	-	-	-	1500	500	-	-
	Tangaza	-	-	-	-	-	-	1500	500	-	-
	Bodinga Kara	-	-	-	-	300	350	-	-	-	-
	Wamako	-	-	-	-	300	400	-	-	-	-
	Sokoto Livestock	-	-	-	-	-	-	6000	4000	-	-
	Dange	-	-	-	-	400	350	-	-	-	-
	Gwadeba	-	-	-	-	-	-	2500	2000	-	-
Kano	Wudil	1001400	809503	700000	703026	500000	508553	500000	550021	-	-
	K/Dangora	600000	613261	-	-	-	-	-	-	-	-
	Getso	200000	207127	-	-	-	-	-	-	-	-
	Danbatta	150000	151662	600000	603216	300000	303127	-	-	-	-
	Falgore	150000	156003	-	-	-	-	-	-	-	-
	L/Zango	-	-	400000	408011	350000	351197	350000	352067	-	-
	Getso	-	-	-	-	-	-	300000	303811	-	-
Kebbi	Dodoru	60800	70200	55150	60000	15773	16700	24964	36480	-	-
	Bachaka	17400	22100	10694	12200	16397	22500	325378	35300	-	-
	Amagwaro	24720	36400	-	-	23917	30560	-	-	-	-
	Argungu	5120	15200	13313	14300	-	-	155918	160101	-	-
	Ambursa	7128	10100	-	-	-	-	-	-	-	-

Table 13.4d: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (South-South)

State	Livestock markets	Livestock Type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Ebonyi	Gariki Abakaliki	1250000	1350000	1500000	1500000	1600000	1800000	-	-	-	-
	Eke Imoha	4500	5000	1000000	1100000	1200000	1250000	-	-	-	-
	Effum Market	2500	2700	-	-	-	-	-	-	-	-
	Onegbe	-	-	-	-	-	-	-	-	-	-
	Chicken Market	-	-	-	-	-	-	10000000	11000000		
	Abakaliki	-	-	-	-	-	-	-	-	1000000	1200000
	Kpinkpiri	-	-	-	-	-	-	6000000	8000000	800000	950000
Enugu	New Artisan	400000	250000	7000	4000	-	-	-	-	-	-
	Gariki	500000	350000			-	-	-	-	21000	21000
	Ugwuoba	550000	400000	10000	5000	-	-	-	-	-	-
	Orba	100000	50000			-	-	-	-	-	-
	Obollo – Afor	100000	50000	5000	5000	-	-	-	-	-	-
	Ibagwa Aka	-	-	-	-	6000	5000			-	-
	Enugu Ezike	-	-	-	-	10000	6000			-	-
	Artisan	-	-	-	-	-	-	10000	7000	-	-
	Abakwa	-	-	-	-	-	-	15000	10000	-	-
	Ogbete	-	-	-	-	-	-	20000	20000	-	-
Anambra	Amansea Market	4000	3000	7000	15000	9000	5000			-	-
	Awka Etiti Market	900	800	-	-	-	-	-	-	-	-
	Uga market	3000	5000	-	-	-	-	-	-	-	-
	Umunya Market	4000	3000	-	-	-	-	-	-	-	-
	Ekwubbia Market	6000	8000	-	-	-	-	-	-	6000	2000
	Nrobi Market	-	-	10000	12000	-	-	-	-	-	-
	Nimo Market	-	-	-	-	10000	9000	-	-	-	-
	Nnobi Market	-	-	-	-	12000	4000	16000	13000	-	-
	Ebe Awka Market	-	-	-	-	-	-	8000	9000	-	-
	Afor Igwe Market	-	-	-	-	-	-	7000	8000	-	-
	Ihiala Market	-	-	-	-	-	-	-	-	5000	6000
	Kwata Market	-	-	-	-	-	-	-	-	3000	5000

Table 13.4e: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (South-East)

State	Livestock markets	Livestock Type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Akwa-Ibom	Uyo/Itam	2465	2981	-	-	-	-	-	-	-	-
	Obo Annang	1348	1984	-	-	-	-	-	-	-	-
	Afa Urua	1238	1451	-	-	-	-	-	-	-	-
	Urua Udoinyang	1573	1589	-	-	-	-	-	-	-	-
	Urua Ete	475	534	-	-	-	-	-	-	-	-
	Urua Otoh	-	-	306	296	-	-	-	-	-	-
	Urua Ekpo	-	-	336	286	-	-	-	-	-	-
	Urua Udoinyang	-	-	618	504	-	-	-	-	-	-
	Uyo	-	-	1232	1245	-	-	-	-	-	-
	Uya Oron	-	-	489	492	-	-	-	-	-	-
	All major markets	-	-	-	-	301619	302670	4286237	4289677	-	-
	Itam	-	-	-	-	-	-	788760	858795	-	-
	Obo Annag Market	-	-	-	-	-	-	-	-	14321	10376
	Ukam	-	-	-	-	-	-	-	-	6321	6340
Ikot Ibritam	-	-	-	-	-	-	-	-	9018	6518	
Urua Ikpe	-	-	-	-	-	-	-	-	5489	5310	
Esit Eket	-	-	-	-	-	-	-	-	3801	3811	
Cross River	Bacoc	350000	350000	150000	10000	150000	200000	-	-	-	-
	Nasarawa	350000	350000	-	-	-	-	-	-	-	-
	Individual Farms	-	-	-	-	-	-	200000	1000000	50000	200000
	Markets	-	-	-	-	-	-	2000000	1000000	-	-
	Watt	-	-	-	-	-	-	-	-	1000000	1000000
Edo	Eyean	60000	63000	53000	55000	-	-	-	-	-	-
	Aduwawa	60000	55000	55000	51000	61000	53000	950000	900000	-	-
	Okada Junction	85000	71000	-	-	-	-	-	-	-	-
	Temboga	-	-	25000	23000	20000	20000	-	-	-	-
	Oliha	-	-	-	-	50000	60000	700000	710000	-	-
	Ekiosa	-	-	-	-	-	-	650000	600000	-	-
River	Mile 3	23800	20400	89305	63500	55600	38450	-	-	-	-
	Minapu	45700	28400	32400	21415	-	-	-	-	-	-
	Okwuru	35903	25301	-	-	-	-	-	-	-	-
	Cattle Market	85700	93400	-	-	-	-	-	-	-	-
	Eledenoro/Iriebe	1107300	75600	-	-	-	-	-	-	-	-
	Iriere	-	-	902300	457220	-	-	-	-	-	-
	Iriebe/Minapu	-	-	-	-	103250	46500	-	-	-	-
	Mile 1 LBM	-	-	-	-	-	-	25010	18300	-	-
	Mile 3 LBM	-	-	-	-	-	-	92325	41400	-	-
	Rumuokoro/Creek Road	-	-	-	-	-	-	52400	20150	-	-
	Rumuokoro	-	-	-	-	-	-	-	-	8450	3500
	Rumukrushu	-	-	-	-	-	-	-	-	3305	2500
Bayelsa	Bayelsa Palm Elebele	22605	25400	-	-	-	-	-	-	-	-
	Bayelsa Swali Market	-	-	37120	-	-	-	-	-	-	-

Table 13.4f: Volume of Trades of Livestock in Major Livestock Markets in Nigeria (South-West)

State	Livestock Market	Livestock type									
		Cattle		Sheep		Goats		Poultry		Swine	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Ekiti	Cattle Market	19057	12381	-	-	-	-	-	-	-	-
	Atikakan, Ado	-	-	7220	4030	-	-	-	-	-	-
	Adekunle Market, Oke-oniyo	-	-	-	-	10464	6221	-	-	-	-
Lagos	Oko Oba	600000	458000	858000	725000	987000	625000	-	-	-	-
	Alaba	218000	123000	1120000	867000	1528000	928000	-	-	-	-
	Sabo Market Ikorodu	485000	186000	230000	158000	827000	418000	-	-	-	-
	Oke Aro Pig Estate	-	-	-	-	-	-	-	-	80000	45000
	Gberibe Pig Estate	-	-	-	-	-	-	-	-	35000	10000
Oyo	Ogbomoso	735	405	-	-	-	-	-	-	-	-
	Iseyin	1351	1157	-	-	-	-	-	-	-	-
Osun	Sekona Cattle market	3000	2700	-	-	-	-	-	-	-	-
	Cattle Market Ara Junction	1800	1200	-	-	-	-	-	-	-	-
	Osunjela Cattle Market Osogbo	2500	2000	-	-	-	-	-	-	-	-
	Oja Oba Market, Osogbo	-	-	5000	5500	3000	2700	22000	20000	-	-
	Powerline Market, Osogbo	-	-	4800	5000	-	-	-	-	-	-
	Oja Eran, Ife	-	-	-	-	2700	2400	-	-	-	-
	Olufi Market, Gbongan	-	-	-	-	2300	2100	-	-	-	-
	Oluode Market, Osogbo	-	-	-	-	-	-	25000	22000	-	-
Alekuwodo Market, Osogbo	-	-	-	-	-	-	18000	16000	-	-	

14.0 FISHERIES PRODUCTION SITUATION

14.1. Aquaculture Production

The 2023 and 2024 aquaculture production for 23 States and FCT is shown in Table 14.1, while Table 14.2 reflects the summary based on agro-ecological zones. Paucity of data has been plaguing aquaculture production across the country with States not having consistent mechanisms for production data collection. However, data from States are indication of production situations, as data from the Federal Department of Fisheries and Aquaculture on national fisheries statistics have been moribund for some years.

However, field data from States indicate that the South-South zone had the highest production in 2023 with 122,003 MT (34.4%) and in 2024, 113,831MT (36.0%) of total aquaculture production in the country. Lack of data from Lagos, Ondo and Osun States, placed the Southwest with total production of 87,312 MT (26.2%) in 2023 and 68,893 MT (21.8%) in 2024 of the national production. Interventions in fish farming by government and development partners were mainly on advisory services.

Table 14.1a: Aquaculture Production in North-Central

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Benue	Clarias	30	52
	Heterobranchus	0	173
	Heteroclarias	170	120
	Tilapia	0	225
FCT	Clarias	90	974
Kwara	Catfish	3,628	1,814
Plateau	Clarias	1,500	253
	Heterobranchus	500	4,500
	Tilapia	200	5,200
	Carp	50	80
	Mudfish	1,000	70
Taraba	Clarias spp	50,877	45,856
Zonal Total		58,045	59,317

Table 14.1b: Aquaculture Production in North-East

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Adamawa	Clarias sp	186	23
	Tilapia sp	9	3
	Heterobranchus	1	0.5
	Carp	1	0.5
	Pengasius	0.5	0.5
Bauchi	Clarias sp.	520	380
	Tilapia	2	1.5
	Heterobranchus spp	3	6
Borno	Clarias	11,207	10,765
	Tilapia	9,657	11,000
Gombe	Clarias spp	3,000	2,000
	Heterobranchus spp	50	120
	Tilapia	2,000	2,500
Yobe	Clarias	5,500	1,150
	Tilapia	510	780
	Common carp	3,000	200
Zonal Total		35,646.5	28,930

Table 14.1c: Aquaculture Production in North-West

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Kano	Catfish	71	85
	Carp	0.4	0.5
Sokoto	Tilapia sp	10,000	10,000
	Clarias	10,000	20,000
Zamfara	Clarias sp	351	310
	Tilapia	148	139
Zonal Total		28,930	30,543.5

Table 14.1d: Aquaculture Production in South-East

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Abia	Clarias sp	700	0
	Heterobranchus sp	500	0
	Carp	0	0
Anambra	Tilapia	5,000	9,000
	Clarias	2,000	1,000
	Heterobranchus	1,000	150
	Others	1,000	3,000
Enugu	Clarias	480	536
	Tilapia	218	826
	Heterobranchus	210	303
	Carp	97	125
Zonal Total		11,205	14,940

Table 14.1e: Aquaculture Production in South-South

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Akwa-Ibom	Catfish	37,775	38,500
	Tilapia sp	28,164	28,574
	Others	2,677	2,677
Cross-River	Clarias sp	220	190
	Tilapia	1,450	1,290
Delta	Clarias spp	18,775	18,886
	Heterobranchus	12,052	10,080
	Tilapia	5,890	4,690
Edo	Catfish	14,800	8,694
Rivers	Clarias	200	250
Zonal Total		122,000	113,831

Table 14.1f: Aquaculture Production in South-West

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Ekiti	Clarias sp	7,800	6,410
	Tilapia	1,900	1,300
Ogun	Clarias spp	30,000	25,000
	Tilapia spp	3,000	2,500
	Clarias	2,600	1,796
	Tilapia	1,600	2,500
	Pengasius	0	2.5
Oyo	Clarias sp	36,420	25,870
	Tilapia sp	1,420	1,200
	Heterotis spp	841	500
	Clarias	3,629	1,814
Zonal Total		87,312	68,893

Table 14.2: Summary of Aquaculture Production (MT) in the Zones

S/No.	Zone	2023		2024	
		MT	%	MT	%
1	Southsouth	122,000	36.4	113,831	36.0
2	Southwest	87,312	26.2	68,893	21.8
3	Northcentral	58,045	17.4	59,317	18.7
4	Northeast	35,647	10.6	28,930	9.1
5	Northwest	20,570	6.1	30,544	9.7
6	Southeast	11,205	3.3	14,940	4.7
Total		334,779	100	316,455	100

14.2. Capture Fisheries Production

Only twenty-two (22) states gave data on the artisanal production figures, and the details are presented in Tables 14.3 and 14.4 Across the zones, the Southwest had the highest production of 399,010 MT i.e. 37% of the total national production in 2022. The Southeast, Northwest and Northeast had significant productions of 241,040 MT (22.58%), 197,967 MT (18.54%) and 151,109.6 MT (14.15%) respectively of the estimated total national production of 1,067,647 MT in 2022. Data for 2023 was not available as at the time of the field work.

Table 14.3: Capture Fisheries Production in States in 2023 and 2024

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
Benue	Clarias spp	550	750
	Heterobranchus	0	3.1
	Tilapia	170	1,200
Kwara	Clarias sp	119.04	71.44
Nasarawa	Lates	1000	225
	Clarias	1000	0
	Tilapia	1500	0
	Heterotis	250	0
	Synodontis	550	
Plateau	Tilapia	400	5500
	Heterobranchus	4500	4000
	Carp	15	23
	Clarias	75	83
	Mudfish	700	600
Taraba	Clarias spp.	20,000	20,991
Zonal Total		30829	334466
North East			
Adamawa	Catfish	185	226
	Tilapia	130	148
	Others	90	47
Bauchi	Clarias spp	260	460
	Tilapia spp	156	183
	Heterobranchus spp	6	9.2
	Bagrus bayad	2	11
	Alestes	45	53
Borno	Catfish	58,737	38,103
	Tilapia	110,000	107,530
	Heterotis	15,000	12,516
	Lates	1,103	3,104
	Momyrus	991	100
Gombe	Clarias spp	1000	1500
	Tilapia	350	300
	Heterobranchus	250	200
	Lates	50	40
	Heterotis	5	6
Yobe	Catfish	84,000	95,000
	Tilapia	120,000	107,000
	Heterotis	95,000	85,000
	Common carp	75,000	64,000
	Lung fish	55,000	32,000
Zonal Total		617,360	547,536

Table 14.3b: Capture Fisheries Production in States in 2023 and 2024

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
North-West			
Kano	Tilapia	10	12
	Carp	0.4	0.5
Sokoto	Tilapia	15	6,000
	Clarias	20,000	5,000
	Heterotis	3,000	3,000
	<i>Gymnarchus niloticus</i>	2,000	1,000
	<i>Lates niloticus</i>	3,000	1,000
Zamfara	Clarias spp	110	150
	Tilapia spp	72	135
	Synodontis spp	86	91
	Labeo spp	81	72
Zonal Total		28,374	16,461
Southeast			
Abia	Tilapia	420	700
	Catfish	400	600
	Carp	220	200
Anambra	Tilapia	2000	300
	Clarias	2000	800
	Heterobranchus	800	80
	Others	1000	50
Enugu	Clarias	204	312
	Tilapia	182	174
	Heterobranchus	19	107
	Carp	107	375
Zonal Total			

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
South-south			
Akwa-Ibom	Baracuda	33.65	32.65
	Bonga	34.67	35.5
	Catfish	17.55	25,874
	Crayfish	5.38	7.99
	Croaker	275.8	273.62
	Grunters	43.89	44.87
	Horse Mackerel	39.89	41.89
	Mullet	54.84	52.84
	Ray	75.47	76.27
	Sardinella	877.11	878.92
	Shark	21.46	10.31
	Soles	63.76	68.45
	Snapper	56.48	57.51
	Thread fin	45.65	47.64
	Tilapia sp	18.479	28.899
	Shining nose	39.75	39.98
Others	3.869	4.589	
Cross River	Chrysichthys	1140	1094
	Snapper	560	421
	Grunter	300	140
Delta	Clarias	17885	17885
	Heterobranchus	14256	14256
	Tilapia	15387	15387
Rivers	Sardine	200	300
	Croakers	150	250
	Tilapia	200	220
	Mullet	250	300
	<i>Chrysichthys</i>	100	150
Zonal Total		52,136	77,979

State	Species	Production in 2023 (MT)	Production in 2024 (MT)
South-West			
Lagos	Croaker	111.11	29.747
	Chrysichthys spp	19.27	36.108
	Tilapia	99.27	39.814
	Ethmalosa	28.9	32.596
	Grunter	42.6	20.88
	Bonga	26.03	0
	Shiny nose	16.19	2.802
	Thread fin	11.051	4.2
	Sole	9.6	0.0945
	Barracuda	2.8	15.62
	Citharinus	4	0
	Shrimp	3.575	0
	Sea snail	9.5	0
	Ray	7	0
	Redsnappe	10	0.268
	Arius	6.5	0
	Octopus	30	0.918
	Mullet	0	5.72
	Silver pomfret	0	1.5
	White snapper	0	0.296
	Clarias	0	4.4
	Sea catfish	0	0.307
	Tiger prawn	0	4.1
	White prawn	0	0.361
	Others	0	9.234
	Catfish	119.04	1,814.38
Oyo	Lates spp	3927	0
	Gymnachus spp	2945	0
	Hepsetus spp	196	0
	Snake head	491	0
	Bagrus spp	128	0
	Chrysichthys spp	1473	0
	Synodontis	245	0
	Prawn	412	0
Zonal Total		10,373	2,023

**Data from 22 States and the FCT*

Table 14.4: Summary of Capture Production (MT) in the Zones, 2023 and 2024*

S/No.	Zone	2023		2024	
		MT	%	MT	%
1	Southwest	10,373	1.4	2,023	0.3
2	Southeast	7,352	0.9	3,698	0.5
3	Northeast	617,360	82.6	547,536	80.4
4	Northwest	28,374	3.9	16,461	2.4
5	Northcentral	30,829	4.1	33,447	5.0
6	Southsouth	53,136	7.1	77,979	11.4
Total		747,424	100	681,144	100

*Data from 22 States and the FCT

Table 14.5 Summary of National Fisheries Production in 2023 and 2024

S/N	Sub-Sector	2023	% of Total	2024	% of Total
1	Aquaculture	334,779	30.9	316,455	31.7
2	Capture Fisheries	747,424	69.1	681,144	68.3
Total		1,082,203		997,599	

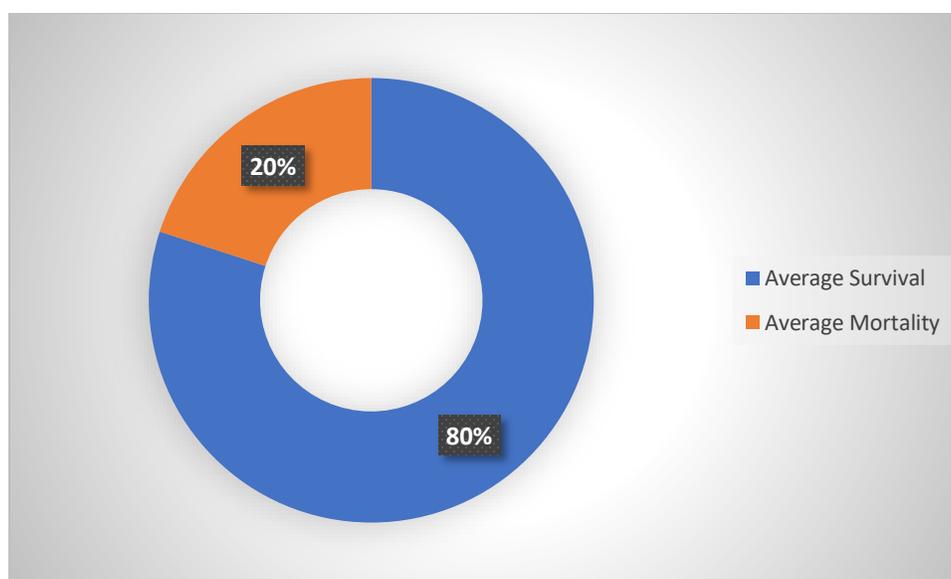


Figure 14.1: Average Mortality and Survival in Aquaculture due to Pests and Diseases

Table 14.6 presents data on aquaculture input procurement and distribution across various states in Nigeria for 2023 and 2024, including estimated requirements for each state. In the North-Central region, Benue state procured and distributed 10,000 juveniles and 800 units of fish feeds in 2023. In 2024, the state secured 6 collapsible tanks, 60 units of fish feeds, and 1,200 fingerlings, with an estimated requirement of 2,800 tons of collapsible tanks, 22,000 tons of fish feeds, and 100,000 fingerlings. Kwara state, meanwhile, distributed 100,000 fingerlings and 1,500 fish feeds in 2024, along with 1,000 sachets of Acphonol. In the North-East region, Bauchi state distributed 10,000 fingerlings, 150 units of fish feeds, 20 tarpaulin tanks, and 30 antibiotics in 2024, with estimated requirements of 2,000,000 fingerlings, 5,500 tons of fish feeds, 6,000 tarpaulin tanks, and 23,000 units of antibiotics. Yobe state, in the same region, distributed 17,000 fingerlings and 340 units of fish feeds, with a requirement of 100,000 fingerlings and 200 tons of fish feeds. In the North-West region, Jigawa distributed 900,000 fingerlings in 2024, though no specific requirement was provided. In the South-South region, Akwa Ibom distributed 280,000 fingerlings, 35,000 units of fish feeds, and 35,000 units of feed ingredients in 2024, with estimated requirements of 20,000,000 fingerlings, 10,000,000 tons of fish feeds, and 20,000,000 tons of feed ingredients. Delta state distributed 689,000 fingerlings and

150,980 units of fish feeds in 2023. Finally, in the Southwest region, Ogun state procured 5,000 tons of agricultural lime and 100 nets in 2023, while Oyo state distributed 100,000 fingerlings and 1,500 units of fish feeds in 2023 and procured 50 additional units of fish feeds in 2024. Oyo's estimated requirement included 1,100 tons of fish feeds.

