AGRICULTURAL PERFORMANCE SURVEY OF 2017 WET SEASON IN NIGERIA

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NATIONAL REPORT

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Federal Ministry of Agriculture and Rural Development
Ahmadu Bello University, Zaria

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Federal Dept. of Agricultural Extension (FDAE)

&

Planning and Policy Coordination Department (P&PCD),
Federal Ministry of Agriculture and Rural Development (FMARD),
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Agricultural Performance Survey of 2017 Wet Season in Nigeria
National Agricultural Extension and Research Liaison Services,
Ahmadu Bello University
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Collaborators**:**

P&PCD, NBS, FDAE, FDA, FDFA, FDAPHS, IAR, DFISS, NAPRI, NIMET, NPC, FEWSNET and ADPs

December 2017

PREFACE

The assessment of agricultural production in Nigeria is a key annual activity of NAERLS. The 2017 wet season assessment exercise was conducted in August in collaboration with:

- State Agricultural Development Programmes (ADPs) and Ministries of Agriculture
- Federal Department of Agricultural Extension (FDAE);
- Planning, Policy and Coordination Department (PPCD);
- National Bureau of Statistics (NBS);
- Federal Department of Fisheries and Aquaculture (FDFA);
- Nigeria Meteorological Agency (NIMET);
- Federal Department of Agriculture (FDA);
- Federal Department of Animal Production and HusbandryServices (FDAPHS);
- Federal Department Farm Inputs Support Services (FDFISS);
- National Productivity Centre (NPC);
- Institute for Agricultural Research (IAR)
- National Animal Production Research Institute (NAPRI) and
- Famine Early Warning Service Network (FEWSNET), Nigeria

Nineteen teams covered the 36 states and the Federal Capital Territory (FCT) involving 148 LGAs across the country. Six monitoring teams, one per geo-political zone monitored the survey. I wish to commend all the teams especially those who covered Borno, Yobe and Adamawa States for their sacrifices despite the restiveness in the area.

The same sincere appreciation goes to farmers and farmers' groups, officials of the State Ministries of Agriculture, State Agricultural Development Projects (ADPs), other Parastatals and LGA officials across the country who made all the necessary arrangements to facilitate the smooth conduct of the fieldwork and also provided the required data. The outputs of the evaluation exercise have been put together into 36 states/FCT reports and a national report. The reports are available to all stakeholders. The continued involvement of agencies such as NBS, NPC, NARIs, NIMET and FEWSNET continues to raise the scope and quality of the reports. The support of the Food and Agriculture Organization (FAO) of the United Nations (UN) through the provision of Android tablets facilitated electronic data capture during this year's survey. NAERLS will continue to explore options for improving the quality of the exercise as well as developing the capacity of key partners in data collection and management.

As usual, we welcome comments and suggestions for the improvement of the survey.

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ACRONYMS

ADP	-	Agricultural Development Programmes
AfDB	-	Africa Development Bank
APS	-	Agricultural Performance Survey
APSR	-	Agricultural Performance Survey Report
ASC	-	Agro Service Centers
BES	-	Block Extension Agent
CAYS	-	Crop, Area and Yield Survey
CBARD	-	Community Based Agricultural and Rural Development
EA	-	Extension Agent
FAO	-	Food and Agriculture Oganization
FDA	-	Federal Department of Agriculture
FDFA	-	Federal Department of Fisheries and Aquaculture
FDAPHS	-	Federal Department of Animal Production and Husbandry Services
FDFISS	-	Federal Department Farm Inputs Support Services
FNT	-	Forthnightly Training
IAR	-	Institute for Agricultural Research
IAR&T	-	Institute for Agricultural Research and Training
LCRI	-	Lake Chad Research Institute
LGA	-	Local Government Area
MANR	-	Ministry of Agriculture and Natural Resources
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

NBS	-	National Bureau of Statistics
NCRI	-	National Cereals Research Institute
NFRA	-	National Food Reserve Agency
NIFOR	-	National Institute for Oil Palm Research
NIMET	-	Nigerian Meteorological Agency
NRCRI	-	National Root Crops Research Institute
NPAFS	-	National Programme on Agriculture and Food Security
NPFS	-	National Programme on Food Security
NSPFS	-	National Special Programme for Food Security
OFAR	-	On Farm Adaptive Research
PM	-	Programme Manager
P&PCD	-	Planning and Policy Coordination Department
RID	-	Rural Insfrastructure Department
RTEP	-	Root and Tuber Expansion Programme
SPAT	-	Small Plot Adaptation Technique
SSP	-	Single Super Phosphate
T & V	-	Training and Visits
TOHFAN	-	Tractor Owners and Hiring Facilities Association of Nigeria
ZEO	-	Zonal Extension Officer

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EXECUTIVE SUMMARY

1.0 INTRODUCTION AND METHODOLOGY

1.1. Introduction

National Agricultural Extension and Research Liaison Services (NAERLS) conducted the 2017 Agricultural Performance Survey (APS) between 20th and 27th of August. The survey was conducted in collaboration with the Federal Department of Agricultural Extension (FDAE) and other eighteen other relevant stakeholders in agricultural data generation and use. The objectives of the survey were to assess the crops performance during the wet season; make production forecasts; identify constraints to increased agricultural productivity and effective extension delivery service; and provide feedbacks on field situation and farmers' problem for improved research and policy performance.

1.2. Methodology.

Participatory Rural Appraisal (PRA) methodology was adopted. This involved the use of questionnaire/ checklists, farm visits/observations, interviews with farmers and Ministry/ADP officials /reports technology review meetings. Nineteen multi-disciplinary teams of three scientists each constituting 57 scientists conducted the exercise across the 36 States, Federal establishments and Federal Capital Territory. In addition, there were six NAERLS principal Officers including the Executive Director who monitored the exercise across the six geo-political zones of the country.

In each state, two communities were selected from two LGAs in two selected agricultural zones for the field evaluation. From each community, five farmers were interviewed in addition to focused group discussions held at every site and rapid rural appraisal. In all, interactions were held with 674 individual farmers and 74 different farmers groups. Data capture from the farmers was done electronically using Android Tablets. Extensive discussions were also held with the ADP staff, ministry officials and staff of other relevant agencies. Final wrap-up sessions to validate the data generated and findings were held at the end of each state's visit with officials of the State ADP and Ministry of Agriculture.

Primary and secondary data were collected and analyzed using simple statistics. To forecast the 2017 crops yield, adjusted land area/output estimates of 2016 were used as base figures in computing percentage changes in the areas devoted to various crops. This was applied in conjunction with Report of NPFS, document from the Strategic Development Initiatives and reports of respective ADPs to generate outputs forecast for 2017 for each state. Yield figures from 24 model sample plots linked to Decision Support Agricultural Information Tools (DSAT) were used to correct forecast of average yields from each state to generate the output forecasts for 2017

2.0.RAINFALL SITUATION

2.1 Rainfall Situation

The south experienced more rainfall compared to the north in 2017. In the Northeast, rainfall started in April in Adamawa, Gombe and Yobe States. Borno and Bauchi States received their first rainfall and in May 2017. In Gombe state, there were floods in six LGAs while Bauchi and Yobe states experienced dry spells. Generally, rainfall was higher in 2016 than in 2017 in the Northeast. Similarly, rainfall commenced in April in 2017 in many states of the Northwest zone. However, rain did not fully establish across the states in the zone until May 2017. Rainfall was highest in Kaduna and Kebbi with the least in Sokoto. Kano, Zamfara, Sokoto and Jigawa States experienced dry spells. There was no record of flood in the Northwest. Rainfall started in April 2017 in most parts of the North-Central zone except Kwara and Plateau. Dry spell was experienced in the months of April, May and June in Nasarawa State, There were also incidences of flood between July and August in Niger State in April. Less rainfall was experienced in 2017 than 2016 in the North-Central.

In the Southwest zone, rainfall commenced in January 2017 except in Ondo and Osun states where rain started in February and March, respectively. There were severe incidences of flooding across Lagos State and some parts of Ogun State. For the Southeast, rains started early in March in most parts of the zone. The data show progressive distribution of rainfall pattern with the highest values occurring between April and August across the zone, both for 2016 and 2017. Incidences of severe flooding were reported in Abia, Ebonyi and Anambra states in May-July. The rainfall situation was generally higher in 2016 than in 2017 in the south.

2.2 Rainy Days

The cumulative rainy days in the Northeast were lower in 2017 compared to 2016. Adamawa State recorded 57 rainy days as highest in 2017 and Yobe state had the least number (32) of days in the zone. Kaduna State had the highest rainy days of 58 while the least number of 32 rainy days were recorded in Kebbi State. In the northwest, the number of rainy days was higher in 2016 than 2017. The rainy days in the North-Central zone were more in 2016 than 2017. In the Southwest states

Cumulative data indicated that Oyo State had the highest (97) number of rainy days, while the least (62) was Ondo. The first rains started early in March in most parts of the Southeast. Generally, the rainy days were more in 2016 than 2017 for the Southeast zone. In the South-South cumulatively, Cross River and Delta states had the highest (118) number of rainy days, while the least (69) was Akwa Ibom in 2017.

3.0. USE OF IMPROVED FARM INPUTS

3.1 Use of Improved Seeds and Seedlings

Borno, Gombe and Taraba states out of the 6 states in the northeast zone procured and distributed improved maize, rice and sesame seeds to their farmers. In the Northwest, three states; Katsina, Sokoto and Jigawa procured and distributed improved millet, rice, maize, sorghum, cowpea, soybean and groundnut seeds to the farmers

Seed procurement and distribution in the North-Central zone was quite impressive. Plateau, Nasarawa, FCT, Niger, Kwara, Kogi and Benue procured and distributed rice, maize, soybean and tomato seeds, as well as cassava cuttings to their farmers in 2017. However, the seeds distributed were grossly inadequate for the farmers' needs. In the Southwest, Osun, Ekiti, Ogun, and Lagos procured and distributed improved maize, rice and vegetables seeds and cassava cuttings for their farmers. In the Southeast, Anambra, Ebonyi, Abia and Imo procured and distributed improved maize, rice, okra, cucumber, pepper, watermelon and soybean seeds, as well as cassava cuttings to farmers. Similarly, in the South-South, Edo, Delta and Akwa Ibom states procured and distributed improved maize, rice, soybean and cassava cuttings to their farmers.

3.2 Use of Agrochemicals

Only 13 states across the nation namely- Bauchi, Borno, Sokoto, Jigawa, Nasarawa, FCT, Kwara, Enugu, Ebonyi, Abia, Ondo, Ogun, and Lagos procured and distributed agrochemicals to their farmers.

3.3 Use of Fertilizers across the States

Fertilizers were procured and distributed by various government agencies throughout the country. 19 states (Borno, Adamawa, Yobe, Bauchi, Gombe, Sokoto, Kebbi, Zamfara, Kaduna, Kano, Nasarawa, Platau, Kogi, Niger, Benue, Ogun, Lagos, Abia and Anambra) provided records on fertilizer procurement and distribution. The fertilizers procured and distributed were mainly NPK and urea. Only Benue and Akwa Ibom states had data on procurement and distribution of SSP fertilizers. Similarly, only Akwa Ibom purchased and distributed crystalizer to its farmers. Generally, there was a remarkable improvement in the availability and affordability of fertilizers in 2017 compared to 2016

4.0 CROP PESTS, DISEASES AND NATURAL HAZARDS

Many states experienced attacks of pests and diseases on crops. The infestations of stem borer and armyworm on maize and rice were found in all the agro-ecological

zones, with varying degrees of severity. Flood was also experienced in many states. Field observations indicated that scarcity, high cost, and adulteration of agrochemicals, as well as inadequate training on the use of agrochemicals were the major constraints to pest and disease control nationwide. Quelea birds also attacked rice farms, with farmers using nets and scarecrow techniques, among others, to keep the birds away.

In the northeast, the armyworm attack was first reported in 2016, with an increased infestation in 2017. Termites were also a serious threat to maize production in the zone. Other pests reported were spittle bugs, aphids, white flies and cored bugs. The reported diseases were downy mildew, rice blast, sorghum midge, groundnut rosette, fusarium wilt, and leafspot. The crops affected were maize, millet, rice, sorghum, cowpea, groundnut, soybeans, sweet potato, tomato, Irish potato and ginger —these occurred across the states, with different degrees of severity.

Generally, the challenges encountered with pest and disease control on crops as observed in the survey were:

i. Pests and diseases resistant to pesticides and insecticides
ii. Adulterated agrochemicals in the market
iii. Inadequate skills and technical know-how on application of chemicals for effectiveness
iv. Erratic distribution of rainfall
v. Unavailability and high cost of chemicals
vi. Farmers' refusal to strictly follow the manufacturer's guideline before and after use
vii. Inadequate fund to buy recommended insecticides
viii. Stem borer resistance to insecticides
ix. High infestation of army worm on maize, especially during the dry spell

5.0. AGRICULTURAL MECHANIZATION

Data provided by 26 of the 36 states and FCT gives the total number of functional states government tractors for 2016 and 2017 in Nigeria as 908 and 964 respectively. This represents a 6.17% increase. However, there is no record for actual number of tractors in the country. Non-functional government-owned tractors in 2016 and 2017 were 539 and 524, a reduction of 2.78%. This suggests an improvement in their management in the year. Among the states that provided data, Plateau State reported the highest number of government functional tractors of 279 while Rivers and Akwa Ibom states reported 2 and 1 respectively. Generally, the number of non-functional tractors reduced in most states, except in a few instances such as Borno, which had 21.88% increase in the number of non functional tractors.

6.0 COST OF PRODUCTION OF MAJOR CROPS

The general outlook of production costs per hectare of major crops in Nigeria in 2017 showed significant increases, compared to what were reported in 2016.

7.0 GRAIN RESERVES

The survey recorded 32 Federal Government silos for grains reserve in different locations in the country across the 6 geo-political zones. The Silos have a total storage capacity of 1,235,000 million metric tonnes; fourteen of the silos were fully operational, while four were fully completed but not yet operational and fourteen were at various levels of completion between 75 and 95%.

8.0 COSTS OF FARM OPERATIONS

In 2017, generally, the costs of farm operations were observed to increase across the country compared to 2016. The national average of cost of ploughing per hectare increased from N16,588 to N17,186. Costs of harrowing and ridging were higher by 26.2% and 24.8% within the same period under review. In the Northeast, average cost of ploughing increased from N18,000 to N23,500, harrowing increased from N10,000 to N20,000, ridging was increased from 12,500 to N17,500 within the same period. In the Northwest, the average cost of ploughing across states in the zone increased from N14,000 to N17,500; cost of harrowing and ridging also had 29% and 36% increases, respectively within the same period. North-Central zone had a 0.6% marginal increase in cost of ploughing from N17,400 to N17,500; harrowing and ridging had a 16% and 27.4% cost increases in the same period. The situation was similar in the Southwest with marginal increase in cost of ploughing by 5.7%, cost of harrowing (20.2%) and ridging (24.3%) from 2016 to 2017. Cost of ridging in the Southeast and South-South zone had decreases of 15% and 40.5%, respectively. However, cost of harrowing and ridging had 17% and 11% increases, respectively for the Southeast zone from 2016 to 2017. In the South-South, cost of harrowing and ridging had 2.2% and 16.1% increases, respectively within the same period.

9.0 FOOD COMMODITY PRICES

General increases in prices of all commodities were recorded across the country. Maize, a major staple food crop, had price increase between January 2016 and January 2017 by 137%, 63%, 93% and 79% for Northeast, Northwest, North-Central and Southwest zones, respectively. Similar trends were observed for sorghum, milled rice, cassava, yam and other staple crops.

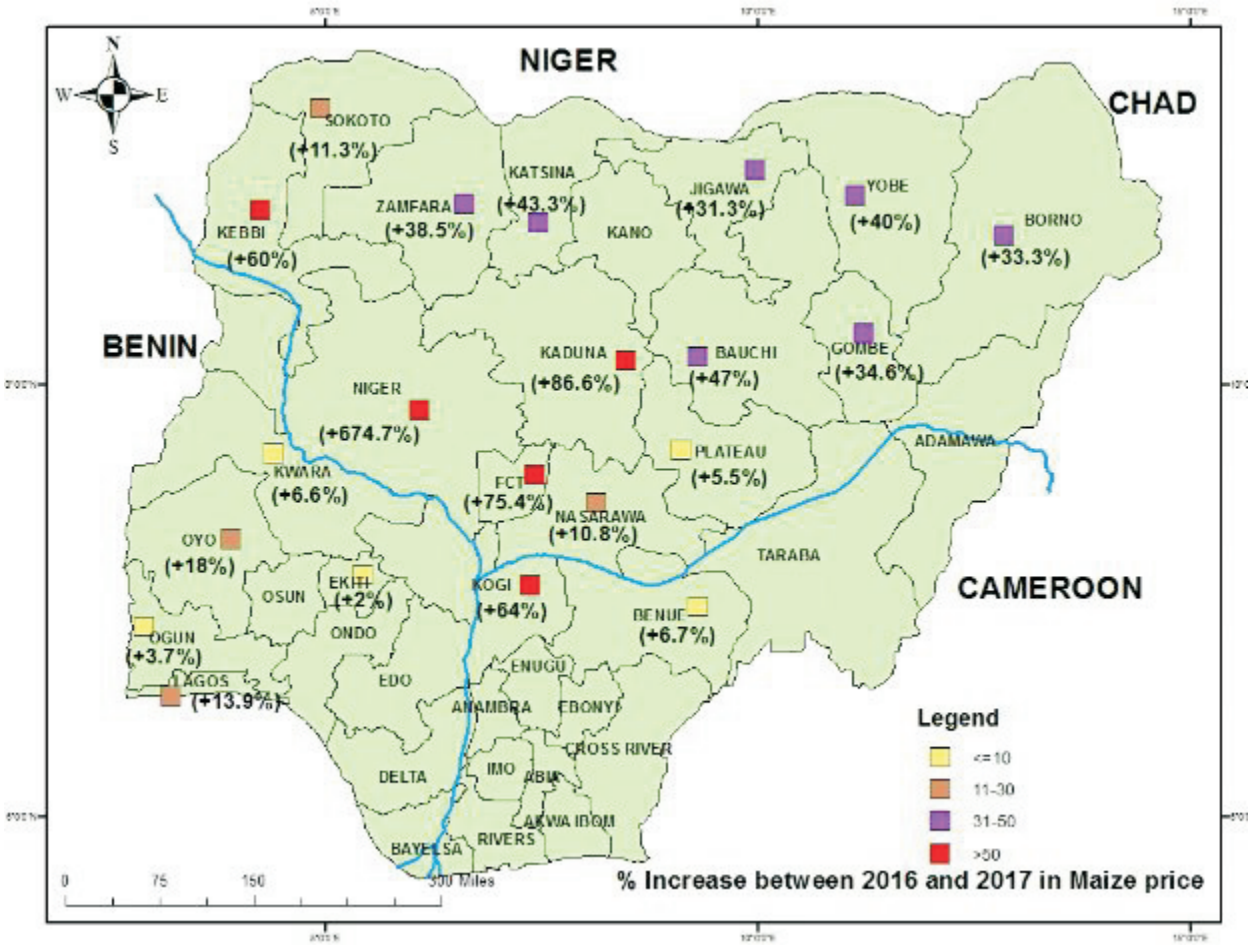


Figure 1: Average Price of Maize per Kilograma cross the major towns between Jan 2016 and 2017

10. CROPS PRODUCTION ESTIMATES

Crops production estimates for fifteen staple crops were made. Maize is the second most important cereal crop produced in Nigeria after rice. The total estimated land area devoted to maize production in 2017 was about 5,960,920 ha, which indicated an increase of 8.70 % compared to 2016 estimates (5,484,060 ha). Generally, maize production increased from 10,813,980 metric tons to 12,107,580 metric tons in 2017 representing about 11.96 % increase in national total output. An average yield of 1.53 to 2.53 ton/ha was recorded in 2016 compared to 1.64 to 2.55 ton/ha recorded in 2017. A national average yield of 2.0 tons per hectare was recorded for the crop in 2017

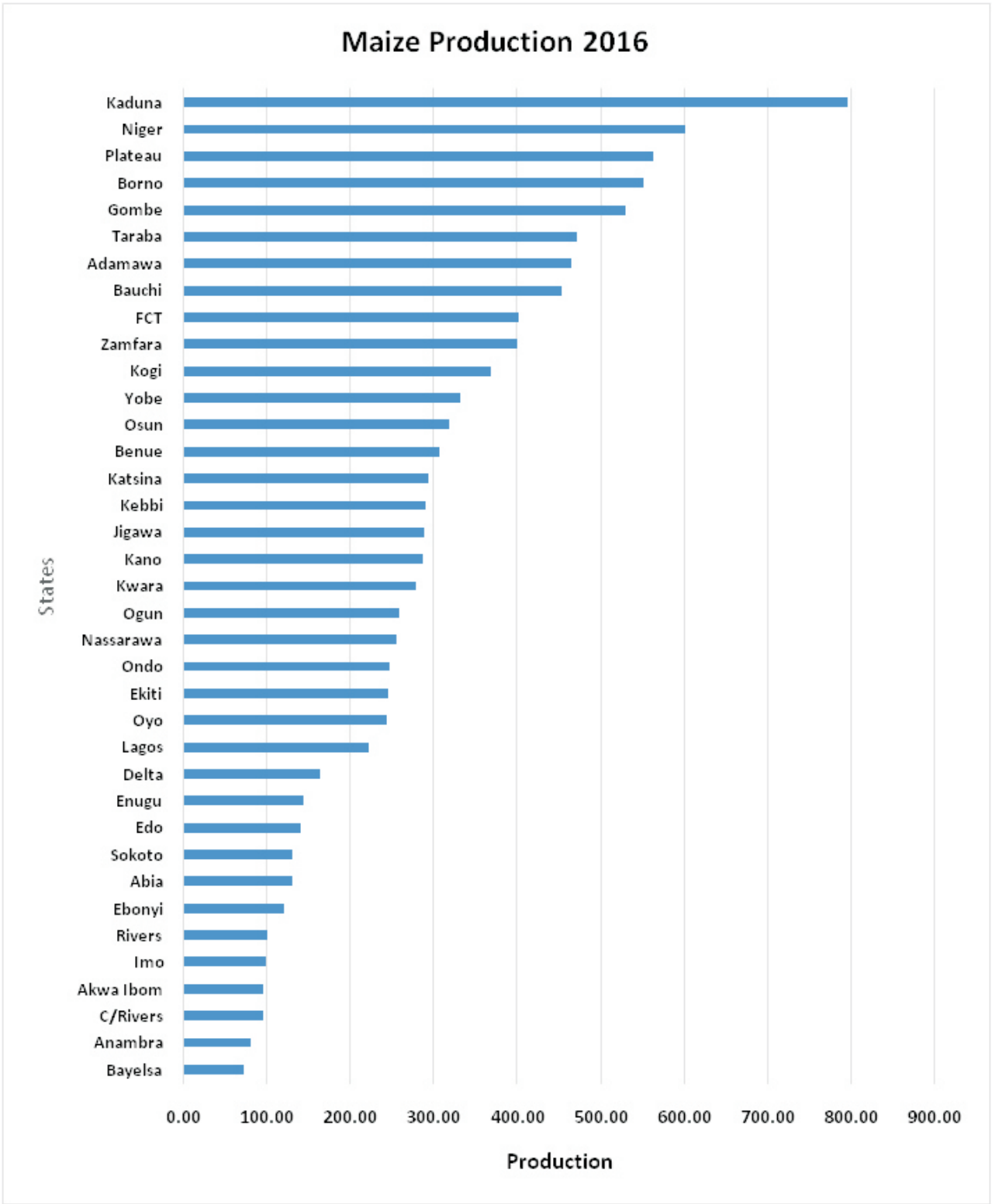


Figure 2: Maize Production Estimates in 2016 and 2017 across states

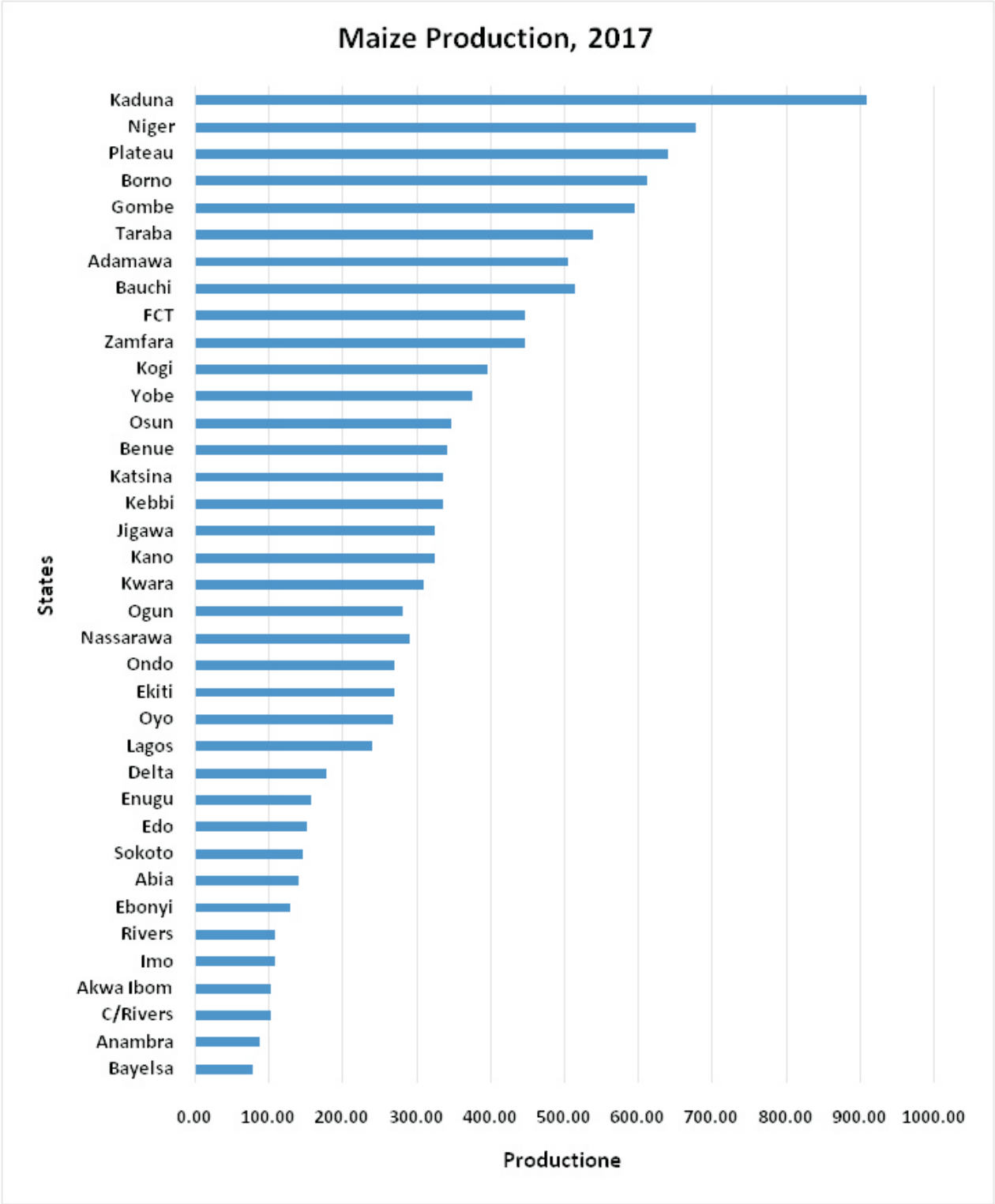


Figure 2: Maize Production Estimates in 2016 and 2017 across states

Rice is consumed in almost all households in the country. The crop is grown in all the states of the federation. The 2017 estimated cropped area for rice was 3.390.3 million hectares, which is an increase of 6.9% over 2016. The increase in land area could be attributed to the Federal Government initiative on curbing large importation of rice and promoting intensive rice production in the country. A total output of 8.02 million metric tons was recorded in 2017, an increase of 14.7% over 2016 output. The total estimated land area devoted to rice production in 2017 was 5.377 million hectares, which is an increase of 4.5% over 2016 figure. A national average yield of 2.4 ton per hectare was recorded for the crop in 2017.

Generally, the survey recorded percentage increases in most staple crops in 2017 compared to their production estimates in 2016. Thus, there was an increase of 4.4% for sorghum and average yield of 1.3 ton per hectare; 6.1% increase for Cowpea and average yield of 1 ton per hectare. Similarly, an increase output of 11.4% and average yield of 0.9 ton per hectare was recorded for soybean. Cassava had an output increase of 7.7% and national average yield of 7.3 tons per hectare. 5.0 % output increase and an average yield of 1.6 ton per hectare were recorded for groundnut. Other crop production increases recorded during the period under review were cotton (2.3%), Cocoyam (16.8%), beniseed (6.5%), tomato (13.2%), onion (7.6%) and okra (6.9%), respectively.

11. LIVESTOCK PRODUCTION, PESTS AND DISEASES

Records for livestock and fisheries have been scanty as a result of the inability of the sector to transit from traditional to modern production methods. Thus, the survey was not able to establish reliable population of livestock in the country.

The Pests and diseases of cattle as observed in 2017 include Contagious Bovine Pleuropneumonia (CBPP) reported in eight states with mortality of 25% to 40% of the affected animals. Other livestock diseases were foot and mouth disease, brucellosis and anthrax, kirchi and mange. Poultry diseases reported in nearly all the agro-ecological zones include Newcastle disease (NCD), gumboro, coccidiosis and chicken pox. A new strain of avian influenza (bird flu) was reported in 26 states and the FCT, with over 3.5million birds affected.

On the other hand, only eight states-Adamawa, Bauchi, Gombe, Ogun, Oyo, Abia, Ebonyi and Cross-River - had records of procurement and distribution of livestock production inputs in 2017. Production inputs for livestock are still generally expensive in the country.

12. FISHERIES PRODUCTION, PESTS AND DISEASES

Nigeria's total annual fish demand is estimated at 2.7 million metric tonnes. Just 30% of this demand is met domestically, resulting in an annual expenditure of N125bn on fish imports. Most of the diseases and pests of culture and artisanal fish production reported in 2017 across most States of Nigeria were more of that of catfish since it is the most popularly cultured fish. Fin rot, abdominal dropsy, broken head, fish louse and skin ulcer were wide spread in fish farms across the country with estimated mortality of 50 to 60% of stockings.

On the other hand, only 5 states - Bauchi, Gombe, Benue, Abia and Enugu- had records of procurement and distribution of fisheries inputs in 2016 and 2017. Recurring problems in the fisheries industry include high cost of production and processing inputs such as feeds, drugs, improved ovens; and poor market for fish products.

15. EXTENSION ACTIVITIES OF AGRICULTURAL DEVELOPMENT PROGRAMMES

15.1 ADP Funding Situation in 2017

Most of the ADPs identified poor/under funding especially by State Governments as a critical challenge to their performance over the years. **In 2017, only** three State ADPs; namely Lagos (91.3%), Rivers (91.3%) and Plateau (59.5%)} obtained over 50% of the budgeted fund from their respective State Governments.

15.2 Performance indicators of ADPs

The performance indicators of ADPs across the country in 2016 and 2017 revealed a general decline in their performance as follows:

1. Number of Farm Families: The number of families served/contacted by the ADPs staff is a function of the number of extension agents as well as their mobility. Kano state had the highest, with 1,620,000; followed by Bauchi (987,925), Katsina (965,536), Niger (965,536), and Akwa-Ibom State (685,095). Bayelsa recorded the least of 95,465 farm families.

2. Number of Extension Workers (SMS, BES, BEA (WIA), and VEA: A decrease in the number of extension workers who are facilitators of technology transfer, especially the VEAs was observed for many States. The dwindling number of frontline extension agents in the ADPs across the country can best be described as alarming but the intervention by the Federal Government under N-Power (Agro) has assisted the ADPs with volunteer extension advisors.

3. Village Extension Visits (EA): visits are technology delivery exercise, which enhance acquisition of new knowledge, skill and practices on improved technology by the farmers which is expected to translate into increased adoption of technology. Extension visits to farmers by the ADP decreased in most States due to shortage of staff, inadequate funding and poor mobility.

4. Technology Dissemination Strategies (OFAR, SPAT, and MTP): On-Farm Adaptive Research (OFAR), Small Plot Adoption Technique (SPAT) and Management Training Plot (MTP) are strategies used to disseminate technologies and encourage adoption by farmers. Only seven ADPs reported activities on OFAR on technology dissemination strategies in 2017.

5. Technology/Knowledge Sharing, Transfer and Feedback platforms (MTRM/QTRM and FNT/MT): Monthly/Quarterly Technology Review Meetings and Fortnightly/ Monthly Trainings are important REFILs activities, which provide platforms for SMSs, and field staff to interact with farmers. Only about 27% ADPs held MTRM/QTRM and 35% of the ADPs conducted FNT/MT respectively.

6. Farmers' Group Development and Training: Participatory extension approaches are being deployed to promote farmer group formation in order to enhance access to farm services. About 50% of the ADPsparticipated in this activity in 2017.

7. Extension Agent Farm Family Ratio (EA-FF ratio): The survey observed high EA-FF ratio in 2017 in most ADP (Enugu 1:12,114; Anambra 1:6000; Osun 1:8,792; Rivers 1:8,429; Katsina 1:4500; Kwara 1:4300; Kogi 1: 4000) as against the ideal recommended ratio of 1:500 to 800.

8. Training of Farmers. The survey recorded only 40% of the ADPs trained farmers in the period under review. Ebonyi trained the highest 100,000 farmers in 2017, followed by Osun with 59,320 farmers, Ekiti trained 50,000 farmers, Katsina had 15,000 farmers and Kano with 11,780 farmers. Kebbi, however reportedly trained only 10 farmers within the year under review.