Table 14.6: Aquaculture Input Situation in the States

States	Types of input	Quantity Procured		Quantity Distributed		Estimated requirement for state (tons)
		2023	2024	2023	2024	
North Central						
Benue	Juveniles	10,000	-	10,000	-	-
	Fish feeds	800	-	800	-	-
	Collapsible tank	-	6	-	6	2,800
	Fish feeds	-	60	-	60	22,000
	Fingerlings	-	1,200	-	1,200	100,000
Kwara	Fingerlings	-	100,000	-	100,000	-
	Fish feeds	-	1,500	-	1,500	-
	Acphonol	-	1000 sachets	-	1000	-
North East						
Bauchi	Fingerlings	-	15000	-	10000	2000000
	Fish Feeds	-	150	-	150	5500
	Tarpauline tanks	-	30	-	20	6000
	Antibiotics	-	60	-	30	23000
Yobe	Fingerlings	-	-	17,000	17,000	100,000
	Fish feeds	-	-	340	340	200
North-west						
Jigawa	Fingerlings	-	900,000	-	900,000	-
South East						
South South						
Akwa Ibom	Fingerlings		280000		280000	20000000
	Fish feeds		35000		35000	10000000
	Feed ingredients		35000		35000	20000000
Delta	Fingerlings	689000	-		689000	-
	Fish feeds	150,980	-		150,980	-
South West						
Ogun	Agric lime	5000				
	Nets	100				
	Fish feed	-	50,000	-	50,000	750
Oyo	Fingerlings	100,000	-	100,000	-	
	Fish Feeds	1,500	50	1,500	50	1100
	Fish feed ingredient	1,000	-	1,000	-	

14.3: Fresh and Smoked Fish Traded in the States

Table 14.7 presents the quantity of fresh and smoked fish traded across various states in Nigeria for the years 2023 and 2024. It highlights key fish species, market locations, and the corresponding quantities for each year. In the North Central zone, Benue State saw a noticeable increase in both fresh and smoked fish trade, with species like *Clarias*, *Heterobranchus*, and *Tilapia* being prominent. For instance, fresh *Clarias* traded in Agatu Market increased from 52 MT in 2023 to 61 MT in 2024, while smoked quantities grew from 38 MT to 42 MT. Federal Capital Territory (FCT) reported significant shifts, particularly for *Clarias* spp. in Kado, where the fresh fish quantity in 2024 skyrocketed to 4,630 MT compared to 32.6 MT in 2023. Similarly, smoked fish volumes increased from 356.9 MT to 4,630 MT. Kwara State demonstrated a decline in fresh fish trade in markets such

as Obbo Road, where Catfish quantities dropped from 979.76 MT to 587.8 MT, and smoked volumes decreased from 148.59 MT to 91.44 MT. Tilapia experienced similar reductions. Nasarawa State maintained steady trade with both *Clarias* and *Heterobranchus* species maintaining stable quantities across 2023 and 2024, with no significant fluctuations. In Plateau State, Tilapia remained a dominant species in markets like Kugiya and Bukuru. Fresh Tilapia quantities in Kugiya increased from 2,200 MT in 2023 to 2,300 MT in 2024, with a slight increase in smoked fish quantities. However, in Bukuru, both fresh and smoked volumes declined. Also, North-East Adamawa State saw slight reductions in the trade of species like *Clarias* and Tilapia, particularly in Bye-Pass Market, where fresh *Clarias* fell from 80 MT in 2023 to 60 MT in 2024. Bauchi State had large quantities of smoked fish, with *Clarias* spp. in M/Lawal market increasing from 15,000 MT in 2023 to 20,000 MT in 2024. Tilapia in Maladumba also showed growth, with fresh quantities rising to 46 MT. Borno State witnessed substantial fish trade in smoked fish, with Tilapia and *Heterotis* leading in quantity. Smoked Tilapia reached 95,000 MT in 2023, while *Heterotis* was at 188,000 MT in 2023. Gombe State experienced a mixed trend with some species like *Clarias* showing reductions, while others, such as Tilapia, saw fluctuations in quantities across the markets. In the Northwest, Katsina State primarily traded Catfish and Tilapia, with a notable rise in 2024. Fresh Tilapia reached 2,113 MT in 2024, up from 2,000 MT in 2023. Kebbi State maintained substantial fresh fish trade, with 5,000 MT of Catfish and 6,000 MT of Tilapia traded in 2023. Zamfara State showed slight decreases in both fresh and smoked fish trade for species such as *Clarias*, Tilapia, and *Synodontis* in markets like T/Wada GUS and NATU. South-East Anambra State had high volumes of Catfish trade, particularly in markets like Ekwulobia, where fresh quantities dropped from 10,000 MT in 2023 to 600 MT in 2024. Smoked fish trade also saw declines in several markets, though some increases were observed in Otuocha for smoked Tilapia.

South-South, Akwa-Ibom saw relatively stable quantities of traded fish, with species like *Clarias* and Tilapia maintaining consistency in fresh and smoked volumes across markets such as Oron and Itam. Cross River markets recorded large quantities of smoked fish, with significant volumes of *Chrysichthys nigrodigitatus* increasing from 2,000 MT to 2,500 MT in 2024. Bonga fish also saw a significant jump in Beach market, from 20,000 MT to 24,000 MT for fresh fish. South-West, Ekiti State saw fluctuating quantities of both fresh and smoked *Clarias* and Tilapia species. While fresh *Clarias* volumes dropped slightly from 2,467 MT in 2023 to 1,948 MT in 2024, the smoked quantities slightly increased. Lagos State witnessed significant quantities of fresh Tilapia in Makoko, with a rise from 2,994 MT in 2023 to 10,457 MT in 2024, while smoked fish trade remained consistent. Ogun State displayed large smoked fish volumes, especially for *Clarias* spp., which saw a significant rise to 150,000 MT in 2024. Oyo State recorded substantial trade of *Clarias* and other species, with fresh quantities declining slightly but remaining high, as seen with *Clarias*, which fell from 30,500 MT to 25,000 MT from 2023 to 2024. The table provides a comprehensive overview of fish trade across the states, with varying trends in fresh and smoked fish quantities, reflecting shifts in demand, supply, and possibly environmental or economic factors affecting the fishing industry in these regions.

Table 14.7: Fresh and Smoked Fish Traded in the States

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
North Central						
Benue	Clarias	Agatu Mkt.	52	61	38	42
	Heterobranchus	Guma	39	43	26	38
	Tilapia	Guma	26	28	19	21
	Heteroclarias	Makurdi	71	85	43	52
	Clarias	Guma	48	51	36	40
	Heterobranchus	Buruku/Agat	32	35	18	22
	Mormyrus	K/Ala	15	18	10	12
	Synodontes	Mrk. Guma	11	15	8	9
	Lates	Guma	25	28	11.5	13
FCT	Clarias spp	Kado	2,379	32.6	356.9	4,630
	Clarias sp	Bwari	52	17.7	273	2,969
	Lates niloticus	Kado	76.4	9.19	5.1	13.1
	Gymnachus spp	Kado	38.2	11.1	12.7	13.1
	Heterobranchus spp	Kado	15.2	0	25.4	0
	Others	Kado	22.9	97.4	7.6	48.2
	Frozen fish	Kado	28.1	22.9	24.5	7.6
Kwara	Catfish	Obbo road	979.76	587.8	148.59	91.44
	Tilapia	Egbejila	121.2	107.3	90.5	84.3
	Catfish	Idi-ape	201.4	150.2	101.4	50.2
	Tilapia	Jebba	421.71	210.8	204	95.5
	Tilapia	Gbu-gbu	845.03	745.3	455	345
	Tilapia	Patiki	743.04	654.3	450	385
Nasarawa	Clarias spp		1000	1000	650	50
	Heterobranchus spp		1000	1000	7000	5600
	Heterotis		770	770	7000	3000
	Tilapia		770	770	4000	2000
Plateau	Clarias	Katako	1500	253	1500	253
	Heterobranchus	Kalorko	500	600	400	400
	Tilapia	Kugiya	2200	2300	2000	2100
	Mudfish	Namu	700	700	650	600
	Carp	Mangu	52	52	50	51
	Clarias	Jos town	3000	2300	2500	2000
	Tilapia	Bukuru	5000	4500	4500	3500
	Heterobranchus	Faju	1800	1500	1700	1200
	Mudfish	Shendam	1000	800	700	600
	Carp	Panyam	50	40	42	34
Taraba	Clarias spp	Lau	18,802.1	20,802.1	16,282.1	19,383.1
	Tilapia	Kunini	8.107	10.107	8.321	11.831
Sub-Total						

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
North-East						
Adamawa	Clarias	Bye-Pass	80	60	0	0
	Tilapia	Bye-Pass	95	80	0	0
	Carp	Bye-Pass	20	10	0	0
	Heterobranchus	Bye-Pass	70	60	0	0
	Clarias	Jambutu	0	0	135	90
	Tilapia	Jambutu	0	0	92	65
	Synodontis	Jambutu	0	0	80	72
	<i>Lates niloticus</i>	Jambutu	0	0	50	42
	Hetrotis	Jambutu	0	0	110	98
Bauchi	Clarias spp	M/Lawal	20.5	30.3	15000	20000
	Clarias spp	Misau	18.6	22.5	10000	12000
	Clarias spp	Azare	20	24.6	12000	10000
	Heterobranchus sp	M/Lawal	2.5	3.4	5000	4.500
	Clarias	Piro	35.6	40.7	30000	45000
	Bagrus bayad	G/Maiwa	6	7.2	2000	4000
	Heterotis	Zigau	10.5	10	3000	8500
	Alestes	Piro	20.6	22	10000	11000
	Tilapia	Maladumba	45	46	25000	27000
Borno	Clarias spp		5,000	0	16,000	0
	Tilapia		5,130	0	95,000	0
	Heterotis		890	0	188,000	0
	Alestes		670	0	576,000	0
Gombe	Clarias	Gombe	3,000	2,000	450	85
	Tilapia	Bajoga	2,000	25,000	350	30
	Heterobranchus	Gombe	50	120	28	15
	Heterotis	Dadin Kowa	10	5	25	10
	Tilapia	Gombe	100	150	95	100
	Clarias	Gombe	85	120	40	75
	Lates	Bajoga	25	85	35	25
	Alestes	D/Kowa	20	60	20	85
	Synodontis	D/Kowa	15	30	10	29
Yobe	Clarias spp	G/P/G	125	200	998	250
	Clarias(captured)	-	200	2100	1950	2500
	Tilapia spp	G/P/G	15	25	14	200
	Tilapia	-	950	1000	920	1,500
	Common carp	G/P/G	900	1000	950	1100
	Heterotis	-	500	650	600	780
	Trunk fish	-	400	450	600	720
Sub-Total			20,529.3	33411,7	994,552	145,375.5

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
North-West						
Katsina	Catfish	-	1688	0	1482	0
	Tilapia	-	2113	0	1892	0
	<i>Heterotis niloticus</i>	-	262	0	169	0
	Lung fish	-	158	0	72	0
	Lates	0	39	0	32	0
Kebbi	Catfish	0	5,000	0	0	0
	Tilapia	0	6,000	0	0	0
	Heterobronchus spp	0	3,000	0	0	0
	Nile perch	0	3,000	0	0	0
Zamfara	Clarias sp	I/Wada GUS	122	101	410	356
	Tilapia sp	NATU	95	85	215	192
	Synodontis	Colony	82	71	347	285
	Labeo spp	Dansadau	46	54	101	92
	Clarias sp	I/Wada GUS	56	49	200	182
	Tilapia sp	NATU	35	30	191	142
	Synodontis	Colony	37	29	180	163
	Labeo spp	Dansadau	24	23	192	85
Kano	Tilapia	Galadima	75	56	69	54
	Catfish	Railway Mkt.	83	71	57	64
	Tilapia	Court road	16	12	13	9
	Catfish	Court road	37	39	24	32
	-	Galadima rd.	55	56	42	49
	-	D/Tsalle	30	29	17	20
Sub-Total			22053	705	5705	1725

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
South-East						
Anambra	Catfish	Ekwulobia	10,000	600	6,000	2,000
	Catfish	Eke Awka	20,000	300	1,000	800
	Catfish	Afor Igwe	5,000	400	600	300
	Catfish	Nteje	500	100	300	4,000
	Catfish	Ose	4,000	2,000	3,000	1,000
	Catfish	Otuocha	3,000	1,000	400	3,000
	Catfish	Eke Awka	4,000	2,000	500	600
	Tilapia	Ose	3,000	900	800	900
	Tilapia	Otuocha	1,000	600	700	800
Sub-Total			50500	7900	13300	13400

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
Akwa-Ibom	Clarias spp	Oron &Uruan	625.2	626.4	341.32	341.04
	Tilapia	Itam	475.2	460.2	323.76	323.44
	Barracuda		10.21	8.20	6.85	6.81
	Bonga		25.19	25.78	25.92	24.02
	Catfish	Uruan	88.32	83.37	62.43	62.49
	Crayfish		411.32	617.35	116.32	106.32
	Croaker		119.3	120.6	65.42	62.42
	Grunter		15.76	15.70	9.17	7.17
	Horse Mackerel		6.43	6.38	4.18	4.26
	Mullet		15.72	14.70	5.13	5.18
	Ray		12.98	8.91	2.34	2.39
	Sardinella		65.35	41.30	51.32	56.72
	Shark		15.71	4.33	3.18	3.15
	Soles		24.52	13.72	6.85	6.76
	Snapper		17.98	13.28	8.52	8.50
	Thread Fins		12.05	11.55	3.18	3.29
Others		498.31	528.31	476.3	496.9	
Cross River	Clarias spp	Lag, Str.	100	96	950	890
	Clarias spp	Watt work	50	30	640	590
	Clarias spp	8 miles	25	10	200	260
	Clarias spp	Beach	200	150	730	641
	Clarias spp	Walk over	20	15	960	781
	Sole	Lag, Str.	140	100	750	1000
	<i>Chrysichthys spp</i>	Lag, Str.	2000	1500	2000	2500
	Snapper	Walk over	1000	1200	960	1000
	Bonga	Beach	20,000	24,000	14000	2000
	Barracuda	Beach	15000	10000	7000	6000
Rivers	Tilapia	Creek Rd.	100	100	3000	3500
	Mullet	Ovirokotor	200	210	4500	10000
	Catfish	Kaa	100	120	4000	5000
	Sardine	Light house	200	250	7000	7500
Sub-Total			41564.34	40381.1	48202.2	43182.9

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
South-West						
Ekiti	Clarias	Eja Aro	2.467	1.948	1,520	1,632
	Tilapia	Ipiya	0.506	0.962	305	574
	Clarias	Eja Aro	1.951	1.673	1,704	1,421
	Tilapia	Ipiya	0.262	0.196	402	398
Lagos	Tilapia	Makoko	2994	10,457	1178	2877
	Heterotis	Iwaya	1116	0	1253	0
	Chrysichthys	Iddo	816	7.456	1396	6.576
	Tapon	Law school	286	11.156	77	2,777
	Croaker	Langbasa	129	0	23	0
	Chrysichthys	Ajah	220	0	52	0
	Tilapia	Badore	255	0	186	0
	Ethmalosa	Jakande	150	0	23	0
	Tilapia	Better life	23.9	18.5	393	280
	Chrysichthys	Better life	27.8	-	15	0
	Bonga	Better life	10.26	6.2	510	230
	Barracuda	Better life	6.5	10	287	65
	Shinnynose	Better life	25	0	250	0
	Croaker	Oluwo	11.473	7.9	8.643	5.5
	Chrysichthys	Majoda	12.542	9.1	4.783	4.765
	Tilapia	Marina	11.241	9.0	3.111	2.898
	Ethmalosa	Erepoto	9.574	7.4	3.212	3.129
	Other species	Agbowa	9.285	6.6	2.864	2.112
	Croaker	New Market	10.6	0	3.3	2.3
	Sardinella	Aradagun	9.5	0	7.2	5.8
	Sole	Aradagun	8.2	0	4.2	3.4
	Shinny nose	Liverpool	5.9	0	1.5	1.0
	Barracuda	Liverpool	2	3.2	3.4	2.9
	Sole	Liverpool	1.5	1.6	20	15
	Prawn	Liverpool	40	3.1	20	15
	Grunter	Liverpool	21.5	2.5	3.1	2.0
	Croaker	Liverpool	60.5	5.1	2.6	2.1
	Sea snail	Liverpool	10.5	1.35	3.1	2.6
	Octopus	Liverpool	30	1.974	0	0
	Shrimp	Liverpool	0	1150	3.47	0
Red snapper	Liverpool	10	2.297	0	0	
Ray	Liverpool	7	0.81	0	0	

State	Fish species	Market Name	Quantity of fresh fish traded (MT)		Quantity of smoked fish traded	
			2023	2024	2023	2024
South-West (cont'd)						
Ogun	Clarias spp	Across state	200	210	130,000	150,000
	Tilapia	Across state	140	300	120,000	140,000
	Heterobranchus	Across state	0.3	0.25	200	230
	Clarias	Across state	800	500	20	20
	Heterobranchus	Across state	0.15	0.15	0.2	0.2
	Tilapia	Across state	600	350	10	15
	Momyrus	Across state	0.3	0.2	0.12	0.12
	Lates	Across state	0.3	0.2	0.1	0.1
	Bagridae	Across state	0.06	0.06	0.02	0.02
	Gymnachus	Across state	0.2	0.2	0.18	0.2
	Heterotis	Across state	0.3	0.3	0.2	0.2
	Snake head	Across state	0.1	0.1	0.03	0.03
	Crayfish/Lobster	Across state	0.3	0.2	0.2	0.1
Oyo	Clarias	-	30,500	25,000	18,000	16,500
	Tilapia	-	1,200	1,020	500	250
	Heterotis	-	600	400	200	105
	Lates	-	3,100	2,400	1020	1025
	Gymnachus	-	1800	1030	600	405
	Hepsetus	-	200	200	25	130
	Snake head	-	65	312	253	230
	Bagrus	-	140	150	18	32
	Chrysichthys	-	2800	1450	102	40
	Synodontes	-	120	108	15	25
	Prawn	-	453	412	352	320
	Sub-Total			49,056	45,571	279,282

Table 14.8 provides an extensive overview of various pests and diseases that affected fish production across different Nigerian states in 2023 and 2024, highlighting the impacted fish species, the severity of infestations, estimated losses, and the control measures undertaken. In North-Central, In Benue State, *Tilapia* in locations such as Gwer, Buruku, and Katsina Ala experienced light infestations of leeches, resulting in a minimal loss of 0.5%, with Trichlorfon used as a control measure. *Clarias* in Makurdi suffered from fin rot, leading to a 10% loss, while *Heterobranchus* in Agatu was affected by broken head disease, both of which were managed using antibiotics. In the Federal Capital Territory (FCT), *Clarias* in the Abuja Municipal Area Council (AMAC) experienced a moderate outbreak of an uncommon disease, causing a 30% loss, controlled with antibiotics and salt. Kwara State recorded moderate infestations of anchor worms in *Catfish* in Egbejila, leading to a 30% loss, which was managed through manual removal and the use of Dichlorvos. In Plateau State, *Catfish* suffered from dropsy across 17 local government areas (LGAs), causing a heavy loss of 45%, treated with Chloramphenicol. *Tilapia* in the same region was moderately affected by cotton wool disease, resulting in a 15% loss, controlled with copper sulfate (CUSO₄) treatment. North-East, In Adamawa State, *Clarias* species in Yola South faced moderate fungal infections, leading to a 20% loss, treated by disinfecting and cleaning water tanks. Bauchi State saw various diseases, including gill rot in *Clarias* in Bauchi, costing a 10% loss, controlled with formalin. Other diseases like costidiosis and columnaris affected *Heterobranchus* and *Clarias* respectively, resulting in 10% losses, treated with tetracycline.

In Borno State, gill rot affected *Clarias* and *Tilapia* in Maiduguri, with light losses of 10%, controlled using potassium permanganate (KMnO₄) and salt baths. Gombe State experienced moderate losses due to saprolegnia and gill rot in *Clarias* and *Tilapia* respectively, with formalin and salt baths as control measures. In Yobe State, *Clarias* in Damaturu and Potiskum were lightly affected by white spot and gill rot, with losses under 0.2%, treated with antibiotics. *Tilapia* in Potiskum was moderately affected by exophthalmia, leading to a 0.1% loss, controlled with antibiotics. North-West In Kano State, *Clarias* species faced columnaris and fungal infections, leading to light losses of 10% in different regions, treated with antibiotics and improved water quality. *Clarias* in Dawakin Kudu also suffered from anorexia, with a moderate loss of 30%, controlled with Vitamin C supplements. Sokoto State recorded moderate losses of 50% due to skin lesions in *Clarias*, treated with fungicides. Zamfara State experienced light bacterial infections in *Catfish* and *Tilapia* in Gusau, Mazadu, Bakura, and Talata Mafara, resulting in losses of 10% or less, managed with antibiotics. South-East In Anambra State, light infestations in *Tilapia* and moderate infestations in *Clarias* were reported, with estimated losses of up to 30%, controlled by chemotherapy and water quality management. Ebonyi State saw light infestations of saprolegniasis in *Catfish* in Afikpo, leading to a 2% loss, treated with lime, while *Tilapia* faced gill rot, resulting in a 3% loss. In Enugu State, *Tilapia* and *Heterobranchus* suffered from fin rot and broken head diseases, resulting in moderate losses treated with antibiotics. *Carp* and *Gymnarchus* were also affected by lernaea and broken head, causing up to 30% losses, controlled with potassium permanganate baths and improved diet. In Abia State, light infestations of leeches and dropsy affected *Tilapia* and *Catfish*, with minimal losses of up to 2%, treated with malachite green and antibiotics. South-South In Bayelsa State, *Tilapia* and *Catfish* suffered moderate outbreaks of fin rot and dropsy, leading to 50% losses in Yenagoa, controlled with antibiotics. Cross River State reported heavy losses of 50% in *Catfish* due to bird predation in Calabar Municipal, which was managed through netting. *Catfish* also experienced moderate infestations of *Trichoderma*, resulting in a 20% loss, treated with salt baths. Delta State saw light cases of dropsy and broken head disease in *Clarias* and *Heterobranchus*, causing 10% losses, treated with antibiotics. Edo State had moderate losses of 20% due to various conditions like bacteria, broken skull, swollen abdomen, gill rot, and anemia in *Catfish*, managed with antibiotics, water exchange, and saline solutions. South-West In Oyo State, light infestations of

predators, leeches, and snakes affected *Catfish*, *Tilapia*, and *Heterotis*, with minimal losses across the state. Diseases such as brushed mouth, swollen eye, and gill rot affected *Catfish* in Iddo, Egbeda, and Lagelu, with losses of up to 15%, treated with salt baths and antibiotics. Ekiti State saw light infestations of snakes, birds, and frogs affecting *Clarius* and *Tilapia* in Ado, Ikere, and Ikole, with losses of up to 10%, controlled by netting and manual removal. Hypoxia in *Tilapia* was also reported in Ido/Osi, with minimal losses controlled by Vitamin C treatment. Overall, the table demonstrates the wide range of pests and diseases impacting fish production across Nigeria, with varying degrees of severity and economic losses. Control measures ranged from antibiotics and salt baths to improved water management and manual removal, reflecting the efforts to mitigate the effects of these challenges on the aquaculture industry.

Table 14.8: Pest and Diseases of Cultured Fish

State	Fish spp. Affected	Pest/disease name	Location of incidence (LGA)	Severity (light, moderate, heavy)	Estimated loss %	Control measure(s) undertaken
North-Central						
Benue	Tilapia	Leeches	Gwer	Light	0.5	Application of Trichlorfon
	Tilapia	Leeches	Buruku	Light	0.5	Application of Trichlorfon
	Tilapia	Leeches	Katsina Ala	Light	0.5	Application of Trichlorfon
	Clarias	Fin rot	Makurdi	Light	10	Antibiotics
	Heterobranchus	Broken head	Agatu	Light	10	Antibiotics
FCT	Clarias	Uncommon	AMAC	Moderate	30	Antibiotics and Salt
Kwara	Catfish	Anchor worms	Egbejila	Moderate	30	Manual removal/Dichlorvos
Plateau	Catfish	Dropsy	17 LGAs	Heavy	45	Use of Chloramphenicol
	Tilapia	Cotton wool	17 LGAs	Moderate	15	CUSO ₄ Treatment
North-East						
Adamawa	Clarias spp	Fungal infection	Yola South	Moderate	20	Disinfection/cleaning of water tank
Bauchi	Clarias spp	Gill rot	Bauchi	Light	10	Formalin
	Heterobranchus	Costidiosis	Darazo	Light	10	Tetracycline
	Clarias	Columnaris	Misau	Light	10	Tetracycline
	Carp	Dropsy	Ganjuma	Light	10	Application of Chloramphenicol
	Clarias	Leeches	Bauchi	Light	10	Treatment with Lysol
	Clarias	Enteritis	Bauchi	Light	10	Regulation of feeding
Borno	Clarias	Gill rot	MMC	Light	10	KMnO ₄ , Salt bath
	Tilapia	Gill rot	MMC	Light	10	Salt, KMnO ₄
Gombe	Clarias	Saprolegnia	Y/Deba	Moderate	7	Formalin bath
	Tilapia	Gill rot	Y/Deba	Moderate	7	Salt bath
	Heterobranchus	Lernaea	Y/Deba	Moderate	20	Vitamin C
Yobe	Clarias	White spot	Damaturu	Light	0.2	Antibiotic
	Clarias	Gillrot	Damaturu	Light	0.15	Antibiotic
	Clarias	Gillrot	Potiskum	Light	0.15	Antibiotic
	Tilapia	Exophthalmia	Potiskum	Moderate	0.10	Antibiotic

State	Fish spp. Affected	Pest/disease name	Location of incidence (LGA)	Severity (light, moderate, heavy)	Estimated loss %	Control measure(s) undertaken
North-West						
Kano	Clarias spp	Columnaris	Kano North	Light	10	Antibiotics
	Clarias spp	Fungus	Kano South	Light	10	Ensure good water quality
	Clarias spp	Anorexia	Dawakin kudu	Moderate	30	Vitamin C
Sokoto	Clarias spp.	Skin lesion	Sokoto south	Moderate	50	Fungicide
Zamfara	Catfish	Bacterial	Gusau	Light	10	Antibiotic
	Catfish	Bacteria	Mazadu	Light	10	Antibiotic
	Catfish	Bacteria	Bakura	Light	10	Antibiotic
	Tilapia	Bacteria	Talata Mafara	Light	2	Antibiotic
South East						
Anambra	Tilapia		Awka south	Light	10	Chemotherapy
	Clarias		Ogbaru	Moderate	30	Water quality management
	Clarias		Njikoka	Moderate	20	Water quality management
Ebonyi	Catfish	Saprologniasis	Afikpo	Light	2	Use of Lime
	Tilapia	Gill rot	Afikpo	Light	3	Water management
Enugu	Tilapia	Fin rot	Oji Rivers	Moderate	13	
	Heterobranchus	Broken head	Uzo-uwani	Moderate		Antibiotic
	Carp	Lernaea	Ogungu	Light	5	Potassium Permanganate bath
	Gymnachus	Broken head	Ezeagu	Moderate	30	Improved diet
	Clarias	Dropsy	Ikam east	Moderate	40	Salt bath
Abia	Tilapia	Leech	Aba	Light	1	Malachite green
	Catfish	Dropsy	Arochukwu	Light	2	Antibiotics

State	Fish spp. Affected	Pest/disease name	Location of incidence (LGA)	Severity (light, moderate, heavy)	Estimated loss %	Control measure(s) undertaken
South-South (cont'd)						
Bayelsa	Tilapia	Fin rot	Yenagoa	Moderate	50	Antibiotic
	Catfish	Dropsy	Yenagoa	Moderate	50	Antibiotic
Cross River	Catfish	Birds	Calabar M.	Heavy	50	Netting
Delta	Catfish	Trichoderma	Calabar M.	Moderate	20	Salt bath
	Catfish	Trichoderma	Calabar S.	Light	10	Salt bath
	Clarias spp	Dropsy	Isoko south	Light	10	Antibiotics
	Heterobranchus	Broken head	Ughelli North	Light	10	Antibiotics
	Heterobranchus	Fin rot	Oshimili south	Light	10	Antibiotics
	Clarias	Broken head	Okpe	Light	10	Antibiotics
Edo	Catfish	Bacteria	Ikpoba-Okha	Moderate	20	Antibiotic
	Catfish	Broken skull	Ikpoba-Okha	Moderate	20	Improve water exchange Use of saline solution
	Catfish	Swollen Abdomen	Ikpoba-Okha	Moderate	20	Potassium permanganate
	Catfish	Gill rot	Ikpoba-Okha	Light	10	Formalin
	Catfish	Anemia	Ikpoba-Okha	Moderate	20	Multivitamins/Minerals
	Catfish	Parasites	Ikpoba-Okha	Moderate	20	Salt bath
South West						
Ogun	Catfish	Predators	Across the state	Light	0.2	Traps and nets
	Tilapia	Leeches	Across the state	Light	0.2	-
	Heterotis	Snakes	Across the state	Light	0.2	-
Oyo	Catfish	Brushed mouth	Iddo	Light	2.5	Salt bath
	Catfish	Swollen Eye	Egbeda	Light	10	Antibiotic
	Catfish	White Barbells	Oluyobe	Heavy	15	Antibiotic
	Catfish	Gill rot	Lagelu	Heavy	10	Antibiotic
	Catfish	Broken head	Akinyele	Light	10	Antibiotic
Ekiti	Clarias	Snakes	Ado	Light	10	Netting/Medication
	Tilapia	Kingfishers	Ikere	Light	10	Netting
	Tilapia	Frog	Ikole	Light	10	Netting
	Tilapia	Hypoxia	Ido/osi	Light	10	Vitamin C
	Clarias spp.	Snakes	Ado	Light	3	Provision of Nets
	Tilapia	Birds	Ikere	Light	2	Netting
	Tilapia	Frogs	Ikole	Light	1	Manual removal
	Tilapia	Hypoxia	Ido/Osi	Light	1	Vitamin C
Tilapia	Amphibians	Oye	Light	0.5	Manual removal	

15.0 AGRICULTURAL DEVELOPMENT PROGRAMME (ADPs) EXTENSION ACTIVITIES

15.1 Funding Situation

Agricultural Development Programmes (ADPs) usually cannot function properly without adequate funding. The major source of funding is usually handled by the State government. Also, ADPs sometimes receives funding from the Non-governmental Organizations. However, the participation of ADPs in the implementation of some projects organized by donor agencies usually attract additional funds for the ADPs. Some of the agencies were UAAID, SASAKAWA, IFAD, PALM WALLEY, AGRA, WISE, CEEPE, JICA, WOFAN, YMCA and Farm NET among others. Above all, Table 15.1 clearly shows the status of ADPs' funding of both 2023 and 2024 in the country. On the average, funding of the state ADPs in 2024 was better than 2023 with slight increase compared to 2023. The ADPs normally send their target funds to the state government, but they are not usually met 100%; which may be the reason why ADPs are not functioning as expected. Some states like Borno, Adamawa, Sokoto, Kebbi, Ebonyi, Rivers and Ondo did not provide their funding status. However, 20 States ADPs provided funding records as shown in the Table below 15.1.

Table 15.1: Status of ADP Funding in 2023 and 2024

State	2023			2024			
	Target (₦)	Achieved (₦)	%	Target (₦)	Achieved (₦)	%	% diff.
North-Central							
Kwara	16,351,120	11,351,120		9,414,047	6,036,458.75		
Niger	8,000,000	160,866,		9,500,000	-		
Nasarawa	222100	32836		272,100	40,456		222100
Taraba	272,384,782	207,2271,000		272,384,782	123,812,351		
Kwara	16,351,120.00	11,376,127.00	69.57	9,410,047.00	6,036,458.75	64.1	5.5
North-East							
Personal	217,750,000	191,200,000		--	230,900,000		
Overhead	30,000,000	27,500,000		--	27,500,000		
Capital	400,000,000	330,000,000		--	1,330,000,000		
Bauchi	258,390,628	172,260.4		258,390,628	-		-
Jigawa	600,000,000	2,784,000		800000000	7779961.43		
North-West							
Katsina	500,000,000	200,000,000		300,000,000	2,000,000		
Kano	414,972	467,003		414,972	414,972		
South-East							
Abia	12,000,000	8,000,000	100	12,000,000	8,000,000	100	
Ebonyi	640,500,000	-		10,000,000	-		
Enugu	7,200,000	3,600,000		12,000,000	4,000,000		

State	2023			2024			
	Target (₦)	Achieved (₦)	%	Target (₦)	Achieved (₦)	%	% diff.
South-South							
Akwa Ibom	21,180,000	2,000,000		21,180,000	3,000,000		
Bayelsa	10,000,000	400,000		10,000,000	500,000		
Edo	30,000,000	24,000,000		30,000,000	24,000,000		
Cross Rivers	395306	268253		183734	183734		
	513340	646460		438410	438410		
	3950000	500000		3950000	3508000		
South-West							
Overhead	8,000,000	5,400,000		25,000,000	10,000,000		
Capital vote	80,000,000	9,350,000		80,000,000	-		
Lagos	400,000,000	140000		560000000	180000000		
Osun	7,000,000	3,000,000		30,000,000	1,000,000		
Ogun	974488447.87	220861188.11	55.9	877,222, 692	339,668,137	22.7	

NOTE: There were no data from some states

15.2 Performance Indicators of ADPs

The effectiveness, efficiency and impact of Agricultural extension activities in 2024 have been measured using some specific indicators. The indicators assessed include number of farm families covered by extension agents, number of extension workers, number of visits by Village Extension Agents (VEAs), technology transfer and feedback mechanisms, strategies for technology dissemination, status/condition of farmers' group development and management, Extension Agent (EA)-farmer ratio and status of Farmer Field Schools (FFS) (Table 15.2).

Number of farm families

Farm families in agricultural extension refers to households or families actively engaged in farming activities and participating in Agricultural development programmes. They are the receivers of agricultural technologies in all farming communities. The more the farm family is reached, the more the adoption of agricultural technologies in the targeted communities. The report shows that Taraba State (288,000), Gombe (470,164), Kebbi (690,000), Akwa-Ibom (685,095), Edo (300,000), and Ekiti (255,000) met their targets on the number of farm families. Other states farm families include Plateau (4,840), Bauchi (1,987,925). Bayelsa (15,912), Rivers (80,000), Ondo (95,000) and Osun (216,000). This implies that as the number of farm families increases across the states, there is need for more extension personnel's recruitment to cover more farm families.

Number of extension workers

The Block Extension Agents (BEAs) and Village Extension Agents (VEAs) are the active extension workers for agricultural extension service delivery across the country. Therefore, the higher the number of VEAs and BEAs in any ADP, the better the extension coverage in the state. Every state ADP is generally classified into extension Cells/Circles, Blocks and Zones. A Cell/Circle is meant to be manned by a VEA for their close contact with the farmers while the BEA plays a vital role in delivering agricultural extension services to farmers at block level. Generally, there was shortage of extension agents across the country compared to the targets as reported below; though, there was slight improvement in the number of extension workers in 2024 compared to the previous year. The number of extension workers were 120, 350, 150, 61, 50, and 135 in states like Kwara, Niger, Taraba, Adamawa, Gombe and Kebbi respectively. States like Kogi, Nasarawa, Plateau, Yobe, Jigawa, Kano, Sokoto, Zamfara, Abia, Cross river, and Delta had no record of extension workers. However, this result implies that there is need for more extension workers in most states.

Farm visits by VEAS

Farm visits are crucial components of agricultural extension services, enabling extension agents to identify farm needs, assess farm condition and provide advisory services to his clients. Farm visits is an important function of VEAs. Therefore, technology transfer is dependent on them. VEAs and BEA as well as women in agriculture (WIA) are supposed to visit farmers for four (4) days per week. Hence, VEAs/BEAs visit per year is estimated by multiplying the expected number of working weeks for each VEA/BEA by 4. The state aggregated number of visits is estimated by multiplying the result obtained by the number of VEAs/BEAs in the state. It must be noted that when extension workers are domiciled in their areas of coverage, it usually enhanced the number of farm visits since mobility is a challenge. The report shows that Gombe State (2,860), Akwaibom (2,103), Ekiti (8,000), Ondo (900) and Osun (230,000) recorded the highest number of farm visits in 2024. Other states include Kwara (0), Adamawa (4), Katsina (256), and rivers (48) recorded low visits compared to previous years.

Technology/knowledge sharing, transfer and feedback mechanism

Sharing of technology among ADP workers, is carried out through Monthly Technology Review Meeting (MTRM) and Fortnightly Trainings (FNT). Also, MTRM provides opportunity for researcher to interact with the Subject Matter Specialists (SMSs) while FNT is an avenue where the SMSs, VEAs, BESs and BEAs interact together. Although, MTRM and FNTs are not held regularly due inadequate funds reported by ADPs across the country. In 2024, record of MTRM shows that only Taraba (3), Gombe (4), Bayelsa (3), Edo (4), Rivers (3) and Ekiti (5) conducted MTRM. The record showed that there was low dissemination of improved agricultural technologies in the year under review. FNT is supposed to be conducted for about 26 times in a year but only Akwaibom (17), Bayelsa (3), Edo (14), Rivers (12), Ekiti (8), Ondo (16) and Osun (18) were able to conduct below 20 FNT in 2024. Over Fifty percent (50%) of the States did not conduct FNT in 2024. This implies that there was a big gap between the National Agricultural Research Institutes (NARIs) and the ADPs thereby, making frontline extension workers not to have access to new research technologies.

Technology dissemination strategies (OFAR, MTP, SPAT)

Technology dissemination strategies refer to the methods and approaches used to promote the adoption of new technologies among farmers. Technology dissemination to farmers is demonstrated through On-Farm Adaptive Research (OFAR), Management Training Plot (MTP) or the Small Plot Adaptive Technique (SPAT). OFAR, MTP and SPAT are farmer-managed but mostly funded by the ADPs, especially in provision of inputs, technical back-up and logistics. Hence, the number of OFAR, MTP or SPAT established by the ADP depends on availability of funds. ADPs were requested to supply the number of each of the trials as well as the number of replicates. Only Benue (121), Niger (21,000), Ekiti (50), and Ondo (6) reported OFAR activities. SPAT information reveals the following: Benue (70), Ekiti (50,000), Adamawa (165), Katsina (200), Akwaibom (680), Bayelsa (112) Edo (5671), Ondo (170), and Osun (24). Information on number of MTPs established across each state indicates Benue (105), Akwaibom (30), Rivers (3), Ondo (8) and Osun (2). Also, some states (Kogi, FCT, Kwara, Nasarawa, Plateau, Taraba, Kano and Enugu) had no report on OFAR, MTP and SPAT in 2024. The data provided revealed a slight decline in the activities compared to previous years. This implies that there was poor technology dissemination delivery in 2024.

Farmers' groups development and management

Farmers' group development and management plays a vital role in enhancing the effectiveness of agricultural extension programmes. It enhances improved outreach coverage, farmers' participation and increases adoption of new technologies. This will ensure that EAs cover more farmers within the state. Also, this saves more time and energy as well as good management of farmers. Data provided by states across the country indicated the following number of farmers group: Benue (876), Niger (300), Plateau (400), Taraba (200), Gombe (2,500), Akwaibom (108), Bayelsa (5), Edo (513), Ekiti (55), Ondo (82) and Osun (316) respectively. Gombe state had the highest farmers' group. The report showed increase in the number of farmers group compared to the previous year.

Extension agent: farm family ratio (EA: FF)

Extension agent: farm family ratio (EA: FF ratio) measures extension service coverage and indicates the capacity of the extension agents. The extent performance of village extension agent (VEA) is measured

by the number of families covered by the VEA. The EA: FF ratio for a state is estimated by dividing the number of farm families by the sum of VEA and BEA. Realizing the recommended ration of 1:800-1000 has not been easy over the years due to the gross inadequate of the number of VEAs despite the increase in the number of farmers in the states. This is the reason why most of the states that provided data had high EA: FF ratio. Data recorded shows that Gombe state had 1:35,000, Katsina (1:7,197), Kebbi (1:4,600), Akwaibom (1:24,468), Bayelsa (1: 3292) , Edo (1:6250), Ekiti (1:5732), Ondo (1:4186) and Osun (1:8800). Poor EA:FF ratio, as indicated in the table below can result in overworking the VEAs and BEAs, thereby reducing farmers' access to information and also decrease adoption of new technologies.

Trainings of farmers

Farmers' training is crucial for improving agricultural productivity. Training and re-retraining of farmers is a pre-requisite for technology adoption. Therefore, farmers' knowledge and skills need to be increased from time to time. This is only possible through regular trainings and re-retraining of farmers in the rural areas. Also, the activeness and performance of farmers' cooperatives is usually sustained through trainings whenever funds are available. The number of farmers trained in 2024 indicates that, Benue trained 1,300, Gombe (2,315), Katsina (400), Akwa-Ibom (320), Rivers (2,800), Ekiti (7,542), Ondo (900) and Osun (9,500). Compared to previous years, training of farmers greatly reduced. This may be due to poor funding. However, many states did not indicate farmers trained in 2024.

Status of Farmer Field Schools (FFS)

Farmers Field School (FFS) is a participatory and experimental learning approach that empowers farmers to improve their agricultural practices. It can also be considered as a form of adult education. It focuses on building farmers capacity to make well-informed crop management decision through increased knowledge and understanding of the agro-ecosystem. Farmer Field School Approach in most states have not been documented as shown in the record. Benue recorded 121, Katsina (20), Ekiti (39) and Osun (30). The few states that provided data on status of FFS indicated that FFS as an extension approach is yet to be fully adopted as an extension approach.