9. Farmer Field Schools (FFSs) Activities: Farmer Fields Schools provide a platform for experiential learning and encourages farmer-to-farmer information sharing. Only eight ADPs (21%) organized FFS during the period under review. Edo ADP operated the highest FFS activities of 1,620, Lagos ADP had 81, Imo and Oyo ADPs had 55 FFSs each.

16.0 FIELD PROBLEMS AND PROBLEMS NEEDING RESEARCH IN NIGERIAN AGRICULTURAL SECTOR

The most common problems needing research observed and recorded during the 2017 APS cut-across all sectors of agriculture. In crop production sector, the problems include pest and diseases such as *Tuta absoluta* commonly known as 'tomato ebola' in tomato, Armyworms infestation in maize and also in breeding improved crop varieties – drought tolerance, nitrogen efficient, disease and pests resistance, high

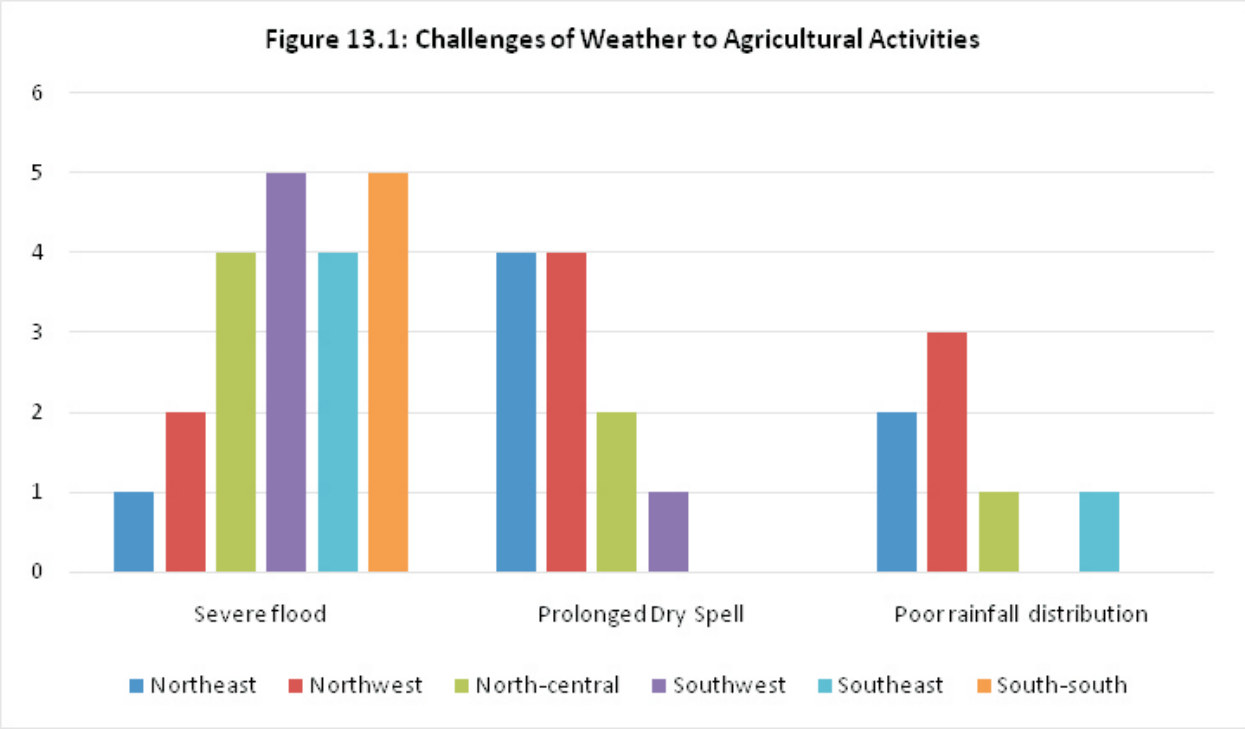
yielding, etc.). In Livestock sector, the problems include techniques of cross breeding, techniques of controlling animal pests and diseases, Animal feed and medication, livestock census, artificial insemination, pasture production, etc. In fishery sector, research works on cross breeding, formulation of floating fish feeds, Training of fisheries extension staff, etc were reportedly needed to address the problems of the sector. With regards to Extension services, vigorous capacity building of EAs on new extension techniques, use of ICT in Agricultural extension, Seminars and workshops for subject matter specialists were highly desirable for effective extension advisory services. Others proposed include research on gender issues, training women on commodity processing and value addition, etc under the Women In Agriculture sector. Similarly, in Agro-forestry sector**,** seedlings of disease-resistant varieties are needed to address field problems in the sector

17.0 GENERAL CONSTRAINTS TO AGRICULTURAL PRODUCTION

The 2017 APS identified general constraints/ challenges to agricultural production in the year. They are presented under the following: weather, inputs, mechanization, extension activities, agricultural broadcasts, e-extension and others.

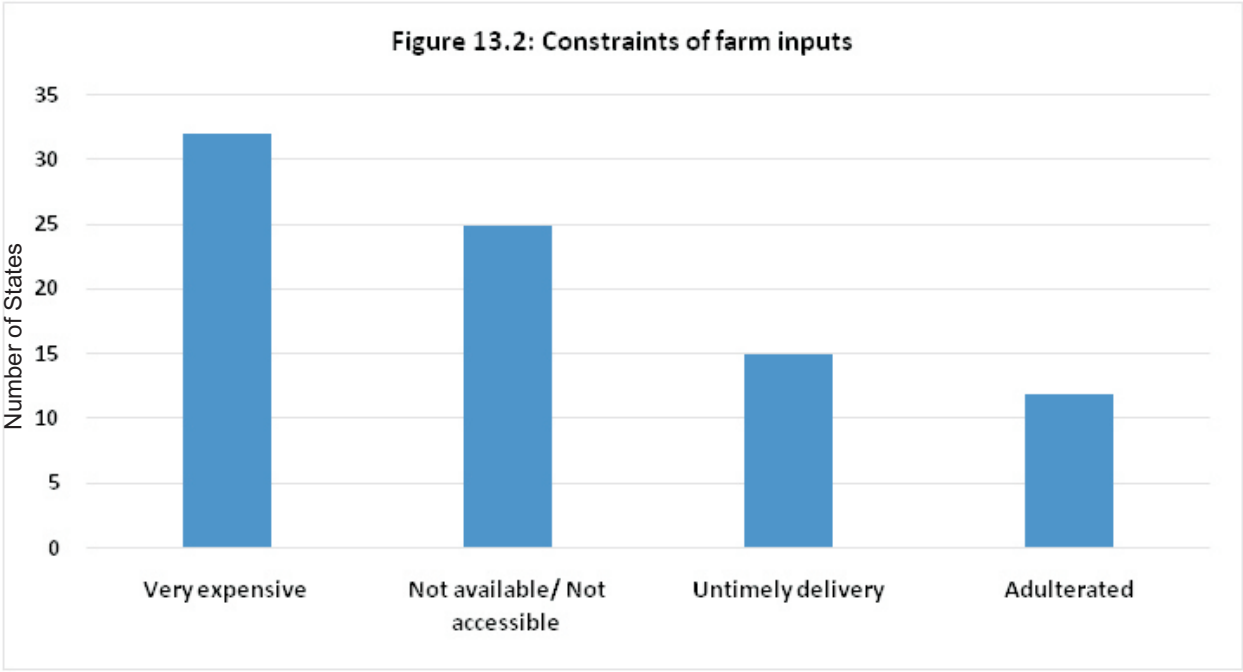
1. Challenges of weather to agricultural activities

Figure 1 shows that the most common weather constraint was flooding. Severe flooding was recorded in 21 states in 2017, with the southwest and south-south zones suffering the most from the consequences of severe flooding, with 5 states recording high incidences in each zone; while the northeast had the least (one state). Dry spells, which affected crops, were reported across the zones, except in the southeast and south-south. Moreover, poor rainfall distribution patterns were reported for all zones, except southwest and south-south.



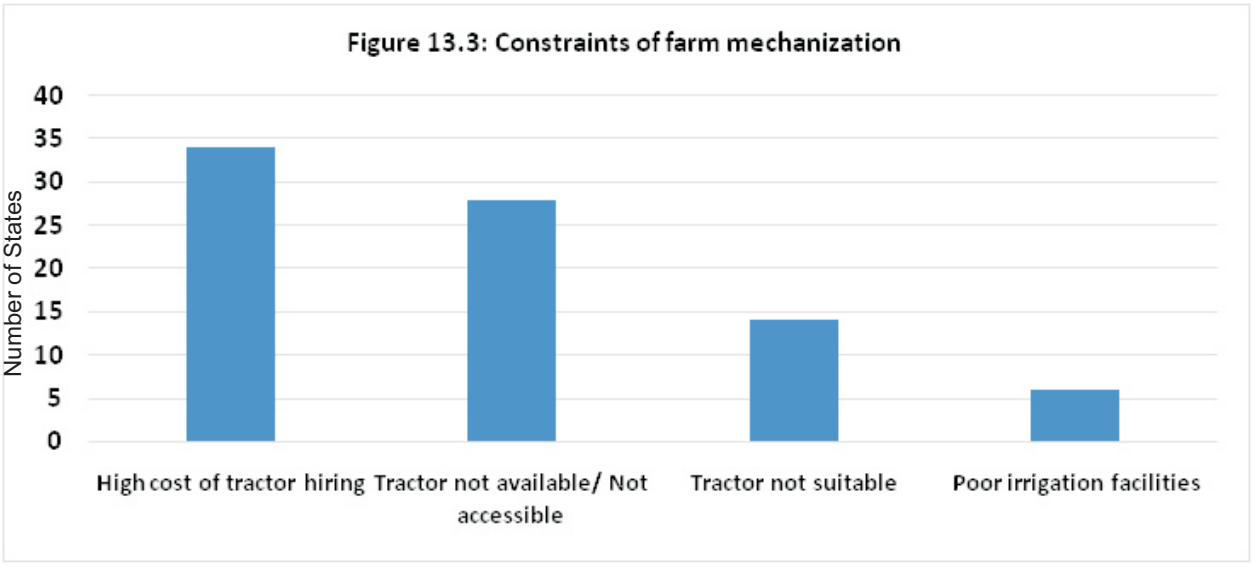
2. Farm Input provision, availability and accessibility

In 2017, farmers in 32 states largely considered farm inputs expensive. Figure 13.2 presents the global picture of inputs availability and accessibility this year.



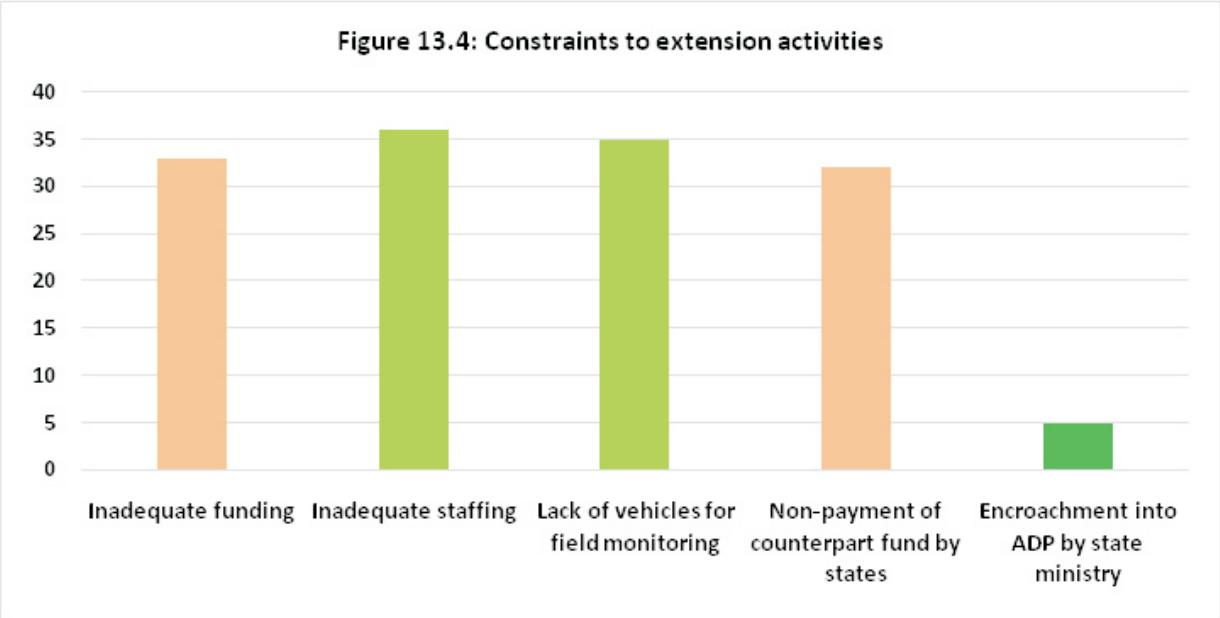
3. Agricultural mechanization

Figure 13.3 reveals that farmers in 34 states could not access tractor services in 2017 due to high cost of tractor hiring services; while about 28 (75%) states could not access tractor services for their wet season agricultural production activities due to unavailability. Other reasons, which prevented farmers from accessing tractor services in 2017, are indicated in Figure 13.3



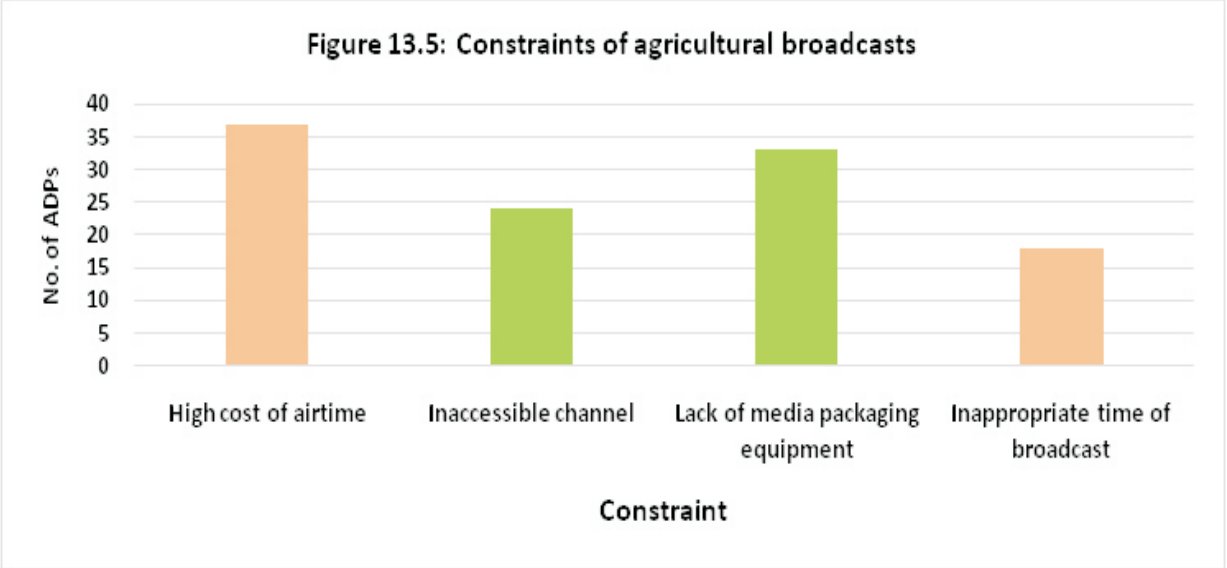
4. Poor Extension Support

The 2017 survey data showed that there was inadequate funding and personnel to support extension service delivery in most states as presented in Figure 13.4. The figure shows that 36 ADPs representing 97% of the 37 ADPs were highly under-staffed while 95% were not mobilized enough to play their facilitation role and 89% were underfunded. Moreover, the extension work of 5 (14%) of the ADPs had been practically taken over by the State ministries of agriculture.



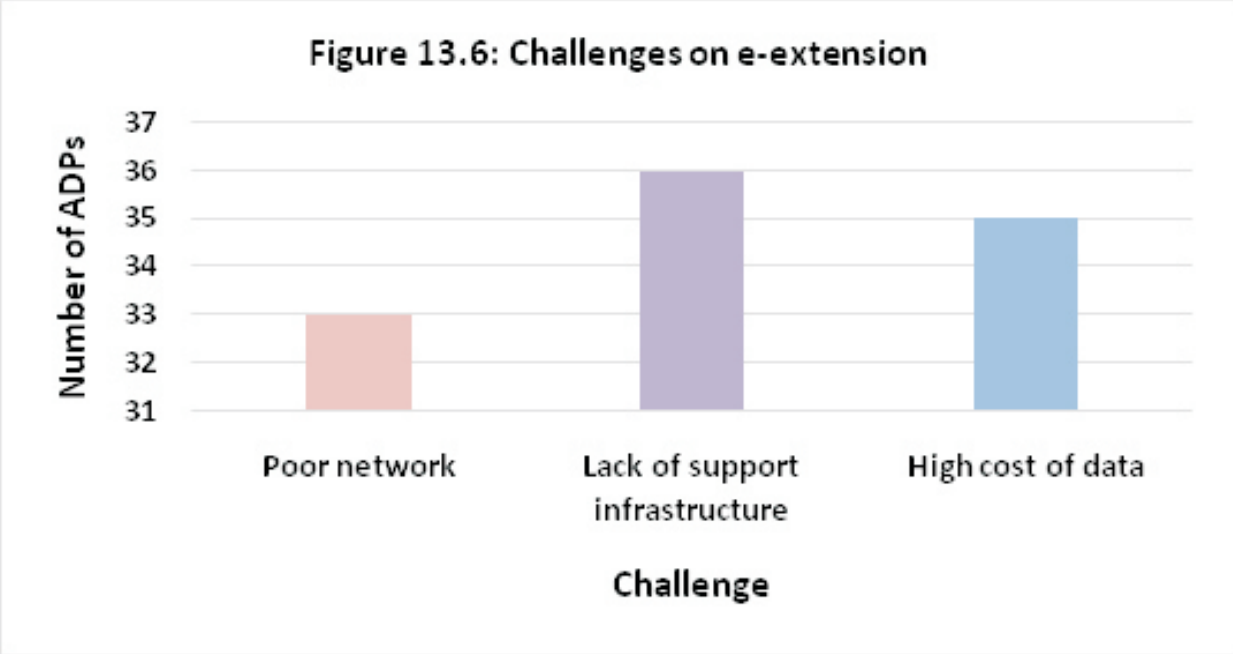
5. Agricultural Broadcast

The survey data presented in Figure 13.5 show that all the ADPs complained of the high cost of airtime as a major constraint to airing their programmes. Other constraints to agricultural broadcasts as captured include lack of equipment (89%), poor access by farmers, 24 ADPs (65%), and inappropriate broadcast times in 18 ADPs (49%).



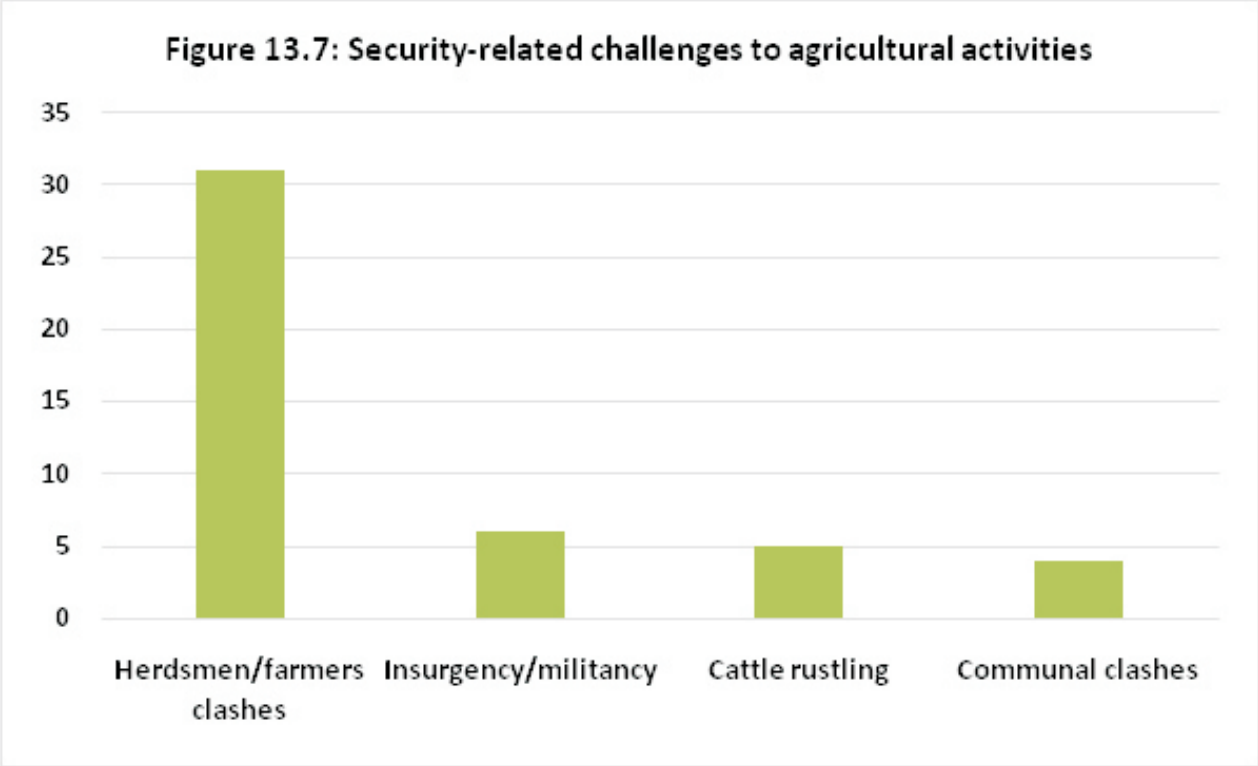
6. E-Extension

E-Extension is a veritable platform for real-time access to agricultural information and technologies using ICT. Majority of the ADPs were unable to use the e-platform for their extension delivery services due to constraints presented in Figure 13.6.



7. Security-related Constraints

Information on increasing security challenges to agricultural production was captured in the 2017 survey. Figure 13.7 shows the spread of various challenges across the states. 31 states reported frequent incidences of herdsmen/farmers conflict; 6 States (16%) reported activities related to insurgency and kidnapping while 5 and 4 states reported cattle rustling and communal clashes respectively. This situation has caused a lot of farming communities to abandon their homes, farmlands and other agricultural ventures out of for fear for their lives while potential investors were scared away.



18.0 CONCLUSION AND RECOMMENDATIONS

The 2017 Wet Season Agricultural Performance Survey in Nigeria was conducted with the support and collaboration of all state Agricultural Development Programmes and Ministries of Agriculture. The study documented several constraints, ranging from the challenges of climate change and absence of government input support, through insecurity and kidnapping, to those of poor support for agricultural extension activities. These constraints affected all the subsectors of agriculture (crops, livestock, fisheries and aquaculture, and agro forestry) along the value chains. These challenges, notwithstanding, the study noted increased land area for production. The survey forecasts production increase of at least 35% above that of 2016 in all areas of agriculture. However, this is expected to be marginal for livestock and aquaculture. Nevertheless, overall farm yields would remain below global and African averages for all the subsectors.

Based on the various observations, findings and challenges from the field, the following recommendations are made:

I. **Promotion of research and extension responses to the challenges of climate change**: The impact of climate change on agricultural production in the country is becoming more apparent each year. In 2017, Nigeria witnessed excess rainfall with irregular distribution and several incidences of flooding, erosion, dry spell, diseases and pests, which affected crop, livestock, and fisheries productivity. This

situation raises the scope for increased funding for and focus on research and extension activities towards mitigating the effects of climate change

ii. **Strengthening the capacity of ADPs and all other agencies involved with Agricultural data capture.** The importance of data in planning cannot be overemphasized. The level of accuracy of data generated however has a direct bearing on the appropriateness and effectiveness of plans and policies generated/ formulated based on the data. Data capture at the grassroot level by the ADPs is currently very weak and needs to be supported for improved results. A collective action of relevant stakeholders is highly desirable.

iii. **Effective subsidy as strategy for enhancing agricultural production**: The study recorded appreciable government support and intervention programmes in several states. However, many of the supports were ineffective, as majority of the farmers could not access such supports. Therefore, a cost-effective and efficient subsidy application system across the value chains is recommended.

iv. **Conscientious promotion of agricultural mechanization as a national priority**: The survey observed that about five states acquired new tractors to increase mechanization. Despite this and the Federal Government's effort at providing mechanization inputs nationwide, the survey noted that most farmers are still using hand-tools for farm operations. There is the need for government to intensify efforts, using the Public-Private Partnership platform to promote the use of appropriate mechanization technologies especially small-scale tillage and processing machineries, which could be affordable by small-scale farmers. Concerted efforts should be made to repair and maintain the huge number of non-functional tractors across the nation; PTF examples of 1990s can be replicated.

v. **The need to open virgin lands for agribusiness**: The cost of opening new land for agriculture is high and in some cases such as Rivers, Bayelsa, Ogun, Edo and Benue States, prohibitive. For Example, it took as much as N120,000 to N150,000 to manually clear one hectare, in Ijebu because of huge tree felling and de-stumping. To achieve the desired field crop expansion and promote profitable farming, therefore, government land clearing units should be revived to open up more arable land.

vi. **Improve Funding and Recruitment of Extension Personnel:** Dwindling funding for capital projects, shortage of staff, inadequate training and lack of mobility were observed as the major challenges of extension delivery nationwide. There was also the problem of inadequate extension delivery packages (in the form of broadcasts, prints, field demonstrations, visits, etc). Therefore, there is an urgent need for the State Governments to provide needed funds, recruit more personnel and build their capacity to strengthen extension service delivery in the States.

vii. **Recruitment of N-Power (Agro) Volunteers:** The survey observed that N-Power (Agro) volunteers in many states are actively participating in extension advisory services. States are encouraged to actively engage them for their volunteer period. This category of personnel is a potential pool for recruitment by the states as agric extension staff

viii **Collaboration and policies to strengthen agricultural broadcasts**: Agricultural media packages and broadcasts in the country are gradually fading out due to inability of many producers to pay for the air time. The costs of production and airtime are far beyond what the State ADPs can bear. It takes, for example, about N6 million to produce and air a 30-minute programme on state radio for one year. With almost zero capital budget release for ADPs, 34 states could not produce or air a single radio programme in 2017. This has been the trend for a while. Government should partner and collaborate with Private Sector to extend agricultural information through expanded broadcasting objectives. The government should also make appropriate policies on broadcasting, through the National Broadcasting Commission (NBC) that would mandate radio and television houses to dedicate a certain percentage of their programming to agriculture towards transforming the sector.

ix. **Strengthening of e-Extension centres to boost agricultural advisory delivery**: The survey found that the zeal of farmers to expand agricultural activities was not equally matched with the requisite knowledge for improved farm management practices. Besides, the average ratio of extension agent to farm families has remained astronomically high— up to 1:17,000 for some states, instead of the FAO recommended 1:500-800. Nigeria should leverage on the use of ICT to reach out to teeming farming population real-time online. In this regard, the National Farmers' Helpline Centre and the zonal hubs should be urgently and adequately supported to be fully operational.

x. **Dealing with the scourge of insecurity:** One of the outstanding findings of this survey was the threat of insecurity to the business of agriculture across the country. This threat was mainly in the forms of farmers/herdsmen conflicts, kidnapping, militancy/insurgency, cattle rustling and communal clashes/land disputes. The menace was first strongly reported in the 2011 survey, and since then in subsequent surveys. Proactive strategies involving all stakeholders towards controlling and eventual elimination of these security challenges should be developed and implemented.

xi **Creation of policy environment for accelerating agricultural industrialization**: One consistent issue considered worrisome in the field was adulteration of inputs. The farmers are consistently exposed to poisonous and ineffective inputs at the expense of national food safety and security. Also, at various border towns in Ogun, Niger, Benue, Sokoto and Katsina states, the survey teams observed the thriving 'business' of smuggling cheap and 'expired' agricultural produce into Nigeria from neighbouring countries. These activities serve as disincentive to farmers, especially along the border towns. Border patrol and control activities of the the Nigerian Immigration Service, Nigerian Customs Services, Nigeria Police Force, and the military should be strengthened and made effective. Law against smuggling should be strongly enforced.

Cars packed full with rice, ready to be smuggled into Nigeria at the Ilaro border town, Ogun State. Smuggling of agricultural produce is a disincentive to farmers in the country

0.1 INTRODUCTION

The 2017 wet season agricultural performance survey was conducted between 20th and 27th August 2017. The survey is a major annual activity of the NAERLS, and was done to:

- Evaluate the performance of crops and livestock during the season and estimate outputs;
- Identify the constraints to increased agricultural productivity;
- Identify conditions affecting technology transfer and advisory services within the season; and
- Provide feedback on field situation and farmers' problems for improved research and policy performance.

This year's survey was carried out by the Institute in collaboration with the Federal Department of Agricultural Extension (FDAE), Planning and Policy Coordination Department (P&PCD), Federal Department of Agriculture (FDA), National Bureau of Statistics (NBS), Federal Department of Fisheries and Aquaculture (FDFA), Federal Department of Animal Production and Husbandry Services (FDAPHS), Institute for Agricultural Research (IAR), Department of Farm Inputs and Support Services (DFISS), National Animal Production Research Institute (NAPRI), Nigerian Metereological Agency (NIMET), National Productivity Center (NPC), Farming Early System Warning Network (FEWSNET) and the 37 state/FCT Agricultural Development Programmes (ADPs).

In furtherance of the effort to add value to the exercise in terms of quality, utility and depth of data generated, electronic data capture was introduced this year. All data capture from farmers this year were done electronically, using tablets, while questionnaires for ADPs, ministries and other parastatals were carried out on hard copies.

2.0 METHODOLOGY

Data were collected using questionnaires, Participatory Rural Appraisal (PRA) techniques and interviews. Nineteen multi disciplinary teams of three scientists each carried out the exercise across the 36 states and the Federal Capital Territory (FCT). In every state, two ADP zones were selected for the field visit. In each zone, two LGAs were selected and one community selected per LGA. In each community, five farmers were interviewed and focus group discussions held. Extensive discussions were held with the ADPs staff, ministries' officials and staff of other relevant agencies. Final wrap-up sessions to validate the data generated and findings were held at the end of each state visit with officials of the State ADP and Ministry of Agriculture.

As earlier mentioned, data capture from the farmers was done electronically using Android tablets. In the current report, adjusted land area/ouput estimates of 2015 were used as base figures in computing percentage changes in the areas devoted to various crops and applied in conjunction with Report of NPFS, document from Strategic Development Initiatives and reports of respective ADPs

to generate outputs forecast for 2017 for each state. Yield figures from 24 model sample plots linked to Decision Support Agricultural Information Tools (DSAT) were used to correct forecast of average yields from each state to generate the output forecasts for 2017.

3.0 RAINFALL SITUATION

Rainfall situation

Rainfall assessment constitutes a fundamental part of the Agricultural Performance Survey (APS). As expected, the south experienced more rainfall compared to the north in 2017. The rainfall amounts across all the six geopolitical zones of the country are as presented in Tables 1a, 1b, 1c, 2a, 2b, 2c, 3a, 3b and 3c. and discussed as follows.

NORTHEAST ZONE

Rainfall started early April in Adamawa, Gombe and Yobe States and May in Borno and Bauchi. Bauchi and Yobe experienced dry spells, while Gombe experienced flooding in six (6) Local Government Areas. Generally, rainfall was higher in 2016 than in 2017 in the Northeast. Similarly, the cumulative rainy days were lower in 2017 compared to 2016 in all the states in the zone. Adamawa State recorded the highest (57) rainy days in 2017, while Yobe had the least (32).

NORTHWEST ZONE

Rainfall commenced in the month of April in most of the northwest, which was late compared to 2016 when rain commenced in March. Rain was fully established across the states in May with the highest in Kaduna and Kebbi and the least in Sokoto (311.5mm). Kano, Zamfara, Sokoto and Jigawa States experienced dry spells, which spread across areas like Tureta, Goronyo, Shagari Isa and Yabo (Sokoto) and 14 Local Government Areas of Zamfara State. There was no record of flood in the zone. Kaduna State had the highest rainy days (15) in the month of May while the least (2) rainy days were recorded in Kano State in the same month. The number of rainy days was higher in 2016 than 2017 for all the states in the zone. Cumulatively, Kaduna State had the highest (58) number of rainy days while the least (32) was Kebbi in 2017.

NORTH-CENTRAL ZONE

Rainfall started in April 2017 in most of the zone. However, it commenced in March in Kwara, Plateau and FCT. Dry spell was experienced in the months of April, May and June in Nasarawa State, affecting Lafia, Awe, Obi and Koana Local Government Areas. However, there were incidences of flood between July and August in Lavun, Mokwa, Suleja, and Shiroro LGAs of Niger State. Severe drought was reported in Wushishi LGA (Niger State) in April. The data showed that less rainfall was experienced in 2017 than 2016 in the zone. Niger State had the highest (17) rainy days while Benue had the least (8). Generally, the rainy days were less in 2017 than in 2016.

SOUTHWEST ZONE

Rainfall commenced early in January 2017 in most parts of the zone. However, it started in February in Ondo State and March in Osun State. There were severe incidences of flooding across Lagos State and some parts of Ogun State. In the month of July, the rainy days across the zone were similar with Ogun recording the highest (24) while Oyo recorded the least (12). Cumulative data indicated that Ogun State had the highest (97) number of rainy days, while Oyo had the least (62).

SOUTHEAST ZONE

Rains started early in March in most parts of the zone. The data show progressive distribution of rainfall pattern with the highest values occurring between April and August across the zone, both for 2016 and 2017. Incidences of severe flooding were reported in Abia, Ebonyi and Anambra states in May and July. Imo State experienced slight drought at Okohia, Isiala and Mbano Local Government Areas. In August 2017, the highest (29) rainy days were recorded in Enugu, while the least (19) were recorded in Imo State. Generally, the rainy days were less in 2017 than 2016 in the zone.

SOUTH-SOUTH ZONE

Rainfall started in the zone in January with intermittent dry spells until April when the rains were fully established. Incidence of flood was reported in Akwa Ibom, Cross River and Bayelsa states. The rainfall amount received was higher in 2016 than in 2017.In the month of July, rainy days across the zone were similar, but the highest (27) rainy days were recorded in Delta and Edo States, while the least (14) were in Cross River State. Cumulatively, Cross River and Delta States had the highest (118) number of rainy days while the least (69) was for Akwa Ibom in 2017.

3.2 TOTAL MONTHLY MAXIMUM TEMPERATURE (^{0}C) ACROSS THE NORTHERN AND SOUTHERN ZONES

Temperature records in Nigeria varied across the zones in the North and South. In the north, Borno State (Northeast) had the highest temperature of 41.8^{o}C in the month of May followed by Sokoto State (Northwest) with 41.4^{o}C in April, and Nasarawa State (39.1^{o}C) in April in the North-Central. Similar variations in temperatures were seen across the southern zones. The highest temperature of 38.5^{o}C was recorded in Oyo State (Southwest) and Cross River State (South-South) in March, and April followed by Imo State (Southeast) had 37.3^{o}C in April. Generally, temperature values were higher in the North than the South.

TABLE. 1a TOTAL MONTHLY RAINFALL(mm) NORTHEAST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Adamawa	Yola	0	0	0	0	0	0	49.7	69.8	148.8	161.8	256	114.0	113.8	247.4	209	158	263.4		30.2		0		0		**1070.8**	**751.0**
Borno	maid	0	0	0	0	0	0	2.4	0	94.4	52.4	69.6	173.1	233.1	235.1	318.9	236.9	97.5		0		0		0		**815.9**	**697.5**
Bauchi	Bauchi	0	0	0	0	11.8	0	27	0	109.3	55.8	184	220.5	322.5	288.8	433.5	401.4	281.6		0.6		0		0		**1370.5**	**966.5**
Gombe	Gom	0	0	0	0	15.5	0	86.4	33.3	89.3	165.7	174	166.9	124.5	245.4	310.6	186	162.6		7.5		0		0		**970**	**797.3**
Yobe	Ngu	0	0	0	0	0	0	0	63.5	26.7	4.2	216	104.2	173.2	250.1	312.7	358.5	106.6		2.1		0		0		**837.5**	**780.5**
Yobe	Potisk	0	0	0	0	0	0	1	0	71.4	57.8	48.7	99.7	200.2	133.5	212.6	161.7	120.9		70		0		0		**724.8**	**452.7**

TABLE. 1 b
NORTHWEST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Kaduna	Kad	0	0	0	0	95.1	0	29	13.2	239.8	351.3	216.5	293	324.2	400.4	498.1	316	351.8		35.2		0		0	0	**1789.7**	**1373.9**
Kaduna	Zaria	0	0	0	0	33.2	0	2.2	2.8	164.6	141.1	216.4	161.2	235.6	211.6	263.7	186.5	182.7		267.8		0		0	0	**1366.2**	**703.2**
Kano	Kano	0	0	0	0	1	0	8.8	0	72.1	48.1	214.9	184.5	211.7	149.0	323.9	257	159.2		2		0		0	0	**993.6**	**638.6**
Katsina	Kat	0	0	0	0	0	0	11.9	0	7.2	9.1	79.1	110.5	68.3	147.8	230.5	186.1	88.8		0		0		0	0	**485.8**	**453.5**
Kebbi	Yel	0	0	0	0	0	0	33.2	18.7	64.1	186.6	276.9	174.2	165.9	177.5	192.6	478.0	183.3		46.2		0		0	0	**962.2**	**1035.0**
Sokoto	Sok	0	0	0	0	1.5	0	15.9	0	30.6	25.4	33.4	67.6	152.7	129.5	286.1	89	134.8		0		0		0	0	**655**	**311.5**
Zamfara	Gus	0	0	0	0	0	0	31.6	53	110	NA	217.4	206.7	279.5	173.9	211.7	223.3	108.3		4.6		0		0	0	**963.1**	**656.9**
Jigawa	Dutse	0	0	0	0	0	0	0	9.5	13.2	18.7	290.3	122	155.8	151.4	229.1	239	106.7		0		0		0	0	**795.1**	**540.6**

TABLE. 1 c
NORTH-CENTRAL ZONE(mm)

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	**Station**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**TOTAL**	**TOTAL**
Benue	Mak	0	0	0	0	52.6	0	91.6	86.3	233.2	245.8	50.9	394.8	265.2	95.2	214	224.3	268.9		116.1		0		0		**1292.5**	**1046.4**
Kogi	Lok	0	0	0	0	81.8	0	93.5	126.4	176.6	153.4	124.9	194.3	120.8	192.6	350.5	220	109.6		76.8		0		0		**1134.5**	**886.7**
Kwara	Ilor	0	0	0	0	137.4	26.4	223	77.5	315.1	244.6	300.5	341.3	376	55.6	178.1	406.6	446		213.8		24.8		37.6		**2252.3**	**1152.0**
Nasarawa	Laf	0	0	0	0	31.2	0	43.6	126.3	166.3	133.9	234.4	278.6	392	293.3	387.5	680.9	211.6		84.6		0		0		**1551.2**	**1519.0**
Niger	Bid	0	0	0	0	26.3	0	20	0	326.7	159.6	326.3	151.2	250.1	161.1	201.2	249.9	247.1		75.5		0		0		**1473.2**	**721.8**
Niger	Min	0	0	0	0	26.3	0	47.8	7.3	123.6	213.6	198.3	268.2	170.2	195.8	307.6	209.6	426.2		247.4		0		0		**1547.4**	**894.5**
Plateau	Jos	0	0	0	0	22	11.7	20.1	66.4	190.7	178.5	197.6	348.5	215.3	252.7	205.5	394	142.3		3		0				**996.5**	**1251.8**
Taraba	Ibi	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX		XX		XX		XX		0		**XX**	**XX**
FCT	Abuja	0		0		52.7	8.2	100.7	61.3	216.9	172.3	175.8	187.7	698	76.8	324.2	392.9	245.8		154		0		0		**1968.1**	**899.2**

TABLE. 1e
SOUTHEAS
T ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Abia	Umu	0	32.9	64.6	0	150.3	76.8	202.8	424.7	247.3	260.4	350.5	560.5	268.5	509.6	269.5	219.8	458.7		234.4		25.3		7.3		**2279.2**	**2084.726**
Anambra	Awka	0	3.4	26	0	142.5	33.4	177.2	519.8	228.6	299.5	282.1	674.5	238.9	675.5	419.2	407.4	262.8		264.8		42.7		0		**2084.8**	**2613.51**
Enugu	Enu	1	1.9	0	0	53.8	10.8	93.3	295.6	269.7	170.8	207.1	356.7	334.3	374.2	395.8	371	326.6		137.3		63.6		0		**1882.5**	**1580.994**
Imo	Owr	0	8.8	29.4	0	192.7	70.8	113.7	112.5	224.9	204.6	272.6	213.4	378.1	388.6	413.2	391.2	457.2		144.4		12.2		0		**2238.4**	**1389.945**
Ebonyi	Abak	0	3.2	0	0	88.2	45.6	78.1	199.9	412.2	232.2	369.7	196.8	698	133.3	577.2	481.6	223		315.1		4.6		0		**2766.1**	**1292.565**

TABLE. 1 d
SOUTHWES
TZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
tate S	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Ogun	Abeo	0	43.2	0	24	232.9	18.9	144.2	118.1	237.3	247.8	126	130.7	111.6	159.8	105.5	781	277.9		185.7		29.8		5.4		**1456.3**	**820.5935**
Ogun	I – Ode	16.6	3.6	22.1	43.4	81.4	105	102.7	47.7	286.2	304.8	243.4	398.8	123.4	236.7	174.8	159.2	336.9		290.2		20.3		25		**1723**	**1299.197**
Ondo	Aku	0	0	0	0	70.4	33.4	102.1	75.3	153.6	88.9	375.3	200.2	124	249.1	327.8	711	224.3		174.1		16.9		0		**1568.5**	**717.9839**
Ondo	Ond	0	0	2	34.3	102.6	53.1	63.8	NA	99.8	170.1	210.1	466.3	252.1	354.9	334.2	248.6	477.8		200.9		4.7		0		**1748**	**1327.29**
Osun	Osh	22.8	0	11	0	155.6	46.4	69.1	109.3	118.5	63.5	178	82.5	96.3	143.1	86.6	98.2	324.6		184.6		44.7		15		**1306.821**	**542.971**
Oyo	Iba	25.5	4.9	0	21	83.2	167	91.4	108.6	256.9	209.8	149.4	278	132.9	305.8	157.5	141.8	356.8		209.4		18.1		0		**1481.1**	**#REF!**
Oyo	Isey	0	0	0	0	115.6	77.1	156.8	52.8	120.5	309.6	153.9	129.8	180.6	127.8	229.1	196.5	387.8		129.7		14.1		0		**1488.1**	**793.7935**
Oyo	Shak	0	35	0	0	113.2	13.7	120.6	NA	186.1	105.5	204.2	196.9	208	117.0	162.7	197	259.9		68		1		0		**1323.7**	**665.0548**
Lagos	Ikj	0	1.4	0	25.6	71	90.8	91.3	91.2	234.8	231.8	124.9	370.3	115.6	305.7	81.5	93.3	301.1		343.9		48.5		14.2		**1426.8**	**1210.052**
Lagos	Osho	0	1.2	0	13.3	38.9	137	68.2	75.9	140.2	151.5	181.1	340.7	23.5	143.1	86.6	98.2	248.7		267.8		108.7		xx		**1163.7**	**960.871**
Ekiti	Ado-Ekiti	0	42.5	0.5	4.9	171.9	29.2	142.8	123	74.6	211	228.6	264	87.9	418.8	104.3	73.5	212.9		130.8		47.6		0		**1201.9**	**1166.887**

TABLE. 1f
SOUTH-
SOUTH ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
A - Ibom	Eket	1	12.4	16.2	1.8	383.2	164	226.2	3.2	407	NA	730.4	NA	1153	557.8	662.4	470.7	738		220.8		353.7		62.8		4955	**1209.93**
A - Ibom	Uyo	0	22.5	0	0	234.7	118	125.6	260.6	304.9	424.2	283.6	344.3	384.3	468.5	313.7	177.1	390.5		202.6		50		43.9		2333.8	**1815.24**
C/Rivers	Cal	0	25.4	3.5	0	192.9	134	202.4	419.8	420.3	290.1	261.3	352.5	454.6	423.7	309.7	620.5	363.3		137		95.7		1.2		2441.9	**2266.04**
C/Rivers	Ikom	0	49.8	0	0	131.5	64.3	157.7	130.9	383.7	223.1	402.5	98.1	538.7	339.7	422.8	406.5	234.3		236.5		11.4		0		2519.1	**1312.42**
C/Rivers	Ogo	0	0	0	0	26.2	NA	126.4	128.8	224.5	362.1	164.6	155.2	311.7	221.1	332.5	368	321		288.8		25.9		0		1821.6	**1235.21**
Delta	Asa	0	3.9	18.2	0	141.3	12.7	140.4	323.6	206.2	335.7	619.5	374.2	490.8	634.1	324	497.4	352.8		170.2		15		0		2478.4	**2181.62**
Delta	War	1.2	59.9	0.7	16.3	228.9	73.8	180.7	283.7	296.3	175.8	281.9	426.4	537.3	585.1	437.3	282.8	572.2		231.7		62.4		34.3		2864.9	**1903.28**
Edo	Ben	0	0.6	2.4	51.1	184.6	131	47.8	206	232.9	262.0	312.7	271.2	325.9	431.0	256.9	433.2	360.2		184.2		58.1		4.2		1969.9	**1786.07**
Rivers	PHC	0	10.1	0	0	309.7	231	64	230.5	236.4	142.8	300.2	463.6	280.1	537.9	428	362.9	257.9		269.7		66.2		38.2		2250.4	**1978.81**
Bayelsa							NA				NA				NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	**NA**	**NA**

TOTAL RAINY DAYS
TABLE. 2a

NORTH EAST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Adamawa	Yola	0	0	0	0	0	0	5	7	8	7	10	12	11	17	14	14	13		6		0		0		67	57
Borno	maid	0	0	0	0	0	0	1	0	8	6	6	9	16	13	15	13	5		0		0		0		51	41
Bauchi	Bauchi	0	0	0	0	1	0	1	0	3	5	8	10	17	13	16	17	13		1		0		0		60	45
Gombe	Gom	0	0	0	0	1	0	5	4	8	7	8	12	13	15	18	15	16		1		0		0		70	53
Yobe	Ngu	0	0	0	0	0	0	0	4	2	2	10	4	9	13	15	9	7		1		0		0		44	32
Yobe	Potisk	0	0	0	0	0	0	1	0	8	7	5	6	10	10	16	13	10		1		0		0		51	36
AVERAGE RAINY DAYS		0	0	0	0	0	0	2	3	6	6	8		13		16		11		2		0		0		57	8

TABLE. 2 bNORTHWEST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Kaduna	Kad	0	0	0	0	4	0	4	1	10	15	15	15	12	13	17	14	19		3		0		0		84	58
Kaduna	Zaria	0	0	0	0	5	0	2	1	11	9	12	15	14	11	16	17	15		9		0		0		84	53
Kano	Kano	0	0	0	0	2	0	1	0	5	2	13	9	11	11	14	15	7		1		0		0		54	37
Katsina	Kat	0	0	0	0	0	0	1	0	2	3	6	7	6	9	11	13	7		0		0		0		33	32
Kebbi	Yel	0	0	0	0	0	0	3	2	7	9	12	12	9	14	14	13	16		3		0		0		64	50
Sokoto	Sok	0	0	0	0	1	0	2	0	5	8	6	7	9	9	14	11	8		0		0		0		45	35
Zamfara	Gus	0	0	0	0	0	0	1	1	11	NA	9	12	15	15	17	12	13		1		0		0		67	40
Jigawa	Dutse	0	0	0	0	0	0	0	2	3	5	12	11	9	14	12	11	8		0		0		0		44	43
AVERAGE RAINY DAYS		**0**	**0**	**0**	**0**	**2**	**0**	**2**	**1**	**7**	**7**	**11**	**11**	**11**		**14**		**12**		**2**		**0**		**0**		59	19

TABLE. 2 c NORTH-CENTRAL ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Benue	Mak	0	1	0	0	5	0	5	8	11	8	12	12	14	13	15	18	15		9		0		0		**86**	**60**
Kogi	Lok	0	0	0	0	4	0	7	7	9	10	9	11	9	11	17	11	12		6		0		0		**73**	**50**
Kwara	Ilor	0	1	0	0	6	2	5	5	10	15	15	14	11	8	10	11	19		12		1		1		**90**	**56**
Nasarawa	Laf	0	1	0	0	2	0	4	4	12	10	9	7	18	15	18	18	17		7		0		0		**87**	**55**
Niger	Bid	0	0	0	0	4	0	5	0	13	14	12	13	4	16	11	15	12		7		0		0		**68**	**58**
Niger	Min	0	0	0	0	4	0	7	3	12	17	14	11	17	15	18	13	18		12		0		0		**102**	**59**
Plateau	Jos	0	0	0	0	4	2	5	5	16	14	17	19	22	23	24	23	19		2		0		0		**109**	**86**
Taraba	Ibi	x	x	x	X	x	x	x	x	X	x	x	x	x	x	x	x	x		x		x		x		**0**	**0**
FCT	Abuja	0	1	0	0	8	2	6	3	14	13	13	15	21	15	19	21	13		16		0		0		**110**	**70**
AVERAGE RAINY DAYS		0	1	0	0	5	1	6	4	12	13	13	13	15		17		16		9		0		0		**91**	**31**

TABLE.
2dSOUTHWEST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Ogun	Abeo	0	2	0	1	9	6	6	8	19	16	14	13	14	20	15	14	19		17		2		1		**116**	**80**
Ogun	I -Ode	2	2	4	4	9	8	7	5	17	15	18	21	20	24	20	18	20		17		6		2		**142**	**97**
Ondo	Aku	0	0	0	0	11	4	5	2	11	11	12	15	20	20	19	10	20		13		2		0		**113**	**62**
Ondo	Ond	0	0	1	1	7	11	5	NA	8	12	16	19	18	22	20	19	23		18		4		0		**120**	**84**
Osun	Osh	1	0	1	0	8	5	5	10	11	4	17	12	16	20	11	12	18		21		4		1		**114**	**63**
Oyo	Iba	2	1	0	1	7	8	7	7	11	11	15	15	13	13	16	11	15		12		2		0		**100**	**67**
Oyo	Isey	0	0	0	0	5	4	8	5	9	13	13	11	13	17	11	13	18		12		2		0		**91**	**63**
Oyo	Shak	0	2	0	0	2	4	4	NA	11	10	18	15	13	12	13	16	16		5		1		0		**83**	**59**
Lagos	Ikj	0	1	0	6	6	7	5	6	10	15	14	21	11	19	8	8	17		14		3		1		**89**	**83**
Lagos	Osho	1	1	0	1	4	10	5	7	9	9	11	22	6	20	5	5	15		13		7		0		**76**	**75**
Ekiti	Ado Ekiti	0	2	1	1	11	5	5	14	10	13	14	16	17	18	15	15	18		16		6		0		**113**	**84**
AVERAGE RAINY DAYS		**1**	**1**	**1**	**1**	**7**	**7**	**6**	**7**	**11**	**12**	**15**	**16**	**15**		**14**		**18**		**14**		**4**		**0**		**105**	**44**

TABLE. 2 e
SOUTH - EAST ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Abia	Umu	0	1	1	0	9	5	9	5	17	13	17	16	24	21	19		21		8		1		2		**128**	**61**
Anambra	Awka	0	1	1	0	7	3	8	15	13	12	15	16	18	21	17	23	22		14		2		0		**117**	**91**
Enugu	Enu	1	1	0	0	8	4	10	13	12	17	15	13	24	20	17	29	16		7		2		0		**112**	**197**
Imo	Owr	0	2	2	0	10	8	9	7	10	12	15	19	22	21	23	19	21		10		3		0		**125**	**88**
Ebonyi	Abak	0	1	0	0	3	2	4	9	12	8	11	11	17	14	17	22	8		13		1		0		**86**	**67**
AVE RAGE RAINY DAYS		**0**	**1**	**1**	**0**	**7**	**4**	**8**	**10**	**13**	**12**	**15**	**15**	**21**		**19**		**18**		**10**		**2**		**0**		**113.6**	**42.8**

TABLE. 2
fSOUTH-SOUTH ZONE

		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	20 17	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
A –Ibom	Eket	1	4	1	1	15	12	16	2	15	NA	19	NA	27	23	28	25	24		13		10		8		177	67
A - Ibom	Uyo	0	2	0	0	13	9	7	12	14	14	14	26	22	17	27	16	23		9		5		3		137	96
C/Rivers	Cal	0	4	2	0	16	6	13	14	16	22	17	24	29	24	25	24	22		11		14		1		166	118
C/Rivers	Ikom	0	3	0	0	11	4	15	9	18	16	22	8	24	26	24	20	21		17		4		0		156	86
C/Rivers	Ogo	0	0	0	0	4	NA	5	8	15	13	11	15	21	14	22	19	20		13		2		0		113	69
Delta	Asa	0	1	1	0	7	2	7	11	14	10	16	15	23	21	20	17	17		11		1		0		117	77
Delta	War	1	4	1	3	14	12	13	13	18	17	22	20	29	27	24	22	28		20		8		3		181	118
Edo	Ben	0	1	1	3	10	8	4	14	14	13	19	21	20	27	22	14	24		16		7		1		138	101
Rivers	PHC	0	1	0	0	16	12	9	7	16	10	21	21	24	22	22	22	12		15		5		4		144	95
Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA	NA
AVERAGE RAINY DAYS		0	2	1	1	12	8	10	10	16	14	18	19	24		24		21		14		6		2		148	54

TABLE. 3 a NORTHEAST ZONE

NORTH EAST ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Adamawa	Yola	33.4	36	37.0	36.4	41.0	41.1	40.7	39.7	36.7	35.8	33.8	33.1	32.2	31.4	31.5	31.2	32.0		35.0		37.8		37.3		**35.7**	**35.6**
Borno	maid	32.2	34.4	35.0	34.4	41.2	33.1	42.3	39.2	40.0	41.8	36.5	40.4	32.7	35.1	28.5	32.5	33.5		31.0		37.1		34.2		**35.3**	**36.4**
Bauchi	Bauchi	29.0	31.5	32.8	31.8	38.5	37.3	39.2	36.6	35.5	37.0	33.6	32.2	30.6	30.4	29.8	29.8	31.0		33.8		34.5		33.0		**33.4**	**33.3**
Gombe	Gom	30.5	33.2	34.5	33.4	38.5	38.7	39.5	38.7	35.6	35.1	33.0	31.5	29.8	29.7	29.5	29.6	30.5		34.2		35.9		32.9		**33.7**	**33.6**
Yobe	Ngu	30.0	31.9	33.9	35.1	40.1	32.3	42.6	38.5	40.9	40.6	36.5	41.1	33.9	34.5	30.8	33.4	34.8		32.7		36.9		32.3		**35.5**	**35.9**
Yobe	Potisk	29.5	32.2	33.6	32.3	39.6	38.4	41.3	40.3	38.6	38.8	35.8	34.7	32.2	32.1	31.0	31.1	32.7		35.6		36.1		32.1		**34.8**	**35.0**

TABLE. 3 bNORTHWEST ZONE

NORTH WEST ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Kaduna	Kad	30.4	32.6	35.3	33.0	36.2	37.2	36.8	NA	33.2	32.7	30.6	30.4	29.2	29.3	30.6	28.1	30.1		35.5		34.6		32.5		**32.9**	**27.9**
Kaduna	Zaria	28.3	31.5	32.7	31.5	36.9	37.1	38.5	38.0	34.2	34.9	28.2	31.4	29.6	29.7	29.1	29.1	30.4		32.7		34.6		31.3		**32.2**	**32.9**
Kano	Kano	28.5	31.2	32.1	31.4	38.9	37.7	41.1	39.3	38.7	39.1	34.3	33.6	31.5	31.8	30.2	31.0	32.4		36.5		34.9		30.9		**34.2**	**34.4**
Katsina	Kat	31.1	31.1	32.2	31.3	38.5	37.4	40.5	38.3	38.7	39.1	34.9	34.4	32.2	31.9	29.7	30.8	33.4		33.0		35.5		31.3		**34.2**	**34.3**
Kebbi	Yel	35.0	35.2	37.8	37.7	39.9	40.9	38.8	40.2	36.8	35.9	32.0	32.7	31.3	31.7	29.9	30.4	30.8		34.3		37.5		37.2		**35.1**	**35.6**
Sokoto	Sok	31.6	33.3	35.5	34.7	40.1	40.4	41.4	41.4	39.3	39.1	35.8	35.9	32.4	32.7	31.5	30.7	33.3		37.5		37.7		34.4		**35.9**	**36.0**
Zamfara	Gus	30.2	33.5	34.2	33.4	40.1	39.2	40.4	40.5	37.2	NA	33.1	32.4	30.6	31.2	30.3	30.2	31.4		35.2		35.9		33.4		**34.5**	**30.0**
Jigawa	Duts	28.7	32.8	32.2	31.9	38.9	38.3	40.8	40.0	38.4	39.7	34.8	34.0	32.0	32.2	30.4	31.0	32.9		36.1		35.5		31.2		**34.3**	**35.0**

TABLE. 3 c
NORTH-CENTRAL ZONE

NORTH-CENTRAL ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Benue	Mak	35.3	36.3	38.1	38.0	35.8	39.4	35.3	36.2	33.4	33.1	31.7	32.0	31.0	30.9	29.8	30.1	30.9		32.5		35.3		35.5		**33.7**	**34.5**
Kogi	Lok	35.0	36.3	37.6	37.6	36.2	38.6	35.2	36.6	34.2	33.6	32.1	32.5	31.0	30.9	31.6	29.8	31.2		37.3		35.4		35.2		**34.3**	**34.5**
Kwara	Ilor	34.9	34.8	36.9	36.1	36.6	38.0	35.1	35.9	33.6	33.5	30.6	31.8	30.1	30.7	31.9	28.8	30.0		31.1		34.8		34.4		**33.3**	**33.7**
Nasarawa	Laf	36.0	36.1	38.7	37.3	37.4	39.1	36.1	36.6	34.2	33.4	32.5	31.7	29.7	30.0	30.7	29.3	30.4		32.6		36.3		35.9		**34.2**	**34.2**
Niger	Bid	35.2	36.1	38.0	37.4	38.2	39.6	38.2	38.5	33.9	34.6	31.5	32.5	31.0	31.6	30.0	30.2	31.5		33.3		36.1		35.7		**34.4**	**35.1**
Niger	Min	35.1	35.6	37.9	36.7	37.9	39.4	37.2	37.9	34.0	33.4	31.1	31.5	30.3	30.3	32.5	28.9	30.6		38.0		35.3		35.7		**34.6**	**34.2**
Plateau	Jos	27.6	29.4	31.1	29.4	32.0	32.7	31.7	31.5	28.8	28.7	26.5	26.4	25.1	24.7	29.0	24.5	26.3		33.1		29.2		28.2		**29.0**	**28.4**
Taraba	Ibi	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX		XX		XX		XX		XX		**XX**	**XX**
FCT	Abuja	35.0	35.4	37.2	36.7	35.6	38.1	34.9	36.4	32.8	33.1	30.4	30.9	29.7	29.8	29.7	28.6	30.0		31.7		35.3		35.6		**33.1**	**33.6**

TABLE. 3 d
SOUTHWEST ZONE

SOUTH WEST ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Ogun	Abeo	36.2	35.9	37.6	36.6	35.8	37.6	35.2	35.3	33.3	33.1	30.9	31.7	30.2	29.8	29.6	28.6	30.7		32.6		34.1		35.3		**33.5**	**33.6**
Ogun	I - Ode	34.0	34.6	35.3	35.1	33.9	34.0	34.0	32.9	32.0	31.9	29.7	30.6	29.3	28.8	28.4	28.2	29.1		31.6		33.3		33.8		**32.0**	**32.0**
Ondo	Aku	34.7	34.4	35.9	35.5	34.0	34.8	33.3	32.9	31.7	31.5	29.4	30.5	31.7	28.7	27.9	27.7	29.3		31.1		33.3		34.1		**32.2**	**32.0**
Ondo	Ond	35.4	35.1	35.7	35.6	35.3	34.7	32.3	NA	30.1	31.9	29.0	30.3	30.1	28.6	28.6	27.3	29.5		29.7		33.2		34.2		**31.9**	**27.9**
Osun	Osh	34.5	34.3	36.3	35.7	34.0	35.9	33.6	32.8	32.2	32.2	29.4	30.9	28.4	28.4	27.9	27.4	29.2		30.9		33.0		33.5		**31.9**	**32.2**
Oyo	Iba	34.6	35	36.5	36.0	34.7	35.4	34.5	33.5	32.4	32.1	30.2	30.9	29.3	29.1	28.7	27.7	30.1		31.7		34.1		34.8		**32.6**	**32.4**
Oyo	Isey	35.0	35.2	37.0	36.1	35.0	36.8	33.0	34.1	31.3	31.5	28.6	30.8	28.0	28.6	24.9	27.0	29.7		28.7		33.9		34.7		**31.6**	**32.5**
Oyo	Shak	35.2	35.6	37.9	36.7	36.7	38.5	34.2	NA	32.6	31.7	29.7	30.2	28.4	28.6	27.9	26.3	29.8		31.5		35.1		35.4		**32.8**	**28.5**
Lagos	Ikj	34.6	34.5	35.2	34.6	34.1	34.1	34.5	33.7	32.5	32.3	30.4	30.7	29.8	28.7	30.1	28.3	29.2		32.6		33.2		34.1		**32.5**	**32.1**
Lagos	Osho	34.4	33.9	NA	33.8	33.2	33.5	33.6	33.2	32.2	32.5	29.9	30.6	30.0	28.5	29.0	27.9	28.7		31.3		32.9		NA		**26.3**	**31.7**
Ekiti	Ado-Ekiti	34.0	34	35.7	35.1	33.6	35.2	32.9	32.4	31.8	31.6	29.4	29.9	28.5	28.6	28.0	27.7	29.0		31.1		32.8		33.2		**31.7**	**31.8**

TABLE. 3 e
SOUTHEAST ZONE

SOUTHEAST ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
Abia	Umu	34.0	33.4	36.3	34.7	33.0	34.4	33.2	33.0	31.9	31.5	30.0	30.1	29.1	29.3	29.0	NA	29.9		31.0		32.2		32.6		**31.8**	**28.3**
Anambra	Awka	35.0	34.9	36.8	36.6	34.2	35.8	34.0	33.6	32.8	32.6	31.1	31.6	30.0	29.9	29.4	29.1	30.2		31.7		33.9		34.3		**32.8**	**33.0**
Enugu	Enu	34.7	35.2	37.0	36.6	34.3	37.0	34.1	34.1	32.4	32.7	30.9	31.7	29.7	30.1	29.6	29.4	30.4		32.2		34.0		34.6		**32.4**	**33.4**
Imo	Owr	34.7	34.4	35.0	36.4	33.9	34.6	33.6	37.3	31.5	32.1	31.0	31.4	29.6	29.6	29.3	28.5	30.2		31.8		33.5		34.1		**33.8**	**33.0**
Ebonyi	Abak	36.1	36.3	37.6	38.2	35.6	37.9	35.1	35.6	34.1	33.0	32.2	32.6	31.1	31.3	30.0	30.2	30.3		32.5		35.4		35.7		**33,8**	**34.4**

TABLE. 3 f
SOUTH-SOUTH ZONE

SOUTH-SOUTH ZONE																											
		January		February		March		April		May		June		July		August		September		October		November		December		2016	2017
State	Station	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	TOTAL	TOTAL
A – Ibom	Eket	30.8	30.1	31.0	31.0	30.5	30.3	30.7	33.0	29.8	NA	28.6	NA	27.6	26.9	27.1	26.3	27.2		28.5		29.3		30.3		29.3	**22.2**
A – Ibom	Uyo	35.3	33.9	36.3	35.8	33.3	34.3	33.2	32.4	31.9	31.2	30.7	30.8	29.0	29.4	29.0	28.3	29.6		31.6		32.8		33.7		32.2	**32.0**
C/Rivers	Cal	33.7	33.4	35.2	34.9	32.6	34.3	32.4	32.3	32.1	31.3	30.6	30.9	29.3	29.0	28.7	28.2	29.3		30.9		31.9		33.2		31.65	**31.77**
C/Rivers	Ikom	35.1	34.1	37.4	35.2	34.1	36.7	34.2	31.7	33.0	32.3	31.5	31.0	30.2	29.8	29.5	28.7	31.0		32.0		34.0		33.9		33.0	**32.43**
C/Rivers	Ogo	36.1	36.2	38.4	37.5	35.8	38.5	35.3	37.0	33.5	33.3	32.3	32.4	30.7	31.3	28.2	30.0	31.3		31.5		34.8		35.8		33.63	**34.51**
Delta	Asa	35.6	36.1	37.4	37.9	35.3	38.1	35.5	34.9	34.4	34.4	32.3	33.3	31.7	31.3	31.4	29.8	32.0		33.5		35.7		35.7		34.21	**34.48**
Delta	War	34.0	34.3	34.5	34.6	33.9	34.1	34.0	34.0	33.0	33.4	30.8	31.7	29.2	29.6	29.2	28.8	30.4		32.5		34.1		34.0		32.48	**32.56**
Edo	Ben	34.8	34.9	36.0	35.9	34.2	34.1	34.1	33.1	32.8	32.7	30.5	30.9	29.4	28.6	28.7	28.6	29.9		31.5		33.4		34.4		32.49	**32.33**
Rivers	PHC	34.9	33.8	36.4	35.8	33.2	32.7	33.2	32.6	32.5	31.5	30.7	30.2	28.9	29.1	29.3	28.7	29.6		31.3		32.2		32.9		32.9	**31.8**
Bayelsa		NA		NA			NA		NA		NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	**NA**	**NA**

4.0 USE OF IMPROVED FARM INPUTS

USE OF IMPROVED FARM INPUTS

Seed procurement in the Northeast in 2017 is presented in Table 4a. The data indicated that only Borno, Gombe and Taraba states out of the 6 states in the zone were able to procure and distribute maize, rice and sesame seeds to their farmers. The seeds included both certified and foundation seeds. In most cases, the seeds supplied were below the actual demand of farmers, and they were relatively costly.

Table 4a: Use of Farm Inputs (Seed and Seedlings) Procured and Delivered by States In 2017

Northeast–Zone Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Borno						
seed	Maize	66.4	66.4	Yes	Yes	MANR
seed	Rice	1.93	1.93	Yes	Yes	Fadama III, FAO, IFAD, NGO
Gombe						
seed	Maize	40	40	No	Yes	
Taraba						
Seed	Sesame	18.4	18.4	No	Yes	

In the North West also only three states (Katsina, Sokoto and Jigawa) procured and distributed improved seeds to the farmers. Seeds procured and distributed included millet, rice, maize, sorghum, cowpea, soybeans and groundnut; the source of seeds was mainly JASCO and Premier. In 2017, improved seeds were scarce as the demand for improved seeds increased.