Table 15.2a: Extension Activities /Workers in the North-Central Zone

State	Years	Target/ Achievement	№ of Farm Families	SMSs	BES	BEAs/WIAs	VEAs	MTRMs / QTRMs	FNTs/NTs	VEAs' Visits	OFARs	SPATs	MTPs	№ of Groups /Coops	EA/ Farmer Ratio	№ of farmers Trained	№ of farmers field schools	Directors	Deputy Director	Assist Director	Zonal Manager	Enumerators	No of Zones	
Benue	2023	Tar	79,000	15	43	43	344	12			105	90	120	1000	1:800	1050	105	8	8	8	3	45	3	
		Ach	-	6	2	2	3	-			105	60	100	300	-	1050	105	8	7	6	3	0	3	
	2024	Tar	79,000	15	43	43	344	-			140	100	120	1000	1:800	1400	140	9	9	9	3	45	3	
		Ach	-	2	0	0	0	-			121	70	105	876	-	1300	121	9	5	4	2	0	3	
Kwara`	2023	Tar	400,000	16	-	50	Nil	12	24	24				50	1:500				3	4	4	4	40	
		Ach	300,000	16	-	50	Nil	2	8	10				20	1:1000				3	4	4	4	16	
	2024	Tar	-	16	12	50	400	-	-	-				-	-				4	5	4	4	40	
		Ach	-	16	12	50	120	-	-	-				-	-				3	4	4	4	28	
Niger	2023	Tar	4,034,413	5	46	46	365	12	24		60,000			150	1:800			2	2	2	3	45	3	
		Ach	1,034,413	5	46	24	179	-			21000			200	1:200			2	2	3	3	19	3	
	2024	Tar	-	5	46	46	365	-	-		60000			200	1:800			2	2	2	3	45	3	
		Ach	-	5	40	40	350	-	-		21000			300	1:200			2	2	2	3	22	3	
Taraba	2023	Tar	288,000	32	60	70	288	12				-	64	240	1:1000			7	17	28	4	200	4	
		Ach	288,000	24	20	40	150	-				-	48	167	1:400	1:400		7	9	15	4	100	4	
	2024	Tar	288,000	32	60	70	288	12				40	64	240	1:1000			7	17	28	4	200	4	
		Ach	288,000	24	20	40	150	3				-	0	200	1:400			7	9	15	4	100	4	

Ach = Achieved; Tar = Targeted

Table 15.2b: Extension Activities/Workers in the North-East Zone

State	Years	Target/Achievement	Nº of Farm Families	SMSs	BES	BEAs/WIA	VEAs	VEAs' Visits	MTRMs / QTRMs	Directors	Deputy Directors	Assistant Directors	Zonal Manager	Nº of Groups /Coops	EA/Farmer Ratio	Nº of farmers Trained	Nº of farmers field schools	Enumerators	No of zones	SPAT's	FNTs	MTTPs	
Adamawa	2023	Tar	-	8	46	46	61	4	-	1	1	1	4	-	1:10,000	-	-	60	4	125	-	-	
		Ach	-	8	46	46	61	4	-	1	1	1	4	-	1:10,000	-	-	32	4	125	-	-	
	2024	Tar	-	8	46	46	61	4	-	1	1	1	4	-	1:10,000	-	-	60	4	165	-	-	
		Ach	-	8	46	46	61	4	-	1	1	1	4	-	1:10,000	-	-	30	4	165	-	-	
Bauchi	2023	Tar	-	24	50	60	500	-	-	8	9	9	3	-	1:800	-	-	-	3	-	24	3,500	
		Ach	-	24	37	29	185	-	-	7	9	8	3	-	1:3800	-	-	-	3	-	6	2870	
	2024	Tar	3,000,000	30	50	60	500	-	-	8	9	9	3	-	-	-	-	-	-	-	-	-	-
		Ach	1,987,925	24	49	26	182	-	-	8	9	8	3	-	-	-	-	-	-	-	-	-	-
Borno	2023	Tar	-	12	162	-	975	-	-	6	9	9	3	-	-	-	-	54	-	-	-	-	
		Ach	-	3	0	-	215	-	-	6	6	6	3	-	-	-	-	8	-	-	-	-	
	2024	Tar	-	12	162	-	975	-	-	6	9	6	3	-	-	-	-	54	-	-	-	-	
		Ach	-	1	5	-	123	-	-	6	6	6	3	-	-	-	-	2	-	-	-	-	
Gombe	2023	Tar	465,446	11	66	139	463	24,510	12	6	6	105	11	-	1:800	-	-	55	-	-	-	-	
		Ach	465,446	0	0	14	42	5,600	3	6	6	22	11	125	1:9499	-	-	6	-	-	-	-	
	2024	Tar	470,164	11	66	139	463	26,300	12	6	6	105	11	-	1:800	-	-	55	-	-	-	-	
		Ach	470,164	0	0	10	50	2,860	4	6	6	11	11	2500	1:9403	2,315	75	10	-	-	-	-	

Ach = Achieved; Tar = Targeted

Table 15.2c: Extension Activities/Workers in the North-West Zone

State	Years	Target/Achievement	№ of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEAs' Visits	MTRMs / QTRMs / FNTs/MTs	OFARs	SPAT's	MITs	№ of Groups /Coops	EA/Farmer Ratio	№ of farmers Trained	№ of farmers field schools	Directors	Deputy directors	Assistant Director	Zonal Managers	Enumerators	No of zones
Kano	2023	Tar		50	176				4	300		1200	800	1:800	1500	42	8	22	48	3	99	3
		Ach		50	176				3	-		1200	900	1:9000	-	42	8	22	48	3	99	3
	2024	Tar		50	176				-	-		-	-	-	-	-	8	22	48	3	99	-
		Ach		50	176				-	-		-	-	-	-	-	8	22	48	3	99	-
Katsina	2023	Tar		18	34	272	506	360	12	24	506	10		1:800	100,000	50	8	9	11	3	68	3
		Ach		6	34	272	506	256	-	-	-	-	-	1:7197	300	20	8	9	2	3	-	3
	2024	Tar		18	34	272	506	360	12	24	506	10		1:800	100,000	50	8	9	11	3	68	3
		Ach		6	34	272	506	256	-	-	200	-	-	1:7197	400	20	8	9	2	3	-	3
Kebbi	2023	Tar	690,000	8	30	340	500							1:4600			6	15	15	4	100	4
		Ach	690,000	8	30	17	135							1:4600			6	15	15	4	20	4
	2024	Tar	690,000	8	30	340	500							1:4600			6	15	15	4	100	4
		Ach	690,000	8	30	170	135							1:4600			6	11	10	4	20	4

Ach = Achieved; Tar = Targeted

Table 15.2d: Extension Activities/Workers in the South-East Zone

State	Years	Target/Achievement	№ of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	MTRM / QTRMs	FNTs/MTs	OFARs	SPATs	MTPs	№ of Groups /Coops	EA/Farmer Ratio	№ of farmers Trained	№ of farmers field schools	Directors	Deputy Directors	Assist Directors	Zonal Managers	Enumerators	
Anambra	2023	Tar																					
		Ach																					
	2024	Tar																					
		Ach																					
Ebonyi	2023	Tar	1000000	15	24	26	500	22133	12	26		5130	515	25000	-			13	2	-	3	29	
		Ach	622000	15	24	26	103	16000	-	17		1545	206	5000	-			10	-	-	3	8	
	2024	Tar	1000000	20	24	26	300	20000	12	26		5139	515	25000	-			13	-	-	3	-	
		Ach	820000	15	24	26	44	14120	-	17		1350	184	1000	-			10	-	-	3	-	
Enugu	2023	Tar		6	26	260	300	-	-	-	-	-	-	-	-	-	-	6	6	6	6	6	
		Ach		6	23	23	0	-	-	-	-	-	-	-	-	-	-	-	6	6	0	6	0
	2024	Tar		6	26	260	300	-	-	-	-	-	-	-	-	-	-	-	6	6	6	6	6
		Ach		6	21	21	0	-	-	-	-	-	-	-	-	-	-	-	6	6	0	6	0

Ach = Achieved; Tar = Targeted

Table 15.2e: Extension Activities/Workers in the South-South Zone

State	Years	Target/Achievement	No of Farm Families	SMSs	BES	BEAs/WIAs	VEAs	VEA Visits	MTRMs / QTRMs	ENTs/MTs	OFARs	SPATs	MTPs	No of Groups /Coops	EA/Farmer Ratio	No of farmers Trained	No of farmers field schools	No of Zones	Director	Deputy Director	Assistant Director	Zonal Manager	Enumerators	Number of zones
Ak/Ibom	2023	Tar	685,095	30	40	40	274	12,480	12	26		2,645	106	640	1:2,500	500		6	8	8	8	6	-	
		Ach	685,095	27	40	18	66	3,073	-	26		1,010	20	188	1:12,926	282		6	8	0	0	6	-	
	2024	Tar	685,095	30	40	40	274	10,816	-	26		2,225	104	416	1:2,500	500		6	8	8	8	6	-	
		Ach	685,095	27	33	28	47	2,103	-	17		680	30	108	1:24,468	320		6	8	0	0	6	-	
Bayelsa	2023	Tar	95494	12	8	8	174	-	3	24		1099	30	50	1:549	50	180					3	32	-
		Ach	-	3	0	0	30	-	3	8		177	-	5	1:325	-	-					3	14	-
	2024	Tar	95474	12	8	8	174	-	3	24		1099	29	60	1:549	-	-					3	32	-
		Ach	15912	3	0	0	29	62	3	3		112	-	5	1:3292	-	-					3	0	3
Delta	2023	Tar	545989	12	25	25	200	4460	12	24			9		1:1000				1	4	-	3	50	3
		Ach	340079	12	25	25	120	550	1	12			6		1:5199				1	4	-	3	9	3
	2024	Tar	545989	12	25	25	200	4460	12	24			9		1:1000				1	4	-	3	50	3
		Ach	8400	12	22	15	103	550	1	12			-		1:5199				1	3	-	3	8	3
Edo	2023	Tar	300,000	9	36	36	288		12	26				250	1:800	2			1	1	-	3		3
		Ach	300,000	7	22	-	26		4	14					192	1:6,250	-			1	-	-	3	
	2024	Tar	300,000	9	36	36	288		12	26				250	1:800	2			1	1	-	3		3
		Ach	300,000	8	19	-	27		4	14		5671		513	1:6,250	1			1	-	-	3		3
Rivers	2023	Ta	900,000	3	-	-	283	96	12	24			3	999	1:12,500	2,000	-	3	1	1	-	3	60	
		Ach	80,000	3	-	-	72	48	3	12			3	999	1:1111	2,800	-	3	1	1	-	3	-	
	2024	Tar	900,000	3	-	-	283	96	12	24			3	999	1:1111	2,000	-	3	1	1	-	3	-	
		Ach	80,000	3	-	-	72	48	3	12			3	999	1:1111	2,800	-	3	1	1	-	3	-	

Ach = Achieved; Tar = Targeted

Table 15.2f: Extension Activities/Workers in the South-West Zone

State	Years	Target/Achievement	Nº of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	MTRMs / QTRMs	FNTs/MTs	OFARs	SPATs	MTPs	Nº of Groups /Coops	EA/Farmer Ratio	Nº of farmers Trained	Nº of farmers field schools	Directors	Deputy Director	Assistant Director	Zonal Managers	Enumerators	No of Zones
Ekiti	2023	Tar	200000	16	16	16	112	24575	12	24	320	200000		100	1:1000	20000	70	10	10	10	3	32	3
		Ach	200000	10	16	12	30	10250	4	8	47	150000		45	1:3100	8250	30	10	6	6	3	4	3
	2024	Tar	255000	16	16	16	128	26000	12	24	320	200000		120	1:1000	25000	90	10	10	10	3	32	3
		Ach	255000	14	16	12	38	8000	5	8	50	50000		55	1:5732	7542	39	10	6	6	3	2	3
Ondo	2023	Tar	501,428	16	18	18	256	1,920	12	24	-	1000	10	248	1:725	-	-	1	1	1	4	18	4
		Ach	100,000	10	18	11	43	1,100	1	24	-	200	6	82	1:2,450	-	-	1	1	-	4	1	4
	2024	Tar	501,428	16	18	18	256	1,920	12	24	20	1000	10	248	1:725	180,000	-	1	1	1	4	18	4
		Ach	95,000	7	18	14	41	900	-	16	6	170	8	82	1:4,186	900	-	1	1	-	4	1	4
Osun	2023	Tar	256000	12	46	46	256	430000	12	24		60	30	620	1:1200	24000	155	5	5	5	3	30	3
		Ach	186000	3	12	12	12	230000	-	20		30	3	248	1:8533	10500	62	5	1	0	3	4	-
	2024	Tar	256000	12	46	46	256	430000	4	24		60	30	620	1:1200	24000	155	5	5	5	3	30	12
		Ach	216000	3	12	12	12	230000	-	18		24	2	316	1:8800	9500	30	5	1	0	3	4	-

Ach = Achieved; Tar = Targeted

15.3 List of Technologies under OFAR, MTP, SPAT

The On-farm Adaptive Research (OFAR), Management Training Plots (MTPs) and Small Plot Adoption Techniques are usually the routine activities carried out by the ADPs in demonstrating and disseminating improved agricultural practices and technologies to farmers. Immediate field problems are usually solved by these activities. Every ADP design its own activities on OFAR, MTPs and OFAR SPAT which is the more reason why each state is different from another. These activities include sustainable rice production, evaluation of planting techniques on rice and variety response of sweet potato to soil nutrients. Others include post-harvest management, sunflower varietal trial, extra early maturing groundnut variety, sole cassava production using Akilimo tool, Maize/cassava intercropping using Akilimo tool, bio security in livestock, and dry season vegetable farming under irrigation among others. Each technology is expected to be replicated in ADP zonal offices across the state. Many ADPs had no complete record list of technologies conducted, while some had no record at all. Table 15.3 shows that only Ondo, Lagos and Bayelsa ADPs reported complete list of technologies conducted under OFAR, MTP and SPAT. In general, only 16 states gave information on record of technologies tried under OFAR, MTP and SPAT respectively.

Table 15.3: List of Technologies Tried Under OFAR, MTP and SPAT

State	OFAR	MTP	SPAT
North-Central			
Plateau	-	Maize spacing Soya bean Fertilizer application	-
Benue	-	Sustainable rice production	Sustainable rice production GAP
Nasarawa	On-farm Sesame variety trial. Evaluation of planting techniques on rice yield Variety response of sweet potato to soil nutrient Effect of intercropping timing on the yield of cereal	Rice Maize	-
North-East			
Adamawa	-	-	Climate Smart Regenerative Organic Pesticides Biomass
Yobe	Farmer Fields Schools	-	Fertilizer application Spraying techniques Erosion control Post-harvest management
North-West			
Kano	Technology introduction Seed introduction	Variety introduction GAP	
Katsina			Fertilizer application
Zamfara	Sunflower varietal trial. Quality Protein Maize. Samsorgh 45 and Samsorgh 49. Extra Early G/nut Variety		System Rice Intensification Use of quality protein
South-East			
Anambra	Fruit abortion in tree Fungal attack in cocoyam production	-	Yam minisett Cassava mult Vegetable production

State	OFAR	MTP	SPAT
South-West			
Ogun		Sole cassava production using Akilimo tool Maize/cassava intercropping using Akilimo tool Bio security in livestock production Early detection of disease on cassava control using nuru app Dry season vegetable farming under irrigation Climate smart agriculture Backyard farming to ensure food security	
Ondo	Evaluation of the use of organic and inorganic fertilizer for yam Evaluation of local fish waste as replacement for imported fish meal Evaluation of sundried poultry litters as feed for pigs	Plantain intercrop Cassava Maize (Opp) Cassava (Sole)	Onion Production Tomato Production Maize production Vegetable Production Cassava production Cowpea production
Ekiti		Combating army worm in maize and rice Sheep and goat fattening	Fertilizer application to crops Seed yam production Optimum plant population OFST Introduction to PBR cowpea Rehabilitation of cocoa
Osun		Cropping spacing Pest control in cowpea	Cropping spacing Pest control in cowpea
Lagos	Appropriate fertilizer for tomato	practice of TMS Cassava variety Planting of maize Rearing of male Tilapia in concrete pond	Optimum plant population Use of organic fertilizer

State	OFAR	MTP	SPAT
South-South			
State	OFAR	MTP	SPAT
Akwa-Ibom	-	Cassava/maize/vegetable Swamp rice Poultry production Concrete fish pond Yam/maize/vegetables Plantain/banana Forest vegetables	Cassava/maize/vegetables Dry season vegetables Swamp rice Poultry production Yam/maize/vegetables Plantain/banana/cocoyam Artificial brooding of local chicks Processing and utilization of agro products Pig production Concrete fish pond Forest vegetable
Cross Rivers			Cassava, maize Row planting. Boiling of rice Sole cropping of Cassava. Oil palm nursery. Good farm management Role planting of rice Establishment Yam miniset
Bayelsa	Storage of cassava stem during flood Demonstration of confectionaries	Brooding of local chicks Homestead fish Snail farming	Cassava/maize intercrop Production of swamp rice Plantain/cocoyam intercrop Fish processing
Edo	Evaluation of the growth and yield of three maize varieties in the three agro-ecological zones in Edo state	-	-
Rivers	-	Yam miniset Dry season vegetation	Yam miniset Cassava/ Maize Homestead fish pond Dry season vegetation Sheep/Goat Production

15.4 Radio Programs

Disseminating agricultural extension messages in both rural and urban areas are usually through radio broadcasting. Radio is a communication tool recognized as a means of reaching out to rural farmers. Agricultural programs aired on the radio in different states in 2023 and 2024 are shown on Table 15.4. It is very clear that, there was a reduction in the number of agricultural programs aired on radio across the states in 2024. The reason for this was due to poor funding of the ADPs. However, some states like FCT, Benue, Niger, Adamawa, Bauchi, Borno, Gombe, Yobe, Katsina, Ekiti, Kano, Nasarawa, Zamfara, Enugu, Akwa-Ibom, Bayelsa and Ondo reported agricultural radio programs in 2023 and 2024 (Table 15.4). The table shows that the Northern states had more radio programs aired in comparison with the Southern states. It implies that, many farmers, even in the rural areas could have accessed radio programs which must have sensitized and provided awareness to various technologies and innovations for increased farm yield productivity and farmer's livelihood.

Table 15.4: Radio Programs (Agriculture) Aired in 2024

State	Programmes title	Number Proposed		Number Achieved		Time aired	Station aired	Programme duration	Language	Cost of airing per annum	Sponsor
		2023	2024	2023	2024						
North-Central											
FCT	Agric scope	26	26	10	11	6:30pm	-	-	-	-	-
Benue	The New farmer					12 pm	RB.95	30mins	English	3,840m	GIZ
Nasarawa	Wealth Alternative	48	48	40	25	6:30pm-7:30pm	NBS	30mins	English	500,000	NBS
	Mu Koma Gona	48	48	48	35	3:00pm	NBS	30mins	Hausa	100,000	NBS
Niger	Noma Babar Sana'a	56	56	0	0	3.30	Crystal radio	25mins	Hausa	300,000	Namda
North-East											
Adamawa	Noma	52	52	52	52	5.30pm	ABC	50min	Hausa		NGOs
	Hadomi Malafa	52	52	50	51	4.35pm	GOTL	30 mins	Hausa		NGOs
	Agric digest	52	52	48	45	1.30pm		30mins	Hausa		Usako radio
Bauchi	Akoma gona	52	52	52	32	6.30pm	BRC	30mins	Hausa	702,000	BSADP
	Nomad a Raya kadara	52	52	52	32	7pm	Albarka radio	30mins	Hausa	1,404,000	BSADP
Borno	Kasurara	24	24	12	-	7pm	-	1.30mins	hausa		
-Gombe	Postharvest	-	-	-	3	10-11	-	1 Hour	Hausa	-	Harvest Plus
	GAP	-	-	-	3	10-11	-	1 Hour	Hausa		-
Yobe	Saurauran manoma	24	24	24	24	4pm	YBC	1 Hr	Hausa	200,000	ADP
North-West											
Kano	Gona	15	-	15	-	8am	ACTV	1hour	Hausa		KSADP
Katsina	K/S Noma	24	24	24	18		SKKR	30	Hausa		KTAR
Zamfara	Kusaurara manoma	52	52	24	24	Sat/Tue	Radio Zamfar	30mt	Hausa	500,000	ZADP
South-East											
Ebonyi	KusauraraManoma Noma babbar samaa	14	14	3	8	4hours	Deam fm	4hours	Igbo/english	250,000	ADP

State	Programmes title	Number Proposed		Number Achieved		Time aired	Station aired	Programme duration	Language	Cost of airing per annum	Sponsor
		2023	2024	2023	2024						
Enugu	KusauraraManoma										
	Noma babbar samaa	14	14	3	8	4hours	Deam fm	4hours	Igbo/english	250,000	ADP
South-South											
Akwa-Ibom	Radio farmer	104	104	-	-	6.30 pm	AKBC	15 mins	English/Efik	N5,000,000	AKSG
Edo		-	52	-	-	6.30pm	EBS	30mins	PIDGIN	-	-
Bayelsa	Swamp rice production	4	5	4	5	11am	93.1 fm	30 mins	English	20,000	ADP
South-West											
Ekiti	Agbeloba	315	315	76	315	5.45am	BSES	10mins	Yoruba	100,000	EKSG
Ondo	Kajiekayo	13	-	13	13						
	Jingles	40	-	40	40						

Note: There were no data from 7 states

15.5: Television Programmes

Television is another communication medium for dissemination of proven agricultural information and technologies after radio. It passes both moral, immoral, pictures and audio messages. Its unique characteristic is the consequent demonstrative power of Television which is a living testimony of its capacity to sensitize, convince and mobilize its audience socially, morally, psychologically, emotionally and otherwise. Television offers a great avenue for disseminating agricultural information to farmers. Such programmes are meant to create awareness and showcase successes in agricultural technology adoption. Table 15.5 provides information on such agricultural programmes aired in different States in 2023 and 2024. States like Bauchi, Borno, Katsina, Ekiti, Niger, Nasarawa, Adamawa, Kano, Sokoto, Enugu, Edo and Bayelsa provided information on agricultural programmes televised in 2023 and 2024 respectively. There was more of such programmes by the ADPs in Northern zones than the Southern parts of the country as shown in 2023 and 2024 records. This implies that the farmers in the Northern parts of the country in 2023 and 2024 could have been more exposed to new technologies and practices which could be assessed through television programme.