Northwest Zone – Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Katsina						
seed	Maize	20	20	no	yes	
seed	Sorghum	25	25	no	yes	
seed	Millet	20	20	no	yes	
seed	Groundnut	10	10	yes	yes	
seed	Cowpea	20	20	no	yes	
seed	Rice	2	2	no	yes	
Sokoto						
seed	Millet SOSAT	15	15	No	Yes	Premier
seed	Millet	15	15	Yes	Yes	Premier
seed	Maize Hybrid	13	13	Yes	Yes	Premier
seed	Farrow 44	18	18	Yes	Yes	Premier
Jigawa						
seed	Rice	200	200	Yes	Yes	JASCO
seed	Sesame	50	50	yes	yes	JASCO
seed	Groundnut	300	300	yes	yes	JASCO
seed	Soybean	7.5	7.5	yes	yes	JASCO

Seed procurement and distribution in the North-Centralzone was quite impressive. The data showed that all the six states procured and distributed rice, maize, soybean and tomato seed, as well as cassava cuttings to their farmers in 2017. However, the seeds distributed were inadequate for farmers' needs.

North-Central Zone –Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Plateau						
seed	Maize	12.3	12.3	No	Yes	Romery
seed	Rice	21.8	21.8	No	Yes	
seed	Soybean	1.62	1.62	No	Yes	
Nasarawa						
seed	Maize	1.9	1.8	Yes	Yes	Outgrower/ADP
seed	Rice	2.66	1.85	Yes	Yes	Outgrower/ADP
FCT						
Seed	Maize	1.5	1.5	No	Yes	NCRI
Seed	Rice	3.0	3.0	No	Yes	
Niger						
seed	Tomato	147 TINS	133 TINS	YES	YES	FREE
Kwara						
seed	Maize	1	1	yes	yes	
Kogi						
seed	Maize	1.870	1.870	No	Yes	Suppliers
seed	Rice	2.244	2.244	No	Yes	Suppliers
Cutting	Cassava	250,000bd	250,000bd	No	Yes	IITA
Benue						
Seed	Maize[hybrid]and samaz 20	2.0	2.0	No	No	
Seed	Rice faro 44	3.0	3.0	No	No	

For the Southwest zone, Osun, Ekiti, Ogun, and Lagos were able to procure and distribute seeds of maize, rice, vegetables and cassava cuttings for their farmers. The field data indicated that the seeds and cuttingswere affordable but inadequate to the farmers. The seeds and seedlings were sourced from ADP and IITA among others.

Southwest–Zone Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Osun						
Seed	Maize	7.0	7.0	No	yes	
Ekiti						
Seed	Maize	5	5	NO	YES	ADP/NASC
Seed	Rice	12.5	12.5	NO	YES	ADP
Ogun						
Seed	Maize seed	11.22	10.04	yes	yes	
Seed	Vegetable seeds	2,505 sacks	459 sacks	yes	yes	
Seed	Cassava cuttings	1654 bundles	1654 bundles	Yes	Yes	IITA
Lagos						
Seed	Maize	5	5	No	No	
Seed	Rice	2.5	2.5	No	No	
Seed	Vegetable	1.5	1.5	No	Yes	

In the Southeast zone, Anambra, Ebonyi, Abia and Imo procured and distributed seeds of maize, rice, okra, cucumber, pepper, watermelon and soybean, as well as cassava cuttings to farmers. These inputs were sourced from the open market, IITA, FADAMA, IFAD and state governments. Most of the inputs supplied, according to reports,were inadequate.

Southeast–Zone Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Anambra						
seed	RICE	117.8	47.1	Yes	Yes	Market
seed	Water Melon	0.1	0.1	Yes	yes	market
seed	Cucumber	0.05	0.05	Yes	Yes	market
seed	Maize	150	150	Yes	yes	market
Cuttings	Cassava	17000 packs and 2000 bundles	17000 packs and 2000 bundles	Yes	yes	IITA
Ebonyi						
seed	Rice	1.160	1.160	No	Yes	IFAD, FADAMA and State Govt.
	Cuttings					
cuttings	Cassava	100,000 bundles	100,000	No	Yes	IFAD, FADAMA and State Govt.
Abia						
Seed	Maize	2	2	No	Yes	market
Seed	Rice	3	3	No	Yes	market
Seed	Soybean			Yes	yes	
cuttings	Cassava	10	7	No	Yes	market
Imo						
	Maize (MT)	3.5	3.5	No	Yes	
Seed	Okra (no)	10,000 (Sachets)	10,000 (Sachets)	No	Yes	
Seed	Cucumber (no)	5,000 (Sachets)	5,000 (Sachets)	No	Yes	

In the South-South zone, Edo, Delta and Akwa Ibom states procured and distributed maize, rice, soybean and cassava cuttings to their farmers during the year under review. The field report also indicated that most of the inputs supplied were both adequate and affordable.

South-South Zone – Seed and Seedlings						
State	**Crop**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Akwa Ibom						
Seed	Maize	0.8	0.8	No	Yes	Harvest Plus
Delta						
seed	Maize	10.015	10.015	yes	yes	√
seed	Rice	5.125	5.125	yes	yes	√
Edo						
seed	Maize	1.50	1.50	✓	yes	IAR&T IBADAN
Seed	Soya bean	0.05	-	yes	yes	IAR&T IBADAN
Cuttings	Cassava bundles	2,107				OUTGROWERS

Use of Agrochemicals

Table 4b presents data on procurement and distribution of Agrochemicals. The data indicates that only 13 states across the nation procured and distributed Agrochemicals. The states were Bauchi, Borno, Sokoto, Jigawa, Nasarawa, FCT, Kwara, Enugu, Ebonyi, Abia, Ondo, Ogun, and Lagos. The chemicals supplied were mostly herbicides and insecticides, obviously for the control of weeds and some diseases that affected crops on the fields. Although the data indicated adequacy and affordability of the agrochemicals, the field visits across the states suggested otherwise. Majority of the chemicals were sourced from the open market except a few provided by the state ministries of agriculture and ADPs.

Table 4b: Procurement of Agrochemicals according to States

Northeast–Zone - Agrochemicals						
State	**Agrochemiceal**	**Quantities Procured(l)**	**Qty Distributed(l)**	**Adequacy**	**Affordability**	**Source**
Bauchi						
	Lanida	300	250	No	No	
	Mancozeb	300	250	No	No	
	Cupe-plus	300	250	No	No	
	Paraquat Dichloride	300	250	No	No	
Borno						
	Pesticides/Herbicides	59,760	59760	Yes	Yes	FADAMA, IFAD,FAO, MANR

Northwest Zone – Agro-chemicals						
State	**Agrochemiceal**	**Quantities Procured(l)**	**Qty Distributed(l)**	**Adequacy**	**Affordability**	**Source**
Sokoto						
	[illegible]	15000	12000	yes	yes	Nil
	Gramazone	20000	17000	yes	yes	Nil
	Para Force	5000 ltr	4500	yes	yes	Nil
Jigawa						
	Herbicide	16	16	yes	yes	JASCO
	Insecticide	80	80	yes	yes	JASCO

North-Central Zone –Agro-chemicals						
State	**Agrochemical**	**Quantities Procured(l)**	**Qty Distributed(l)**	**Adequacy**	**Affordability**	**Source**
Nasarawa						
	Herbicides	657	657	No	Yes	
	Insecticides	438	438	No	Yes	Jubaili
	Rodenticide (tube)	400	400	No	Yes	
FCT						
	Paraquat	300	200	No	Yes	
	Glyphosate	142	100	No	Yes	
	Aminoseal	155	75	No	Yes	
	Butastar	155 l	100	No	Yes	
Kwara						
	Power force	10 cartons	10 cartons	No	Yes	Jubaili
	Force up	7 cartons	7 cartons	No	Yes	Hepotec

Southeast Zone – Agro-chemicals						
State	**Agrochemiceal**	**Quantities Procured(l)**	**Qty Distributed(l)**	**Adequacy**	**Affordability**	**Source**
Enugu						
	Herbicides	200	200	No	No	FadamaII AF
Ebonyi						
	Total Herbicides	140,000	140,000	No	Yes	State Govt.
	Select herbicides	160,000	160,000l	No	Yes	State Govt.
Abia						
	Herbicides	13	13	No	Yes	market
	Pesticides	5	5	No	Yes	market

Southwest Zone – Agro-chemicals						
State	**Agrochemiceal**	**Quantities Procured(l)**	**Qty Distributed (l)**	**Adequacy**	**Affordability**	**Source**
Ondo						
	Herbicides	20,460	20,460	NO	NO	
	Insecticides	2,012	2,123	NO	NO	
	Fungicides	11,500	11,500	NO	NO	
Ogun						
	Glyphosate	36	36	yes		Jubaili
	Herbicides	504	472	yes	yes	Jubaili
	Pre-emergence	30	30	yes		Jubaili
	Pesticides	486	413	yes	yes	
Lagos						
	Vinash	15 cartoons	15 cartoons	No	Yes	
	Dragon	25 cartoons	25 cartoons	No	Yes	
	Weedcrusher	25 cartoons	25 cartoons	No	Yes	

South-South Zone – Agro-chemicals						
State	**Agrochemi ceal**	**Quantities Procured(l)**	**Qty Distributed(l)**	**Adequacy**	**Affordability**	**Source**
Akwa Ibom						
	Pesticides	0.15 mt	0.15 mt	No	No	Accredited Agent
	Herbicides	0.2 mt	0.2 mt	No	No	Accredited Agent
Delta						
	Action 40	60	60	No	No	Accredited Agent
	Attack	60	60	No	No	Accredited Agent
	No pest	20	20	No	No	Accredited Agent

Use of Fertilizer across the States

Fertilizer was procured and distributed by various government agencies throughout the six geo-political zones. Nineteen states (Borno, Adamawa, Yobe, Bauchi, Gombe, Sokoto, Kebbi, Zamfara, Kaduna, Kano, Nasarawa, Platau, Kogi, Niger, Benue, Ogun, Lagos, Abia and Anambra) provided records of fertilizer procurement and distribution. The other states were either unable to procure and distribute fertilizers or did not supply the data for this purpose. The fertilizers procured and distributed were mainly NPK and urea. Benue and Akwa Ibom states procured and distributed SSP while only Akwa Ibom procured and distributed crystalizer. Generally, there was a marked improvement in the avalibility and affordability of fertilizers in 2017 compaired to 2016.

Table 4c: Use of Farm Inputs (Fert ilizer) Procured and Delivered by States in 201 7						
Northeast Zone						
State	**Fertilizer**	**Quantities Procured(MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Borno						
	NPK	30,000	ALL	Yes	Yes	
	SSP	9,000	ALL	Yes	Yes	
Adamawa						
	NPK	9,000	9,000	No	No	
	Urea	NA	600	No	No	
Yobe						
	NPK	3,000	3,000	No	No	
	Urea	1,050	1,050	No	No	
Bauchi	NPK	25,680	25,680	No	No	
	Urea	12,840	12,840	No	No	
Gombe	NPK	20,000	20,000	No	No	
	Urea	10,000	10,000	No	No	

Northwest–Zone Fertilizer						
State	**Fertilizers**	**Quantities Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Sokoto	NPK	25,000	25,000	No	No	
Kebbi	NPK	7,983	5,000	No	No	
Kaduna	NPK	50000	10560	No	No	
Zamfara	NPK	50,000	50,000	No	No	
Kano	NPK	40,000	40,000	No	No	

North-Central Zone – Fertilizer						
State	**Fertilizer**	**Quantity Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Nasarawa	NPK	3,720	3,720	No	No	NA
	Urea	450	450	No	No	NA
Plateau	NPK	20,000	17,000	No	No	NA
	Urea	5,000	2,000	No	No	NA
Kogi	NPK	2160	2160	No	No	NA
Niger	NPK	4000	4000	No	No	NA
Benue	NPK	3,300	3,300	No	No	NA
	Urea	600	600	No	No	NA
	SSP	720	720	No	No	NA

Southwest Zone – Fertilizer						
State	**Fertilizer**	**Quantity Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Ogun	NPK	1725.9	749.1	No	No	NA
	Urea	210	171.6	No	No	NA
Lagos	NPK	200	150	No	No	NA

Southeast Zone – Fertilizer						
State	**Fertilizer**	**Quantity Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Abia	NPK	10,000	10,000	No	No	NA
	Urea	10,000	10,000	No	No	NA
	SSP	5,000	5,000	No	No	NA
Anambra		120	50	No	No	NA
		90	18	No	No	NA
Ebonyi	NPK	50,0000	50,0000	No	No	NA
	Urea	25,0000	25,0000	No	No	NA
	NPK	50,0000	50,0000	No	No	NA
	Urea	25,0000	25,0000	No	No	NA

South-South Zone – Fertilizer						
State	**Fertilizer**	**Quantity Procured (MT)**	**Qty Distributed (MT)**	**Adequacy**	**Affordability**	**Source**
Akwa Ibom	Lime	540	200	No	No	NA
Delta	NPK	143	143	No	No	NA
	Urea	25	25	No	No	NA
	NPK	17.493	17.493	No	No	NA
	Urea	17.493	17.493	No	No	NA
	Lime	350	350	No	No	NA

5.0 CROP PESTS, DISEASES AND NATURAL HAZARDS

5.1. Crop Pests, Diseases and Natural Hazards

Pests, diseases and natural hazards reduce crop output, yields and quality significantly, and eventually result in economic losses. The 2017 wet season survey indicated that states across Nigeria experienced the attacks of pests and diseases, which affected most crops as presented in Table 3. Stem borer and armyworm infestation on maize and rice were observed in all agro-ecological zones, with varying degrees of severity. Flood was also experienced in many states. Field observations indicated that scarcity, high cost, and adulteration of agrochemicals, as well as inadequate training on their use were major constraints to the control of pests and diseases across the country. Quelea birds also attacked rice farms, with farmers using different strategies, such as nets and scarecrow techniques to keep them away.

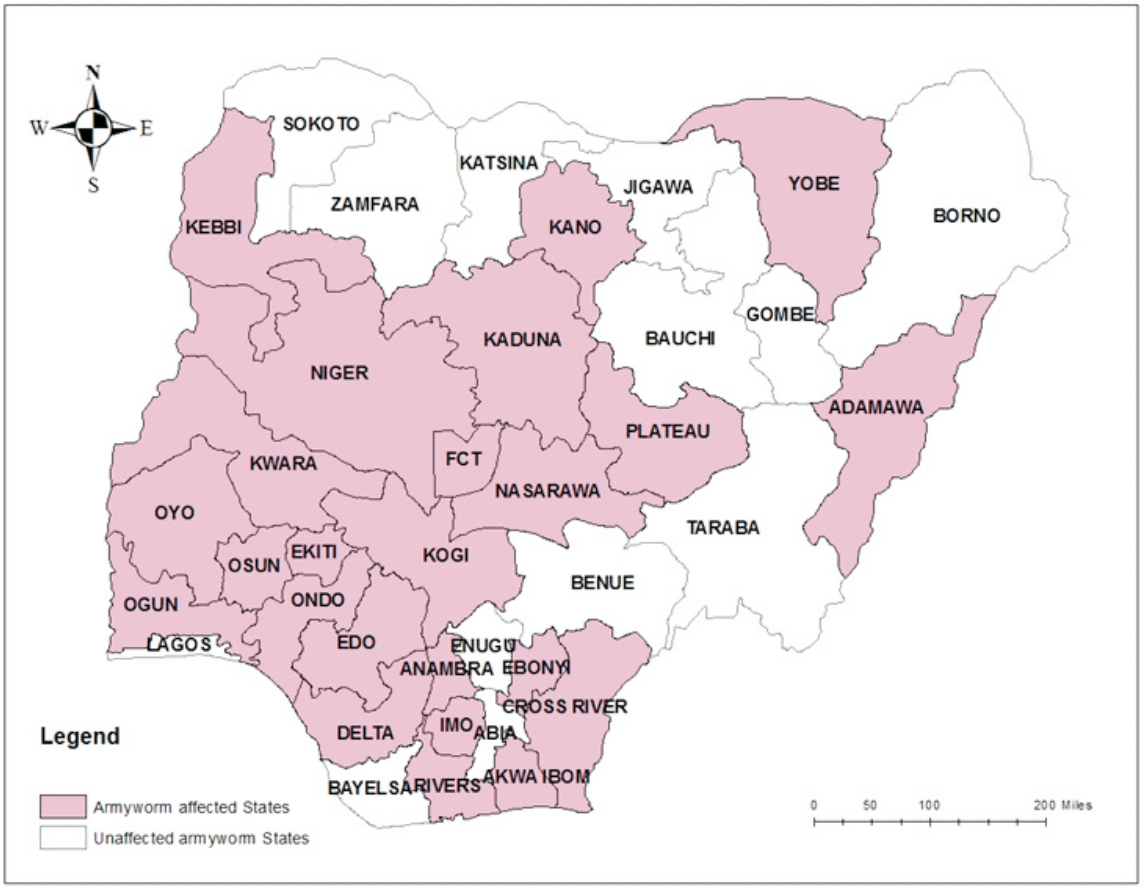


Fig: 5:1 Army Worm Infestation in Nigeria 2017 Rainy Season

Figure 5.1: Armyworm infestation in Nigeria 2017 rainy season

Northeast Zone

Armyworm and stemborer attack were reported in Adamawa State. Significant yield loss was expected for maize as a result of the armyworm and stemborer attack. The first state-wide armyworm attack of 2016 was less severe than 2017. Termites also posed some threat to maize production. Temporary dry spells led to significant damage by insect pest attack. Farmers complained of adulteration and high cost of agrochemicals. The pests recorded in Bauchi included stemborer, spittle bugs, aphids, white flies and coreidbugs, while the diseases were downy mildew, rice blast, sorghum midge, groundnut rosette, fusarium wilt, and leafspot. The crops affected were maize, millet, rice, sorghum, cowpea, groundnut, soybeans, sweet potato, tomato, Irish potato and ginger.

There were also dry spells that affected maize, sorghum, benniseed and millet in Borno State. Cases of stemborer which affected maize, millet and soybeans were reported all over Gombe, with severity of the attack between light and moderate. Other pests/diseases reported were rice blast, which affected rice with moderate severity, armyworms on maize and sorghum, and aphids on cowpea with moderate severity. The chemicals applied to control these were largely ineffective. Problems of low quality, adulteration and high cost of pesticides were among the major challenges faced by farmers in Gombe State. There were also cases of pests on maize, millet, sorghum, cowpea and groundnuts in Damaturu, Jakusko, Geidam and Yunusari LGAs in Yobe State. Measures taken to control the menaces were replanting of early maturing varieties and spraying with pesticides.

Northwest Zone

There was statewide report of armyworms and stemborers infestation on maize in Kaduna State, while stemborers and aphid infestation on millet, sorghum and cowpea farms were reported in Kebbi State. The infestation was light in both states and occurred at the early stage of crop growth. Kano state reported cases of stemborer, termites, striga, aphids and armyworm infestation on maize, millet, sorghum and rice, with varying degrees of severity.

Plate 5.1: *Murzuna*- infected millet in Kebbi State

North-Central Zone

Armyworm and stemborer attack on maize were found in most communities in the FCT. Pesticides were used by farmers to control the armyworm infestation on maize. Infestation of armyworm and stemborer on maize were also reported in Nasarawa State with projected significant yield losses. There were also armyworm and stemborer infestation on maize in all the communities visited in Niger State.In addition, there were heavy floods in Lavun, Mokwa and Suleja LGAs between July and August. The floods in Mokwa LGA damaged a major access bridge at Tatabu which links the North West and South-Western States. On the other hand, a dry spell was reported and estimated to have a slight effect on crop yield. Leaf miners and termites affected leaves and stems of maize, with moderate severity in Taraba State. The farmers were not generally able to control the pests.

Southwest Zone

The pests infestation observed in this zone included armyworm, grasscutter, birds, rodents and millipede. Similarly, diseases reported in the zone were tuber rot, leaf borer, leaf miner, black pod, rice blast, cassava mosaic and tomato blight/wilt as reflected in Table 5.

In Oyo State, invasion of cattle on maize, cassava and yam farms, which caused conflicts between Fulani herdsmen and the farming communities in many areas of the state was reported. Mitigation

measures included the use of pesticides, insecticides and fungicides. The high cost of agrochemicals and adulteration limited their utilization by farmers.

Southeast Zone

Cases of squirrel and grasscutter attack on young shoots of cassava and vegetables, and monkey attack on maize were reported in Anambra State. There was also reported case of armyworm on maize in 21 LGAs of Anambra State at the beginning of the season. Incidences of Striga infestation in rice and armyworms in maize were as well reported in Imo State especially in Okigwe zone. Weaver birds, grasscutters and rat attacks on rice were also reported. In Abia state, armyworm infestation on maize was heavy while light tomato wilt and cassava mosaic were reported. In Enugu State, stemborer was reported on maize and fungal disease on cocoyam. The fungal attack on cocoyam seemed resistant to chemical treatment.

South-South Zone

Stemborer and armyworm attack was reported in all states in the zone. Other pests reported include caterpillar, mealybug and birds while blight on cocoyam and fusarium wilt on tomato were the diseases reported.

Flooding was a major natural hazard on crop production reported in the zone. Heavy floods were recorded in Eket and Itu LGAs of Akwa Ibom State and while serious cases of farmland submergence were reported in Bayelsa State. Control measures taken to mitigate the diseases infestation in the State includes spraying of insecticide and uprooting and discarding the affected plants. Major challenges encountered with pest and disease control include high cost of pesticide, inadequate skilled manpower and adulteration of agrochemicals.

Plate 5.2: Maize destroyed by armyworm in Rivers State

Plate 5.3: Cassava tuber rot disease

Generally, the challenges encountered with crop pest and disease control in 2017 were:

i. Resistance to pesticides
ii. Adulterated pesticides
iii. Inadequate skilled manpower on handling and application of chemicals
iv. Erratic distribution of rainfall especially at onset
v. High cost of chemicals
vi. Farmers' refusal to strictly follow the manufacturer's guideline before and after use
vii. Use of banned pesticides eg. Furadan
viii. High level of ignorance among end users on the types and most appropriate uses of pesticides

Table 5:Incidences of pests, diseases and natural disasters on crops in 2017wet season

Table 5: Incidences of pests, diseases and natural disasters on crops of the wet season of 2017 in Nigeria

Affected Resources/Crops	Pests/ Diseases/Hazard	StatesAffected	Severity	Estimated yield loss (%)	Management Practice(s)
Farms & farm-Lands	Dry Spell at the beginning of the planting season	Borno, Akwa Ibom, Ekiti, Nasarawa	L - H	Ranges from 5 to 30	Planting of early mature varieties when rains establish. Irrigation application
	Dry Spell in the middle of wet season (during August break)	Zamfara, Plateau, Kwara, Kogi, Ebonyi,	L - H	Ranges from 2 to 55	When rains return, plant second season crops if time permits. Use short duration varieties, if available. Plant drought tolerant varieties. Irrigate if possible.
	Flood, erosion and water logging	Kano, Lagos, Gombe, Cross River, Enugu, Imo, Anambra, Niger, Yobe, Ebonyi, Bayelsa	L-H	5- >10	At planting avoid areas that are prone to water logging, and plant improved varieties
	Submergence of farmland	Bayelsa	M	10-20	Upland planting; early mature crops planting
Banana/ Plantain	Fusarium disease	Imo	H	29	Use of improved seedlings and fumigation
	Submergence of farmland	Bayelsa	M	10	Plant on upland
	Cassava Mosaic	Abia, Kogi, Kano, Ekiti, Kwara, Nasarawa	L, M	Ranges from 5-20	Plant improved resistant varieties
	Mealy bug	Cross river, Adamawa, Ebonyi, Lagos,	L	4 – 73	Plant resistant varieties, use of chemicals
	Stray animal, cattle	Akwa Ibom, Kwara, Oyo	M-H	10-60	Dialogue, court of law

CASSAVA	Grass cutter	Ekiti, Imo, Anambra	L	5	Setting traps
	Tuber rot	Lagos, Ondo	M	15	Early harvesting, short duration varieties;
	Flood, water logging	Ebonyi, Lagos, Niger	H	40-87	At planting avoid areas that are prone to flood and water logging. Plant improved varieties. If possible, create drainages in farms
	Cassava bacterial blight (C.B.B)	Imo	M	4	Insecticides
	Termites	Kano, Ekiti	L- M	>15	Use of improved variety, early planting, Insecticides
	Grasshopper	Adamawa, Imo, Kwara	L	20	Use of pesticides
	Die back	Imo			
Cocoyam	Rodent	Ondo	M		Set trap
	Pod suckers	Taraba	H	35	Spraying
	Root rot	Abia, Kano	M, L	15, 8	Determine the cause and take appropriate action
	Beniseed	Kano	L	5	
	Fungal disease	Enugu	H	90	
	Blight/wilt	Imo, Ebonyi, Akwa ibom	H, M	20-25, 70	use fungicide according to recommendation, use improved variety
Cotton	Aphids	Adamawa	M	40	Insecticides
	Leaf roller	Adamawa	L	20	Insecticides
Cowpea	Pod borer	Adamawa	M	40	use insecticide
	Aphids	Adamawa, Oyo, Sokoto, Kano	M	40	
	Leaf borer	Ondo	M		
	Weevils	Nasarawa	. . .	30	Hermetic storage, use of bag.
	Blight	Kano			
	Leafspot	Kano			
	Bird	Abia, FCT, Oyo	L	10	Spray with pesticide
	Grasshopper	Yobe	M	M	
	Weevils	Imo	L	< 10	Hermetic storage, use of improve seed and crop rotation
	Grasshopper	Yobe	L	20	Chemical spray

Groundnut	Insects		L	10	.
	Aphids	Kano, Jigawa	M-H	10-30	Treat according to recommendation eg treat against termites using Termicot. Flood the farm against termites where possible. Integrated control method, sprayed
	Termites	Kano	L		
	Millipedes	Adamawa	L	20	Furadais
	Rosette	Adamawa, Kano, Imo, Ebonyi, Borno	L, M	10-25	Early planting, use of improve seed and crop rotation, spray fungicides, uprooting the affected plant
Ginger	Corcospora leaf spot	Bauchi	L	9	Application of fungicides
MAIZE	Stem borer	Cross river, Enugu, Kaduna, Plateau, Adamawa, Kogi, Akwa Ibom, Imo, FCT, Gombe, Kebbi, Kano, Osun, Edo, Nasarawa	L - H	10 - 60	Timely planting, use of improve planting, Use of pesticides, insecticidesand Biological control
	Weevils	Ebonyi, Imo, Nasarawa	H	75	
	Caterpillar attack	Delta	L	10	
	Army worm	Abia, Anambra, Yobe, Cross river, Kaduna, Adamawa, Kogi, Akwa Ibom, Ebonyi, Oyo, FCT, Kebbi, Kano, Edo, Niger, Ogun, Osun, Rivers, Ondo, Kwara, Delta,	L - H	20 - 80	
	Streak	Adamawa	L		Resistance variety
	Termites	Taraba, Kano	H	30	Spraying
	Leaf miner	Taraba, Nasarawa	M	25	Spraying
	Grasshopper	Oyo	H	26	
	Bird	Oyo	H	60	Scary method
	Rodents	Imo	M	20	Early planting
	Drought	Gombe, Borno	M	20	Spraying
	Spittle bugs	Bauchi	L		Insecticides
	Flooding	Lagos	H	97	Evacuation/relocation

	Ice rain (hail)	Jigawa	H	40	
Millet	Stem borer	Plateau, Kano, Sokoto	M - H	15 – 40	treat with insecticides, harvest immediately
	Smut	Adamawa	M	20	Rotation, use of resistance variety
	Worms	Jigawa, Nasarawa	L	9, 10	
	Downy mildew	Kano, Bauchi	L		
	Birds	Jigawa	L	10	Non
	Ice rain[Hail]	Jigawa	L	10	Non
	Birds	Borno	L		
	Drought -Dry spell in the middle of wet season (during August break)	Borno	L	1	Save affected field crops by harvesting (even when premature). When rains re-establish plant second season crops if time permits, use short duration varieties, if available, Irrigate if possible.
RICE	Stem borer	Adamawa, Kano, Ebonyi, Kwara	M	40	Use insecticide, fungicides
	Grasscutter	Imo, Ondo, Ekiti	M	10	Setting of traps
	Termites	Kogi, Ekiti	H		Insecticides
	Blast	Adamawa, Kogi, Kano, Gombe, Bauchi	M	20	Treat according to recommendation eg treat with systemic fungicides
	Army worm	Nasarawa, Sokoto	L-H	5-40	Insecticides
	Brown leaf spot	Kwara	L	9	Chemical control
	Quela birds	Kogi, Imo, Kano, Oyo, Akwa Ibom, Kwara, Bayelsa, Ondo, Ekiti, Sokoto	M		Scare, Setting of traps
	Grasshopper	Oyo	M	20	
	Rats	Oyo	M	10	
	Gulma	Ebonyi	H	72	
	Flood	Ebonyi, Sokoto, Niger	M, H	15-40	Short duration varieties planted; at planting avoid areas that are prone to water logging. Plant improved varieties. Creation of water channel

SORGHUM	Stem borer	Plateau, Gombe, Kwara, Kano	L- M	3-15	
	Flood	Sokoto			
	Downy mildew	Kwara	M	25	Chemical control
	Sorghum midge	Bauchi	L		Application of insecticides
	Army worm	Gombe, Nasarawa, Kwara, Jigawa, Kano	L, M	5-25	Chemical spray
	Smut	Adamawa, Kano	L	9-20	Treat according to recommendation eg treat with systemic fungicides.
Soybeans	Borer	Gombe	M	15-20	
	Aphids	Adamawa	L	20	Insecticides
	Weevils	Kwara	M	25	Cultural/Chemical
	Bird	Oyo	L	10	Chemical seed
	Rabbits	Oyo	L	5	Dressing/people care
	Coried bugs	Bauchi	L		Application of contact systemic insecticides
	White flies	Bauchi	L		
	Cepidopters	Bauchi	L		
	Bacterial pustule		L	1	Use of improved varieties and better cultural practices, chemical spray
	Yellow mosaic disease.	Kano	L		
	Low yield		L	4	
SWEET POTATO	Leaf rot		Heavy	40	Determine the cause and appropriate action.
	Weevil	Adamawa	M	20	Early planting
	Sweet potato virus	Adamawa	M	20	Resistance variety
TOMATO	Tomato wilt	Abia , Bauchi, Ondo, Edo	H	20	Seed treatment, spray with appropriately with pesticides
	Bacterial wilt	Ekiti	H	52	
	Aphids	Bauchi			
	Root rot	Kwara	M	25	Chemical
	Nematode	Cross river, Adamawa, Kano, Ekiti	L - H	Ranges from 5 to 53	Uprooting and discarding disease plant, Furadan, spraying of insecticides, planting of resistant variety
	Tuta absoluta	Kano, Delta, Oyo	H	53	Chemical
	Blight disease	Plateau, Adamawa, Kano, Nasarawa	L, M, H	7 53	Spraying and Early Planting

	White flies	Adamawa	L	20	Insecticides
YAM	Rot	Kogi, Ebonyi, Lagos	M-H	25-78.5	Use of improved varieties. The cultural practices of hot water or chemical treatment of planting materials before planting may manage root rot and beetle; and timely harvesting manage yam rot.
	Beetle	Oyo, Kwara, Akwa Ibom	L	9	
	Yam virus	Nasarawa	L	5	
	Green spider mite	Adamawa	M	20	Insecticides
	Cattle	Kwara	L	9	Chemical control
	Fulani cattle rearer	Oyo	M	25	Court of law
	Weevils	Imo	M	20-25	Use of insecticides
	Submergence of farmland	Bayelsa	H	20	Early planting. Use of early mature variety
	Cricket	Ondo	L	<9	Treat according to recommendation eg use Terrmicot according to recommendation.
	Termite	Imo	L	5-10	
	Nematode	Ebonyi	H	78.5	Nematicide
	Rodent	Imo	L	9	Trap setting, and application of chemicals

H represents Heavy, M represents Moderate and L represents light which is the same as low

6.0 AGRICULTURAL MECHANIZATION

Agricultural mechanization is the use of machines and associated euipment for agricultural production. It reduces drudgery, enhances productivity and facilitates large-scale production. Agricultural mechanization includes the use of tractor and other farm machinery for land clearing, ploughing, harrowing, planting, fertilizer application, spraying, shelling, threshing,winnowing and several other activities. There is more emphasis on tillage mechanization in Nigeria hence, tractor use is the main focus of this section.

6.1 Tractor Availability and Functionality

Tractor is the symbol of agricultural mechanization in Nigeria. Data on tractor availability and functionality were collected from ADPs, state ministries of agriculture and relevant agencies nationwide. Data provided by 26 of the 36 states and FCT gives the total number of functional government tractors for 2016 and 2017 in Nigeria as 908 and 964 respectively. This represents a 6.17% increase although still far from reality. Non-functional government-owned tractors in 2016 and 2017 were 539 and 524, a reduction of 2.78%. This suggests an improvement in their management in the year.

Among the states that provided data, Plateau State reported the highest number of government functional tractors of 279 by any state while Rivers and Akwa Ibom states reported 2 and 1 respectively. Generally, the number of non-functional tractors reduced in most states, except in a few instances such as Borno, which had 21.88% increase in the number of non functional tractors. The full picture is as presented in Table 6.1 below.

Table 6.1: Tractors Available Nationally

NORTHEASTAGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non-Functional			Functional			Non-Functional		
State	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**
Adamawa	NA	NA	NA	NA	NA	NA						
Bauchi	15	29	93.33	69	55	-20.29						
Borno	115	1800	1465.22	32	39	21.88						
Gombe	17	27	58.82	30	20	-33.33						
Yobe	230	228	-0.87	184	148	-19.57						
Total	**377**	**2084**	**1616.50469**	**315**	**262**	**-51.313406**	**0**	**0**		**0**	**0**	**0**

NORTHWESTAGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non Functional			Functional			Non Functional		
State	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**
Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kaduna	NA	NA	NA	NA	NA	NA		250				
Kano	30	27	-10.00	51	46	-9.80			NA			NA
Katsina	1	5	400.00			NA			NA			NA
Kebbi	3	NA		7	7	0.00	40	30	-25.00	NA	NA	NA
Sokoto	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zamfara	36	36	0.00	8	8	0.00			NA			NA
Total	**70**	**68**	**390**	**66**	**61**	**NA**	**40**	**280**	**NA**	**0**	**0**	**NA**
NORTH-CENTRAL AGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non Functional			Functional			Non Functional		
State	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**	**2016**	**2017**	**% change**
Benue	0	6	NA			NA			NA			NA
FCT			NA			NA			NA			NA
Kogi	4	30	650.00	5	5	0.00			NA			NA
Kwara	1	1	0.00		1	NA			NA			
Nassarawa			NA	32	32	0.00			NA			NA
Niger	7	0	-100.00	7	0	-100.00			NA			
Plateau	289	279	-3.46	1	11	1000.00			NA			NA
Taraba	6	7	16.67	6	7	16.67	85	94	10.59	59	62	5.08
Total	**307**	**323**	**NA**	**51**	**56**	**NA**	**85**	**94**	**NA**	**59**	**62**	**NA**

SOUTHWEST AGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non Functional			Functional			Non Functional		
State	2016	2017	% change	2016	2017	% change	2016	2017	% change	2016	2017	% change
Ekiti	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lagos	36	11	-69.44	NA	26	NA			NA			NA
Ogun	7	10	42.86	8	11	37.50	92	102	10.87	44	46	4.55
Ondo	2	2	0.00	68	68	0.00			NA			NA
Osun	9	7	-22.22	11	13	18.18			NA			NA
Oyo	1	1	0.00	NA	NA	NA			NA			NA
Total	**55**	**31**	**-48.809524**	**87**	**118**	**NA**	**92**	**102**	**NA**	**44**	**46**	**NA**
SOUTHEAST AGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non Functional			Functional			Non Functional		
State	2016	2017	% change	2016	2017	% change	2016	2017	% change	2016	2017	% change
Abia	2	2	0.00			NA			NA			NA
Anambra	14	16	14.29	6	12	100.00			NA			NA
Ebonyi	51	51	0.00	2	1	-50.00	38	38	0.00			NA
Enugu	20	0	-100.00			NA			NA			NA
Imo	1	0	-100.00	2	2	0.00			NA			NA
Total	**88**	**69**	**-185.7142 9**	**10**	**15**	**NA**	**38**	**38**	**NA**	**0**	**0**	**NA**

SOUTH-SOUTH AGRO-ECOLOGICAL ZONE												
	Government Tractors						Private Tractors					
	Functional			Non Functional			Functional			Non Functional		
State	**2016**	**2017**	**%**	**2016**	**2017**	**%**	**2016**	**2017**	**%**	**2016**	**2017**	**%**
Cross River	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta	8	6	-25.00	2	4	100.00	NA	NA	NA	NA	NA	NA
Edo	0	0	NA	5	5	0.00	NA	NA	NA	NA	NA	NA
Rivers	1	1	0.00	1	1	0.00	NA	NA	NA	NA	NA	NA
Total	11	9	NA	10	12	NA	NA	NA	NA	NA	NA	NA
Nat. Total	**908**	**2584**	**184.58**	**539**	**524**	**-2.78**	**NA**	**NA**	**NA**	**NA**	**NA**	

The state ADPs and ministries of agriculture generally supplied data on only government-owned tractors. Data on privately owned tractors were scanty. The Tractor Owners and Hiring Facilities Association of Nigeria (TOHFAN), however provided some data on privately-owned tractors availability and operational details (Table 6.2).

Plate 6.1: Newly procured tractors by TOHFAN awaiting distribution

Table 6.2: Seasonal Deployment of Privately Owned Tractors by TOHFAN in 2017

TOHFAN Private Tractors						
	April –May		June – July		August – September	
S/No	State	Number	State	Number	State	Number
1.	Niger	142	Kaduna	86	Niger	96
2.	Nassarawa	128	Kano	52	Nassarawa	102
3.	Kwara	10	Sokoto	33	Oyo	6
4.	Plateau	20	Zamfara	15		
5.	Abuja	42	Jigawa	18		
6.	Akwa Ibom	9	Yobe	21		
7.	Taraba	32	Benue	15		
	Total	**113**		**240**		**204**

The data provided indicated that at the on-set of the season (April), TOHFAN tractor coverage areas were concentrated in the North-Central, with about 113 tractors. At the peak of the farming season (June), concentration shifted to the Northwest with about 240 tractors. The distribution of tractors relating to areas covered and period of work was found to be related to the commencement of rains in the states where TOHFAN tractors operated.

Plate 6.2: Power tillers procured for farm mechanization

Plate 6.3: Traditional methods of threshing and shelling grains

Plate 6.4: Threshers and shellers for processing agricultural produce

6.2 COSTS OF TILLAGE OPERATIONS

Farm operations are the activities carried out before, during and after planting. These operations include land clearing, ploughing, harrowing, ridging, spraying, harvesting and winnowing. The farm operations captured in this section are the tillage operations of ploughing, harrowing and ridging (Table 6.3). Generally, the costs of tillage operations were observed to increase across all the agro-ecological zones, which were attributable to the increased demand that resulted from the marked increase in land brought under cultivation in 2017. Gombe state recorded the highest increase in the cost of ploughing (100%) at N20,000/ha. The least increase was 6.25% recorded in Borno state. Similarly, the highest increase in cost of harrowing (100%) was recorded in Gombe state (N20,000/ha). Ondo state recorded the least increase of 8.3% (N13,000/ha). Lagos state had the highest increase in the cost of ridging (155%) at N15,000/ha though it was below the average cost of N20,000/ha reported by Gombe. The least increase (8.3%) was in Ondo State.

Northeast Agro- Ecological Zone									
	Ploughing (N/Ha)			Harrowing (N/Ha)			Ridging (N/Ha)		
	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change
Adamawa	20,000	25,000	25.00	NA	NA	NA	NA	NA	NA
Bauchi		NA	NA	NA	NA	NA	NA	NA	NA
Borno	24,000	25,500	6.25	NA	NA	NA	15,000	15,000	0.00
Gombe	10,000	20,000	100.00	10,000	20,000	100.00	10,000	20,000	100.00
Yobe		NA	NA	NA	NA	NA	NA	NA	NA
Z. Mean	**18,000**	**23,500**	**44**	**10,000**	**20,000**	**100**	**12,500**	**17,500**	**50**
Northwest Agro-Ecological Zone									
	Ploughing (N/Ha)			Harrowing (N/Ha)			Ridging (N/Ha)		
	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change
Jigawa		NA	NA	NA	NA	NA	NA	NA	NA
Kaduna	18,000	20,000	11.11	NA	NA	NA	8,000	9,500	18.75
Kano		NA	NA	NA	NA	NA	NA	NA	NA
Katsina	10,000	15,000	50.00	14,000	18,000	28.57	13,000	20,000	53.85
Kebbi		NA	NA	NA	NA	NA	NA	NA	NA
Sokoto		NA	NA	NA	NA	NA	NA	NA	NA
Zamfara		NA	NA	NA	NA	NA	NA	NA	NA
Z. Mean	**14,000**	**17,500**	**31**	**14,000**	**18,000**	**29**	**10,500**	**14,750**	**36**
North-Central Agro-Ecological Zone									
	Ploughing (N/Ha)			Harrowing (N/Ha)			Ridging (N/Ha)		
	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change
Benue			NA			NA			NA
FCT	20,000	25,000	25.00	20,000	25,000	25.00	20,000	25,000	25.00
Kogi	15,000	15,000	0.00	15,000	15,000	0.00	15,000	15,000	0.00
Kwara	15,000	20,000	33.33	NA	NA	NA	12,000	20,000	66.67
Nasarawa		NA	NA	NA	NA	NA	NA	NA	NA
Niger	12,000	15,000	25.00	12,000	15,000	25.00	12,000	20,000	66.67

Plateau	NA	NA	NA	NA	NA	NA	NA	NA	NA
Taraba	25,000	30,000	20.00	20,000	25,000	25.00	10,000	15,000	50.00
Z. Mean	**17,400**	**17,500**	**NA**	**11,167**	**13,333**	**NA**	**11,500**	**15,833**	**NA**
Southwest Agro-Ecological Zone									
	Ploughing (N/Ha)			**Harrowing (N/Ha)**			**Ridging (N/Ha)**		
	2016	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% change**
Ekiti	7,000	15,000	114.29	7,000	11,000	57.14	7,000	11,000	57.14
Lagos	10,000	12,000	20.00	10,000	12,000	20.00	12,000	15,000	25.00
Ogun			NA			NA			NA
Ondo	12,000	13,000	8.33	7,500	9,000	20.00	7,500	12,000	60.00
Osun	20,000	25,000	25.00	25,000	30,000	20.00	25,000	30,000	20.00
Oyo		NA	NA	NA	NA	NA	NA	NA	NA
Z. Mean	**12,250.00**	**13,000.00**	**NA**	**9,900.00**	**12,400.00**	**NA**	**10,300.00**	**13,600.00**	**NA**
Southeast Agro Ecological Zone									
	Ploughing (N/Ha)			**Harrowing (N/Ha)**			**Ridging (N/Ha)**		
	2016	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	
Abia	20,000	25,000	25.00	15,000	20,000	33.33	15,000	20,000	33.33
Anambra	10,000	10,000	0.00	10,000	10,000	0.00	10,000	10,000	0.00
Ebonyi	20,000	30,000	50.00	20,000	30,000	50.00	25,000	30,000	20.00
Enugu		NA	NA	NA	NA	NA	NA	NA	NA
Imo	25,000	25,000	0.00	NA	NA	NA	NA	NA	NA
Z. Mean	**18,750**	**18,000**	**15**	**9,000**	**12,000**	**17**	**10,000**	**12,000**	**11**
South-South Agro Ecological Zone									
	Ploughing (N/Ha)			**Harrowing (N/Ha)**			**Ridging (N/Ha)**		
	2016	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**

Akwa Ibom	30,000	30,000	0.00	NA	NA	NA	NA	NA	NA
Bayelsa		NA	NA	NA	NA	NA	20,000	30,000	50.00
C/Rivers		NA	NA	NA	NA	NA	NA	NA	NA
Delta	1500	1,700	13.33	1500	1,700	13.33	1500	1,700	13.33
Edo	20,000	25000	25.00	15,000	15,000	0.00	15,000	20,000	33.33
Rivers	25,000	25,000	0.00	25,000	25,000	0.00	25,000	25,000	0.00
Z. Mean	**19,125.00**	**13,616.67**	**NA**	**6,916.67**	**6,950.00**	**2.22**	**10,250.00**	**12,783.33**	**16.11**
Nat. Mean	**16,588**	**17186.1111**		**10,164**	**13,781**		**10,842**		

6.3 COST OF PRODUCTION OF MAJOR CROPS

Nigeria is endowed with many agricultural commodities reflecting the wide agro-ecological diversity of the nation. Different types of crops are produced across the agro-ecological zones of the country at different production costs. Fourteen (14) major crops produced in Nigeria, were considered in this section. The general outlook of production costs per hectare of the crops in 2017 showed marked increases over that of 2016.

6.3.1 Cereals/Legumes

The cost of production per hectare of the following crops was considered in this section maize, melon, cowpea, groundnut, rice, sorghum, wheat, soybeans and millet. Significant increase in costs of production was recorded across all zones except for Borno State where no significant difference was observed between 2016 and 2017. This could probably be due to the restiveness in the state. Gombe State recorded the highest increase in production cost of 91.2% for rice. Though the state recorded the highest increase in cost of production, the average costs of production per hectare (N 115,000) was below those recorded from the key rice producing states of Katsina, Sokoto, Kebbi, Kano and Kaduna withN200,000 (11.1%), N170,000 (4.9%), N250,000 (25%), N420,000 (17.9%) and N198,000 (15.1%) respectively. The least increase in cost of production (4.9%) was recorded for rice and maize in Sokoto and Ebonyi respectively.

Table 6.4: Production costs of Major Crops

Northeast Agro-Ecological Zone (Cereals/Legumes)												
	Maize			Melon			Cowpea			G/Nut		
	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change	2016	2017	% Change
Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bauchi	150,000	180,000	20.00	NA	NA	NA	65,000	70,000	7.69	81,000	90,000	11.11
Borno	226,000	226,000	0.00	NA	NA	NA	147,000	147,000	0.00	167,000	167,000	0.00
Gombe	30,000	104,400	248.00	NA	NA	NA	18,000	25,800	43.33	NA	NA	NA
Yobe	72,000	75,000	4.17	NA	NA	NA	70,000	73,000	4.29	75,000	79,500	6.00
Total												
Northwest Agro-Ecological Zone (Cereals/Legumes)												
	Maize			Melon			Cowpea			G/Nut		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Jigawa	200,000	200,000	0.00	NA	NA	NA	NA	NA	NA	157,000	157,000	0.00
Kaduna	175,000	187,000	6.86	NA	NA	NA	142,000	198,000	39.44	120,000	135,000	12.50
Kano	180,000	233,000	29.44	NA	NA	NA	130,000	150,000	15.38	150,000	180,000	20.00
Katsina	150,000	180,000	20.00	NA	NA	NA	101,000	130,000	28.71	115,000	120,000	4.35
Kebbi	180,000	195,000	8.33	NA	NA	NA	80,000	95,000	18.75	185,000	200,000	8.11

Sokoto	40,000	50,000	25.00	NA	NA	NA	86,000	90,000	4.65	78,000	78,000	0.00
Zamfara	151,000	175,000	15.89	NA	NA	NA	121,000	125,000	3.31	NA	NA	NA
North-Central Agro-Ecological Zone (Cereals/Legumes)												
	Maize			**Melon**			**Cowpea**			**G/Nut**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Benue	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FCT	105,500	105,500	0.00	NA	NA	NA	97,500	97,500	0.00	93,600	93,600	0.00
Kogi	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kwara	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nassarawa	121,500	130,000	7.00	74,500	75,000	0.67	85,000	90,000	5.88	90,000	100,000	11.11
Niger	150,000	160,000	6.67	NA	NA	NA	NA	NA	NA	NA	NA	NA
Plateau	187,800	210,000	11.82	NA	NA	NA	104,700	131,000	25.12	NA	NA	NA
Taraba	170,000	200,000	17.65	NA	NA	NA	130,000	155,000	19.23	NA	NA	NA
Southwest Agro-Ecological Zone (Cereals/Legumes)												
	Maize			**Melon**			**Cowpea**			**G/Nut**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Ekiti	130,000	220,000	69.23	NA	NA	NA	120,000	186,000	55.00	NA	NA	NA
Lagos	180,000	187000	3.89	45,000	55,000	22.22	NA	NA	NA	NA	NA	NA

Ogun	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ondo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Osun	100,000	120,000	20.00	NA	NA	NA	75,000	80,000	6.67	NA	NA	NA
Oyo	83,500	124,000	48.50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Southeast Agro-Ecological Zone (Cereals/Legumes)												
	Maize			**Melon**			**Cowpea**			**G/Nut**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Abia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anambra	50,000	70,000	40.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ebonyi	162,000	170,000	4.94	NA	NA	NA	NA	NA	NA	93,500	120,000	28.34
Enugu	254,600	312,000	22.55	NA	NA	NA	NA	NA	NA	NA	NA	NA
Imo	200,000	300,000	50.00	NA	NA	NA	NA	NA	NA	40,000	60,000	50.00
South-South Agro-Ecological Zone (Cereals/Legumes)												
	Maize			**Melon**			**Cowpea**			**G/Nut**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Akwa-Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cross River	79,200	85,536	8.00	41,300	45,017	9.00	NA	NA	NA	59,500	64,260	8.00
Delta	71,600	73,000	1.96	80,000	87,000	8.75	95,000	99,500	4.74	NA	NA	NA
Edo	220,000	260,000	18.18	NA	NA	NA	180,000	220,000	22.22	NA	NA	NA
Rivers	135,000	141,000	4.44	NA	NA	NA	153,000	165,000	7.84	NA	NA	NA

Table 6.4: Production Costs of Major Crops in Nigeriacontd…

Northeast Agro-Ecological Zone (Cereals/Legumes)															
	Rice			**Sorghum**			**Wheat**			**Soybeans**			**Millet**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bauchi	180,000	200,000	11.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Borno	125,000	125,000	0.00	180,000	180,000	0.00	NA	NA	NA	162,800	162,800	0.00	156,000	156,000	0.00
Gombe	60,150	115,000	91.19	30,000	38,000	26.67	NA	NA	NA	13,000	25,000	92.31	30,000	45,000	50.00
Yobe	90,000	94,000	4.44	79,000	84,000	6.33	106,000	109,500	3.30	NA	NA	NA	635,000	62,500	-90.16
Average															
Northwest Agro-Ecological Zone (Cereals/Legumes)															

	Rice			Sorghum			Wheat			Soybeans			Millet		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Jigawa	250,000	250,000	0.00	NA	NA	NA	200,000	200,000	0.00	NA	NA	NA	NA	NA	NA
Kaduna	172,000	198,000	15.12	145,000	165,000	13.79	NA	NA	NA	149,000	176,000	18.12	NA	NA	NA
Kano	356,000	420,000	17.98	160,000	167,000	4.38	NA	NA	NA	NA	NA	NA	130,000	145,000	11.54
Katsina	180,000	200,000	11.11	108,000	125,000	15.74	NA	NA	NA	NA	NA	NA	132,000	140,000	6.06
Kebbi	200,000	250,000	25.00	163,000	185,000	13.50	170,000	NA	NA	135,000	142,000	5.19	155,000	175,000	12.90
Sokoto	162,000	170,000	4.94	140,000	145,000	3.57	120,000	140,000	16.67	NA	NA	NA	35,000	45,000	28.57
Zamfara	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
North-Central Agro-Ecological Zone (Cereals/Legumes)															
	Rice			**Sorghum**			**Wheat**			**Soybeans**			**Millet**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Benue	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FCT	115,000	115,000	0.00	78,000	78,000	0.00	NA	NA	NA	NA	NA	NA	76,000	76,000	0.00
Kogi	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Kwara	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nassarawa	160,000	165,000	3.13	100,700	110,000	9.24	NA	NA	NA	91,000	95,000	4.40	NA	NA	NA
Niger	160,000	170,000	6.25	140,000	150,000	7.14	NA	NA	NA	NA	NA	NA	NA	NA	NA
Plateau	200,500	235,000	17.21	109,700	125,600	14.49	NA	NA	NA	97,600	101,000	3.48	86,550	90,000	3.99
Taraba	210,000	230,000	9.52	120,000	140,000	16.67	NA	NA	NA	170,000	205,000	20.59	NA	NA	NA
Southwest Agro-Ecological Zone (Cereals/Legumes)															
	Rice			**Sorghum**			**Wheat**			**Soybeans**			**Millet**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Ekiti	145,000	174,000	20.00	NA	NA	NA	NA	NA	NA	120,000	195,000	62.50	NA	NA	NA
Lagos	270,000	245,000	-9.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ogun	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ondo			#DIV/0!	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Osun	200,000	220,000	10.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA	122,500	119,000	-2.86	NA	NA	NA
Southeast Agro-Ecological Zone (Cereals/Legumes)															
	Rice			**Sorghum**			**Wheat**			**Soybeans**			**Millet**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**

Abia	280,000	400,000	42.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anambra	60,000	100,000	66.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ebonyi	300,000	400,000	33.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Enugu	251,000	326,000	29.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Imo	220,000	300,000	36.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South-South Agro-Ecological Zone (Cereals/Legumes)															
	Rice			**Sorghum**			**Wheat**			**Soybeans**			**Millet**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Akwa-Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cross River	116,400	125,712	8.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Edo	300,000	355,000	18.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rivers	146,000	155,000	6.16			#DIV/0!			#DIV/0!			#DIV/0!			

6.2.2Roots and Tuber Crops

Roots and tuberscrops- yam, cassava, carrots, sweet potatoes, and Irish potatoes produced in Nigeria were the focus of interest in this section. Increase in the costs of production of all these crops was observed across all zones. The highest increase in crop production (84%) was observed in cassava production in Ekiti state. The least increase in production cost (3.3%) was in yam production in Taraba state.

Table 6.4: Production Costs of Major Crops in Nigeria contd…..

Northeast Agro-Ecological Zone (Roots/Tuber Crops)						
	Cassava			**Yam**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Adamawa	NA	NA	NA	NA	NA	NA
Bauchi	96,000	100,000	4.17	NA	NA	NA
Borno	NA	NA	NA	NA	NA	NA
Gombe	NA	NA	NA	NA	NA	NA
Yobe	70,000	75,000	7.14	NA	NA	NA
Northwest Agro-Ecological Zone (Roots/Tuber Crops)						
	Cassava			**Yam**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Jigawa	NA	NA	NA	NA	NA	NA
Kaduna	115,000	128,000	11.30	380,000	396,000	4.21
Kano	NA	NA	NA	NA	NA	NA
Katsina	NA	NA	NA	NA	NA	NA
Kebbi	NA	NA	NA	NA	NA	NA
Sokoto	NA	NA	NA	NA	NA	NA
Zamfara	NA	NA	NA	NA	NA	NA
North-Central Agro-Ecological Zone (Roots/Tuber Crops)						
	Cassava			**Yam**		

State	2016	2017	% Change	2016	2017	% Change
Benue	NA	NA	NA	NA	NA	NA
FCT	90,700	90,700	0.00	266,500	266,500	0.00
Kogi	NA	NA	NA	NA	NA	NA
Kwara	NA	NA	NA	NA	NA	NA
Nassarawa	120,000	150,000	25.00	678,000	750,000	10.62
Niger	170,000	200,000	17.65	1,620,000	1750000	8.02
Plateau	33,500	97,800	191.94	536,750	389,000	-27.53
Taraba	120,000	157,000	30.83	300,000	310,000	3.33
Southwest Agro-Ecological Zone (Roots/ Tuber Crops)						
	Cassava			**Yam**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Ekiti	125,000	230,000	84.00	350,000	400,000	14.28
Lagos	240,000	300,000	25.00	NA	180,000	NA
Ogun	NA	NA	NA	NA	NA	NA
Ondo	NA	NA	NA	NA	NA	NA
Osun	130,000	140,000	7.69	300,000	360,000	20.00
Oyo	118,000	166,500	41.10	121,000	129,000	6.61
Southeast Agro-Ecological Zone (Roots/ Tuber Crops)						
	Cassava			**Yam**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Abia	180,000	200,000	11.11	200,000	300,000	50.00
Anambra	75,000	120,000	60.00	75,000	120,000	60.00
Ebonyi	154,000	180,000	16.88	529,000	600,000	13.42
Enugu	298,000	342,000	14.77	246,000	270,000	9.76
Imo	300,000	360,000	20.00	600,000	690,000	15.00
South-South Agro-Ecological Zone (Roots/ Tuber Crops)						

	Cassava			Yam		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Akwa-Ibom	NA	NA	NA	NA	NA	NA
Bayelsa	NA	NA	NA	NA	NA	NA
Cross River	19,500	20,670	6.00	243,000	257,580	6.00
Delta	96,600	96,800	0.21	100,000	100,150	0.15
Edo	250,000	290,000	16.00	NA	NA	NA
Rivers	181,000	215,000	18.78	163,000	166,000	1.84

6.3VEGETABLES

Vegetables are important crops in Nigerian diets. The vegetables considered in this survey were tomato, okra and pepper. Gombe State recorded the highest increase in costs of production for tomato (43.7%) and pepper (50.79%). Ebonyi State in the Southeast reported the least increase in cost of production (2.04%) for pepper.

Table 6.4: Production Costs of Major Crops in Nigeria contd…

Northeast Agro-Ecological Zone (Fruits and Vegetables)									
	Tomato			**Okra**			**Pepper**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bauchi	NA	NA	NA	NA	NA	NA	NA	NA	NA
Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gombe	71,000	102,000	43.66	25200	38,000	50.79	NA	NA	NA
Yobe	NA	NA	NA	NA	NA	NA	NA	NA	NA
Northwest Agro-Ecological Zone (Fruits and Vegetables)									
	Tomato			**Okra**			**Pepper**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kaduna	NA	NA	NA	NA	NA	NA	NA	NA	NA

Kano	NA	NA	NA	NA	NA	NA	NA	NA	NA
Katsina	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kebbi	100,000	120,000	20.00	NA	NA	NA	100,000	120,000	20.00
Sokoto	140,000	135,000	-3.57	NA	NA	NA	102,000	103,000	0.98
Zamfara	NA	NA	NA	NA	NA	NA	NA	NA	NA
North-Central Agro-Ecological Zone (Fruits and Vegetables)									
	Tomato			**Okra**			**Pepper**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Benue	NA	NA	NA	NA	NA	NA	NA	NA	NA
FCT	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kogi	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kwara	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nassarawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
Niger	NA	NA	NA	NA	NA	NA	NA	NA	NA
Plateau	28,4000	30,1500	5.99	NA	NA	NA	NA	NA	NA
Taraba	NA	NA	NA	NA	NA	NA	NA	NA	NA
Southwest Agro-Ecological Zone (Fruits and Vegetables)									
	Tomato			**Okra**			**Pepper**		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Ekiti	105,000	200,000	90.48	80,000	180,000	125.00	NA	NA	NA
Lagos	125,000	130,000	4.00	NA	NA	NA	NA	NA	NA
Ogun	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ondo	NA	NA	NA	NA	NA	NA	NA	NA	NA
Osun	NA	NA	NA	80,000	90,000	12.50	80,000	90,000	12.50
Oyo	NA	NA	NA	NA	NA	NA	96,000	120,000	25.00
Southeast Agro-Ecological Zone (Fruits and Vegetables)									

	Tomato			Okra			Pepper		
State	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**	**% Change**
Abia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anambra	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ebonyi	NA	NA	NA	NA	NA	NA	78,400	80,000	2.04
Enugu	NA	NA	NA	NA	NA	NA	NA	NA	NA
Imo	NA	NA	NA	NA	NA	NA	NA	NA	NA

7.0 GRAIN RESERVES

Storage of agricultural produce is the planned deposit of produce in specified structures for safekeeping. Grains are major staple crops produced and stored in Nigeria. Grain reserves are designed to store grains from harvest for use at off-season. It stabilizes price, checks wastages and ensures all year-round availability. Grains are stored in silos of different capacities at various locations across the country. The Food and Strategic Department of the Federal Ministry of Agriculture and Rural Development provided information on the level of completion and use of various silos in the country (see Table 7.1).

In addition to the information on Federal Government silo complexes and their capacities provided, some states had silos where grains are stored to complement Federal government efforts. The states were Kebbi (10,000 MT), Adamawa (4,000 MT), Bauchi (12,000 MT), Gombe (3,600 MT), Katsina (7,000 MT), Osun (1,600 MT) and Rivers (20 MT).

Table 7.1: Silo Complexes and their Capacity as at August, 2017

Northeast Zone			
State	**Location**	**Capacity (MT)**	**Status**
Adamawa	Yola	25,000	95% Completed
Bauchi	Bauchi	25,000	90% Completed
Gombe	Gombe	25,000	Operational
Yobe	Damaturu	25,000	73% Completed

Northwest Zone			
State	**Location**	**Capacity (MT)**	**Status**
Jigawa	Jahun	25,000	Operational
Kaduna	Kaduna	25,000	Operational
Kano	Gaya	25,000	95% Completed
Katsina	Dutsinma	25,000	100% Completed
Kebbi	Birnin Kebbi	100,000	100% Completed
Sokoto	Sokoto	25,000	100% Completed
Zamfara	Gusau	100,000	90% Completed
North-Central Zone			
State	**Location**	**Capacity (MT)**	**Status**
Abuja	FCT	100,000	100% Completed
Benue	Makurdi	25,000	Operational
Kogi	Lokoja	25,000	75% Completed
Kwara	Ilorin	25,000	Operational
Kwara	Lafiagi	10,000	Operational
Nassarawa	Lafia	25,000	80% Completed
Niger	Minna	25,000	Operational
Plateau	Jos	25,000	Operational
Taraba	Jalingo	25,000	95% Completed
Southwest Zone			
State	**Location**	**Capacity (MT)**	**Status**
Ekiti	Ado Ekiti	100,000	90% Completed
Ogun	Ikenne	25,000	95% Completed
Ondo	Akure	25,000	Operational
Osun	Ilesa	25,000	90% Completed
Oyo	Ibadan	25,000	Operational

Southeast Zone			
State	**Location**	**Capacity (MT)**	**Status**
Anambra	Igbariam	25,000	Operational
Ebonyi	Ezillo	25,000	Operational
Imo	Okigwe	100,000	73% Completed
South-South Zone			
State	**Location**	**Capacity (MT)**	**Status**
Akwa Ibom	Uyo	25,000	90% Completed
Bayelsa	Yenagoa	100,000	55% Completed
Cross Rivers	Ogoja	25,000	Operational
Edo	Irrua	25,000	Operational

8.0 FOOD COMMODITY PRICES

This section deals with prices of major food commodities across the country. Comparison of prices were made between January and July 2016 and the corresponding periods in 2017. General increases in prices of all commodities were recorded across the country. This rise in prices could be attributed to the general rise in prices of all other commodities in the economy, as well as the high increases in the costs of production. The recent import restriction and strict tariff imposed on some agricultural commodities with no corresponding increase in local agricultural production to bridge the supply gap could be other reasons for the general price increases. The increase in prices ranged from 2.0 to 164% for cereal crops; 7-150% for yam/yam flour; 6-124% for soybeans and 0-224% for cassava. The price of meat and meat products remained relatively stable with a maximum change of 24%. Table 8.1 presents commodity prices for the specified periods in the six geopolitical zones.