Table 15.5: Television programmes aired in different States in 2024

State	Programmes	No. Proposed		No. achieved		Time of Airing	Station Aired	Programme duration	Language	Cost of Airing per annum	Sponsor
		2023	2024	2023	2024						
North-Central											
Niger	-	56	56	0	0	2.30pm	NTA	25mins	English Hausa	2,000,000	NAMDA
Nasarawa	Noma Turshi Arziki	48	48	48	40	4:00pm-4:30pm	NBS	30mins	Hausa	550000	NBS
North-East											
Adamawa	Noma	52	52	45	40	5.30pm	ATV	30mins	Hausa		
Bauchi	Noma Tushen Arziki	52	52	52	32	7pm	BATV	30mins	Hausa	786,000	BSADP
	Akoma gona	52	52	52	32	7.30pm	NTA	30mins	Hausa	860,000	BSADP
Borno	FRN	10	10	8	-	3pm	BCT	1hour	haus		Fadama
North-West											
Kano	Noma da kamu	6	-	6	-	7am	ACTV	30mins	Hausa		
Katsina	Naduke	24	24	24	18		KTV	30mins	Hausa		KTGO
Kaduna											
Sokoto	Na Duke	8	8	-	-	8:30	Rima TV	30mins	Hausa	600000	ADP
South-East											
Enugu	-	4	4	1	2	1.50mins	Afia	1.30 mins	English	120,000	ADP
Anambra	Ozu ugpo	5	4	2	1	7pm	ATS	1hr	Igbo	250000	
South-South											
Edo	Farming Hint	-	52	-	-	6.30 pm	EBS	30mins	pidgin	-	-
Akwa-ibom	The farmer	52	52	-	-						
Bayelsa	Agric home discussion	2	3	2	3	8am	NTA	1hr	English	30,000	ADP
South-West											

State	Programmes	No. Proposed		No. achieved		Time of Airing	Station Aired	Programme duration	Language	Cost of Airing per annum	Sponsor
		2023	2024	2023	2024						
Ekiti	Lahere	54	54	54	54	5.30pm	EKTV	30mins	Yoruba	100,000	EKSG
Ondo	Obalagbe	10	10	10	10						

Note: There were no data from 9 states

15.6 Problems Affecting the Effective Performance of ADPs in Nigeria

The primary aim of Agricultural Development Programme (ADP) is to improve the overall wellbeing of farmers, agricultural communities and the broader economy. The farmers are usually the targets because they are the backbone of the agricultural sector, playing a crucial role in food security, poverty reduction and economic growth. Unfortunately, the ADPs are usually underfunded, making it impossible for them to carry out these functions effectively. Table 15.6 showed that inadequate funding was generally the major problem affecting effective performance of ADPs in Nigeria. This was followed by shortage of trained extension personnel and inadequate mobility. Others include, lack of extension materials, security challenge, lack of awareness, lack of motivation and non-payment of hazard and transport allowances.

15.6: Problems Affecting the Effective Performance of ADPs

States	Problems
North-Central	
Niger	Poor funding
Plateau	Lack of fund, Security Mobility
FCT	Poor funding Shortage of extension staff Lack of mobility No extension kits
Kogi	Lack of funds for extension publication Inadequate staff/extension agents Inadequate mobility
Taraba	Funding Collaboration
Benue	Lack of extension staff Poor funding Lack of mobility for staff Insufficient office accommodation and dilapidated function
Kwara	Low funding backup Lack of extension agents in ADP sectors No mobility for extension agents in service delivery Logistics
North East	
Borno	Lack of fund to conduct training Lack of motivation and mobility
Yobe	Inadequate funding Inadequate staff Logistic issues Lack of routine training
Bauchi	Inadequate extension staff Lack of mobility Inadequate extension materials Poor condition of service of extension staff
Gombe	Inadequate Personnel Insufficient fund
Adamawa	Training and re-training to update knowledge
North-West	
Kano	Lack of funds
Katsina	Lack of funds Inadequate training of EA Lack of QTRM
Kebbi	Poor funding Low number of extension agents Capacity building
Jigawa	Inadequate funding Lack of training Low level of agricultural personnel No farm inputs
Sokoto	
Zamfara	Shortage of extension workers Poor training facilities Lack of motivation and incentives e.g. mobility, allowance etc
Kaduna	

Problems Affecting the Effective Performance of ADPs (cont'd)

States	Problems
South-East	
Anambra	Funding problem Inadequate extension agents
Ebonyi	Funding Inadequate number of EA Lack of mobility
Enugu	Lack of extension staff Lack of qualified extension staff Lack of vehicle Lack of working materials Poor in service training
Abia	Insufficient funding Inadequate extension personnel Lack of modern extension delivery tools
South-South	
Akwa-Ibom	Lack of rain outfits Non-payment of hazard transport allowance High cost of fuel Poor mobility services Inadequate extension staff
Bayelsa	Lack of fund Shortage of EAs
Cross-river	Poor funding Inadequate no of extension agents Lack of mobility -
Delta	Inadequate funding Lack of logistics
Edo	Financial constraints Lack of information and awareness Cultural and traditional Policy and traditional practices Policy and regulatory barriers Social –economic factors Technology compatibility
Rivers	Lack of training Lack of mobility
South West	
Ekiti	Mobility problem Insufficient working tools Poor condition of EAs motorcycles
Oyo	Inadequate funding Low number of staff Logistics Unavailable of Mobilization at the zone and headquarter
Ondo	Paucity of funding Shortage of certificated extension manpower
Ogun	Poor funding Lack of mobility Lack of personnel
Osun	Zero recruitment of extension agent
Lagos	Lack of funding and vehicle

15.7 NGOs Participation in Extension Activities

Non-Governmental Organization (NGOs) play a vital role in complementing government efforts in agricultural extension services. They bring innovative approaches, community trust and additional resources to enhance the effectiveness of extension services. NGOs in extension activities recorded in Table 15.7 shows that 20 out of 37 states ADPs gave information on record of NGOs extension delivery services. The NGOs participated with the state ADPs in the areas of crop production, animal production, training women farmers, empowering women and youth, input supply, agro practices, veterinary services, seed multiplication, tree growing, private extension delivery, soil heat and capacity building, among others. The major NGOs recorded in Table 15.7 were JICA, USAID, AGRA, WISE, CEEPE, SEEDCO, NG CARES, SASAKAWA, IFAD, PALM WALLEY, Extension Africa, FADAMA Cares, WOFAN, Farm NET, NRC, CIP, ASTC, NVRI, Development Exchange Center, UNDP, IOM, FOA, IITA, KNARDA, OX-FARM, SSDO, Vika Farms, Edet Farms, Ene compost service limited, I-Press, SHEP, GAIN, and JDPC among others.

Table 15.7 NGOs Participating in Extension Service Delivery

State	NGO	Activities	Location	No of Farm families Reached
North-Central				
Benue	UAAID	Crop production	20 LGA	62,771
	SASAKAWA	Soil heat and cassava seed production	40 LGA	1000
	IFAD	Crop production and capacity building	8 LGA	22,292
	PALM WALLEY	-	5LGA	30,000
	Extension Africa	Extension delay	7 LGA	11,000
	FADAMA cares	-	23 LGA	5,950
Niger	IFAD	-	LGAs	35,000
	ACRESAL	-	zones	15,000
	AGRA	-	Zones	40,000
Kwara	WISE	Tree growing	Ilorin south LGA	20
	CEEPE	farming	Kaiama LGA	20
FCT	JICA	Capacity building	Gwagwalada and Abuja	240
	WOFAN	Training of women in farming	FCT, Abuja and Gwagwalada	14000
Nasarawa	YMCA	Private extension delivery	Lafia	-
	Farm NET	Private extension delivery	Lafia	-
	AGRA	Private extension delivery	Lafia	-
Plateau	NRC	Refugees	Plateau	4000
	CIP	Seed multiplication	Plateau	20,000
	SEEDCO	Varieties of Seed	Plateau	20,000
	CRUDAN	Agric Extension	Bukuru State Wide	20,000
	ASTC	Extension delivery	State Wide	20,000
	NVRI	Vet Services	Vom	20,000
Taraba	Development exchange center	Women and youth	16 LGAs	850
North East				
Adamawa	NURU	Agro practices	Micika	250,000
	UNDP	Principles of farm	Yola south	700,000
	IOM	Principles of farm	Yola south	700,000
	FAO	Registrative agriculture	Yola south	800,000
	USAID	-	-	2,000
Bauchi	WOFAN	Empowering women and youth	8 LGAs	30,000
	SWOFON	Training of women farmers	20 LGAs	Few
Gombe	SASAKAWA	Extension	9	2,100
	JICA	Vegetative propagation	5	1,540
	IITA	Seed Propagation	5	2,300
	NG. CARE	Parliative	11	7,000
North-West				
Kano	KNARDA	EXTENSION	44 LGA	200
	SAA	EXTENSION	44 LGA	300
Kebbi	OX-FARM	Capacity building of EAs	BK Tega Dince	5,000
Katsina	Sasakawa	-	-	-
South-East				
Ebonyi	Participatory Development Alternative (PDA)	Financial support	Abalabi Atikpo Onicha	55 cooperatives
Anambra	Sasakawa	Yellow cassava multiplication	3 agricultural Zones	2000
Enugu	SSDO	Helping women and youth with social, health. And economic empowerment	Isi-uzo Nsukka	Within Enugu and Anambra state

State	NGO	Activities	Location	No of Farm families Reached
South-South				
Akwa-Ibom	Domita farms	Crops/livestock	Uyo	220
	Vika farms	Integrated farms	Uruan	65
	Isobara farms	Crops	Essien Udim	30
	Edet farms	Processing	Esien Udim	25
	Ene compost service ltd	Crops	All zones	40
Delta	USAID	Dissemination of NIP on maize agriculture	15 LGA	3415
Edo	Afoz	Trainings	Edo-central	1000
	L-press	Data capturing	Edo-central	2000
	Live ND	Trainings, input supply	Edo-central	700
	Heifer	Trainings	Edo-central	1000
South-West				
Osun	SHEP	Training of vegetable farmer	Ife east	90
Oyo	GIZ-GIAE	Training on cassava value addition	10LGAs	48,300
	GAIN	Training	4 LGAs	48,300
	Harvest – plus	Commercialization of bio-fortified crops	33 LGAs	100
Ondo	JDPC	Training of extension agents and farmers	Akure south	100
Ekiti	Justice development and peace initiative	Training of trainers on organic agriculture production and airing of radio agricultural enlightenment	All the 16 LGA	50,000

15.8 Training Needs

The effectiveness of ADPs depends on the capacity and skills of their personnel. Training is essential to bridge knowledge gaps, enhance technical expertise and ensure successful programme implementation. Such trainings will make them relevant and help them achieve their goals such as provision of capacity building for the rural and urban farmers to maintain efficient and sustainable farms, improving the standard of living of the farmers through higher and increased productivity, improving the knowledge, skills and attitudes and leadership potentials of rural farmers etc. Some of the trainings need by the various ADPs in the country as shown in Table 15.8 were training on ICT, climate smart agriculture, crop and animal production, Good Agronomic Practices (GAP), value chain development, leadership management, APS, fish production, post-harvest management, pest and disease control, feasibility study and proposal writing in agricultural business management, irrigation management, gender development empowerment, pre-season training and women group training . The category of personnel requiring these trainings include Extension agents, directors, VEAs, ZPMs, farmers, SZEAs, AEO, zonal managers, PME staff, women group, BEAS, and SMSs BES, DES, enumerators, PPME, and extension officers.

Table 15.8: Training Needs of ADPs

State	Subject matter	Category of personnel	No of personnel
North-Central			
Kwara	Training on climate change	All PME Staff	10
	Training on I.C.T	All PME staff	10
	Training on maize production	All Extension Agent	121
	Training on rice production	All Extension Agent	121
	Training on cowpea and soybean production	All Extension Agent	121
Niger	Climate resilience	EAs and farmers	200
	Training of EAs and farmers on rice transplanting using single seedlings	EAs and farmers	100
	Fertilizer application methods	EAs, BES, SMS	250
Taraba	Extension skills	EAs	72
	Climate smart	EAs, farmers	100
	E-extension skills	EAs	50
	ICT based operation	EAs, enumerators	40
Benue	Technical skill		
	Leadership management development		
	IT skills		
	Data analysis and interpretation		
	Training		
Nasarawa	Post-harvest magt.	Agro-processing officers	5
	APS training	PME staff	50
	FUAS training	FADAMA	250
	FNT training	Extension officers	200
	Mid-season training		
	Agro-forestry training	Forestry Staff	70
	Fisheries training	Fishery staff	60
	Women group training	Women group	60
Plateau	Pest/disease identification and treatment	VEA'S/Farmer's	25
	Post-harvest management	VEAs	450
	Raising of vegetables from nursery to maturity	VEAs	450
	Potato storage	VEAs	450
	Livestock disease and treatment	VEAS	450
	Identification and treatment of disease in tree crops	VEAs	450
FCT	On the job training	Head extension	2
North-East			
Adamawa	Extension department	Departmental staff	20
	Finance dept staff		3
	Admin dept staff		17
	ATS dept staff		13
	M.E dep staff		15
Borno	T.O.T	SMS Personnel	14
	FFS Training	Extension agent	20

State	Subject matter	Category of personnel	No of personnel
	Step down Training	Extension agent	35
Bauchi	Pre-season training	SMSs, SZEOS, EAs	200
	Monthly training	ZPMs, SMSs, SZEOS	50
	Farmers sensitization	Farmers	5000
	Farmers training	Farmers	1500
Gombe	Smart Agriculture	Extension Agents	50
	Good Agriculture Practice	Extension Agents	50
	Weather and its effect on plants	Extension Agents	50
	Information Technology	Enumerators	10
North-West			
Kano	Drip irrigation	Extension agents	88
	Training on software	Accounting staff	12
	Essential office practices	Admin staff	10
	Marketing of agric products	Extension agents	88
	Small and large ruminant production	Extension agents	44
Katsina	Maize Value chain	Extension Agents	778
	Sorghum Value chain	Extension Agents	778
	Millet Value chain	Extension Agents	778
	Cotton Value chain	Extension Agents	778
	Rice Value chain	Extension Agents	778
	Hibiscus Value chain	Extension Agents	778
Kebbi	Computer	Enumerators	50
	Crop production	Extension Agents	100
	Soil management	Extension Agents	20
	Disease control	Extension Agents	50
	Pest control	Extension Agents	50
Jigawa	Extension Technical Planning engineering	Principal staff	50
Sokoto	Pre-season training of EA's	EA's	240
	FNT	EA's	240
	MTRM	SMS, SENIOR OFFICERS	40
Zamfara	Fishery production	Extension Workers	200
	Poultry production	“	1000
	Livestock production	“	1000
	Irrigation management	Farmers	100
	Modern Effective communication gap on agronomic practice	“	100
South-East			
Abia	Value chain development	EAs/farmers	500
	Use of ICT platform	EAs/Farmers	500
	Climate smart agricultural	EAs/Farmers	500
	Effective extension delivery	SMS/EAs	500
Anambra	Effective extension delivery	BEA/SMS	25
	Soya milk W/A	W/A	

State	Subject matter	Category of personnel	No of personnel
Ebonyi	Effective livestock	ZEOs,SMSs	
	Extension method	BES, EAs	
	ICT application	BES, EAs	
	Effective record	BES, EAs	
	management	BES, EAs	
Enugu	Cassava Ethanol training Use of computer Pre season/Post season Livestock Fisheries Farm radio Farm improvement Artificial insemination	Senior and middle staff of ADP	Extension staff of the ministry
South-South			
Akwa-Ibom	Rice production	EAs, BEAs, BES, SMSs	47,28,33,27
	Maize production	EAs, BEAs, BES, SMSs	47,28,33,27
	Pepper production	EAs, BEAs, BES, SMSs	47,28,33,27
	Tomato production	EAs, BEAs, BESs, SMSs	47,28,33,27
	Processing of ripe banana into jam	EAs, BEAs, BESs, SMSs	47,28,33,27
	Cassava production	EAs, BEAs, BESs, SMSs	47,28,33,27
	Chemical weed control in farms	EAs, BEAs, BESs, SMSs	47,28,33,27
Bayelsa	MTRM	PM, DIRECTORS, EAs, ZM AEO	43
	FNT	EAs, BES, SMs	43
Cross Rivers	Management of extension and advisory services	DES, ZMS	4
	Project performance evaluation	PM, DM&T, DPME	3
	Sustainable agribusiness	DCS, DES, PPME &PM	4
	Prevention and control of army worm	DES, EAS	61
Delta	MIP on fisheries	All extension staff	200
	Poultry	All extension staff	200
	Cassava	All extension staff	200
	Maize	All extension staff	200
	Yam	All extension staff	200
South-West			
Ogun	Capacity building on yam multiplication for backyard farming	Nil	Nil
	Capacity building on orange fleshed potato		
	In-season training		
Osun	FNT	EAs	24
Oyo	Effective Extension Delivery system	GL08 – 16	4
	Basic Computer Training	GL08 – 16	4
	Climate Smart Agriculture	GL08 – 16	4

State	Subject matter	Category of personnel	No of personnel
	Good Agricultural Practices on major crops grown in South-west, Nigeria	GL08 – 15	3
	Communication training Enterprise	GL08 – 15	3
	Training on food processing	GL08 – 14	4
	Climate smart agriculture	GL08 – 14	4
Lagos	Extension communication	Extension officers	4
	Climate resilient agriculture	Extension officers	4
Ekiti	Training on scientific reporting and ICT	SMSs	15
	Training on Good Agricultural P	EAs	30
	Agric business practice and implementation management	Planning officers and enumerators	10
	Management of extension and advisory services	Extension officers and extension agents	
	Gender development and empowerment	WIA	10
	Feasibility study and proposal writing in agribusiness management	PME Officers	5
Ondo	Modern practice in crop production	EAs	50
	M&E Specialized course	PM&E STAFF	20
	Livestock and fisheries	STAFF	40
	ICT specialized courses	STAFF	30
	Management / Leadership	DIRECTORS	30
	Extension delivery course	EAs	50

15.9 Major Problems of Extension Services in Nigeria.

Extension services bridge the gap between research institutions, policy makers and farmers', providing vital information, skills and technologies necessary for sustainable agricultural practices. However, the extension system in Nigeria faces numerous challenges that hinders its effectiveness and impact. As identified on Table 15.9, across the states in the six agro-ecological zones of the country, the major problems include inadequate funding and inconsistent release of budget after approval, insufficient number of extension workers, mobility (vehicles for transport) for staff/ extension agents, inadequate training and E-training, inadequate working materials, late arrival of farm inputs, low motivation in terms of stipends payments for field activities, disproportionate Extension Agent: Farm Family ratio and insecurity challenge,

Table 15.9: Problems of Extension Services in Nigeria

State	Problems
North-Central	
Kogi	Inadequate staff/extension agents Inadequate mobility Poor funding
Niger	No adequate funding No adequate facilities
Benue	Lack of extension staff No funding Lack of mobility Insufficient accommodation
FCT	Poor funding Shortage of extension staff Lack of mobility No extension kits
Nasarawa	Inadequate vehicles for inspection and supervision of projects and farming activities in the state including lack of allowances
Kwara	Mobility challenge The ratio of extension agent is very low Lack of fund to extension delivery service
Taraba	Funding Inadequate working materials Inadequate trained personnel Collaborations
Plateau	Insufficient funds Lack of mobility Inadequate staff number
North-East	
Adamawa	Lack of trained staff Lack of sponsorship
Borno	Lack of fund to conduct trainings and re-training Lack of motivation and mobility
Bauchi	Inadequate extension staff Lack of mobility Inadequate extension materials
Yobe	Lack of mobility Inadequate personnel Poor funding
Gombe	Inadequate Personnel Paucity of funds
North-West	
Kaduna	
Katsina	Inadequate fund Inadequate training of extension agents Lack of QTRM
Kano	Mobility Training High cost of fuel Capacity building Insufficient fund
Kebbi	Poor funding
Jigawa	Inadequate funding Staff capacity training Inadequate extension personnel Inadequate training of agricultural extension staff Inadequate agricultural extension agents Inadequate farm input Inadequate of transport facilities for agricultural extension agent Ignorance of the tradition and customs of the local community
Sokoto	Inadequate funding Lack of training Low level of agricultural personnel No farm inputs Little or no training and retraining Lack of mobility

State	Problems
Zamfara	Shortage of extension workers Poor training facilities Lack of motivation and incentives e.g. mobility, allowance etc.
South-East	
Abia	Lack of mobility Poor job incentive Inadequate funding Non implantation of Extension policy
Anambra	Inadequate funding Inadequate extension agents Insecurity Lack of mobility
Ebonyi	Inadequate number of EAs Funding Lack of mobility
Enugu	Insufficient extension staff Late arrival of input Herders attack Lack of information Lack of vehicle Lack of qualified extension staff Lack of working materials
South-South	
Akwa-Ibom	Lack of rain outfits Non-payment of hazards transport allowance High cost of fuel Poor mobility services Inadequate extension staff
Bayelsa	Lack of fund Insufficient EAs
Delta	Inadequate funding Lack of logistics
Edo	
Rivers	Lack of training Lack of mobility
Cross River	Poor funding Inadequate extension agents Lack of mobility
South-West	
Ekiti	Mobility problems Insufficient working tools
Oyo	Inadequate funding Low number of staff Inadequate logistics Inadequate mobility Inadequate training and E-training
Ondo	Funding Shortage of staff
Ogun	Poor funding Lack of Mobility Insecurity
Osun	Poor infrastructure Drastic reduction of staff Poor funding
Lagos	lack of mobility inadequate extension agents

Note: There were no information from four states

15.10 Problems Needing Research in the Nigerian Agricultural Sector

Nigerian Agricultural Sector faces numerous challenges hindering its growth and productivity. To ensure sustainable development and food self-sufficiency, it is crucial to identify and address these problems through targeted research. Table 15.10 identified areas of challenges in the agricultural sector across the six (6) zones that required research in 2024. The challenges were categorized based on nine (9) prioritized areas; crops, horticulture, livestock, fisheries, agro-forestry, irrigation, agricultural mechanization, extension services and women in agriculture.