Table 8.1: Commodity Prices (N) in Northeast Zone (Kg) (Sorghum, Millet and Maize)

Commodity Prices (N) in Northeast Zone/ (Kg)																		
	Sorghum						Millet						Maize					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Borno	95.00	125.00	31.58	118.00	155.00	31.36	70.00	135.00	92.86	115.00	155.00	34.78	70.00	170.00	142.86	120.00	160.00	33.33
Yobe	90.00	120.00	33.33	90.00	160.00	77.78	73.00	140.00	91.78	120.00	164.00	36.67	65.00	150.00	130.77	125.00	175.00	40.00
Bauchi	99.35	135.00	35.88	99.48	174.80	75.71	68.45	165.80	142.22	110.24	160.00	45.14	69.98	155.00	121.49	114.30	168.00	46.98
Gombe	140.00	153.84	9.89	146.20	176.92	21.01	62.00	153.85	148.15	146.20	176.92	21.01	63.00	160.00	153.97	130.80	176.00	34.56
Z. Mean	106.09	133.46	27.67	113.42	166.68	51.46	68.36	148.66	118.75	122.86	163.98	34.40	67.00	158.75	137.27	122.53	169.75	38.72

Commodity Prices (N) in Northwest Zone (Kg) (Sorghum, Millet and Maize)

Commodity Prices (N) in Northwest (kg)																		
	Sorghum						Millet						Maize					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Jigawa	110.00	145.00	31.82	112.00	168.00	50.00	100.00	155.00	55.00	112.00	172.00	53.57	110.00	132.00	20.00	128.00	168.00	31.25
Zamfara	115.00	160.00	39.13	150.00	180.00	20.00	110.00	200.00	81.82	110.00	200.00	81.82	130.00	180.00	38.46	130.00	180.00	38.46
Kaduna	90.00	120.00	33.33	130.00	200.00	53.85	95.00	150.00	57.89	180.00	200.00	11.11	63.00	100.00	58.73	134.00	250.00	86.57
Katsina	82.85	135.71	63.80	96.42	146.42	51.86	86.00	130.00	51.16	100.00	143.33	43.33	60.00	130.00	116.67	100.00	143.33	43.33
Kebbi	125.00	150.00	20.00	180.00	270.00	50.00	120.00	140.00	16.67	180.00	270.00	50.00	120.00	150.00	25.00	150.00	240.00	60.00
Sokoto	76.00	162.26	113.50	142.93	160.40	12.22	80.00	149.38	86.73	123.85	161.49	30.39	73.53	159.43	116.82	137.96	153.60	11.34
Z. Mean	99.81	145.50	50.26	135.23	187.47	39.65	98.50	154.06	58.21	134.31	191.14	45.04	92.76	141.91	62.61	129.99	189.16	45.16

Commodity Prices (N) in North-Central Zone (Kg) (Sorghum, Millet and Maize)

Commodity Prices (N) North-Central (kg)																		
	Sorghum						Millet						Maize					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Plateau	70.69	182.82	158.62	181.99	200.00	9.90	74.50	205.62	176.00	163.89	180.00	9.83	63.70	155.62	144.30	170.63	180.00	5.49
Nasarawa	72.21	186.00	157.58	250.81	291.80	16.34	86.00	195.00	126.74	200.11	285.45	42.65	71.43	180.00	151.99	250.00	277.08	10.83
Fct	175.00	268.71	53.55	216.67	237.50	9.61	180.00	158.34	-12.03	166.67	237.50	42.50	104.16	181.50	74.25	145.84	255.84	75.43
Niger	57.51	136.18	136.79	97.92	174.33	78.03	56.50	151.94	168.92	99.47	176.46	77.40	53.36	141.17	164.56	97.47	NA	-
Kwara	82.76	218.75	164.32	183.50	181.30	-1.20	133.73	118.75	-11.20	118.75	118.75	0.00	83.43	133.33	59.81	155.30	165.49	6.56
Kogi	166.67	200.00	20.00	135.30	154.00	13.82	150.00	214.28	42.85	180.00	200.00	11.11	166.67	214.29	28.57	133.33	218.75	64.07
Benue	200.00	250.00	25.00	350.00	350.00	0.00	350.00	300.00	-14.29	300.00	450.00	50.00	200.00	250.00	25.00	300.00	320.00	6.67
Z. Mean	117.83	206.07	102.27	202.31	226.99	18.07	147.25	191.99	68.14	175.56	235.45	33.35	106.11	179.42	92.64	178.94	310.33	120.54

Commodity Prices (N) in Southwest Zone (Kg) (Sorghum, Millet and Maize)

Commodity Prices in Southwest																		
	Guninea Corn							Millet							Maize			
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Osun	160.00	210.00	31.25		214.50			209.50			118.90		90.00	205.00	127.78		118.90	
Oyo	140.41	246.50	75.56	184.61	230.76	25.00	92.30	269.23	191.69	192.30	230.79	20.02	75.53	166.00	119.78	180.66	213.33	18.08
Ekiti													200.00	250.00	25.00	250.00	255.00	2.00
Ondo	300.00	461.53	53.84	282.00	368.00	30.50							175.00	200.00	14.29		180.00	
Ogun	252.00	430.00	70.63	339.00	400.00	17.99	115.00	240.00	108.70	190.00	215.00	13.16	82.00	175.00	113.41	82.00	85.00	3.66
Lagos							82.52	146.81	77.91	119.04	146.81	23.33	71.14	125.00	75.71	109.75	125.00	13.90
Z. Mean	213.10	337.01	57.82	268.54	303.32	24.50	96.61	216.39	126.10	167.11	177.88	18.83	115.61	186.83	79.33	155.60	162.87	9.41

Commodity Prices (N) in Northeast Zone (Kg) (Milled rice, yam tuber and yam flour)

	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Borno	140	210	50	250	310	24.00												
Yobe	120	220	83.33	290	345	18.97												
Bauchi	150	190.33	26.89	313.49	350.5	11.81												
Gombe	170	214.28	26.05	330	350	6.06	160	230	43.75	280	350	25.00						
Z. Mean	145	208.6525	46.57	295.8725	338.875	15.21	160	230	43.75	280	350	25						

Commodity Prices (N) in Northwest Zone (Kg) (Milled rice, yam tuber and yam flour)

Northwest Zone (kg)																		
	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Jigawa	190.00	300.00	57.89	200.00	232.00	16.00	200.00	212.00	6.00	220.00	300.00	36.36						
Zamfara	226.00	340.00	50.44	226.00	340.00	50.44	230.00	260.00	13.04	230.00	270.00	17.39						
Kano																		
Kaduna	175.00	370.00	111.43	340.00	380.00	11.76	189.00	250.00	32.28	210.00	250.00	19.05						
Katsina	116.67	266.67	128.57	216.67	250.00	15.38	140.00	200.00	42.86	100.00	320.00	220.00						
Kebbi	180.00	275.00	52.78	270.00	380.00	40.74	300.00	400.00	33.33	500.00	700.00	40.00						
Sokoto	162.25	278.34	71.55	245.91	257.87	4.86	94.25	161.07	70.90	152.40	172.16	12.97						
Z. Mean	174.99	305.00	78.78	249.76	306.65	23.20	192.21	247.18	33.07	235.40	335.36	57.63						

Commodity Prices (N) in North-Central Zone (Kg) (Milled rice, yam tuber and yam flour)

North-Central Zone (kg)																		
	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July prices			January Prices			July prices			January Prices			July prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Plateau	156.26	453.49	190.22	307.81	450	46.194081												
Nasarawa	275	356.67	29.70	312.22	400	28.11	156	240	53.85	350	375	7.14	120	168.4	40.33	145	200	37.93
Fct	280	535	91.07	300	550	83.333333	185.43	350	88.75	190	200	5.26	130	180	38.46	200	250	25.00
Niger	134.25	264.62	97.11	253.19	267.99	5.85	160.93	185.28	15.13	120	155	29.17	150	230	53.33	145	230	58.62
Kwara	213.33	337.5	58.21	320.75	343.75	7.17	167.69	180.6	7.70	122.46	175.88	43.62	152.72	207.29	35.73	122.46	207.29	69.27
Kogi	277.3	296.84	7.05	277.3	322.22	16.20	100	120	20.00	120	120	0.00	250	333.33	33.33	250	375	50.00
Benue	300	320	6.67	420	500	19.05	270	350	29.63	140	150	7.14	190	300	57.89	250	380	52.00
Z. Mean	233.73429	366.30286	68.57	313.03857	404.85143	29.41	173.34167	237.64667	35.84	173.74333	195.98	15.39	165.45333	236.50333	43.18	185.41	273.715	48.80

Commodity Prices (N) in Southwest Zone (Kg) (Milled rice, yam tuber and yam flour)

Commodity Prices in Southwest Zone (kg)																		
	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Osun	185.00	280.50	51.62	250.00	262.50	5.00	120.00	176.50	47.08	120.00	188.00	56.67	270.00	396.00	46.67	290.00	420.00	44.83
Oyo	194.11	341.17	75.76	411.76	352.54	-14.38	140.05	179.78	28.37	73.15	81.30	11.14	300.00	500.00	66.67	400.00	450.00	12.50
Ekiti	250.00	350.00	40.00	255.00	340.00	33.33	125.00	150.00	20.00	115.00	130.00	13.04	350.00	450.00	28.57	400.00	450.00	12.50
Ondo	521.00	650.00	24.76	175.00	483.00	176.00	100.00	130.00	30.00	100.00	140.00	40.00	250.00	400.00	60.00	150.00	375.00	150.00
Ogun	310.00	327.00	5.48	360.00	365.00	1.39	247.00	255.00	3.24	90.00	115.00	27.78	285.00	290.00	1.75	320.00	345.00	7.81
Lagos	487.41	508.46	4.32	508.46	508.46	0.00	94.42	116.14	23.00	126.48	131.63	4.07	202.54	340.00	67.87	215.38	416.26	93.27
Z. Mean	324.59	409.52	33.66	326.70	385.25	33.56	137.75	167.90	25.28	104.11	130.99	25.45	276.26	396.00	45.25	295.90	409.38	53.48

Commodity Prices (N) in Southeast Zone (Kg) (Milled rice, yam tuber and yam flour)

Commodity Prices in Southeast Zone (Kg)																		
	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Enugu	152.15	337	121.49	315	425	34.92	113	278.63	146.58	127	165	29.92						
Ebonyi	245	400	63.27	370	429	15.95	100	125	25.00	120	130	8.33						
Abia	272.72	590	116.34	441.55	565	27.96	135.5	160	18.08	115	189	64.35						
Imo	300	400	33.33	350	500	42.86	130	150	15.38	130	175	34.62						
Z. Mean	242.4675	431.75	83.61	369.1375	479.75	30.42	119.625	178.4075	51.26	123	164.75	34.30						

Commodity Prices (N) in South-South Zone (Kg) (Milled rice, yam tuber and yam flour)

Commodity Prices in South-South Zone (kg)																		
	Milled Rice						Yam Tuber						Yam Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Akwa-Ibom	293	541	84.64	270	351	30.00	147	165	12.24	165.94	224.5	35.29						
Bayelsa	371	454	22.37	434	451	3.92	199	233	17.09	125	297	137.60						
Cross River	280	370.3	32.25	290.72	370.3	27.37	195.3	253	29.54	145	240.9	66.14						
Delta	319.3	480.6	50.52	400	480	20.00	196.55	233.2	18.65	132.5	220.5	66.42						
Edo	360	500	38.89	360	500	38.89	159	220	38.36	169	234	38.46	400	550	37.50	500	650	30.00
Rivers	315	500	58.73	310	450	45.16	190	245	28.95	115	152	32.17	300	450	50.00	400	550	37.50
Z. Mean	323.05	474.32	47.90	344.12	433.72	27.56	181.14	224.87	24.14	142.07	228.15	62.68	350.00	500	43.75	450	600	33.75

Commodity Prices (N) in Northeast Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

Commodity Prices in Northeast Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Borno																280	385	37.5
Yobe	125	200	60	200	300	50												
Bauchi	139.02	235	69.04043	198.1	285	43.86673												
Gombe	125	266.66	113.328	208	291.66	40.22115	90	200	122.2222	140	200	42.85714	220	300	36.36364	300	400	33.33333
Z. Mean	129.6733	233.8867	80.78948	202.0333	292.22	44.69596	90	200	122.2222	140	200	42.85714	220	300	36.36364	290	392.5	35.41667

Commodity Prices (N) in Northwest Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

Commodity Prices in Northwest Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Zamfara	160	165	3.13	160	165	3.13	200	400	100.00	200	400	100.00	400	833	108.25	400	833	108.25
Kano																		
Kaduna	116	140	20.69	127	136	7.09	67.5	200	196.30	125	250	100.00	450	750	66.67	400	650	62.50
Katsina	83.33	133.33	60.00	116.67	116.67	0.00	66.67	125	87.49	100	133.33	33.33	350	670	91.43	450	700	55.56
Kebbi	240	300	25.00	180	250	38.89	100	200	100.00	120	300	150.00	400	600	50.00	400	650	62.50
Sokoto	132.33	297.53	124.84	151.82	192.58	26.85	45.25	57.96	28.09	79.04	61.51	-22.18	260	400	53.85	400	750	87.50
Z. Mean	146.332	207.172	46.73	147.098	172.05	15.19	95.884	196.592	102.38	124.808	228.968	72.23	372	650.6	74.04	410	716.6	75.26

Commodity Prices (N) in North-Central Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

Commodity Prices in North-Central Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Plateau	135.1	164.56	21.81	160.48														
Nasarawa	150	181.11	20.74	200	234	17.00	180	183.97	2.21	133.3	200	50.04	289	390	34.95	222.22	350	57.50
Fct	175	235	34.29	320	350.25	9.45	140	161.2	15.14	161.29	179.3	11.17	181.82	208.33	14.58	240.5	381.69	58.71
Niger	109.82	143.21	30.40	143.01	152.51	6.64	94.44	138.04	46.17	127.65	142.05	11.28	202.26	285.27	41.04	290.87	393.25	35.20
Kwara	187.5	220	17.33	163.4	187.5	14.75	83.84	86.41	3.07	130	185	42.31	250	295	18.00			
Kogi	147.1	294.1	99.93	147.1	294.1	99.93	70	100	42.86	125	165	32.00						
Benue	250	250	0.00	150	200	33.33	108.69	130	19.61	180	220	22.22222						
Z. Mean	164.9314	212.5686	32.07	183.4271	236.3933	30.19	112.8283	133.27	21.51	142.8733	181.8917	28.17	230.77	294.65	27.14	251.1967	374.98	50.47

Commodity Prices (N) in Southwest Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

Commodity Prices in Southwest Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Ekiti	250	300	20.00	270	300	11.11	70	85	21.43	75	80	6.67						
Ondo							70	253	261.43	100	293	193.00						
Ogun							112.5	150	33.33	155	160	3.23						
Lagos	190.22	261.58	37.51	209.41	261.58	24.91	58.29	57.28	-1.73	54.21	58.14	7.25	169.72	165.49	-2.49	143.41	169.49	18.19
Z. Mean	220.11	280.79	28.76	239.705	280.79	18.01	77.6975	136.32	78.61	96.0525	147.785	52.54	169.72	165.49	-2.49	143.41	169.49	18.19

Commodity Prices (N) in Southeast Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

Southeast Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Ebonyi	400	600	50.00	500	700	40.00	150	200	33.33	300.00	350.00	16.67						
Abia							150	317	111.33	172.00	500.00	190.70						
Imo	300	400	33.33	350	450	28.57	260	500	92.31	280.00	800.00	185.71						
Z. Mean	350	500	41.67	425	575	34.29	186.67	339	78.99	250.67	550.00	131.03						

Commodity Prices (N) in South-South Zone (Kg) (Soybeans, Sweet potato and Irish Potato)

South-South Zone (kg)																		
	Soybean						Sweet Potato						Irish Potato					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Akwa-Ibom		390			421		153.00	192.00	25.49	141.21	190.00	34.55	226.5	254	12.14	205	234	14.15
Bayelsa							145.80	160.00	9.74	120.50	173.00	43.57						
Cross River	260.07	333.4	28.20	269.58	341.1	26.53	59.63	65.12	9.21	56.41	67.14	19.02	400	420	5.00	300.9	425	41.24
Delta							141.25	203.45	44.04	151.39	305.50	101.80						
Edo	300	500	66.67	300	550	83.33	200.00	420.00	110.00	400.00	450.00	12.50	500	530	6.00	500	550	10.00
Rivers							200.00	200.00	0.00	200.00	200.00	0.00	281.4	250	-11.16	282	300	6.38
Z. Mean	280.035	407.8		284.79	437.3667		149.95	206.76	33.08	178.25	230.94	35.24	351.98	363.50	3.00	321.98	377.25	17.94

Commodity Prices (N) in Northeast Zone (Kg) (Cassava tuber, garri and flour)

Commodity Prices in Northeast Zone (Kg)																		
	Cassava Tuber						Cassava Gari						Cassava Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Borno										150	220	46.67						
Yobe	130	180	38.46	160	300	87.50	170	245	44.12	120	200	66.67	260	350	34.62	350	430	22.86
Bauchi	137.06	160	16.74	125	240	92.00	148	215	45.27	164.2	240	46.16	280	390	39.29	328.7	400	21.69
Gombe	140	200	42.86	150	200	33.33	150	230	53.33	180	260	44.44	270	300	11.11	320	395	23.44
Adamawa																		
Taraba																		
Z. Mean	135.6867	180	32.69	145	246.6667	70.94	156	230	47.57	153.55	230	50.99	270	346.6667	28.34	332.9	408.3333	22.66

Commodity Prices (N) in Northwest Zone (Kg) (Cassava tuber, garri and flour)

Northwest Zone (kg)																		
	Cassava Tuber						Cassava Gari						Cassava Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Jigawa							260	292	12.31	140	300	114.29						
Zamfara							225	318	41.33	225	318	41.33						
Kano																		
Kaduna	85	120	41.18	75	125	66.67	110	200	81.82	237.5	400	68.42	95	120	26.32	112.5	170	51.11
Katsina	133.33	180	35.00	100	160	60.00	140	208	48.57	145.83	250	71.43	48	100	108.33	80	158	97.50
Kebbi							350	400	14.29	200	400	100.00						
Sokoto	83.33	186.24	123.50	89.06	190.4	113.79	209.86	256.75	22.34	167.44	297.75	77.82						
Z. Mean	100.5533	162.08	66.56	88.02	158.4667	80.15	215.81	279.125	36.78	185.9617	327.625	78.88	71.5	110	67.32	96.25	164	74.31

Commodity Prices (N) in North-Central Zone (Kg) (Cassava tuber, garri and flour)

Commodity Prices in North-Central Zone (kg)																		
	Cassava Tuber						**Cassava Gari**						**Cassava Flour**					
	January Prices			**July Prices**			**January Prices**			**July Prices**			**January Prices**			**July Prices**		
State	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**
Plateau																		
Nasarawa	76.53	100	30.67	120	133	10.83	100	275.56	175.56	200	285	42.50	71.43	193.5	170.89	86.93	165	89.81
Fct							143.33	255	77.91	205	300	46.34	106.66	200	87.51	228.23	282.22	23.66

Niger	45.53	97.6	114.36	104.93	133.45	27.18	90.02	292.05	224.43	179.48	250.02	39.30	74.73	147.06	96.79	123.07	228.14	85.37
Kwara	19.1	23.5	23.04	28.42	34.15	20.16	115	150	30.43	183.8	250	36.02	100	226.1	126.10	226.1	226.1	0.00
Kogi	62.5	73	16.80	85	120	41.18	160	375	134.38	200	473.68	136.84	162.16	266.67	64.45	200	200	0.00
Benue	60	100	66.67	120	250	108.33	150	200	33.33	200	260	30.00	100	140	40.00	180	200	11.11
Z. Mean	52.732	78.82	50.31	91.67	134.12	41.54	126.3917	257.935	112.67	194.7133	303.1167	55.17	102.4967	195.555	97.62	174.055	216.91	34.99

Commodity Prices (N) in Southwest Zone (Kg) (Cassava tuber, garri and flour)

Commodity Prices in Southwest Zone (kg)																		
	Cassava Tuber						Cassava Gari						Cassava Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Osun	20	32.6	63.00	20	34.1	70.50	120	180.5	50.42	145	183.9	26.83						
Oyo	13.23	17.95	35.68	10	27.94	179.40	70.83	175	147.07	150	166.66	11.11	137.5	250	81.82	250	375	50.00
Ekiti	10	15	50.00	15	18	20.00	125	180	44.00	200	380	90.00	250	300	20.00	255	300	17.65
Ondo	23	27	17.39	27	37	37.04	167	257	53.89	230	350	52.17	250	233	-6.80	250	250	0.00
Ogun	35	55	57.14	28	37	32.14	219	230	5.02	240	255	6.25	230	325	41.30	350	360	2.86
Lagos	36	60	66.67	18	30.65	70.28	96.77	185.49	91.68	184.86	198.72	7.50	120.32	227.27	88.89	161.29	195.84	21.42
Z. Mean	22.87167	34.59167	48.31289	19.66667	30.78167	68.22628	133.1	201.3317	65.34724	191.6433	255.7133	32.30929	197.564	267.054	45.0421	253.258	296.168	18.38505

Commodity Prices (N) in Southeast Zone (Kg) (Cassava tuber, garri and flour)

Commodity Prices in Southeast Zone (kg)																		
	Cassava Tuber						Cassava Gari						Cassava Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Anambra																		
Enugu																		
Ebonyi																		
Imo	20	40	100.00	25	50	100.00	250	500	100.00	210	600	185.71	300	400	33.33	310	460	48.39
Abia	21.34	50	134.30	35.33	73.33	107.56	129	330	155.81	235.3	400	70.00	130	160	23.08	202.3	230	13.69
Z. Mean	20.67	45	117.15	30.165	61.665	103.78	189.5	415	127.91	222.65	500	127.86	215	280	28.21	256.15	345	31.04

Commodity Prices (N) in South-South Zone (Kg) (Cassava tuber, garri and flour)

Commodity Prices in South-South Zone (kg)																		
	Cassava Tuber						Cassava Gari						Cassava Flour					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Akwa-Ibom	59	105	77.97	32.99	101	206.15	104.5	259	147.85	180	206	14.44	292	385	31.85	225	296	31.56
Bayelsa	304	397	30.59	497	424.5	-14.59	150	165	10.00	52.5	65	23.81						
Cross River	32.57	38.45	18.05	36.46	54.02	48.16	105.1	220.1	109.42	187.44	365.7	95.10						
Delta	41.7	69.55	66.79	49.75	103.96	108.96	164.95	205.55	24.61	174.6	345.7	98.00						
Edo	24	170	608.33	24	200	733.33	370	350	-5.41	350	400	14.29	300	350	16.67	300	370	23.33
Rivers	120	120	0.00	122	125	2.46	200	225	12.50	210	300	42.86	600	620	3.33	620	625	0.81
Z. Mean	96.87833	150	133.62	127.0333	168.08	180.75	182.425	237.4417	49.83	192.4233	280.4	48.08	397.3333	451.6667	17.28	381.6667	430.3333	18.57

Commodity Prices (N) in Northeast Zone (Kg) (Beef, Goat meat and Mutton)

Commodity Prices in Northeast Zone (kg)																		
	Beef						Goat Meat			Mutton								
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Borno	750	800	6.67	800	850	6.25	650	700	7.69	700	750	7.14	700	750	7.14	650	800	23.08
Yobe	750	820	9.33	850	900	5.88	800	850	6.25	900	1200	33.33	850	900	5.88	900	950	5.56
Bauchi	853.15	1150	34.79	1,100	1200	9.09	729.04	900	23.45	850	1,100	29.41	792.25	850	7.29	1,000	1100	10.00
Gombe	900	1200	33.33	1200	1200	0.00	750	800	6.67	900	1000	11.11	900	1000	11.11	1000	1000	0.00
Z. Mean	813.2875	992.5	21.03	987.5	1037.5	5.31	732.26	812.5	11.01	837.5	1012.5	20.25	810.5625	875	7.86	887.5	962.5	9.66

Commodity Prices (N) in Northwest Zone (Kg) (Beef, Goat meat and Mutton)

Commodity Prices in Northwest Zone (kg)																		
	Beef						Goat Meat						Mutton					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Zamfara	960	1200	25.00	960	1100	14.58	900	1100	22.22	1000	1100	10.00	975	1000	2.56	975	1800	84.62
Kaduna	1000	1100	10.00	1000	1200	20.00	775	1000	29.03	800	1100	37.50	800	1000	25.00	800	1100	37.50
Kebbi	700	800	14.29	750	850	13.33	650	800	23.08	600	750	25.00	700	800	14.29	700	850	21.43
Sokoto	548.33	964.35	75.87	661.35	879.36	32.96	388.25	523.21	34.76	480	620	29.17	449.92	768.75	70.86	538.1	667.07	23.97
Z. Mean	802.0825	1016.0875	31.29	842.8375	1007.34	20.22	678.3125	855.8025	27.27	720	892.5	25.42	731.23	892.1875	28.18	753.275	1104.2675	41.88

Commodity Prices (N) in North-Central Zone (Kg) (Beef, Goat meat and Mutton)

Commodity Prices in North-Central Zone (Kg)																		
	Beef						Goat Meat						Mutton					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Plateau	974.5	1163.91	19.44	1042.49	1100	5.52	987.9	1150	16.41	1137.69	1200	5.48	1064.6	1074.16	0.90	1150	1300	13.04
Nasarawa	1000	1087.5	8.75	1200	1200	0.00	1000	1275	27.50	1110.1	1150	3.59	750	800	6.67	900.63	844	-6.29
Fct	1100	1400	27.27	1200	1400	16.67	1150	1400	21.74	1200	1400	16.67	1000	1100	10.00	1200	1400	16.67
Niger	862.54	1016.11	17.80	989.62	1000	1.05	668.64	746.66	11.67	605.22	789.93	30.52	671.16	754.85	12.47	753.03	723.27	-3.95
Kwara	945	1038.46	9.89	1038.46	1038.46	0.00	650	700	7.69	700	800	14.29	800	850	6.25	800	900	12.50
Kogi	950	1100	15.79	1050	1100	4.76	1000	1100	10.00	1000	1150	15.00	900	1100	22.22	750	800	6.67
Benue	1200	1300	8.33	1200	1350	12.50	1300	1400	7.69	1200	1300	8.33	1200	1300	8.33	1200	1300	8.33
Z. Mean	1004.5771	1157.9971	15.33	1102.9386	1169.78	5.78	965.22	1110.2371	14.67	993.28714	1112.8471	13.41	912.25143	997.00143	9.55	964.80857	1038.1814	6.71

Commodity Prices (N) in Southeast Zone (Kg) (Beef, Goat meat and Mutton)

Commodity Prices in Southeast Zone (kg)																		
	Beef						**Goat Meat**						**Mutton**					
	January Prices			**July Prices**			**January Prices**			**July Prices**			**January Prices**			**July Prices**		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Enugu	1500	1700	13.33	1658	1852.1	11.71	1067	1800	68.70	1137	1870.7	64.53	1096	1135	3.56	1163.1	1471.2	26.49
Ebonyi	1100	1600	45.45	1100	1600	45.45	1200	1500	25.00	1300	1500	15.38	1000	1200	20.00	1000	1200	20.00
Abia	1250	1253	0.24	1311	1416.6	8.05	1400	1438	2.71	1950	2500	28.21						
Imo	1450	1650	13.79	1500	2000	33.33	1500	1600	6.67	1550	2650	70.97						
Z. Mean	1325	1550.75	18.21	1392.25	1717.175	24.64	1291.75	1584.5	25.77	1484.25	2130.175	44.77	1048	1167.5	11.78	1081.55	1335.6	23.24

Commodity Prices (N) in South-South Zone (Kg) (Beef, Goat meat and Mutton)

Commodity Prices in South-South Zone (kg)																		
	Beef						Goat Meat						Mutton					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Akwa-Ibom	1595	1510	-5.33	1406	1800	28.02	1300	1459	12.23	1259	1470	16.76	1143	1200	4.99	1251	1470	17.51
Bayelsa	1600	1650	3.13	1559	1700	9.04	1185	1200	1.27	1225	1350	10.20						
Cross River	1625.8	1967.3	21.01	1662.47	2011.4	20.99	1763.12	1800	2.09	1834.37	2183.2	19.02						
Delta	1275	1750	37.25	1350	1750	29.63	1050	1550	47.62	1150	1550	34.78						
Edo	900	1800	100.00	1,800	1850	2.78	750	1200	60.00	1,200	1300	8.33	900	1300	44.44	1,500	1600	6.67
Rivers	1600	1700	6.25	1620	1800	11.11	1300	1500	15.38	1350	1500	11.11						
Z. Mean	1432.6333	1729.55	27.05	1566.245	1818.5667	16.93	1224.6867	1451.5	23.10	1336.395	1558.8667	16.70	1021.5	1250	24.72	1375.5	1535	12.09

Commodity Prices (N) in Northeast Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in Northeast Zone (kg)																		
	Fresh Fish						Dry Fish											
	January Prices			July Prices			January Prices			July Prices			Dry Fish					
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	January Prices			July Prices		
Borno										1000	1200	20.00	2016	2017	%Change	2016	2017	%Change
Yobe							800	1000	25.00	1000	1250	25.00						
Gombe	400	600	50.00	800	800	0.00	600	800	33.33	850	1000	17.65	600	700	16.67	700	750	7.14
Z. Mean	400	600	50.00	800	800	0.00	700	900	29.17	950	1150	20.88						

Commodity Prices (N) in Northwest Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in Northwest Zone (kg)																		
	Fresh Fish						Dry Fish						Dry Fish					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Zamfara	650	950	46.15	750	1100	46.67	1000	1200	20.00	675	900	33.33						
Kaduna	900	1050	16.67	700	1150	64.29	1200	1350	12.50	1350	1500	11.11	600	700	16.67	700	750	7.14
Kebbi	800	1000	25.00	300	400	33.33	1200	1400	16.67	1000	1200	20.00						
Sokoto	650	700	7.69	658	780.5	18.62	950	1150	21.05	1000	1180	18.00	1440	1550	7.64	1400	1550	10.71
Z. Mean	750	925	23.88	602	857.625	40.73	1087.5	1275	17.55	1006.25	1195	20.61	1090	1189	9.08	1200	1350	12.50

Commodity Prices (N) in North-Central Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in North-Central Zone (kg)																		
	Fresh Fish						Dry Fish						Dry Fish					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Plateau	517.75	773.26	49.35	850	1000	17.65												
Nasarawa	500	600	20.00	600	850	41.67	1300	1450	11.54	1000	1135.33	13.53	600	700	16.67	700	750	7.14
Fct	750	900	20.00	900	1000	11.11	1100	1300	18.18	1300	2300	76.92						
Niger	600.77	710.74	18.30	829.78	962	15.93	894.22	934.28	4.48	961.52	1063.23	10.58	1440	1550	7.64	1400	1550	10.71
Kwara	656.58	750	14.23	750	750	0.00	850	1200	41.18	1500	1500	0.00	1090	1189	9.08	1200	1350	12.50
Kogi	550	700	27.27	650	800	23.08	818.18	1100	34.44	1300	1450	11.54	1043.3333	1146.3333	11.13	1100	1216.6667	10.12
Benue	600	800	33.33	1100	1250	13.64	1100	1200	9.09	1250	1450	16.00	1090	1189	9.08	1200	1350	12.50
Z. Mean	596.44286	747.71429	26.07	811.39714	944.57143	17.58	1010.4	1197.38	19.82	1218.5867	1483.0933	21.43	1165.8333	1268.5833	9.23	1225	1366.6667	11.46

Commodity Prices (N) in Southwest Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in Southwest Zone																		
	Fresh Fish						Frozen Fish						Dry Fish					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Osun	500	650	30.00	600	700	16.67												
Ekiti	800	900	12.50	900	1100	22.22							600	700	16.67	700	750	7.14
Ondo	800	1150	43.75	850	1120	31.76												
Ogun	615	700	13.82	700	850	21.43	705	805	14.18	700	750	7.14	1440	1550	7.64	1400	1550	10.71
Lagos	690	700	1.45	700	720	2.86	700	850	21.43	700	850	21.43	1090	1189	9.08	1200	1350	12.50
Z. Mean	681	820	20.30	750	898	18.99	702.5	827.5	17.81	700	800	14.29	1043.3333	1146.3333	11.13	1100	1216.6667	10.12

Commodity Prices (N) in Southeast Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in Southeast Zone (kg)																		
	Fresh Fish						Frozen Fish						Dry Fish					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**	**2016**	**2017**	**%Change**
Enugu	800	1200	50.00	965.3	1275.7	32.16							1695	1850	9.14	1758	1900	8.08
Ebonyi	1200	1300	8.33	1300	1400	7.69	1000	1100	10.00	1000	1200	20.00	1600	1700	6.25	1650	1750	6.06
Abia	650	900	38.46	750	988	31.73							1125	1431.4	27.24	1519	1750	15.21
Imo	800	960	20.00	850	1200	41.18	800	900	12.50	850	1000	17.65	1400	1550	10.71	1460	1800	23.29
Z. Mean	**862.50**	**1090.00**	**29.20**	**966.33**	**1215.93**	**28.19**	**900.00**	**1000.00**	**11.25**	**925.00**	**1100.00**	**18.82**	**1455.00**	**1632.85**	**13.34**	**1596.75**	**1800.00**	**13.16**

Commodity Prices (N) in South-South Zone (Kg) (Fresh, Dry and Frozen Fish)

Commodity Prices in South-South Zone (kg)																		
	Fresh Fish						Frozen Fish						Dry Fish					
	January Prices			July Prices			January Prices			July Prices			January Prices			July Prices		
State	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change	2016	2017	%Change
Akwa-Ibom	1450	1654	14.07	1550	1649	6.39							1857	2134	14.92	1765	1948	10.37
Bayelsa	1500	1800	20.00	1800	2000	11.11	1100	1200	9.09	1100	1350	22.73	1800	2100	16.67	2300	2500	8.70
Cross River	1405.34	1698.5	20.86	1411.08	1698.7	20.38							1503.7	2088.6	38.90	1545.18	2018.2	30.61
Delta	1000	1250	25.00	975	1450	48.72	700	855	22.14	700	890	27.14	1050	1450	38.10	1150	1550	34.78
Edo	700	800	14.29	750	900	20.00	750	900	20.00	750	900	20.00	1550	1600	3.23	1200	1400	16.67
Rivers	1300	1500	15.38	1400	1600	14.29	1200	1200	0.00	1000	1300	30.00	2050	2158	5.27	2150	2300	6.98
Z. Mean	1225.89	1450.42	18.27	1314.35	1549.62	20.15	937.50	1038.75	12.81	887.50	1110.00	24.97	1635.12	1921.77	19.51	1685.03	1952.70	18.02

9.0 Farmers' Assessment of Cropping Performance

Responses from a total of 674 farmers out of the expected 740 was analysed**.** About 76 percent of the farmers interviewed were male. Rivers State had the highest proportion of female farmers (84.0%), followed by Bayelsa, Adamawa and Cross River states (46.7%, 45.0% and 44.4%). On the average, the farmers were between 36 and 59 years of age across the states. The household sizes were between 4 and 22 in all the states, with Kano State having the highest average household size and Lagos with the lowest mean (Figure 9.1.3). Generally, household sizes varied across states, with Katsina State having the highest standard deviation of 18.96.