- ❖ **Problems for research in crops were;** Effective control of Fall army worm, prevention and eradication of tomato wilt, Identification and treatment of blight in potato and vegetables, control of fruit piercing moth, Pest and disease tolerant varieties, early maturing varieties of crops, Research in longevity shelf life of perishable crops , GMO seeds, Planting technologies, simple and affordable farm implement, research on seed development, Post-harvest management of crops, need for higher yield crops resistant to drought, among others.
- ❖ **In horticulture,** the areas that required research were; grafting techniques, development of progeny orchard with improved varieties, Improved and adaptable horticultural crops, management of flowers, fruit abortion on tree crops, capacity building on good agricultural practices and availability of pest and disease resistant, high yielding varieties that are adaptable to ecology and Green house production system
- ❖ **In livestock:** Research on the use of indigenous medicines, Training on how to produce high quality animal feeds, management and cross-breeding, improving genetic qualities/growth performance, management of major livestock disease, vaccine development, development of simple and affordable technologies in livestock production, feeding formulars using available local materials etc. were identified as important challenges that required researches in the area of livestock.
- ❖ **In the area of fisheries,** there is need to research on effective fish pond management feed formulation, highly prolific species of: cat fish and tilapia, Fish disease, water quality management and hatching technology etc
- ❖ **For Agro-forestry,** the following were identified as problems needing research; there is need for research on new planting techniques and seedling varieties, new technology on tree production, effective and affordable panacea for fruit spoilage or insect pest attack (infestation) in Agro forestry crops, control of fruit piercing moth and fruit flies in citrus, agro-forestry tools mitigation and adoption to climate change. among others.
- ❖ **In the area of irrigation;** Underground and drip irrigation and modern irrigation technologies research, efficient use of irrigation pumps, construction of modern dams and management, Solar driven irrigation system, Operation and handling of irrigation equipment, appropriate irrigation System/method for specific crop development of mini-irrigation that is adaptable for individual farmers and maintenance of irrigation system were identified as problems needing research.
- ❖ **The Training need for agricultural Engineering include:** Fabrication of devices for weeding, harvesting, and processing of agricultural produce, tractor and equipment maintenance and repair, storage and processing of agricultural products, Simple and environmentally friendly machines needs to be developed and distributed to farmers at an affordable price this will solve farming problems associated with drudgery.
- ❖ For extension services, areas such as research on accessibility of modern extension technology, training on E-extension delivery service, use of effective communication skill,

methodology tools to extension delivery system, electronic means of extension services and approaches of extension training/retraining/capacity building on Information and Communication Technology (ICT) of extension agents etc. were identified to be the areas for research.

- ❖ **Women in Agriculture (WIA):** there is need for development of gender-friendly equipment for farming and processing, Importance of women involvement in agricultural value chain activities, there should be responsive research on trainings of women in area of processing, nutrition, health and safety, technology skills, leadership, group dynamics, value addition, extension service delivery, preservation techniques and land tenure system were identified as problems that require research.

Table 15.10: Problems Needing Research.

State	Problem	Identified Area(s) of Research
North-Central		
FCT	Crop	Training of research staff on Tela maize
	Horticulture	-
	Livestock	Disease control and livestock housing research
	Fisheries	Feed management research
	Agro-Forestry	Awareness and effect of climate research
	Irrigation	Underground and drip irrigation and modern irrigation technologies research
	Agricultural mechanization	-
	Extension Services	Dissemination and information communication
	Women in Agriculture (WIA)	Agro-processing research
Benue	Crop	Wide gap between research institution and ADP
	Horticulture	-
	Livestock	Training of staff on livestock production
	Fisheries	Stock assessment and management
	Agro-Forestry	Staff training on agro forestry
	Irrigation	Provision of water regulations
	Agricultural mechanization	Fabrication of device for weeding, harvesting, and processing of agricultural produce
	Extension Services	accessibility of modern extension technology
	Climate Resilience	
	Women in Agriculture (WIA)	Inadequate number of WIA staff

State	Problem	Identified Area(s) of Research
North-Central (cont'd)		
Kwara	Crop	Man power development Provision of breeders' seeds/foundation seeds
	Horticulture	Grafting techniques Provision of budded seedlings Capacity building
	Livestock	-
	Fisheries	Capacity building in hatchery Effective fish pond management
	Agro-Forestry	Production of seedlings technology for afforestation Capacity building in forestry management
	Irrigation	TOT on new irrigation technology Efficient use of irrigation pumps Soil conservation practices
	Agricultural mechanization	TOT on effective use of tractors Improved ways of preserving harvested crops Agro processing machines
	Extension Services	Training on E-extension delivery service to extension agents Improved knowledge on methodology tools to extension delivery system
	Women in Agriculture (WIA)	Nutrition, health and safety Technology skills Leadership and organization
	Nasarawa	Crop
Horticulture		-
Livestock		There is need for training of staff on livestock production and Management of all livestock officers in the state.
Fisheries		Improved hybrid fingerlings
Agro-Forestry		There is need for research in farming system related to Agro-forestry technology for farmers' adoption.
Irrigation		Need for irrigation engineering
Agricultural mechanization		Need for modern agricultural equipment
Extension Services		There is need for research dissemination through the Monthly Training Review Meeting (MTRM), Forth Nightly Training (FNT) for new innovation and skill to all Extension Agents (EAs).
Women in Agriculture (WIA)	There is need for training in value addition of fruits and vegetables	
State Problem Identified Area(s) of Research		
North-Central (cont'd)		
Niger	Crop	Resilience to pest disease and drought varieties
	Horticulture	Improved crop varieties Soil and irrigation
	Livestock	Use of indigenous medicines
	Fisheries	Provision of quality water source-
	Extension Services	e-extension and communications
Plateau	Crop	Identification and treatment of blight in potato and vegetables
	Horticulture	Identification and treatment of diseases in livestock
	Livestock	
	Fisheries	Raising and identification Hatching of fingerlings.
	Agro-Forestry	Research should be carried to control this destroying crops like Mango and Citrus etc.
Taraba	Crop	GAP
	Livestock	Research on livestock and natural resource management in order to navigate farmer-herder clashes
	Fisheries	Profitability research for more fish productivity
	Agro-Forestry	Government equipment driven by research system is needed
	Irrigation	Solar driven irrigation system
	Agricultural mechanization	-
	Extension Services	Adoption of innovations among rural farmers
Women in Agriculture (WIA)	Roles of women in food production and security	

State	Problem	Identified Area(s) of Research
North-East		
Adamawa	Crop	Cowpea resistant variety
	Horticulture	Spinach and tomato diseases
	Livestock	Management and cross-breeding
	Fisheries	Fish management
	Agro-Forestry	New planting technique and seedling varieties
	Irrigation	Construction of modern dams and management
	Agricultural mechanization	Provision of modern machines
	Extension Services	Training of more extension agents
	Women in Agriculture (WIA)	Training more women in modern techniques
Gombe	Crop	Availability of extra and high yielding crops Affordable planting technologies
	Horticulture	Improved and adaptable horticultural crops in the north east. Introduction of some horticultural crops in the north
	Livestock	Cross breeding of indigenous and exotic breeds Feeding and feeding formulars using available local materials
	Fisheries	Fishery feed formulation using available local materials Hatching technology
	Agro-Forestry	Agro-forestry adaptable to North-East zone
	Irrigation	Irrigation technology using solar power and energy source
	Agricultural mechanization	Manufacturing of planting machines using local materials
	Extension Services	Electronic means of extension services
	Women in Agriculture (WIA)	Value addition on some produce for economic growth Women participation in post-harvest activities
Yobe	Crop	Pest and diseases control
	Horticulture	Processing and storage
	Livestock	Disease control method.
	Fisheries	Processing and marketing.
	Extension Services	Digitization
	Women in Agriculture (WIA)	Processing and Utilization
	Others	-

State	Problem	Identified Area(s) of Research
North-East (cont'd)		
Bauchi	Crop	Seed improvement Management technique Post-harvest dynamic
	Horticulture	Seed improvement Management technique Post-harvest dynamic
	Livestock	Need laboratory for disease diagnosis and treatment Additional vaccine supply unit
	Fisheries	Improve fish feed quality Improve storage facilities
	Agro-Forestry	Need for improved seed seedlings Provision of trial center for each zone
	Irrigation	Provision of affordable irrigation technique Conduct trial on effective water use by crop
	Agricultural mechanization	Modern fabricating machines Modern processing machines
	Extension Services	Training techniques and use of modern instruments The impact of village extension The effectiveness of technology platforms
North-West		
Jigawa	Crop	Development and introduction of new varieties including agronomic practices
	Horticulture	Development of progeny orchid with improved crop varieties
	Livestock	To promote the pasture in grazing reserved and sensitization of the nomads. Upgrading of indigenous breeds of livestock in the state
	Fisheries	Enhancing of fishing activities, training and empowerment
	Agro-Forestry	Research need for identification, adaptation and dissemination of proven agricultural technology on agro forestry
	Irrigation	Need for irrigation schemes and solar system for agricultural production
	Agricultural mechanization	Increased the level of mechanization in agriculture.
	Extension Services	Strengthened extension, research and development in agriculture
	Women in Agriculture (WIA)	Support women in agriculture about nutrition and fortification

State	Problem	Identified Area(s) of Research
North-West (cont'd)		
Kaduna	Crop	
	Horticulture	
	Livestock	
	Fisheries	
	Agro-Forestry	
	Irrigation	
	Agricultural mechanization	
	Extension Services	
	Women in Agriculture (WIA)	
Katsina	Crop	GMO Seeds Crop pests
	Horticulture	Improved seeds
	Livestock	Improved breed for meat and milk
	Fisheries	Higher cost of fish feed
	Agro-Forestry	Improved seeds
	Irrigation	Improved seeds that germinate early
	Agricultural mechanization	Improved planters
	Extension Services	Improved technology of extension service delivery
	Women in Agriculture (WIA)	Improved technology on value added addition

Kebbi	Crop	Increase storage facilities Post-harvest technology
	Horticulture	New varieties of fruits and vegetables
	Extension Services	Capacity building
	Women in Agriculture (WIA) Others:	Capacity building for extension
Sokoto	Crop	Early maturing and drought resistant crops
	Horticulture	Research on new improve Varieties
	Livestock	Producing new breed of cattle, sheep and goat etc
	Fisheries	Producing new improve fingerling
	Irrigation	Solar irrigation method
	Extension Services	E-extension
	Women in Agriculture (WIA)	Nutritional value crops

State	Problem	Identified Area(s) of Research
North-West (cont'd)		
Zamfara	Crop	Management of pest and disease on cereals, legumes and vegetables
	Horticulture	Management of flowers, fruit abortion on tree crops
	Livestock	Management of major livestock and poultry diseases
	Fisheries	Modern fisheries and aquaculture production techniques
	Agro-Forestry	Nursery establishment
	Irrigation	Modern irrigation methods techniques
	Agricultural mechanization	Effective use of power Tiller and maintenance
	Extension Services	Use of effective communication skills Use of power point on extension delivery
	Women in Agriculture (WIA)	-
South-East		
Anambra	Crop	
	Horticulture	
	Livestock	Research on ticks
	Fisheries	Swoleness of body in fish
	Agro-Forestry	
	Irrigation	Season irrigation
	Agricultural mechanization	Animals for farm work Solar pump for water in fish farm
	Extension Services	
	Women in Agriculture (WIA)	
Ebonyi	Crop	Stem borer attack
	Horticulture	
	Livestock	High cost of feed Incidence of disease High fertility
	Fisheries	High breed of fingerling Feed formulation Fast maturity and fertility of fish
	Agro-Forestry	Fruit abortion
	Irrigation	Inadequate land development High cost of irrigation facilities
	Agricultural mechanization	Problem of land tenure system
	Extension Services	Climate change

		e-extension
	Women in Agriculture (WIA)	Lack of fund Mechanization and sensitization of farmers
State	Problem	Identified Area(s) of Research
South-East (cont'd)		
Enugu	Crop	Agronomy, crop improvement, crop physiology, information on crop ecology
	Horticulture	Crop production and management, plant and post-harvest , plant breeding, pest and disease management
	Livestock	Animal health, genetic improvement, feed supply
	Fisheries	Supply of constant and adequate clean water, genetic disorders and environmental quality and ecological integrity
	Agro-Forestry	De-forestation
	Irrigation	Cost of setting up irrigation equipment in a particular area
	Agricultural mechanization	The cost of procuring agricultural equipment is also high because of rising population in the state
	Extension Services	Transportation, lack of experienced staff, Not trained on improved varieties seeds and mechanization, language issues (Illiteracy/English)
	Women in Agriculture (WIA)	Women not allowed to own land, land tenure system, women not having enough cash
South-South		
Akwa-Ibom	Crop	Need in the use of neem ash/palm bunch ash in control of army worm attack in maize crop
	Horticulture	The use of aloe vera /byrophyllum gel as rooting agents in crops planted by cuttings like citrus
	Livestock	Production of feed from local raw materials like waste from maize, rice, cassava peels, fruit seeds like avocado and pear etc
	Fisheries	Production of floating fish feed from locally serviced raw materials
	Agro-Forestry	
	Irrigation	Planting of dwarf banana in snail pens to provide terrestrial habitat
	Agricultural mechanization	-
	Extension Services	-
	Women in Agriculture (WIA)	Sterilization of soymilk by homestead pasteurization using hot water production of pop cassava flour with incorporation of popcorn grits

State	Problem	Identified Area(s) of Research	
Bayelsa	Crop	Climate resilient crop variety Post-harvest handling and storage	
	Horticulture	Improved fruit and vegetable varieties Green house production system	
	Livestock	Feed formulation and nutrition Improved breed for meat and egg production	
	Fisheries	Aquaculture system and management Fish feed formulation and nutrition	
	Agro-Forestry	Tree crop interaction and management	
	Irrigation	Crop water requirement and management	
	Agricultural mechanization	Tractor and equipment maintenance and repair	
	Extension Services	Farmer training and capacity building technology transfer and adoption	
		Women in Agriculture	Women empowerment and organization Women role in agriculture decision making
Delta	Crop	Army worm challenge Improved varieties of crops...cassava, yam	
	Extension Services	Mobility for EAs	
		Women in Agriculture (WIA)	Production of gender friendly tools
	Fisheries	Eco system interaction Developing technology to minimize by-catch Fishery economics Genetics and breeding Socio economic impact of fisheries on community	
	Agro-Forestry	-	
	Irrigation	Water use efficiency Irrigation scheduling	

		Irrigation infrastructure
	Agricultural mechanization	Development of advanced machinery Sustainable and environmentally friendly mechanization
	Extension Services	-
	Women in Agriculture (WIA)	-
Rivers	Crop	Devastation of army worm on maize
	Extension Services	Production and marketing channels for farmers
Cross River	Crop	Combating the menace of army worm
	Fishery	Catfish formulation

State	Problem	Identified Area(s) of Research
South-West		
Ekiti	Crop	Effective control of army worm Improved seeds and seedlings Simple and affordable farm implement Prevention and eradication of tomato wilt Control of fruit piecing moth
	Horticulture	-
	Livestock	Vaccine failure in poultry In-breeding in rabbit production
	Fisheries	Fish disease and water quality management Fish feed formulation
	Agro-Forestry	Control of fruit piercing moth and fruit flies in citrus
	Women in Agriculture (WIA)	Mushroom production technology Preparation of recipes from some food crops
Ondo	Crop	Research in longevity shelf life of perishable crops
	Horticulture	Production/ Preservation of indigenous horticultural crops
	Livestock	Production of non-conventional feed ingredients
	Fisheries	Prevention of in-breeding in catfish
	Agro-Forestry	Re-forestation
	Irrigation	Gestation of hydrological data necessary for its design
	Agricultural mechanization	Problem of hard taproot in rain forest
	Extension Services	How to increase rate of adoption among farmers
Women in Agriculture (WIA)	Processing equipment/ machinery	
Osun	Crop	Crop
	Horticulture	Horticulture
	Livestock	Livestock
	Fisheries	Fisheries
	Agro-Forestry	Agro-Forestry
	Irrigation	Irrigation
	Agricultural mechanization	Agricultural mechanization
	Extension Services	Extension Services
Women in Agriculture (WIA)	Women in Agriculture (WIA)	

State	Problem	Identified Area(s) of Research
Oyo	Crop	Development of tolerant/resistant maize varieties against fall army worm. Production of cowpea varieties with less praying regime
	Horticulture	Development of tolerant/improved tomato varieties against tomato wilt disease. Processing and packaging of fruits and vegetables.
	Livestock	Control Privation of Africa swine fever in pig
	Fisheries	Hygienic fish processing and packaging.
	Agro-Forestry	Development of tolerant/resistant mango varieties against die-back diseases. Effective control and prevention of citrus fruit flies.
	Irrigation	Development of mini-irrigation that is adaptable for individual farmers.
	Agricultural mechanization	Development of mini/intermediate equipment and implements (harvesters, planters, processing machines, Sheller's) that will be affordable.
	Extension Services	ICT training for the e-extension staff.
Lagos	Women in Agriculture (WIA)	Value addition of underutilized legumes Development of gender-friendly equipment for farming and processing.
	Crop	Combating the menace of army worm Agronomic practices in crop production
	Horticulture	Appropriate use of fertilizer
	Livestock	Alternative feeding for livestock
	Fisheries	Alternative feeding for fishery
	Extension services	E-extension
Ogun	Fishery	-
	Crop	Production of short maturing crops Identification and control of emerging pest and diseases Development of storage equipment
	Horticulture	Capacity building on Good Agricultural Practices. Availability of pest and disease resistant and high yielding varieties that are adaptable to Ogun State Ecology. Input support to farmers, Extension Officers and Agricultural Researchers. Combating effects of climate change in horticultural crops. Irrigation support to horticultural crop farmers. Control of pest and disease. Post-harvest losses.

State	Problem	Identified Area(s) of Research
Ogun (cont'd)	Livestock	Improving genetic qualities/growth performance of west African Dwarf goat. Combating African Swine Fever through Local Vaccination. Nutrition and feeding in poultry farming. Research into systemic values of keeping animals.
	Fisheries	Research on cost effectiveness of fish feeds to growth and culture. Development of hatchery and culture techniques. Diversification of fishing methods.
	Agro-Forestry	Modern Farm practice/ crop mix possibilities in Agroforestry Effective and affordable panacea for fruit spoilage or insect pest attack (infestation) in Agro forestry crops e.g. Citrus, Mango. Agro-forestry tools mitigation and adoption to climate change.
	Irrigation	Appropriate irrigation System/method for specific crop. Maintenance of irrigation system. Mini-irrigation unit for smallholder farmers. Database for the design of irrigation models.
	Agricultural mechanization	Linkage development in modern agriculture Fabrication of simple tools for farm mechanization
	Extension Services	Use of artificial insemination in extension
	Women in Agriculture (WIA)	Storage of Rice using Prudile Improved Cowpea PIC) bags and Hermitic aruo by Nigeria Stored Products Research Institute (NSPRI) Evaluation of Quality of product obtained by Sun-drying and oven drying of Ewedu and Okra. Utilization of bio-fortified crops in confectioneries. Assessment of gender-specific obstacles in agriculture.

16.0 SPECIAL PROJECTS/PROGRAMME

The report of Annual Performance Survey (APS) of 2024 on special projects is presented on Table 16.1 below.

The report under North-Central (NC) revealed that Benue state had the highest (7) number of special projects followed by Nasarawa State with 5 special projects. Others included FCT, Niger, Plateau and Taraba states recording 2 special projects each within the zone. There were no information from Kwara and Kogi States for the 2024 APS as it was the same case recorded the previous year (2023) from these two states from the zone. It could be argued that this two States in the zone were less active on special projects due to insufficient funding or poor data collecting and record keeping. The most common of the special projects across the zone included; EXTENSION Africa ,IFAD-VEDP, JICA/SHEP,PALM Valley, USAID,NG-CARES,GIZ.SASAKAWA Africa, Digital green and Fadama NG-CARES . The takeoff year for most of the projects was as far back as 2015 and some currently on going in 2024. The Key activities were capacity building of AEs and farmers on extension, NIPPON Soil health, agricultural inputs and service delivery to farmers' production and processing, assets provision to farmers, demonstration plots on value addition, erosion control and afforestation training. On the whole, the various projects covered about 300 sites across the Local Government Areas (LGAs) of the North central zone. Data from the table also indicated that about 650,000 farmers benefitted from the projects across the entire zone. These projects were mainly sponsored by World Bank/FGN, the various State Governments of the NE zone, UNDP/GEF, FID/EIA, IFAD and JICA. In terms of meeting their target goals, the table shows that there was an average of 90% achievement on the deliverance of the goals of the special projects across the States in the NC zone. Table 16.1 shows that in North East (NE) zone, Adamawa, and Bauchi, Borno, Gombe and Yobe states all had data on the activities of special projects in their respective states. This indicates a remarkable improvement on the performance of the special projects in these their various states as compared to the previous year in 2023. The common special projects carried out across the zones include Sassakawa Global 2000, FADAMA N-Care, JICA, 11TA, Trimming project and IFAD/VCDP. Most of these special projects kicked off since 1998 are still on going for most parts of the states in the zone. The major activities of the projects across the zone include; Empowerment, input supply and service provision, rehabilitation of rural farm roads, Extension Demonstration, Food security and vegetable production and marketing. The table also depicts that most of the projects were carried out state wide across the LGAs of the zone. It was also deduced from the table that on the average most of the special projects had achieved 80% of their target across the states in the zone. On the average, the special projects had reached out to about 250,000 farmers and their families.

In the North West zone however, the table depicts that information on special projects were retrieved only from Katsina and Zamfara States. There were no information from Kaduna, Kano, Jigawa, Kebbi and Sokoto States on special projects as depicted in the table for the 2024 APS report. The main special projects carried out in these 2 states for the 2024 APS included; NG-CARES, Trimming project, Takaful Islamic Insurance on millet and sorghum production. These special projects mostly kicked off from 2017 and are still ongoing as at 2024 of compiling this report. The key activities of these project included; Promotion of Agricultural input Services, Provision of Agricultural inputs, irrigation activation, millet and sorghum production, inputs supply and women empowerment. These special projects were able to cover about 56 LGAs across both states from the NW zone. The sponsorships for these programs as shown in the table were mainly from World Bank, FGN/State, A.B.U Zaria and NGOs. The projects achieved an average of 95% of its target goal and a total of 54,120 farmers were reached across the states of the zone. Thus, there is the need for the states in the NE to collaborate with Agricultural donor agencies and FGN to carry out more projects in this zone to boost the farmers' productivity and thus bettering their collective livelihood.

Data from the South- East (SE) states as shown in table 16.1 below depicts that Anambra, Ebonyi and Enugu States had detailed activities on special projects in 2024. While Abia and Imo States have no record on special projects for APS 2024. The special projects recorded across the SE zones as depicted in the table included; SHEP, Fadama III, IFAD, Special Agro-industrial processing zones (SPAZ) and APPEALS. The table also indicated that most of these projects kicked off as far back as 2014 and are currently on-going in 2024. A total of 28 LGAs were covered across the 3 states in the SE zone. The activities of the special projects in these zones were; Value chain development on rice and cassava production and marketing, Agro-industrial processing, Food production(increasing commercial agriculture, production clusters and aggregation center, value chain on rice processing, poultry and cashew production. These special projects covered most state wide LGAs across the SE zones. The sponsorship for this special projects were mainly; FGN/World bank, AfDB, UN and State government of the respective states in the SE zone. Most of the projects achieved an average of 75% meeting its targeted goals. The data in the table shows that about 540 farmers benefitted from the special projects across the states in the SE zone.

Data from the South-South (SS) states in table 16.1 below shows that special projects were reported from Akwa-Ibom, Bayelsa, Cross- River, Delta, Edo and Rivers States. These special projects included: NIGERIA AGRIC-EXT & ADVISORY SERVICES, UPGRADING WET MARKETS, IFAD/LIFE-ND, PROJECT-GROW, NG-CARES RESULT, AQUACULTURAL ACCESS, EDO-CARES, LIVELIHOOD IMPROVEMENT, FAMILY ENTERPRISES PROJECT NIGER DELTA (LIFE-ND),EDO-AGRIPRENEUR PROG, INDEPENDENT FARMERS INITIATIVE, FISHERY INTERVENTION EMPOWERMENT PRG,CY/CONCEPT, NATIONAL POVERTY REDUCTION WITH GROWTH STRATEGY(NPRGS) FADAMA III PROJECT,SEEFOR PROJECT,RIVCARES-RESULT AREA 2 -FADAMA. The key activities from these special projects included; Artisan fishing, increasing food security and safe function of food supply chain, delivery of MOPS and Maize, Rice and Aquaculture, livelihood support& In fracture, development in rice ,maize ,poultry and fishery production, input supply, provision of market stalls, Agri-business incubation, modelling, youth and women empowerment in agriculture, rehabilitations of market, distribution of irrigation pumps, opening of feeder roads, support to rural business initiative and training on cassava and yam value production. The table also depicts these special projects covered about of 1,200 LGAs across the various states of the SS zone. Sponsorships for these projects included: UN, World Bank, USAID, IFAD, CRSG, OCP Africa, FGN NDDC, EDSG, CBN, NIRSAL and the various State Governments across the South-South zone. The table also shows that most of the special projects achieved an average of 85% of their target goals across the States in the zone. In terms of beneficiaries of these special projects, the table shows that about 685 farmers benefitted from these special projects across the States from the SS region for the 2024 APS.

In the South-West (SW) states, Lagos, Ogun, Ondo and Osun states gave report of activities on special projects, while Ekiti and Oyo states had no Data. The special projects in Lagos State were NPFS, APPEALS Project and CARES. They took off in 2007, 2019 and 2022 respectively. Key activities include addressing household food security needs, empowering farmers on three (3) selected crops' value chains and capacity building. The projects were majorly carried out statewide, sponsored by the FMAFS and World Bank. Over eleven thousand beneficiaries had been recorded for this project. The Lagos State Government also conducted programs such as the establishment of thirty-two (32) Monthly Technological Plot (MTP) Rice Mill, Imota, Cage and Pen Culture For fish and cattle farm project. Others were Central Food Security System and Logistics Hub, Mid-Level Produce Hub, Eko Agro-Mechanization Development Programme, Agricultural Value Chain Enterprise Activation Programme, Lagos Agri-prenuership Programme, Food Production Centre, Coconut Value Chain Development Project, Lagos Agricultural Scholars' Programme, Establishment of Snailery Estate and Development of Red Meat Value Chain which were largely Women and Youths empowerment

projects. The Federal Government of Nigeria (FGN)/IFAD Value Chain Development Programme (VCDP) and CARES FADAMA were the only special projects carried out in Ogun State, consisting of cassava and rice value chain training, and sensitization/ mobilization of farmers' conduct on needs assessment as key activities.

In the South-West (SW) zone, table 16.1 shows the Lagos, Ogun, Ondo, Osun, Oyo had data for their special projects for the 2024 APS. There was no data on special projects from Ekiti state for the 2024 APS. Most of these projects kicked off from 2015 and are on-going in 2024 as at gathering these reports. These special projects included/IFAD/VCDP, OG-CARES FADAMA-RA2, FAO -GEF, LIVE-ND, INPUT DISTRIBUTION and STRENGTHENING OF NUTRITION IN PRIORITY STAPPLES. The Key activities in most these special projects include; Aggregation centers for food crops, support to value addition and market linkages, support to climate resilient market infrastructure, Agro inputs support to farmers, provision of infrastructure, support of assets to farmers, upgrading of wet market, development of integrate land management Extension services, promotion of cocoa value chain, restoration of degraded forest ecosystem Knowlagent management, empowerment of youth/women, increasing food security, distribution of agrochemicals, fertilizer, improved seeds, training of certified crop value chain actors, empowerment of Bio-fortified crop farmers and processors. The table also shows that the special projects covered around 85 LGAs across the States in the South-South zone. Sponsorship for these projects came mostly from LASG, IFAD/FGN, World Bank, FAO, GOBAL and State Governments of the respective states in the zone. The table equally depicts that majority of the special projects had achieved an average of 85% of its target goals. More so, the table also reveals that about 60,000 farmers benefitted from the various special projects across the participating states in the North-West zone.

Table 16.1: Special Projects/Programme

State	Project	Take off year	Key activities	No. of project sites	Sponsors	Percentage of achievement	No. of beneficiaries	Remarks
North-Central								
Benue	IFAD/VEDP	2015	<ul style="list-style-type: none"> • Crop Production, infrastructural development, • capacity building , input distribution. 	8 LGA	IFAD	98%	22,292	successful
	JICA/SHEP	2022	<ul style="list-style-type: none"> • Capacity building of both framers and EAs, • market orientated agriculture with market survey 	5	JICA	100	6500	successful
	Extension Africa	2024	Capacity building on both EAs and Farmers, demonstration farms	88	Heifer	90%	25,620	In progress
	Palm Valley	2022	<ul style="list-style-type: none"> • Infrastructural development, • capacity build on GAP of rice • ICT on plantis Rice input distribution 	9 LGA	Master card	Still in progress	30,070	In progress

	USAID FF	2021	Capacity building for private EAs service delivery support for the small holder farmers		USAID			
	NG CARES	2021	<ul style="list-style-type: none"> • Capacity building of EAs and farmers, • input distribution, small scale processing machine 	23 LGA	WB/FGN	98%	5,950	Successful
	GIZ	2021	<ul style="list-style-type: none"> • Sustainable rice practices on GAP Demonstration plots with distribution of seedlings e.g. mango, banana, oil palm tree 	4 LGA	EU	100%	5,642	Successful
	SASAKAWA Africa	2022	<ul style="list-style-type: none"> • NIPPON-Soil health BASIC -Cassava seed system 	40	JICA	Just started	1,000	On going
	Digital green	2024	Capacity building of AEs and farmers on extension	23 LGA	Digital green	Just started	200,000	Just started
FCT	Fadama NG-CARES (Covid 19 Action Recovery and Economic Stimulus) Program	2023	Input distribution to farmers	1	World bank and FGN	75% in 2023 100% in 2024	3,250 5,040	Program still in progress
Nasarawa	Construction of Rabbit house	2021	Construction and stocking	1 LGA	ARDS	15%	-	-
	Construction of public toilets for ADP HQ	2023	Construction	1 LGA	ADP	-	-	For public visitors

	Construction of drainage system at swampy places in ADP	2023	Construction	1 LGA	ADP	-	-	To drain water logged areas
	Rehabilitation of WIA house and procurement of processing machines	2022-2023	Rehabilitation and Procurement	1LGA	ADP	-	-	For training of WIA
	Rehabilitation /furniture replacement at ADP Head Quarters	2023	Rehabilitation, re-tilling and procurement of furniture	1 LGA	ADP	-	-	Rehabilitation and procurement appreciated
Niger	IFAD/VCDP-AF	2014	Generating input delivery Entrepreneurship	8	IFAD/FGN	75%	Open	Ongoing
	Restoration of degraded land	2014	Sensitization on Vit. A crops	2 LGAs	World Bank	40%	Open	Ongoing
Plateau	Plateau State Potato Value Chain Support Project (PS-PVCP)	2017	-Rural Roads improvements -Water harvesting structures -Spring capture Wash Bores	State-wide	AfDB	78% 78% 78%	300,000	-
	Rural Access and Agricultural Marketing Project (RAAMP)	2018	Road upgrading and rehabilitation Backlog maintenance Spot improvement. Cross drainage structures Road routine maintenance. Market upgrading -Agro logistics centres	State-wide	WB/AfDB /FG	20%	-	-
	Potato Fadama COVID-19 Action and Recovery Economic Stimulus (Fadama-NG)	2021	DL 12.1 Input supply and service provision. DL 12.2 Rehabilitation of rural farm roads. DL 12.3 Provision of Agricultural assets, livestock production and small scale primary processing. DL12.4 Upgrading water and sanitation infrastructure existing wet market.	State-wide	WB, FG and SG	1: 80% 2: 60% 3: 70% 4: 45%	1: 1500 2: 135 3: 829 4: 560	This presentation is for the first six months, representing 2/4 of project target
Tara ba	Fadama III	1998	Empowerment	Statewide	WB/FGN /TRSG	98	Ongoing	Ongoing
	IFAD/VCDP	2015	Empowerment	8 LGAs	WB/FGN /TRSG	94	Ongoing	Ongoing

North-East								
Adamawa	Nigerian Community for action resilient to Economic Stimulus(NG-CARES)	2020	RA1-Social transfer RA2-Food security RA3-Grant to SMEs	21 LGAs	World Bank	100 100 100	RA=Δ3 461	RA
	-	-	-	-	-	-	-	-
Bauchi	Fadama CARES	2022	Food Security	180	World Bank	62%	10,000	On-going
Borno	FADAMA NG-CARE	2022	INPUT SUPPLY	27 LGAs	FGN	85%	85,000	-Completed
	L-PRES	2022		19 LGAs	ADB	Just taking up		
Gombe	SG 2000	1998	Extension Demonstration	9	NIPPON	80%	2,100	- - -
	JICA	2020	Vegetable production and marketing	5	Japan	90%	2,300	-
Yobe	IITA NG-CARES AGRESAL PO UNDP FAO SASSAKAWA GLOBAL 2000	2022 2020 2022 2015 2013 2021	Seed multiplication Empower support Agro-Ecology Extension Services Inputs distribution Livestock supports Processing equipment	11 17 14 5 17 2	World Bank FGN/STATE UN UN	95% 80 40 90 80 100	7000 20,000 100,000 30,000 50,000 5000	-

North-West								
Katsina	NG CARES	2022	-Provision of Agriculture input and services Provision of Agricultural inputs for production and processing	34 LGA	World Bank	95%	44,120	Still on going
Zamfara	Trimming project	2017	Irrigation activation	1 LGA	FGN	100%	N A	Project ended
	Takaful Islamic Insurance on Millet and Sorghum	2023	Millet & Sorghum production	10 LGA	ABU Zaria	NA	NA	Projects ends phase 1
	NG CARES	2023 2024	Inputs support	14 LGAs	FBN/State/LGA	NA	NA	Stage of implementation
	FINDEF	2023 2024	Inputs and women Empowerment	2LGs	NGO	NA	10,000 Farmers	Stage of implementation

South-East								
Anambra	SHEP	2021	Vegetable crop production	18	FMAFS	60%	400	Excellent
Ebonyi	Fadama III 6f	2014	Crop production/Rice	State wide	FGN/WORLD BANK	60%	10,500	On-going
	IFAD	2015	Value chain development on rice and cassava production	7 LGA		95%	25,550	On-going
Enugu	Special Agro-industrial processing Zones (SPAZ) -Food production increasing commercial	2024	Agro-industrial processing Food production increasing commercial agriculture -Production clusters and aggregation centres	3 zones Owo uba hal, Ama akanu Weke dols	AfDB And Federal Government and State government	On Agricultural activity of the State 28% of GDP	About 80% of the inhabitant of farmers will benefit	-

	agricultu re clusters and aggregati on centres								
	APPEA LS	2019	Value chain, Rice processing, Poultry and Cashew	State wide	World Bank	25%	8520 DB 2948,1700(Women and youths	-	
	IFAD VCDP	2020	Rice and Cassava processing and marketing	Anini,Enugu East, Nkahi East Isi-Uzo udeau	UN	25%	52 Farmers traned .590 processors and 1273 Value chain		

South-South									
Bayelsa	NG-CARES	2022			206	World Bank	80%	50,000	
	Aquaculture		Artisan fishing						
	Agricultural access for the production of food		Increasing food security and safe functioning of food supply chain						
	Upgrading wet market								
Cross Rivers	Nigeria Agric Ext &Advisory services (Video Ext)	2020	Delivery of MOPS and Maize, Rice and Aquaculture		18 LGAs	USAID	75%	130,000	On-going
	IFAD LIFE-ND	2018	Livelihood support &infrastructure ,devp in rice,maize,poultry, fishery and others		10 LGAs	IFAD	52.1%	Over 50,000	On-going
	Project Grow	2024	Input supply, support for rice ,maize, aquaculture and folder production.		18 LGAs	CRSG,USA ID	Incepti on, pilot phase	100,000	On-going
	NG-CARES RESULT AREA 2	2022	Input supply, asset supply,provision of market stalls,farm road construction		18 LGAS	WB	100%	Over 63,000 direct beneficiari es	Closing Dec, 2024

Delta	LIFE-ND PROJECT	2020	Agribusiness Incubation Modelling Youth and Women Empowerment in Agriculture.	10 LGAs(45 Project sites)	OCP Africa, NISS/SSSN	100%	4375	On-going
Edo	EDO-CARES	2021	Distribution of inputs, assets, rehabilitation of market, distributions of irrigation pumps and opening of feeder roads.	62	World Bank	45.5	4,627	
	LIVELIHOOD IMPROVEMENT FAMILY ENTERPRISES PROJECT NIGER DELTA(LIFE-ND)	2020	Support to rural business incubation. -Support to agro- business. production and marketing infrastructure. -Promotion of financial inclusion to rural agro-business. -Rural institutional strengthening -Support activities related to nutrition, environment and climate change Mainstreaming..	50	IFAD/ FGN/ND DC/STATE GOVT			
	Edo Agripreneur Programme	2019	Land Development, Crop Production, Livestock Production, Catfish Production, Broiler Production, Farm Mechanization Support, Offtake, Farm Sponsorship(Inputs Provision), Extension Services Provision), Extension Services	30	EDSG,CBN with Technical support from NIRSAL	Catfish 430(430,000 stocked)) Poultry (156(125000Broilers stocked)) Rice 377(716h) Maize 284(816h) Cassava 12015 (1,769h)) Land Devp3,200 (6,630h))		
	Independent farmers Initiative	2020	Provision of inputs (seeds,fertilizer and crop protection products) for farmers I four focal crops.Rice,Maize, Cassava and soya-bean	18 LGAs	EDSG	>3,500 Farmers reached	1,400	
	Fishery intervention	2020	Distribution of catfish fingerlings To potential migrant returnees		IOM		40	
Rivers	Empowerment of Rice farmers grouping the 23 LGA, and Rice paddy for planting	2023	-Technical training on Rice production. -Faro 44 for planting	23 LGAs	FGN and State	75%	1150	-

	Training and empowerment of youth & women on Tomato value chain.	2023	Technical training of tomato and tomato seeds	1 LGA	FGN/State	85%	40 farmers and 10 Extn Staff	-
	Training and Empowerment of cluster farmers in Abalodual LGA	2023	Training of cassava and its value chain	25 clusters	FGN/State	85%	Over a 1000 farmers	-
	Training and Empowerment on yam value chain	2023	-Yam production. -Yam processing and Ext training and Empowerment	1	FGN/State	90%	50	-
	CY/CONCEPT	2023	Training and Empowerment	1	FGN/State	70%	50	-
	National poverty reduction with growth strategy (NPRGS)	2024	Training and starter pack	1	FGN/State	60%	250	The inputs were not shown and badly done
	Fadama III Project	2009	1 Capacity Building for Beneficiaries. 2.Construction of Small-Scale Community own infrastructure. 3. Advisory Service to 1600 beneficiaries. 4. Input Support to 1600 beneficiaries. 5. Asset Acquisition to 1600 beneficiaries	16 LGAs 16 communities in LGAs 16 LGAs 16 LGAs 16 LGAs	WB/FGN WB/FGN WB/FGN WB/FGN WB/FGN	95 95 95 95 95	1,600 16 Communities 1,600 1,600 1,600	Ongoing
	Fadama III Additional Finance	2018	Preparation of 100ha mechanized farm /Distribution of 6,000 bundles of TMS 419 Cassava stems for the production of Cassava value chain at Agbeta Eleme LGA, RS.	700	WB/FGN	95%	700	Male = 36 Female = 54, Youth =10
	Fadama /SEEFOR Project	2013	Implementation Grants for Community Development (CDD) initiative under sub-components A3 of the project implementation manual					Total no. of SEEFOR/FADAMA beneficiaries; Direc 6.617 indirect 109,358

	RiVCARES-RESULT AREA 2 - FADAMA	2022	1. Distribution of Agricultural Inputs and Services 2. Grading and Sand filling of feeder/Access roads. 3. Distribution of Agricultural production & Small scale primary processing equipment 4. Upgrading of water and sanitation facilities of the wet market.	23 LGAs	World Bank/FGN /RSG	96	2,331	
				16 LGAs	World Bank/FGN /RSG	97	7,057	
				23 LGAs	World Bank/FGN /RSG	87	2,754	
				16 LGAs	World Bank/FGN /RSG	30	16 Markets	
					World Bank/FGN /RSG			

South-West								
Lagos	Central Food logistics and hub	2023	Aggregation and centre for food crops	10	LASG	60	79,000	
Ogun	FGN/IFAD (VCDP)	2015	Support to value addition and market linkages support to climate resilient market infrastructure Strengthening of farmers organization and support to stallholder production. Programme coordination and management	8LGAs	IFAD/FGN/Ogun State Govt	50	9,770	
	OG-CARES FADAMA-RA2 DL1 2.1	2022	Agro inputs support to farmers	All 20 LGAs	WB/FGN/Ogun State Govt	21%	1500	On going project
	OG-CARES FADAMA-RA2 DL1 2.2	2023	Provision of infrastructure	8 LGAs	-	151%	8670	On going project
	OG-CARES FADAMA-RA2 DL1 2.3	2022	Support of assets to farmers	All 20 LGAs	-	27%	2170	On going project
	OG-CARES FADAMA-RA2 DL1 2	2023	Upgrading of wet market	10 LGAs	-	14%	2245	On going project
Ondo	FAO GEF-1(FOLUR-1P) Project	2024	Development of integrate land mngt Ext services. Promotion of cocoa value chain. Restoration of degraded forest ecosystem knowledge management	8 LGAs of Ondo State	FAO	Starting stage	Profiling of beneficiaries on going.	The FBS SKDYE program is on-going
Osun	IFAD LIFE -ND FADAMA,N-CARES	2020 2021	Empowerment of youth/women Increasing food security	10 LGAs 18	IFAD World Bank	55% 100%	2,355 12,021	
	Input distribution to farmers	2024	Distribution of agrochemicals, fertilizers, improved seeds	1 LGA	FGN/Osun State GOVT	100%	Excellent	
Oyo	Strengthening nutrition in priority stapples (SNIPS)	2021	Training of certified crop value chain actors Empowerment of Biofortified crop farmers and processors	4 LGAs	Gobal	90%	4000 1054	

17.0 GENERAL CONSTRAINTS IN AGRICULTURAL PRODUCTION

17.1 Rainfall and Weather-related Challenges

The effects of climate change, especially with regard to changing rainfall patterns, were significantly heavy on agricultural productivity in the country in 2024. As at September, there was excessive rainfall that led to heavy flood occurrences in about 17 states, affecting such crops as maize, cassava and vegetables, as well as poultry production. Floods were most heavy in the Northwest, followed by the Northeast. In Borno State (NE), however, the flood combined with the water from the broken Lagdo Dam ravages farmlands, towns and villages, destroying other critical infrastructures and displacing people from their homes. There was also the occurrence of dry spells across all the zones, especially in the Southwest and North-central, some lasting for more than 5 weeks. Rainfall and temperature regimes are perhaps the most important factors in determining the productivity of various agricultural activities. The effects of irregular rainfall patterns also include nutrient leaching and erosion, reduced water availability and changes in the distribution and incidence of pests and diseases including weeds. The 2024 survey results showed that agricultural production was constrained in 2024 (Figure 17.1).

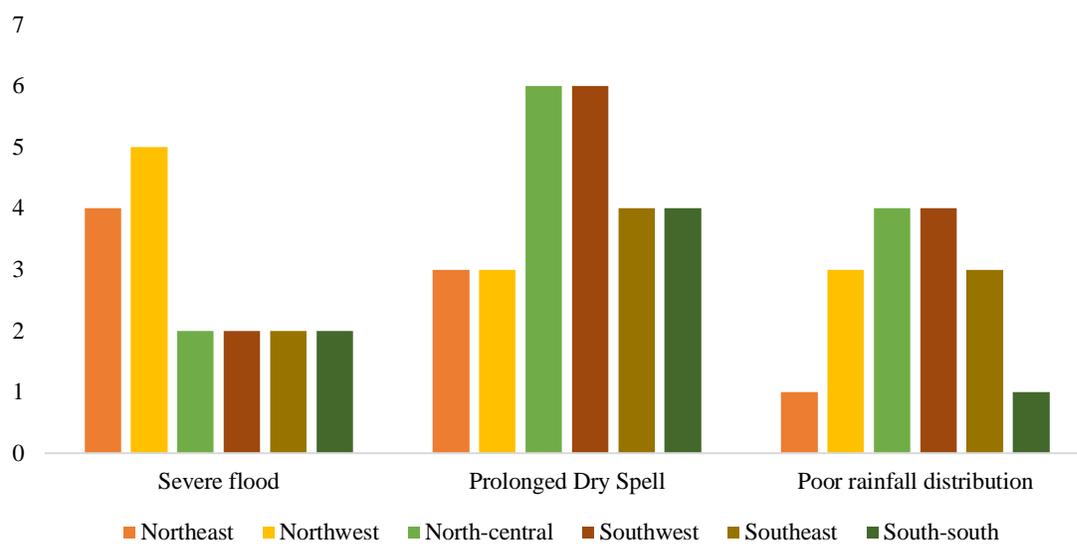


Figure 17.1: Rainfall and weather challenges to agricultural activities

17.2 Farm Input provision, availability and accessibility

Agricultural production and profitability in Nigeria is largely dependent on the rainfall situation and quality of inputs used (including seeds, animal stocks, fingerlings, fishing nets, fertilizers, herbicides and advisory information). This also means that such quality inputs are adequately available and accessible to farmers. In 2024 survey, about 25 states reported that they procured and distributed various farm inputs to farmers to aid agricultural production. However, majority of the farmers reported that they purchased their farm inputs mainly from the open market and at exorbitant prices. With regard to government inputs, the survey generally showed that farmers found them inaccessible, unaffordable, inadequate, politicized distribution and substandard. The survey data (Figure 2) show that government inputs were largely inadequate in the 25 states (for seeds, stocks and chemicals); untimely in 15 states (for chemicals, seeds and stocks); unavailable/ inaccessible in 19 states for chemicals, seeds and stocks). The unaffordability of inputs from open market, inaccessibility and

inadequacy from Government sources; as well as adulterated and substandard chemicals implies that in 2024 agricultural production is constrained by input.