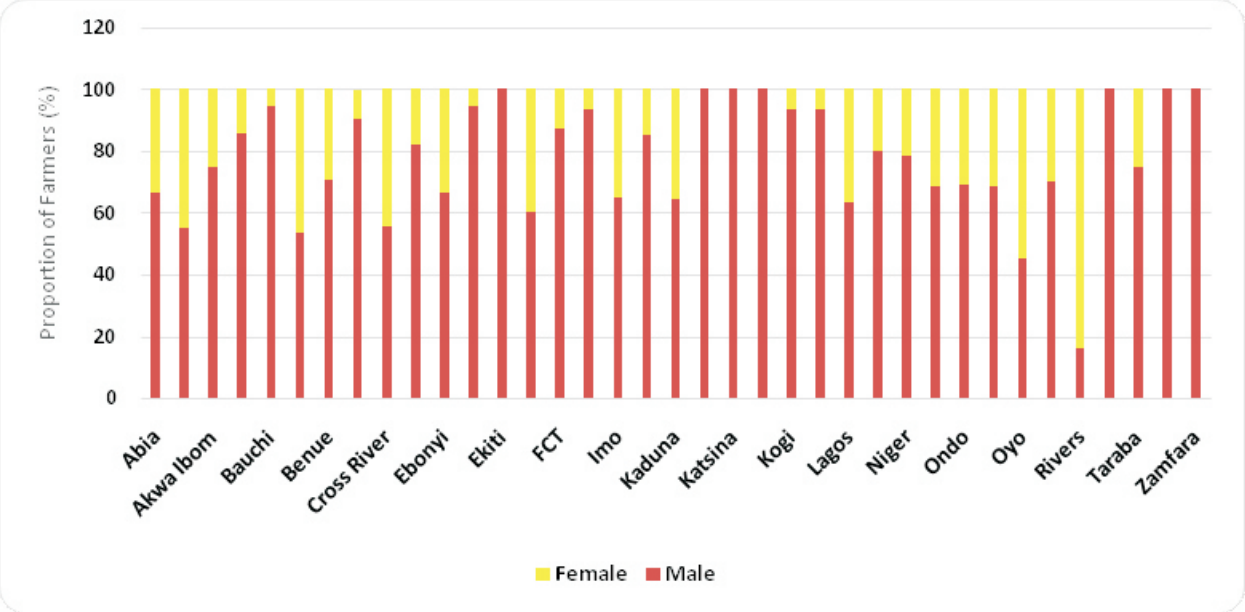


Figure 9.1.1: Sex of Farmers by State

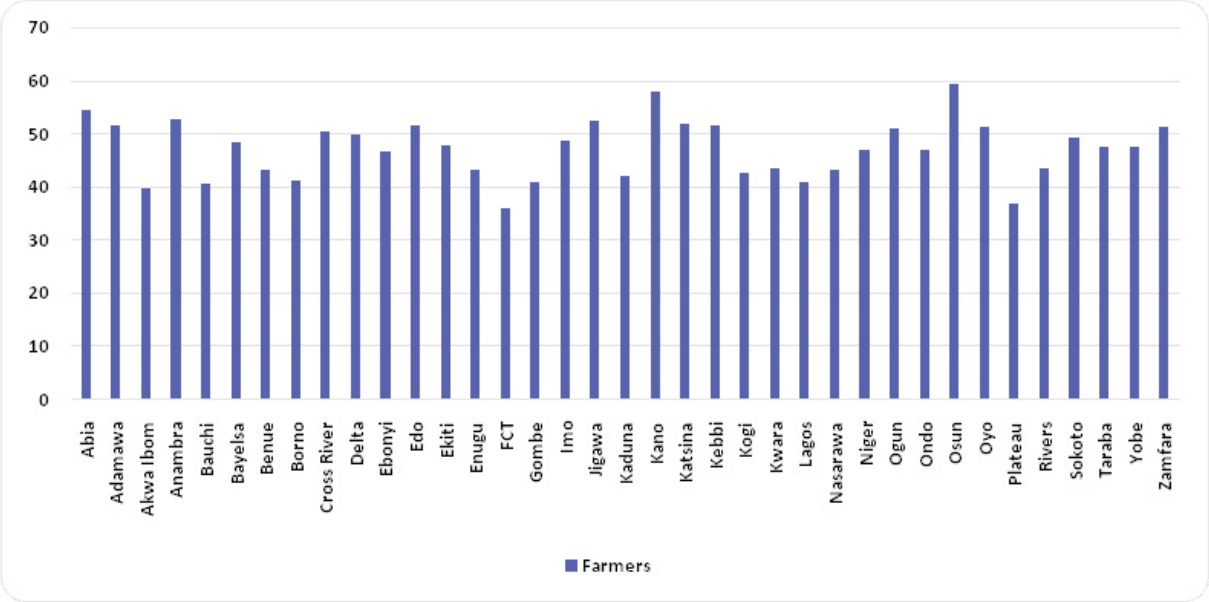


Figure 9.1.2: Mean Age of Farmers

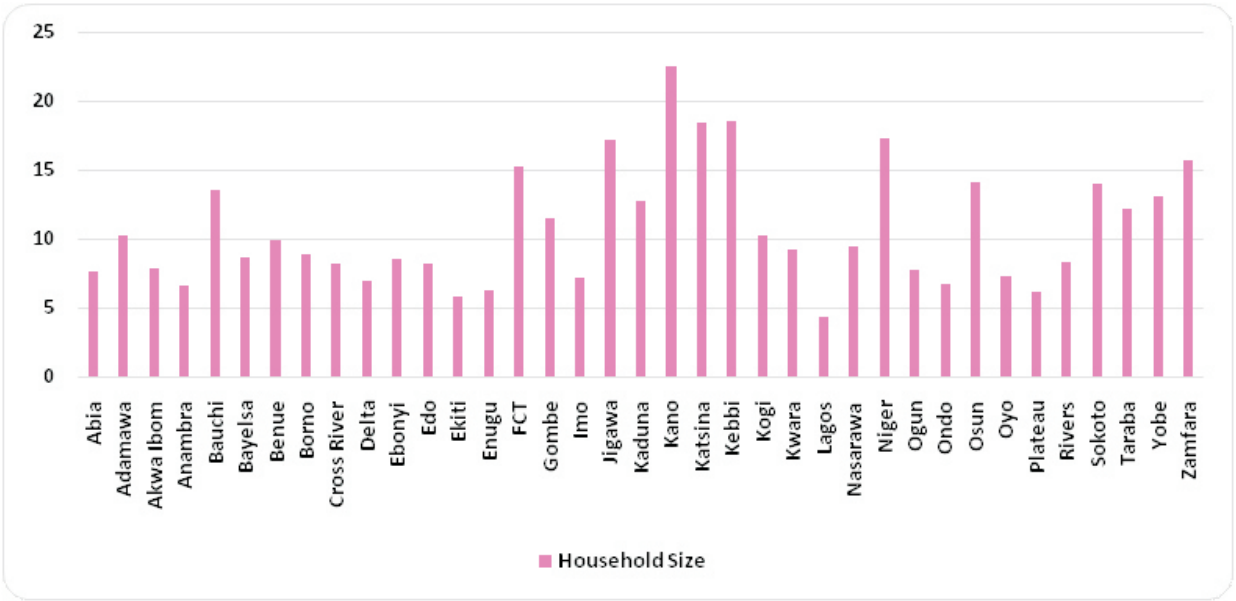


Figure 9.1.3: Mean Household Size

9.2 Crop Production of Farmers

The average farmland cultivated across the states was 1.05ha per farmer. 80% of the farmers practiced mixed cropping. The crops that were commonly mixed were cassava with maize, maize with cowpea, cassava with groundnut and millet with cowpea. Some farmers planted rice, cassava and maize as sole crops. In all the 36 states and FCT, the proportion of crop farmers in 2017 was 94.1% (Figure 9.2.1). Anambra State had the lowest number of crop farmers in 2017. On the average, farmers cultivated 2 staple crops across the states. In each of the states in the Northeast, North-Central and Northwest, the staple cereal cultivated by most of the farmers was maize; after which sorghum, rice and millet occupied varying positions of importance, based on the state. There was a general increase in the proportion of farmers that planted cereal and tuber crops as compared to last season. The proportion of farmers that produced legumes (cowpea soybean and groundnuts) was not as high as those producing cereals, though the production of legumes by farmers varied from state to state. Cowpea was the most commonly planted legumes across the zones.

9.2.1 Livestock, Poultry and Fishery Production

In general, the proportion of livestock, poultry and fish farmers was 39.9%, 20.6% and 4.5% respectively (Figure 9.2.1). Bauchi, Jigawa, Kano, Katsina, Kebbi, Sokoto and Oyo states had more than 60% of farmers who kept some livestock. Goats, sheep and poultry were the most common livestock produced across the states. Small ruminants, particularly goats, were the most important animal species reared and the largest in number that generated substantial income for the farmers. Cattle were commonly produced in some states, but not so much in others. Across the states, the number of livestock kept by farmers ranged between 1 and 8 for cattle; 4 and 12 for sheep; 5 and 14 for goats; and 7 and 32 for poultry (local chicken). Only a few states reported grasscutters, pigs, rabbits and snails farming. In addition, fishing was an important activity in some of the states. Bayelsa and Lagos had the highest proportion of farmers that were engaged in fishing.

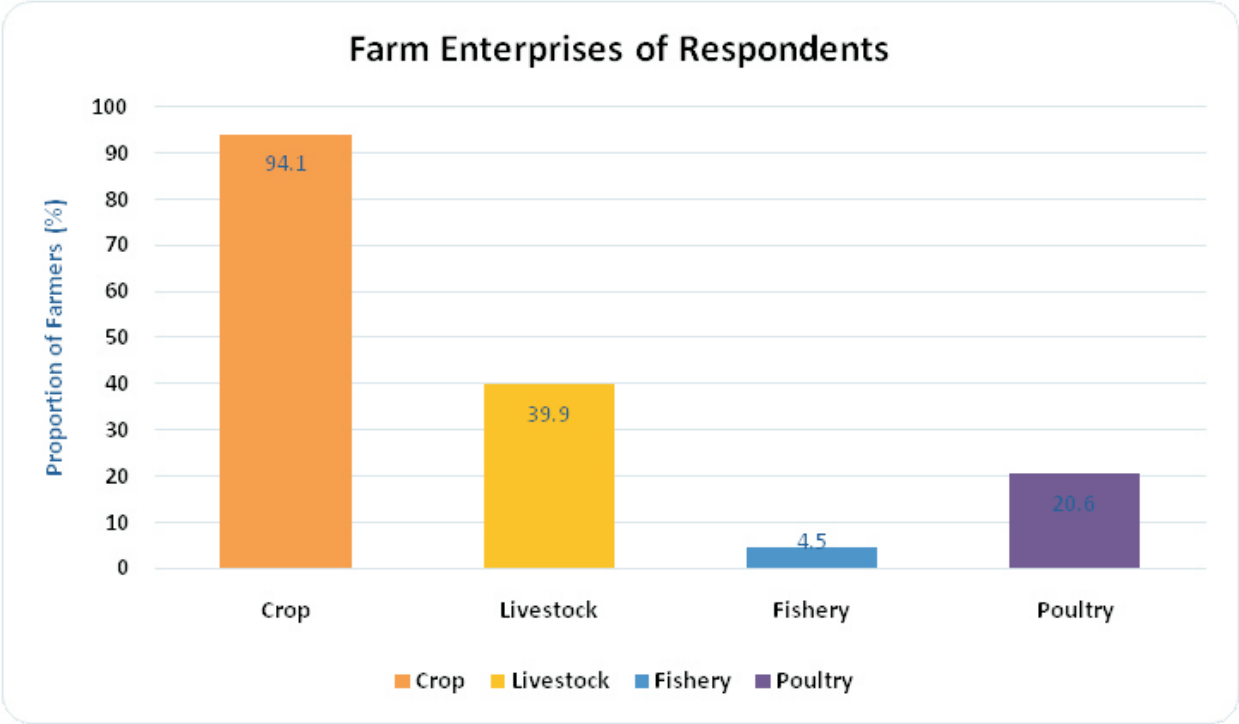


Figure 9.2.1: Farm enterprises

9.3 Input Use by Farmers

High prices of improved seeds, fertilizer and credit facilities posed considerable challenge in several states. However, more farmers had access to seed, fertilizer and pesticides in 2017 compared to 2016. The proportion of farmers that had access to tractors declined slightly by 1.3%. In 2016, 8.8% of the farmers surveyed received subsidized government inputs in form of seeds and fertilizer while 11.9% of the farmers received in 2017. A higher percentage of farmers in the northern states agreed that fertilizer availability was timely and adequate. The commonest types of inorganic fertilizer used are NPK and urea. Market price of fertilizer was lower in 2017 than 2016. Increased use of pesticides by the farmers in 2017 arose because of the heavy infestation of armyworm on maize, which farmers employed pesticides to control.

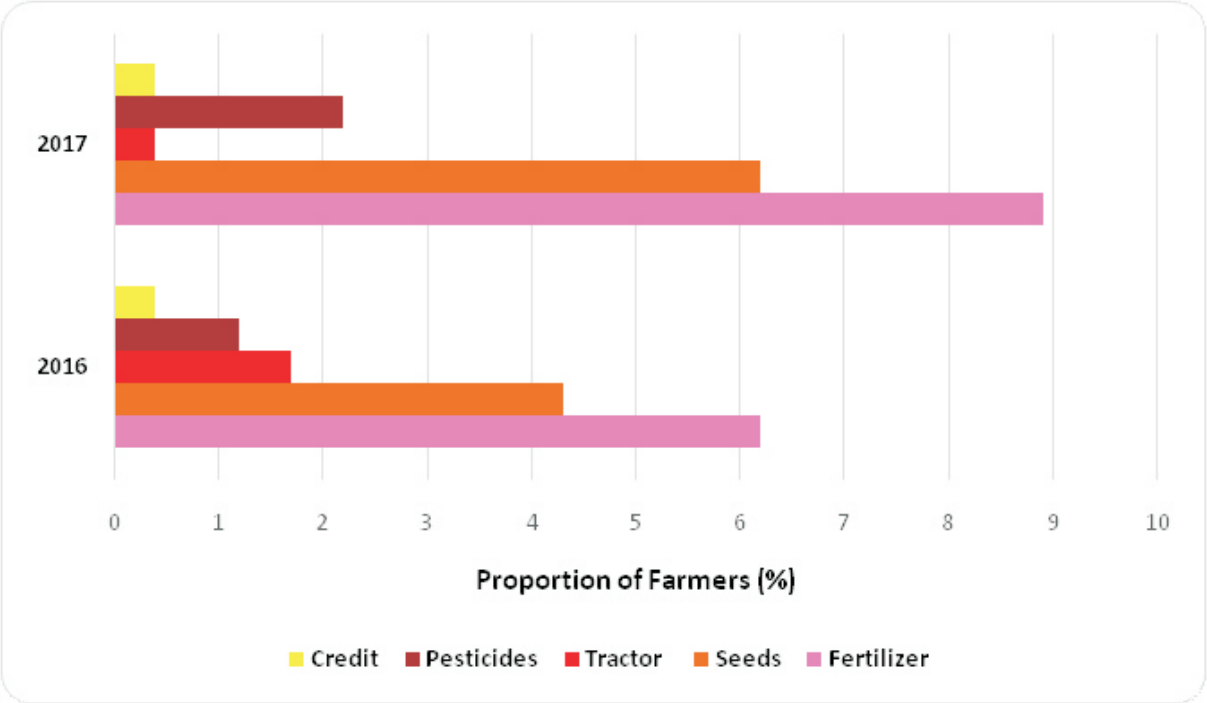


Figure 9.3: Access to Inputs

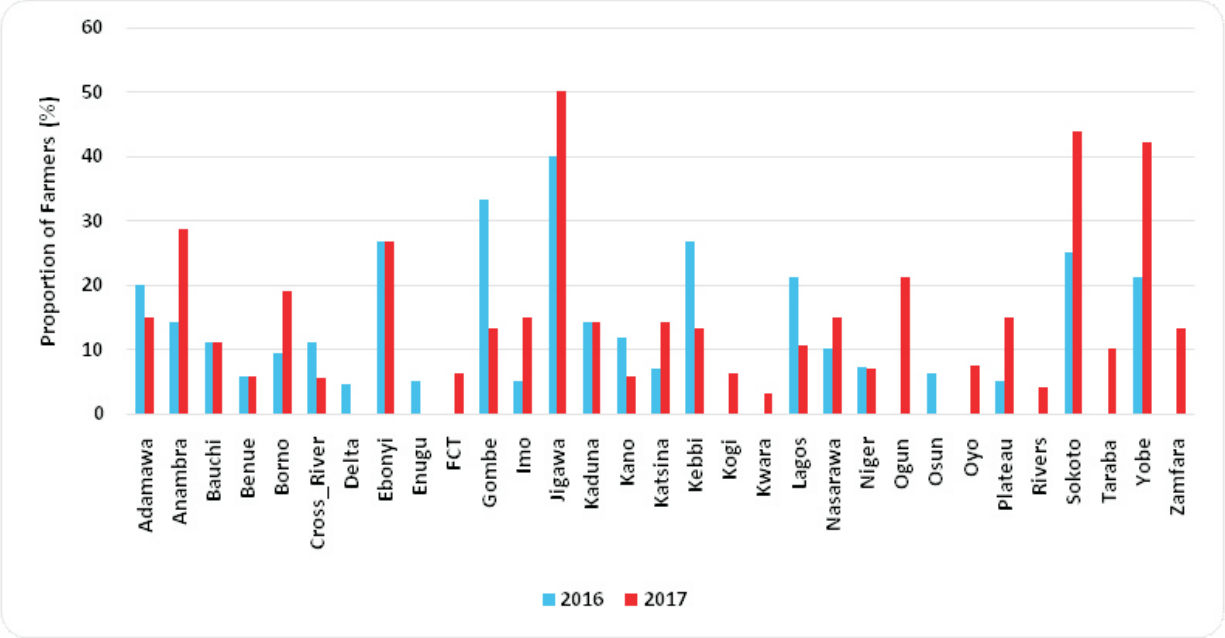


Figure 9.3.1: Farmers that Received Government Inputs

9.3.2 Sources of Inputs used by Farmers

Open market was the main source of inputs- seed, fertilizer and agrochemicals. Most farmers (82.1%) sourced inputs from the open market, 6.4% and 3.8% from government and cooperatives/NGOs respectively. Most farmers (87%)were satisfied with the quality of inputs in 2017.

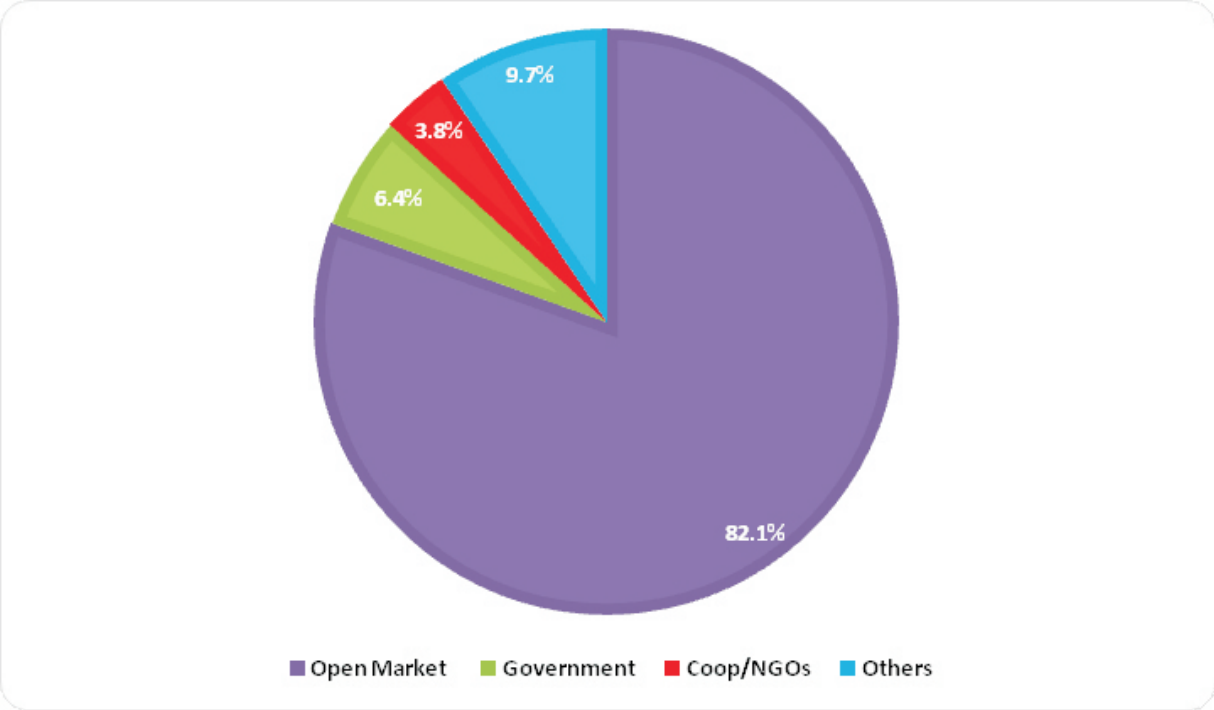


Figure 9.3.2: Sources of Inputs used by Farmers during the 2017 Agricultural Season

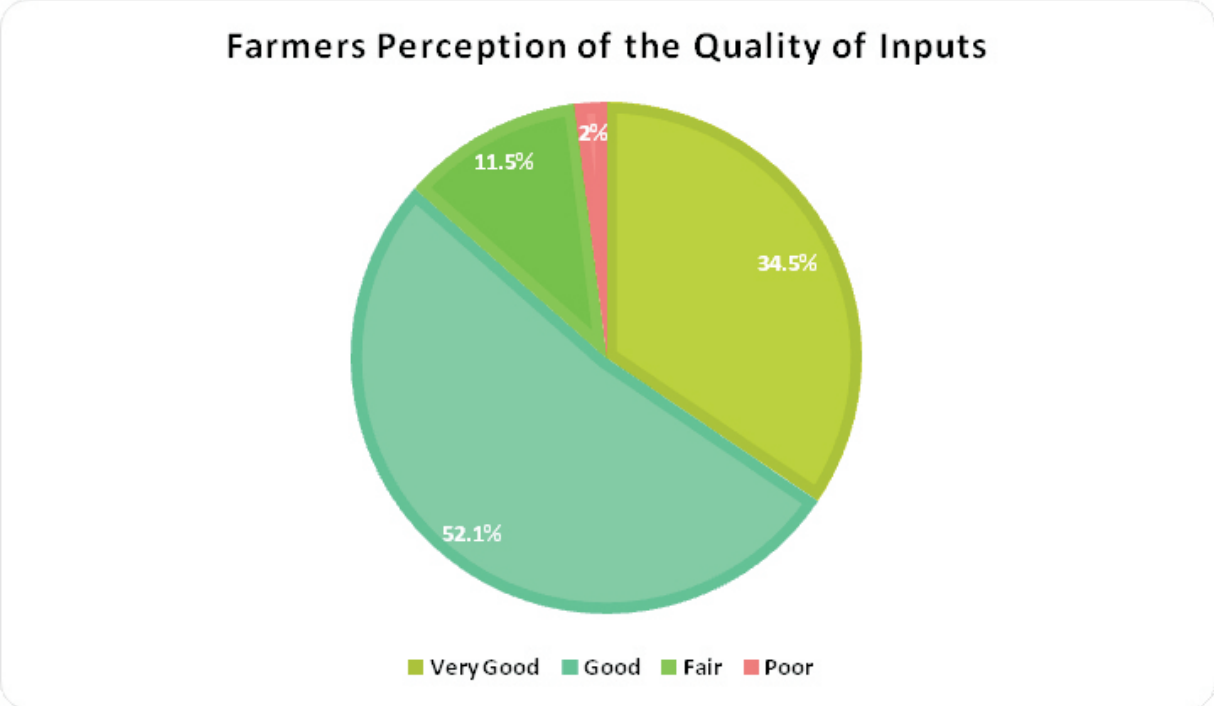


Figure 9.3.3: Farmers' perception on the Quality of Inputs

10.0 PRODUCTION ESTIMATE

LAND AREA AND PRODUCTION FORECAST 2017

Estimates of land area cultivated, crop output and productivity for 2016 and 2017 cropping seasons are presented in Tables 10a to 10f. The individual performance of major crops is presented as follows:

Sorghum

Sorghum is an important crop, mainly cultivated in the northern agro-ecology of Nigeria. The total estimated land area used for sorghum production in 2017 was higher (5,665,830 m ha) compared to 2016 (5,472,010ha) cultivated, which indicated 3.54 % difference. An increase of 3.88 % was recorded in production of sorghum from total output of 6,795. 5 Mt in 2017 to 6,506.4 Mt in 2016. Some states recorded below 5.0 % increase in sorghum production while Kebbi (7.10%), Sokoto (5.54 %), Kano (5.48 %), Kaduna (6.50%), Nasarawa (5.64%), Kogi (6.10 %), Kwara (5.05 %) and Benue (5.06 %) States recorded a significant increase in sorghum production during the year. An average yield of 1.19 t/ha was recorded in both 2016 and 2017 cropping seasons.

Table 10a: Land area estimate and yield production forecast for sorghum								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	319.24	327.22	2.50	323.37	334.54	3.45	0.99	0.98
Yobe	262.03	266.61	1.75	250.89	251.60	0.28	1.04	1.06
Bauchi	376.27	383.88	2.02	332.28	366.77	10.38	1.13	1.05
Gombe	304.22	314.87	3.50	299.00	325.91	9.00	1.02	0.97
Adamawa	287.92	296.17	2.87	225.88	247.33	9.50	1.27	1.20
Taraba	313.65	325.66	3.83	301.39	307.85	2.14	1.04	1.06
Jigawa	347.28	353.92	1.91	289.40	291.72	0.80	1.20	1.21
Katsina	364.69	372.16	2.05	291.59	313.46	7.50	1.25	1.19
Sokoto	290.66	306.76	5.54	275.21	273.90	-0.48	1.06	1.12
Kebbi	372.42	398.86	7.10	310.35	325.87	5.00	1.20	1.22
Zamfara	546.40	570.98	4.50	434.54	435.67	0.26	1.26	1.31
Kano	744.12	784.93	5.48	560.08	576.51	2.93	1.33	1.36
Kaduna	394.26	419.89	6.50	401.65	408.51	1.71	0.98	1.03
Plateau	290.92	294.56	1.25	197.51	196.04	-0.74	1.47	1.50
Nassarawa	151.34	159.88	5.64	126.11	128.63	2.00	1.20	1.24
FCT	126.63	127.70	0.84	98.05	102.46	4.50	1.29	1.25
Niger	514.74	531.36	3.23	367.67	382.38	4.00	1.40	1.39
Kwara	127.83	134.28	5.05	92.86	90.25	-2.81	1.38	1.49
Kogi	119.29	126.56	6.10	91.76	95.89	4.50	1.30	1.32
Benue	156.50	164.41	5.06	120.38	126.40	5.00	1.30	1.30
Osun	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Oyo	57.00	58.00	1.75	47.50	48.71	2.55	1.20	1.19
Ekiti	n.a	n.a	n.a	na	na	n.a	na	na
Ondo	12.00	12.49	4.10	10.00	10.26	2.55	1.20	1.22
Ogun	14.00	14.20	1.43	12.73	13.05	2.55	1.10	1.09
Lagos	n.a	n.a	n.a	na	na	n.a	na	na
Anambra	n.a	n.a	n.a	na	na	n.a	na	na
Enugu	13.00	13.44	3.40	11.82	12.12	2.55	1.10	1.11
Ebonyi	n.a	n.a	n.a	na	na	n.a	na	na
Abia	n.a	n.a	n.a	na	na	n.a	na	na
Imo	n.a	n.a	n.a	na	na	n.a	na	na
Akwa Ibom	n.a	n.a	n.a	na	na	n.a	na	na
Bayelsa	n.a	n.a	n.a	na	na	n.a	na	na
C/Rivers	n.a	n.a	n.a	na	na	n.a	na	na
Delta	n.a	n.a	n.a	na	na	n.a	na	na
Edo	n.a	n.a	n.a	na	na	n.a	na	na
Rivers	n.a	n.a	n.a	na	na	n.a	na	na
National	6506.40	6758.80	3.88	5472.01	5665.83	3.54	1.19	1.19

Maize

Maize is an important food crop produced in all agro-ecological zones of Nigeria. It is the second most important cereal crop produced in Nigeria after rice. The total estimated land area devoted for maize production in Nigeria was about 5,960,920 ha in 2017 which indicated an increase of 8.70 % compared to 2016 estimates (5,484,060 ha). Generally, maize production increased from 10,0813,980 metric tons to 12,107.580 metric tons in 2017 representing about 11.96 % increase in national total output. An average yield of 1.53 to 2.53 ton/ha was recorded in 2016 compared to 1.64 to 2.55 ton/ha recorded for maize yield in 2017 considering all the agro-ecological zones of Nigeria together. Equally, all the States recorded a significant increase in maize output which indicated higher increase of above 10 % in most states in Northern agro-ecological zones than the Southern zones of Nigeria.An average yield of 2.0 tons per hectare was recorded for the crop in 2017.

Table 10b: Land area estimate and yield production forecast for maize								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	550.13	613.55	11.53	358.78	367.75	2.50	1.53	1.67
Yobe	330.95	375.81	13.56	198.57	202.54	2.00	1.67	1.86
Bauchi	453.32	515.26	13.66	271.99	278.79	2.50	1.67	1.85
Gombe	529.36	596.04	12.60	305.40	313.04	2.50	1.73	1.90
Adamawa	464.81	506.00	8.86	249.01	260.21	4.50	1.87	1.94
Taraba	470.13	538.70	14.58	235.06	259.19	10.26	2.00	2.08
Jigawa	288.04	324.64	12.70	166.18	177.92	7.07	1.73	1.82
Katsina	292.62	336.03	14.84	156.21	175.44	12.31	1.87	1.92
Sokoto	130.48	147.06	12.70	83.71	89.55	6.98	1.56	1.64
Kebbi	290.29	335.54	15.59	161.27	172.41	6.91	1.80	1.95
Zamfara	398.46	448.23	12.49	229.88	254.21	10.58	1.73	1.76
Kano	286.91	325.01	13.28	120.71	134.51	11.43	2.38	2.42
Kaduna	795.59	910.50	14.44	315.79	356.61	12.93	2.52	2.55
Plateau	562.94	641.67	13.98	227.46	258.32	13.56	2.47	2.48
Nassarawa	253.99	290.86	14.52	101.84	115.66	13.56	2.49	2.51
FCT	400.89	447.96	11.74	172.36	196.47	13.99	2.33	2.28
Niger	600.81	677.78	12.81	240.72	272.45	13.18	2.50	2.49
Kwara	277.24	310.69	12.06	137.13	151.53	10.50	2.02	2.05
Kogi	367.00	395.99	7.90	153.28	164.13	7.08	2.39	2.41
Benue	305.86	342.76	12.06	120.78	136.94	13.38	2.53	2.50
Osun	317.22	347.02	9.40	155.16	176.10	13.50	2.04	1.97
Oyo	243.57	269.06	10.46	119.47	134.63	12.69	2.04	2.00
Ekiti	244.26	269.81	10.46	139.27	150.53	8.08	1.75	1.79
Ondo	245.82	269.97	9.82	126.36	135.57	7.28	1.95	1.99
Ogun	257.17	281.33	9.40	121.66	137.39	12.93	2.11	2.05
Lagos	220.43	241.14	9.40	126.56	140.22	10.79	1.74	1.72
Anambra	80.61	88.18	9.40	45.27	50.16	10.79	1.78	1.76
Enugu	142.42	157.33	10.46	79.73	86.21	8.13	1.79	1.82
Ebonyi	119.36	129.74	8.70	62.19	67.25	8.13	1.92	1.93
Abia	129.56	140.35	8.33	68.42	75.46	10.28	1.89	1.86
Imo	98.52	109.03	10.68	58.91	63.95	8.56	1.67	1.71
Akwa Ibom	95.21	103.85	9.07	60.90	66.11	8.56	1.56	1.57
Bayelsa	71.86	79.15	10.14	41.74	45.45	8.88	1.72	1.74
C/Rivers	94.85	102.45	8.01	51.61	56.19	8.88	1.84	1.82
Delta	163.24	177.91	8.99	88.33	96.09	8.79	1.85	1.85
Edo	140.31	151.54	8.01	83.18	90.12	8.34	1.69	1.68
Rivers	99.77	109.64	9.90	49.16	51.83	5.42	2.03	2.12
National	10813.98	12107.58	11.96	5484.06	5960.92	8.70	1.97	2.03

Rice

Rice is an important staple food crop in Nigeria consumed in almost every household. The crop is grown in all the States of the Federation. The 2017 wet season survey showed that the estimated cropped area for rice was 3.90 million hectares, which represent an increase of about 6.9% over the 3.17 million hectares cultivated in 2016. The increase in land area could be attributed to the federal government initiatives of reducing the large sum of money use for the importation of the crop and the intensification of the production of the crop in the country. A total output of 8.02 million metric tons was recorded in 2017 as against the 6.99 million metric tons recorded in 2016. This shows that the crop has recorded a significant increase in output of about 14.7%. All the States recorded an increase in the production of the crop, with Lagos State having the highest increase of 30.5%. An average yield of 2.4 tons per hectare was recorded for the crop in 2017.

Table 10c: Land area estimate and yield production forecast for rice								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	178.13	181.44	1.86	111.62	113.03	1.26	1.60	1.61
Yobe	156.63	160.03	2.17	102.09	102.58	0.48	1.53	1.56
Bauchi	202.77	216.16	6.61	118.94	122.08	2.63	1.70	1.77
Gombe	165.76	174.08	5.02	99.74	102.26	2.53	1.66	1.70
Adamawa	265.50	278.58	4.92	155.81	156.83	0.65	1.70	1.78
Taraba	324.15	366.12	12.95	160.83	173.82	8.08	2.02	2.11
Jigawa	186.88	212.08	13.49	97.29	99.66	2.43	1.92	2.13
Katsina	174.82	199.75	14.26	102.68	107.68	4.87	1.70	1.86
Sokoto	145.05	162.31	11.90	79.28	84.36	6.41	1.83	1.92
Kebbi	352.86	411.49	16.61	206.79	216.86	4.87	1.71	1.90
Zamfara	218.52	250.14	14.47	123.66	138.41	11.92	1.77	1.81
Kano	365.58	418.48	14.47	171.09	186.84	9.20	2.14	2.24
Kaduna	295.98	338.81	14.47	144.31	157.59	9.20	2.05	2.15
Plateau	212.74	245.23	15.28	119.62	129.39	8.16	1.78	1.90
Nassarawa	355.35	410.82	15.61	170.39	188.07	10.38	2.09	2.18
FCT	353.15	408.11	15.56	188.76	195.86	3.76	1.87	2.08
Niger	470.57	545.70	15.96	207.55	229.08	10.38	2.27	2.38
Kwara	352.33	408.25	15.87	169.96	187.28	10.19	2.07	2.18
Kogi	446.65	512.61	14.77	215.50	235.52	9.29	2.07	2.18
Benue	425.94	486.62	14.25	206.68	227.73	10.19	2.06	2.14
Osun	80.82	92.54	14.50	39.20	41.94	6.98	2.06	2.21
Oyo	87.48	99.58	13.83	51.13	54.52	6.62	1.71	1.83
Ekiti	117.42	134.72	14.73	67.90	72.87	7.31	1.73	1.85
Ondo	104.21	117.35	12.61	54.40	58.18	6.95	1.92	2.02
Ogun	60.88	68.83	13.05	41.99	44.71	6.49	1.45	1.54
Lagos	56.45	63.52	12.52	34.29	36.18	5.52	1.65	1.76
Anambra	79.76	90.63	13.63	43.18	45.38	5.10	1.85	2.00
Enugu	74.55	84.71	13.63	36.27	39.64	9.31	2.06	2.14
Ebonyi	95.01	109.64	15.40	47.39	49.80	5.10	2.00	2.20
Abia	43.95	50.31	14.46	30.34	31.89	5.13	1.45	1.58
Imo	54.97	63.07	14.73	28.51	30.80	8.05	1.93	2.05
Akwa Ibom	17.12	19.19	12.08	9.64	10.21	5.84	1.78	1.88
Bayelsa	83.25	93.39	12.19	41.80	44.48	6.39	1.99	2.10
C/Rivers	102.38	116.33	13.63	57.33	60.16	4.93	1.79	1.93
Delta	39.32	44.23	12.48	22.96	24.38	6.17	1.71	1.81
Edo	110.20	124.80	13.25	57.10	61.32	7.39	1.93	2.04
Rivers	58.83	66.50	13.03	35.23	37.52	6.50	1.67	1.77
National	6915.97	7826.12	13.16	3651.25	3898.90	6.78	1.89	2.01

Millet

Millet is another important cereal crop mainly produced in the northern States of Nigeria on estimated crop land area of 1,800,070 ha in 2017 and 1,737,830 ha in 2016. The crop performs better in agro-ecology with less amount and short duration of rainfall which account for it being cultivated in the Southern ecological zones of Nigeria. National increase in land area of 3.58 % was recorded between 2016 to 2017 which was proportional to the production estimates of 1,528,250 metric tons in 2017 and 1,487,220 metric tons in 2017. Millet production increased significantly by 2.76 % in 2017 as compared to 2016 production estimats in Nigeria. Adamawa (1.90 %) and Zamfara (1.20 %) States recorded the least increase in production etimates and the highest increase of millet production was recorded in Niger State (5.22 %). This represents a significant output increase of about 12.2% in 2017. There was a general increase in the crop output in all the millet growing States in 2017 but with national average yield reduction of 0.85 t/ha in 2017 compared to 0.86 t/ha recorded in 2016.