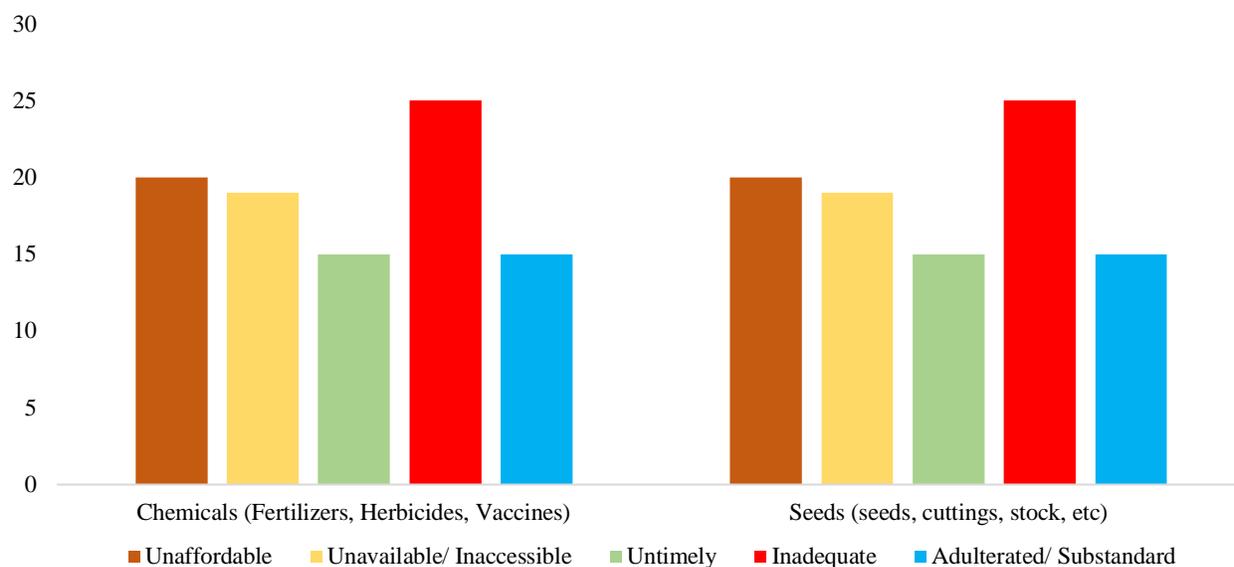


Figure 17.2: Farm input-related challenges

17.3 Agricultural Mechanization

Agricultural mechanization is critical to the achievement of food security and economic development in any country. The data on figure 17.3 shows high cost of hiring in 32 states in 2024 and about 24 states with tractor unavailability/inaccessibility. The inaccessibility of tractors to farmers is largely due to unavailability in most of the states. About 10 states complained of unsuitability of working with tractors, while lack of genuine spare parts for replacement in tractors was encountered by 15 states. This data shows gross constraints regarding agricultural mechanization.

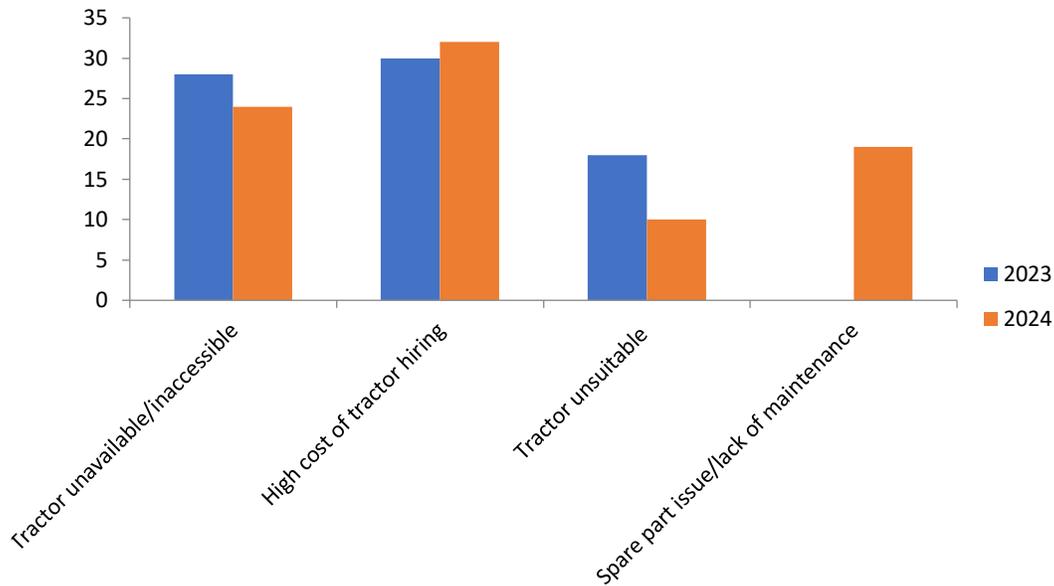


Figure 17.3: Data on mechanization (2023-2024)

17.4 Extension Provision Activities

Extension is an important area to the development of Nigeria's Agricultural sector. The ADPs are the primary Agencies that provide extension information and support to farmers in the country. There is weakening of the ADP system as a result of underfunding and inadequacy of staff. The data in figure 17.4 shows that extension activities have continued to decline with about 25 states with lack of funds, and 9 states with inadequate funds, while 29 states have inadequate staff. This poor funding seriously impacted the level of staff capacity and number of vehicles available for fieldwork. Twenty-three (23) States need adequate training for their staff so as to improve their capacity building. As such, agricultural extension and advisory is critical to the development of the agricultural sector. The ADP in each state is expected to provide advisory services that are necessary for developing the sector and enhancing farmers' livelihoods; as well as linking smallholder farmers to high-value export markets, promoting environmentally sustainable production techniques, and helping farmers and rural households to cope with health challenges that affect agriculture and rural development. By implication, farmers were not reached with the requisite information and technologies for agricultural productivity. Furthermore, only about 9 ADPs have vehicles for field work, making it difficult for the ADPs to conduct field activities reach the field. Some of the ADPs with motorcycles and utility vehicle lacked adequate funds for fueling as well as funds to carry out various field demonstrations on new technologies.

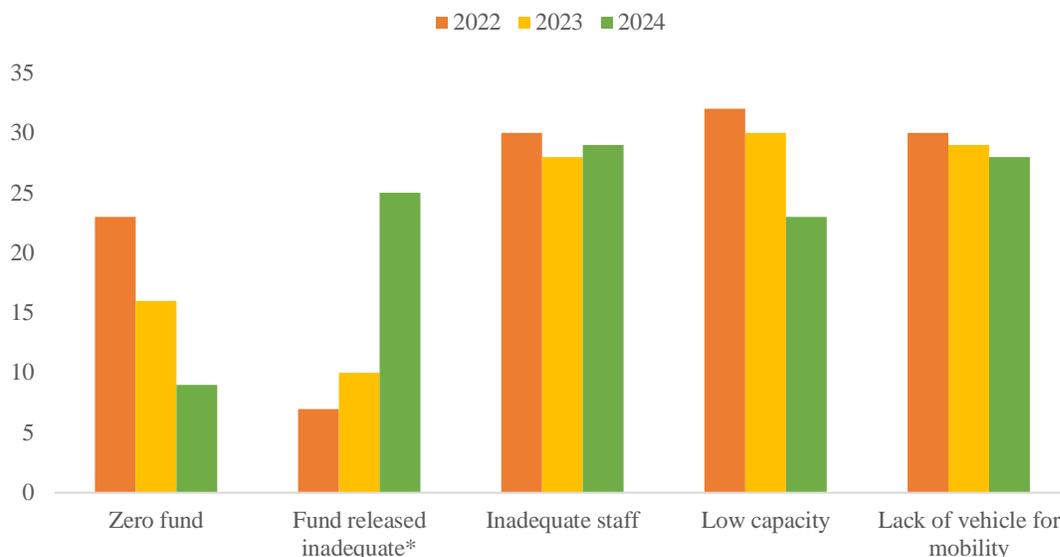


Figure 17.4: Comparative data on constraints related to ADP activities (2022-2024)

17.5 Agricultural Broadcasts

Some of the major channels for reaching farmers with agricultural information are radio and television. Each state ADP is expected to produce and disseminate agricultural information through conventional and new media to farmers in the languages and formats they are familiar with. The agricultural decisions of farmers and outcomes can be greatly affected by information received from the ADP. For the 2024 survey, agricultural broadcast was constrained by high cost of airtime for 28 ADPs lack of media packaging equipment (see Figure 17.5).

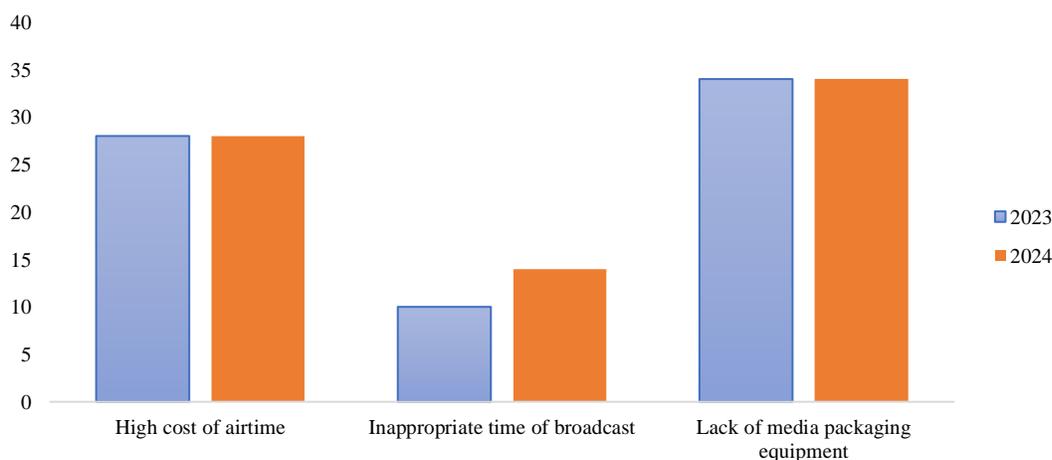


Figure 17.5: Comparative data on constraints in agricultural broadcasts

17.6 e-Extension

With dwindling funding and other forms of support to ADPs, attention is now shifting to leveraging ICT infrastructures and gateways for e-extension activities. Currently, e-Extension intervention is proving to be the fastest and very reliable means of delivering advisory services to farmers and other stakeholders. The survey data revealed that the 2024 situation was comparatively better than that of

2023 concerning network provision and cost of data (Figure 17.6). However, on the side of the farmers in this years' survey, 13 states reported farmers' non-ICT compliance while 10 do not own android phones to access e-extension advisory services.

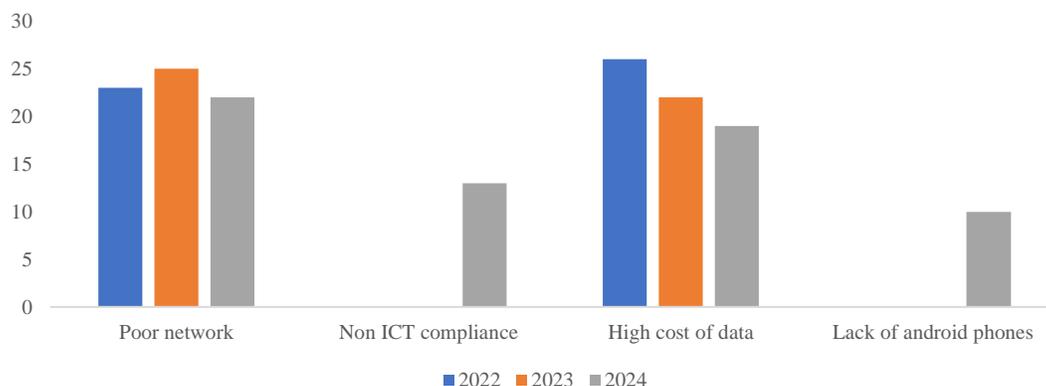


Figure 17.6: Challenges on e-extension

17.7 Security-related Challenge

Every situation required security as a necessary condition for productivity including agricultural practices. Conversely, insecurity poses a threat to agricultural productivity and other forms of economic activity. Since 2016, there has been a gradual and incremental growth in insecurity in the country, especially in the rural areas. This led to an expressed concern about widespread insecurity and higher prices of farm inputs in the country, which have impacted heavily on cultivation and access to productive inputs. Previous APS reports have shown that many farming households in rural areas were displaced of their farmlands by cattle herders or some form of communal crises. Although the government has done a lot to stem the tide of insecurity, the menace persists. The data in Figure 17.7 show that farmer-herder clash is reported in about 31 states, kidnapping in 10 states, and crop theft is on the rise having been reported in 20 states. Other indicators of insecurity across the country were banditry and cattle rustling activities.

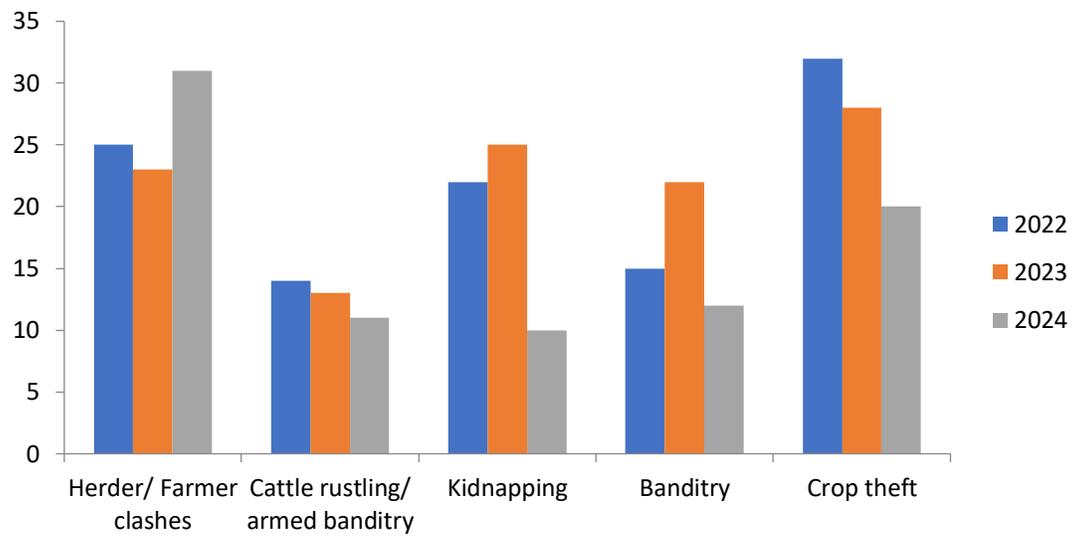


Figure 17.7: Comparative data on constraints related to insecurity (2022-2024)

18.0 CONCLUSION

The 2024 Wet Season Agricultural Performance Survey has presented a holistic picture of agricultural activities and development in the country. The study was conducted with the support and collaboration of all state ADPs, ministries of agriculture and many other organizations. This report is a vivid representation of the field outlook of agricultural activities and development in the country for 2024. The results highlighted the prospect of marginal increases in the national agricultural output, especially on crops. It showed, among others, marginal increases in several economic activities in the agricultural sector (both cultivation areas and production estimates), due to low mechanization, flooding and dry-spells, low utilization of improved inputs, and poor access to extension and advisory services, among others. Overall, the field outlook for 2024 and production forecasts showed that, except for ginger, harvests would rise marginally (between 0.2% and 5.4%) above those of 2023--Ginger, which was devastated in 2023 by a fungus disease, recorded about 38% increase.

19.0 RECOMMENDATIONS

Development of a long-term strategy on agricultural mechanization: There is the need for the governments to develop a long-term strategy on agricultural mechanization, using Public-Private Partnership in tractor, irrigation and other input service delivery, to boost production and reposition agriculture in its rightful economic place. The APS results showed low utilization of farm machinery, occasioned by inadequate access to modern equipment like tractors and irrigation infrastructures. For 2024, Nigeria has a total of 3,297 functional tractors, disaggregated into 2,510 for government and 787 private tractors. This number serves approximately 95 million farming population, translating to 1:28,800 tractor/farmer ratio. Moreover, the cost of ploughing Fadama and upland was as high as N101,600 per hectare in some parts of the country, perhaps due to the removal of fuel subsidy and the resultant increase in inflation rates. This situation has led to heavy dependence on manual labour, which has negatively affected production and productivity. Apart from Ginger, most crops recorded very low marginal increases in production, from 0.22% (for soybean) and 5.4% (for benniseed); a few others had negative increment. There is a need to reverse this trend through deliberate planning to reduce drudgery.

Setting up of Agricultural Trust Fund for farmers in periods of emergency: The magnitude of flood disasters in 2012, 2019 and 2022, the Covid Pandemic and palliative warehouse looting of 2020, and the inflationary trends of 2023/2024, triggered by the petroleum subsidy removal suggest the need for an Agricultural Trust Fund that would cater to investments in agriculture in periods of emergency—an issue that has been enunciated by the Draft Policy on Agricultural Extension. Added to this is perennial threat from the Lagdo Dam water release to agricultural activities in the country. Furthermore, there has been renewed threats in cattle herders' encroachment into crop lands, as well as crop theft in 2024, trends that had been declining since 2022. There is therefore the need to expedite actions on legislating the Policy on Agricultural Extension, to minimize such losses and cushion existing hardship in emergencies.

Increasing investment in resilient agriculture: The increasing incidences of flash and epidemic floods, crop and livestock diseases and pests, as well as prolonged dry spells across the states is becoming a serious call for concern. For 2024, floods were generally devastating, as 31 states and 180 LGAs across the federation were affected; about 17,008 hectares of crop lands were submerged. There was also large-scale report of dry-spells of between 4 and 8 weeks, especially in the Southwest and North-Central. Such adverse changes are threatening the national food security objective, and discouraging farmers from increasing investment in agriculture. There is, therefore, the need for governments at the Federal and State levels to increase investment (in funding and infrastructure) as a rapid response strategy in agricultural research and extension to these monumental imbalances in the sector. The

investment is to develop and promote crops and animal stocks that are resilient to such harsh climatic realities.

Developing national and state blueprints for productivity enhancement through effective input subsidization: Although the 2024 study found some appreciable level of government support and intervention programmes in several states, most of them were largely inadequate and/or inaccessible to farmers; the few farmers that had access to inputs could not afford the subsidized prices. About 25 states reported to have procured and distributed farm inputs to farmers; but majority of farmers reported that they purchased their farm inputs mainly from open markets and at exorbitant rates. Government inputs were largely inaccessible, unaffordable and inadequate; moreover, the distribution chains were said to be politicized, while some inputs were found to be substandard. Such input challenges limit farm yields and income, thereby making agriculture unattractive to prospective farmers and investors. Thus, cost-effective and efficient input subsidization blueprints should be evolved and implemented at national and state levels. The inputs so provided should be subsidized and with minimum interference from third parties. A compromise on agricultural inputs is a compromise on yield quantity and quality, as well as income.

Conscientious efforts at eliminating multiple taxation regimes on agricultural produce and transporter exploitation by security agencies: The study found that costs of agricultural produce have more than tripled in the last two years; and that this trend may continue if no conscientious efforts are made to check this. These high costs are a combined effect of increased costs of farm production activities and the multiple taxation (by various states and local governments at inter-state borders) as well as exploitation by security agencies (experienced by distributors in the course of transporting farm produce to the market). This puts undue pressure on the farmers/ distributors to transfer these additional costs on consumers. There is therefore the need to harmonize the different produce payment fee/ receipt regimes along inter-state highways, to eliminate multiple taxation. This should be complemented with *executive orders* on exploitation by law enforcement agencies on the high-way and market places.

Strengthening options for e-Extension in agricultural advisory services: The zeal of farmers to expand agricultural activities has not been equally matched with the requisite knowledge for improved farm management practices. Besides, the 2024 data showed that the ratio of extension agent to farm families has remained astronomically low — about 1:35,000 for Gombe State and 1:24,468 for Akwa-Ibom state, instead of the FAO recommended 1:1000. There is also the weakening of ADP system as a result of underfunding and inadequacy of staff (as 25 of 36 states and the FCT lacked funds, while 29 states had inadequate staff strength). Thus, Nigeria needs to leverage the prevalence of ICTs to strengthen its e-extension for advisory service delivery. Moreover, the enormity of crop and livestock losses, occasioned by the absence of effective information linkages between farmers and extension service providers, requires the determined efforts of government to strengthen all options (policy, institutional, infrastructures, etc) for agricultural knowledge and information management system for improving farmers' livelihoods of farmers. In this regard, the National Farmers' Helpline Centres should take as a national priority to achieve an information-based and ICT-driven agricultural extension system.

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