Table 10d: Land area estimate and yield production forecast for millet								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	73.18	75.01	2.50	92.74	95.66	3.15	0.79	0.78
Yobe	146.02	149.16	2.15	173.12	179.66	3.77	0.84	0.83
Bauchi	70.05	71.92	2.67	78.90	82.39	4.43	0.89	0.87
Gombe	102.66	105.62	2.88	108.68	111.12	2.24	0.94	0.95
Adamawa	111.20	113.31	1.90	128.79	133.87	3.95	0.86	0.85
Taraba	91.49	93.78	2.50	102.00	104.29	2.24	0.90	0.90
Jigawa	69.42	71.15	2.50	89.73	91.74	2.24	0.77	0.78
Katsina	121.14	124.68	2.92	135.51	139.88	3.22	0.89	0.89
Sokoto	115.35	117.68	2.02	140.94	146.41	3.88	0.82	0.80
Kebbi	72.04	74.29	3.12	76.77	79.90	4.08	0.94	0.93
Zamfara	64.82	65.60	1.20	82.00	83.87	2.28	0.79	0.78
Kano	56.57	58.13	2.77	66.00	68.20	3.33	0.86	0.85
Kaduna	45.43	46.89	3.22	60.41	61.76	2.23	0.75	0.76
Plateau	65.19	67.42	3.42	73.83	76.96	4.23	0.88	0.88
Nassarawa	25.14	25.70	2.22	30.55	31.63	3.55	0.82	0.81
FCT	52.12	53.28	2.22	58.05	58.76	1.22	0.90	0.91
Niger	79.93	84.09	5.20	89.11	94.92	6.52	0.90	0.89
Kwara	24.48	25.53	4.32	26.00	27.79	6.88	0.94	0.92
Kogi	40.02	41.97	4.88	45.00	47.80	6.22	0.89	0.88
Benue	60.97	63.04	3.39	79.70	83.46	4.72	0.77	0.76
Osun	n.a	n.a	n.a	na	na	n.a	na	na
Oyo	n.a	n.a	n.a	na	na	n.a	na	na
Ekiti	n.a	n.a	n.a	na	na	n.a	na	na
Ondo	n.a	n.a	n.a	na	na	n.a	na	na
Ogun	n.a	n.a	n.a	na	na	n.a	na	na
Lagos	n.a	n.a	n.a	na	na	n.a	na	na
Anambra	n.a	n.a	n.a	na	na	n.a	na	na
Enugu	n.a	n.a	n.a	na	na	n.a	na	na
Ebonyi	n.a	n.a	n.a	na	na	n.a	na	na
Abia	n.a	n.a	n.a	na	na	n.a	na	na
Imo	n.a	n.a	n.a	na	na	n.a	na	na
Akwa Ibom	n.a	n.a	n.a	na	na	n.a	na	na
Bayelsa	n.a	n.a	n.a	na	na	n.a	na	na
C/Rivers	n.a	n.a	n.a	na	na	n.a	na	na
Delta	n.a	n.a	n.a	na	na	n.a	na	na
Edo	n.a	n.a	n.a	na	na	n.a	na	na
Rivers	n.a	n.a	n.a	na	na	n.a	na	na
National	1487.22	1528.25	2.76	1737.83	1800.07	3.58	0.86	0.85

Yam

Nigeria is by far the world's largest producer of yams accounting for over 70-76 percent of the world production. It is an important tuber crop in Nigeria. It is produced in all the agro-ecological zones of the country. The total land area put to cultivation of yam in 2,017 was 6,446,110 hectares representing 6.0% increase over land area cultivated in 2016. Yam recorded an increase in output to 54,083,090 metric tons in 2017 representing 5.3% increase over the 5,136,293 metric tons recorded in 2016. This implies that yam production is substantially increasing to meet the growing demand at its present level of use. The national average yield for the crop in 2017 was 8.39 tons per hectare.

Table 10d: Land area estimate and yield production forecast for **YAM**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	na	na	na	na	na	na	na	na
Yobe	na	na	na	na	na	na	na	na
Bauchi	na	na	na	na	na	na	na	na
Gombe	na	na	na	na	na	na	na	na
Adamawa	1486.25	1634.12	9.95	186.95	202.06	8.09	7.95	8.09
Taraba	3472.90	3810.58	9.72	293.49	319.19	8.76	11.83	11.94
Jigawa	na	na	na	na	na	na	na	na
Katsina	na	na	na	na	na	na	na	na
Sokoto	na	na	na	na	na	na	na	na
Kebbi	859.00	896.80	4.40	133.00	141.65	6.50	6.46	6.33
Zamfara	na	na	na	na	na	na	na	na
Kano	na	na	na	na	na	na	na	na
Kaduna	2361.11	2483.89	5.20	182.38	195.87	7.40	12.95	12.68
Plateau	1614.45	1726.37	6.93	122.75	133.12	8.45	13.15	12.97
Nassarawa	3016.87	3246.16	7.60	204.85	222.67	8.70	14.73	14.58
FCT	3468.90	3680.51	6.10	340.62	371.61	9.10	10.18	9.90
Niger	2900.74	3112.49	7.30	223.00	244.32	9.56	13.01	12.74
Kwara	2103.02	2178.79	3.60	226.14	240.53	6.36	9.30	9.06
Kogi	1640.93	1696.46	3.38	174.23	188.87	8.40	9.42	8.98
Benue	2685.32	2894.78	7.80	205.00	231.65	13.00	13.10	12.50
Osun	1744.21	1810.49	3.80	177.72	195.36	9.93	9.81	9.27
Oyo	1244.11	1298.85	4.40	235.55	245.19	4.09	5.28	5.30
Ekiti	1368.18	1396.72	2.09	179.82	193.72	7.73	7.61	7.21
Ondo	1471.29	1552.21	5.50	173.81	185.23	6.58	8.47	8.38
Ogun	966.00	1004.06	3.94	137.93	148.88	7.94	7.00	6.74
Lagos	873.65	892.68	2.18	186.13	193.47	3.94	4.69	4.61
Anambra	846.93	877.55	3.62	152.26	158.30	3.97	5.56	5.54
Enugu	2595.84	2662.90	2.58	215.99	224.50	3.94	12.02	11.86
Ebonyi	1751.58	1825.42	4.22	213.30	219.74	3.02	8.21	8.31
Abia	1644.70	1664.29	1.19	205.94	214.06	3.94	7.99	7.77
Imo	1707.51	1713.77	0.37	236.32	238.54	0.94	7.23	7.18
Akwa Ibom	1581.62	1735.15	9.71	280.10	286.83	2.40	5.65	6.05
Bayelsa	1149.94	1189.13	3.41	264.52	269.91	2.04	4.35	4.41
C/Rivers	2795.99	2831.11	1.26	325.57	328.63	0.94	8.59	8.61
Delta	1087.19	1223.87	12.57	158.99	160.49	0.94	6.84	7.63
Edo	1856.46	1931.74	4.06	261.16	293.70	12.46	7.11	6.58
Rivers	1068.24	1112.20	4.12	382.79	398.03	3.98	2.79	2.79
National	51362.93	54083.09	5.30	6080.28	6446.11	6.02	8.45	8.39

Cassava

Cassava is an important root tuber cultivated in almost all the States of the Federation. The crop recorded a marginal increase in land area used in the production of the crop. The estimated land area for the crop in 2017 was 8,929,090 hectares as against the 8,385,340 hectares used in 2016, representing 6.48 % increase. The survey showed that the total output of the crop has increased from 52,537,850 metric tons in 2016 to 55,068,730 metric tons in 2017, which represent 4.8% increase in output. The crop is grown throughout the year in most of the States making it preferable to the seasonal crops of yam, beans or peas. The average national yield for the crop in 2017 was 6.17 tons per hectare.

Table 10f: Land area estimate and yield production forecast for CASSAVA								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	na	na	na	0.00	0.00	0.00	na	na
Yobe	479.20	487.70	1.77	116.60	121.56	4.25	4.11	4.01
Bauchi	481.56	484.77	0.67	120.07	126.08	5.00	4.01	3.84
Gombe	675.48	698.71	3.44	115.18	123.25	7.01	5.86	5.67
Adamawa	450.84	465.04	3.15	129.18	139.07	7.65	3.49	3.34
Taraba	1328.07	1379.59	3.88	167.91	184.35	9.79	7.91	7.48
Jigawa	375.04	385.44	2.77	124.41	130.39	4.81	3.01	2.96
Katsina	316.61	341.28	7.79	102.31	112.27	9.74	3.09	3.04
Sokoto	224.37	229.05	2.09	92.64	96.75	4.44	2.42	2.37
Kebbi	631.57	648.26	2.64	133.75	139.83	4.55	4.72	4.64
Zamfara	251.86	266.56	5.84	141.20	152.74	8.17	1.78	1.75
Kano	426.63	445.63	4.45	115.10	125.35	8.91	3.71	3.55
Kaduna	2052.62	2243.09	9.28	189.19	195.18	3.16	10.85	11.49
Plateau	980.76	1052.68	7.33	353.64	381.20	7.79	2.77	2.76
Nassarawa	1625.54	1722.11	5.94	265.07	289.51	9.22	6.13	5.95
FCT	1667.69	1770.26	6.15	413.49	449.27	8.66	4.03	3.94
Niger	1310.56	1385.22	5.70	341.26	355.61	4.21	3.84	3.90
Kwara	1411.82	1467.30	3.93	412.20	441.64	7.14	3.43	3.32
Kogi	3423.74	3606.62	5.34	350.54	381.66	8.88	9.77	9.45
Benue	3502.41	3646.48	4.11	312.14	339.86	8.88	11.22	10.73
Osun	1715.99	1805.41	5.21	175.35	187.03	6.66	9.79	9.65
Oyo	1737.09	1775.90	2.23	180.41	187.00	3.66	9.63	9.50
Ekiti	1684.11	1724.78	2.41	224.45	233.55	4.06	7.50	7.38
Ondo	2176.31	2300.69	5.72	204.35	224.31	9.76	10.65	10.26
Ogun	1893.61	1931.48	2.00	190.30	192.14	0.97	9.95	10.05
Lagos	1562.20	1596.88	2.22	252.81	261.21	3.32	6.18	6.11
Anambra	1833.57	1929.09	5.21	222.28	228.38	2.74	8.25	8.45
Enugu	2045.22	2086.19	2.00	217.40	221.23	1.76	9.41	9.43
Ebonyi	1268.34	1351.04	6.52	230.35	238.00	3.32	5.51	5.68
Abia	1336.15	1408.12	5.39	242.72	246.90	1.72	5.50	5.70
Imo	3256.22	3357.82	3.12	306.13	322.50	5.34	10.64	10.41
Akwa Ibom	1626.20	1754.01	7.86	260.17	290.46	11.64	6.25	6.04
Bayelsa	1111.23	1166.86	5.01	313.53	331.59	5.76	3.54	3.52
C/Rivers	1933.05	2016.81	4.33	379.66	397.19	4.62	5.09	5.08
Delta	1661.89	1788.46	7.62	208.37	236.05	13.28	7.98	7.58
Edo	1325.19	1449.60	9.39	263.90	325.26	23.25	5.02	4.46
Rivers	2755.12	2899.80	5.25	517.25	520.71	0.67	5.33	5.57
National	52537.85	55068.73	4.82	8385.34	8929.09	6.48	6.27	6.17

Cocoyam

Cocoyam is an important crop in most States of the country. The crop is mostly used for human consumption. It is commonly grown amongst small-scale farmers who operate with the subsistence economy. The total area put to the production of the crop in 2016 was 947,250 hectares as compared to the 1,061,420 hectares in 2017, representing 7.6% increase. The total output in 2017 was 7,549,500 metric tons as against 7,151,180 metric tons obtained in the 2016 indicating a significant increase of about 5.6 %. The national average yield for the crop in 2017 was 7.6 tons per hectare as against the 7.1 tons recorded in 2016.

Table 10g Land area estimate and yield production forecast for **COCOYAM**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	na	na	na	0.00	0.00	na	na	na
Yobe	na	na	na	0.00	0.00	na	na	na
Bauchi	39.60	40.34	1.85	5.29	5.41	2.17	7.48	7.46
Gombe	na	na	na	0.00	0.00	0.00	na	na
Adamawa	na	na	na	-1.49	-4.72	216.67	na	na
Taraba	196.87	204.45	3.85	76.24	95.48	25.24	2.58	2.14
Jigawa	na	na	na	0.00	0.00	na	na	na
Katsina	na	na	na	0.00	0.00	na	na	na
Sokoto	na	na	na	0.00	0.00	na	na	na
Kebbi	na	na	na	0.00	0.00	na	na	na
Zamfara	na	na	na	0.00	0.00	na	na	na
Kano	na	na	na	0.00	0.00	na	na	na
Kaduna	na	na	na	24.41	23.86	na	na	na
Plateau	69.43	70.72	1.85	11.65	12.20	4.70	5.96	5.80
Nassarawa	176.69	182.26	3.15	25.58	26.89	5.10	6.91	6.78
FCT	65.65	66.50	1.30	13.29	13.72	3.30	4.94	4.85
Niger	251.74	261.81	4.00	23.54	24.91	5.80	10.69	10.51
Kwara	150.72	154.94	2.80	33.39	34.35	2.90	4.51	4.51
Kogi	202.34	209.27	3.42	17.83	19.55	9.61	11.35	10.71
Benue	124.13	127.23	2.50	26.93	28.43	5.55	4.61	4.48
Osun	303.40	329.18	8.50	26.22	26.98	2.90	11.57	12.20
Oyo	127.48	130.66	2.50	48.95	50.14	2.43	2.60	2.61
Ekiti	493.26	501.59	1.69	41.14	44.30	7.69	11.99	11.32
Ondo	497.94	550.22	10.50	33.88	34.23	1.05	14.70	16.07
Ogun	321.47	340.12	5.80	28.84	29.37	1.84	11.15	11.58
Lagos	135.46	139.05	2.65	28.37	29.86	5.24	4.78	4.66
Anambra	442.80	471.58	6.50	41.59	47.47	14.14	10.65	9.93
Enugu	701.84	766.41	9.20	62.02	80.24	29.37	11.32	9.55
Ebonyi	260.60	271.55	4.20	73.34	98.72	34.61	3.55	2.75
Abia	286.11	304.71	6.50	38.28	40.81	6.60	7.47	7.47
Imo	381.68	405.54	6.25	64.52	79.02	22.47	5.92	5.13
Akwa Ibom	406.91	418.30	2.80	35.12	37.65	7.20	11.59	11.11
Bayelsa	403.19	426.17	5.70	44.03	46.90	6.50	9.16	9.09
C/Rivers	385.55	422.18	9.50	32.12	34.79	8.30	12.00	12.14
Delta	189.09	195.26	3.27	34.03	38.13	12.06	5.56	5.12
Edo	299.43	312.80	4.47	31.27	33.27	6.40	9.58	9.40
Rivers	237.80	246.66	3.73	26.86	29.48	9.74	8.85	8.37
National	7151.18	7549.50	5.57	947.25	1061.42	12.05	7.55	7.11

Ginger

Ginger is an important specie produce in Nigeria. Kaduna State stands as the highest producer of the crop while Gombe, Bauchi, Benue, Nasarawa among other States are major producers. The 2017 forecast showed that 85,360 hectares of land was devoted to the production of the crop as against 96,060 hectares used for the production of the crop in 2016. This reflects a significant increase of 6.2% over the land area used for the production of the crop in 2016. The total output for the crop in 2017 was 834,630 metric tons compared with the 774,890 metric tons obtained in 2016 representing 7.71% increase in total output of the crop in 2017. The survey showed that the average national yield for the crop in 2017 was 8.69 tons per hectare.

Table 10h Land area estimate and yield production forecast for **GINGER**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	na	na	na	na	na	na	na	na
Yobe	na	na	na	na	na	na	na	na
Bauchi	23.00	24.00	4.35	2.23	2.43	8.97	10.31	9.88
Gombe	na	na	na	na	na	na	na	na
Adamawa	na	na	na	na	na	na	na	na
Taraba	na	na	na	na	na	na	na	na
Jigawa	na	na	na	na	na	na	na	na
Katsina	na	na	na	na	na	na	na	na
Sokoto	na	na	na	na	na	na	na	na
Kebbi	na	na	na	na	na	na	na	na
Zamfara	na	na	na	na	na	na	na	na
Kano	na	na	na	na	na	na	na	na
Kaduna	468.90	508.29	8.40	43.10	48.44	12.40	10.88	10.49
Plateau	56.00	59.00	5.36	8.90	9.90	11.24	6.29	5.96
Nassarawa	93.30	99.46	6.60	11.33	13.34	17.70	8.23	7.46
FCT	na	na	na	na	na	na	na	na
Niger	na	na	na	na	na	na	na	na
Kwara	na	na	na	na	na	na	na	na
Kogi	na	na	na	na	na	na	na	na
Benue	97.54	107.29	10.00	12.53	14.54	16.00	7.78	7.38
Osun	na	na	na	na	na	na	na	na
Oyo	na	na	na	na	na	na	na	na
Ekiti	na	na	na	na	na	na	na	na
Ondo	na	na	na	na	na	na	na	na
Ogun	na	na	na	na	na	na	na	na
Lagos	36.15	36.60	1.24	7.26	7.41	2.00	4.98	4.94
Anambra	na	na	na	na	na	na	na	na
Enugu	na	na	na	na	na	na	na	na
Ebonyi	na	na	na	na	na	na	na	na
Abia	na	na	na	na	na	na	na	na
Imo	na	na	na	na	na	na	na	na
Akwa Ibom	na	na	na	na	na	na	na	na
Bayelsa	na	na	na	na	na	na	na	na
C/Rivers	na	na	na	na	na	na	na	na
Delta	na	na	na	na	na	na	na	na
Edo	na	na	na	na	na	na	na	na
Rivers	na	na	na	na	na	na	na	na
National	774.89	834.63	7.71	85.36	96.06	12.54	9.08	8.69

Groundnut

Groundnut is an important legume crop produced in the northern part of the country. The estimated land area put to the cultivation of groundnut in 2017 was 3,596,850 hectares showing 3.99 % increase over the 3,458,710 hectares cultivated in 2016. The major producers of groundnut in Nigeria include Nasarawa state, Niger, Jigawa, Kano, Katsina, Taraba, Benue, Kaduna and Borno States. The crop is grown in commercial quantities mostly for the extraction of their oil which is used for cooking, for bio-diesel fuel, laxatives, dye etc. the nut is also used as snacks. The total output for groundnut in 2017 was 4,360.5 metric tons as against the 4,521.45 metric tons obtained in 2016. This indicated that there was an increase of about 3.7 % over that of 2016. The average yield of groundnut in 2017 was 1.3 tons per hectare.

Table 10i: Land area estimate and yield production forecast for **GROUNDNUT**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	184.59	187.36	1.50	153.23	160.13	4.50	1.20	1.17
Yobe	72.26	72.62	0.50	65.14	66.90	2.70	1.11	1.09
Bauchi	494.48	511.78	3.50	394.08	394.34	0.07	1.25	1.30
Gombe	126.66	130.71	3.20	108.00	114.05	5.60	1.17	1.15
Adamawa	125.24	128.73	2.79	102.24	107.05	4.70	1.22	1.20
Taraba	223.00	231.14	3.65	201.92	214.99	6.47	1.10	1.08
Jigawa	120.00	122.00	1.67	120.52	127.10	5.46	1.00	0.96
Katsina	107.89	111.94	3.76	108.69	114.07	4.95	0.99	0.98
Sokoto	221.23	228.63	3.35	191.99	197.18	2.70	1.15	1.16
Kebbi	174.94	182.37	4.25	146.26	148.36	1.44	1.20	1.23
Zamfara	128.89	131.79	2.25	136.80	145.58	6.42	0.94	0.91
Kano	301.06	314.61	4.50	207.72	215.51	3.75	1.45	1.46
Kaduna	279.25	288.61	3.35	194.33	202.59	4.25	1.44	1.42
Plateau	197.37	203.09	2.90	138.38	143.84	3.95	1.43	1.41
Nassarawa	188.29	194.60	3.35	136.71	142.62	4.32	1.38	1.36
FCT	243.67	256.71	5.35	174.22	182.45	4.72	1.40	1.41
Niger	237.45	250.51	5.50	170.18	176.83	3.91	1.40	1.42
Kwara	229.89	239.77	4.30	166.61	175.59	5.39	1.38	1.37
Kogi	159.01	165.99	4.39	120.46	125.40	4.10	1.32	1.32
Benue	258.97	273.29	5.53	188.14	199.41	5.99	1.38	1.37
Osun	38.00	38.96	2.53	32.55	33.79	3.80	1.17	1.15
Oyo	45.80	48.20	5.23	40.94	44.13	7.80	1.12	1.09
Ekiti	67.01	68.56	2.30	52.28	54.36	3.99	1.28	1.26
Ondo	45.90	47.46	3.40	32.40	33.83	4.40	1.42	1.40
Ogun	18.35	18.97	3.40	15.44	15.97	3.44	1.19	1.19
Lagos	4.02	4.03	0.34	3.34	3.42	2.34	1.20	1.18
Anambra	na	na	na	na	na	na	na	na
Enugu	6.33	6.39	0.94	5.16	5.28	2.22	1.23	1.21
Ebonyi	5.06	5.09	0.64	4.65	4.85	4.40	1.09	1.05
Abia	9.86	10.02	1.64	9.32	9.45	1.40	1.06	1.06
Imo	7.20	7.52	4.46	5.93	6.31	6.40	1.21	1.19
Akwa Ibom	15.45	16.32	5.64	11.88	11.97	0.74	1.30	1.36
Bayelsa	na	na	na	0.00	0.00	na	na	na
C/Rivers	17.54	17.61	0.44	13.33	13.35	0.14	1.32	1.32
Delta	na	na	na	0.00	0.00	na	na	na
Edo	5.85	6.05	3.44	5.87	6.17	4.97	1.00	0.98
Rivers	na	na	na	0.00	0.00	na	na	na
National	4360.50	4521.45	3.69	3458.71	3596.85	3.99	1.26	1.26

Cowpea

Nigeria is the largest producer and consumer of cowpea, accounting for 61% of production in Africa and 58% worldwide. The area put to the production of cowpea in 2017 was 5,008,440 hectares compared to 4,814,540 hectares in 2016, an increase of 4.0%. Edo State recorded the highest increase in land area of 61.6%. The report indicated that the total output of cowpea in 2017 was 3,874,740 metric tons as against 3,750,470 metric tons obtained in 2016 representing an output increase of 7.4%. Cowpea production areas are Borno, Bauchi, Zamfara, Kano, Katsina, Kebbi, Sokoto and Kaduna. The national average yield of cowpea in 2017 was 0.8 ton per hectare.

Table 10j: Land area estimate and yield production forecast for **COWPEA**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	117.20	118.77	1.34	139.77	143.75	2.84	0.84	0.83
Yobe	162.41	164.73	1.43	192.62	197.69	2.63	0.84	0.83
Bauchi	167.70	169.58	1.12	180.16	183.48	1.84	0.93	0.92
Gombe	258.18	264.49	2.45	279.87	287.83	2.84	0.92	0.92
Adamawa	181.62	188.10	3.57	191.18	199.30	4.25	0.95	0.94
Taraba	225.02	239.89	6.61	238.69	256.41	7.43	0.94	0.94
Jigawa	103.16	109.61	6.25	128.16	138.96	8.43	0.80	0.79
Katsina	107.95	111.49	3.29	119.52	127.28	6.50	0.90	0.88
Sokoto	124.76	130.41	4.52	146.19	152.40	4.25	0.85	0.86
Kebbi	84.73	86.80	2.44	99.55	107.48	7.97	0.85	0.81
Zamfara	111.18	115.89	4.25	148.47	154.78	4.25	0.75	0.75
Kano	156.13	163.08	4.45	191.85	198.30	3.36	0.81	0.82
Kaduna	137.88	143.25	3.89	165.40	176.81	6.90	0.83	0.81
Plateau	89.81	90.88	1.19	170.47	173.02	1.50	0.53	0.53
Nassarawa	66.22	68.33	3.19	76.47	79.72	4.25	0.87	0.86
FCT	119.02	123.05	3.39	132.76	138.40	4.25	0.90	0.89
Niger	82.67	88.11	6.57	93.55	93.90	0.37	0.88	0.94
Kwara	187.88	189.89	1.07	200.93	204.24	1.65	0.94	0.93
Kogi	156.98	163.96	4.45	345.11	355.28	2.95	0.45	0.46
Benue	110.70	116.62	5.35	129.37	136.77	5.73	0.86	0.85
Osun	129.53	133.68	3.21	199.63	208.11	4.25	0.65	0.64
Oyo	96.57	98.84	2.35	122.43	128.27	4.77	0.79	0.77
Ekiti	89.04	91.65	2.93	157.07	160.30	2.05	0.57	0.57
Ondo	111.06	114.04	2.68	149.87	150.02	0.10	0.74	0.76
Ogun	22.91	23.57	2.89	64.72	67.60	4.45	0.35	0.35
Lagos	76.06	77.20	1.50	119.97	127.42	6.21	0.63	0.61
Anambra	68.55	71.60	4.45	88.66	93.24	5.17	0.77	0.77
Enugu	65.98	68.78	4.24	89.84	94.76	5.48	0.73	0.73
Ebonyi	45.85	47.39	3.35	76.58	81.46	6.37	0.60	0.58
Abia	42.52	43.56	2.45	47.16	49.23	4.40	0.90	0.88
Imo	73.17	75.72	3.49	82.55	87.07	5.48	0.89	0.87
Akwa Ibom	32.91	33.72	2.45	42.30	44.32	4.77	0.78	0.76
Bayelsa	22.44	22.96	2.30	29.74	31.60	6.25	0.75	0.73
C/Rivers	23.51	23.95	1.85	28.30	29.02	2.55	0.83	0.83
Delta	51.00	51.99	1.94	57.40	59.09	2.95	0.89	0.88
Edo	3.77	3.87	2.65	4.90	5.28	7.70	0.77	0.73
Rivers	44.39	45.28	2.00	83.35	85.85	3.00	0.53	0.53
National	3750.47	3874.74	3.31	4814.54	5008.44	4.03	0.78	0.77

Cotton

Cotton has been a major cash crop in Africa, especially in Nigeria. Cotton production in Nigeria is concentrated in the savanna belts of the country, which is the Northern and Southwestern Nigeria such as Kano, Kaduna, Oyo, Ondo, Kwara, Katsina, Jigawa, Ogun, Kebbi, Sokoto and Zamfara States. The land area put to cultivation of cotton in 2017 was 555,800 hectares as against the 549,390 hectares used in 2016. This shows that there was a marginal decrease of 1.2% in the total area devoted to the production of the crop in 2017. The forecast showed that the total crop output for cotton in 2017 was 215,300 metric tons as against the 206,100 metric tons obtained in 2016 representing an increase of 4.5%. The national average yield for cotton in 2017 was 0.4 tons per hectare.

Table 10 k Land area estimate and yield production forecast for **COTTON**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	13.74	13.44	-2.20	42.23	45.26	7.17	0.33	0.30
Yobe	11.11	11.66	4.95	31.34	32.56	3.89	0.35	0.36
Bauchi	26.50	28.73	8.43	96.90	96.57	-0.34	0.27	0.30
Gombe	10.78	11.41	5.84	33.78	32.50	-3.78	0.32	0.35
Adamawa	9.33	10.04	7.62	22.44	22.08	-1.62	0.42	0.45
Taraba	7.09	7.53	6.15	21.61	22.50	4.16	0.33	0.33
Jigawa	11.53	11.82	2.49	35.69	35.00	-1.91	0.32	0.34
Katsina	26.18	26.94	2.91	59.98	62.77	4.65	0.44	0.43
Sokoto	13.67	14.27	4.40	38.23	38.11	-0.33	0.36	0.37
Kebbi	7.51	8.16	8.62	39.46	39.16	-0.76	0.19	0.21
Zamfara	26.85	27.52	2.51	37.48	37.62	0.38	0.72	0.73
Kano	25.24	26.18	3.70	43.72	44.32	1.37	0.58	0.59
Kaduna	3.22	3.29	2.18	8.80	8.74	-0.77	0.37	0.38
Plateau	5.75	6.15	7.01	9.62	9.50	-1.22	0.60	0.65
Nassarawa	na	na	na	na	na	na	na	na
FCT	7.60	8.17	7.56	28.10	29.18	3.84	0.27	0.28
Niger	na	na	na	na	na	na	na	na
Kwara	na	na	na	na	na	na	na	na
Kogi	na	na	na	na	na	na	na	na
Benue	na	na	na	na	na	na	na	na
Osun	na	na	na	na	na	na	na	na
Oyo	na	na	na	na	na	na	na	na
Ekiti	na	na	na	na	na	na	na	na
Ondo	na	na	na	na	na	na	na	na
Ogun	na	na	na	na	na	na	na	na
Lagos	na	na	na	na	na	na	na	na
Anambra	na	na	na	na	na	na	na	na
Enugu	na	na	na	na	na	na	na	na
Ebonyi	na	na	na	na	na	na	na	na
Abia	na	na	na	na	na	na	na	na
Imo	na	na	na	na	na	na	na	na
Akwa Ibom	na	na	na	na	na	na	na	na
Bayelsa	na	na	na	na	na	na	na	na
C/Rivers	na	na	na	na	na	na	na	na
Delta	na	na	na	na	na	na	na	na
Edo	na	na	na	na	na	na	na	na
Rivers	na	na	na	na	na	na	na	na
National	206.11	215.32	4.47	549.39	555.88	1.18	0.38	0.39

Soybean

Soybean is a legume, produced in most parts of the country. It is an important source of high quality protein and oil. The crop has an average protein content of about 40% and oil content of 20%. The total area devoted to the cultivation of soybean in 2017 was 993,950 hectares as against the 936,890 hectares used in the 2016 cropping season. This shows an increase of about 6.1% over the area devoted to the cultivation of the crop in 2016. The survey showed that a total output of 993,950 metric tons was recorded for the crop in 2017 as against the 936,890 metric tons recorded in 2016. This implies that there was a significant increase in the crop output of about 6.1% in 2017 as compared with the output forecast for 2016. The average yield for the crop in 2017 was 0.9 tons per hectare.

	Table 10 L: Land area estimate and yield production forecast for Soybean							
State	**Production** ('000MT)			**Land** ('000ha)			**Yield**	
	2016	**2017**	**% Change**	**2016**	**2017**	**% Change**	**2016**	**2017**
Borno	n.a	n.a	n.a	0.00	0.00	n.a	n.a	n.a
Yobe	n.a	n.a	n.a	0.00	0.00	n.a	n.a	n.a
Bauchi	22.31	23.42	4.97	34.03	34.95	2.70	0.66	22.31
Gombe	50.80	52.59	3.52	58.98	60.88	3.22	0.86	50.80
Adamawa	43.31	44.31	2.30	48.51	50.30	3.70	0.89	43.31
Taraba	51.33	52.44	2.17	54.02	57.37	6.20	0.95	51.33
Jigawa	34.45	35.36	2.64	42.73	43.97	2.90	0.81	34.45
Katsina	28.36	29.10	2.63	38.88	39.73	2.20	0.73	28.36
Sokoto	14.87	15.66	5.35	27.59	28.14	1.99	0.54	14.87
Kebbi	31.09	32.64	4.99	43.08	43.18	0.23	0.72	31.09
Zamfara	22.86	23.97	4.86	42.12	43.50	3.26	0.54	22.86
Kano	67.13	70.24	4.62	70.14	71.53	1.99	0.96	67.13
Kaduna	85.71	94.63	10.40	92.23	100.44	8.90	0.93	85.71
Plateau	20.59	23.42	13.73	43.57	45.87	5.29	0.47	20.59
Nassarawa	27.88	29.17	4.62	36.55	38.06	4.13	0.76	27.88
FCT	31.74	34.37	8.29	57.67	60.61	5.10	0.55	31.74
Niger	31.42	34.87	10.98	47.32	49.83	5.29	0.66	31.42
Kwara	44.21	47.59	7.65	49.70	53.11	6.86	0.89	44.21
Kogi	30.46	30.98	1.71	54.05	56.69	4.89	0.56	30.46
Benue	202.42	219.26	8.32	80.21	87.95	9.66	2.52	202.42
Osun	18.33	19.15	4.47	33.33	34.50	3.49	0.55	18.33
Oyo	20.35	21.03	3.33	34.01	35.00	2.89	0.60	20.35
Ekiti	8.79	8.94	1.67	24.28	24.74	1.89	0.36	8.79
Ondo	30.45	31.26	2.65	27.64	28.78	4.10	1.10	30.45
Ogun	17.16	18.65	8.63	23.93	24.51	2.40	0.72	17.16
Lagos	0.85	0.91	6.29	6.00	6.03	0.42	0.14	0.85
Anambra	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Enugu	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Ebonyi	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Abia	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Imo	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Akwa Ibom	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Bayelsa	n.a	n.a	n.a	na	na	n.a	n.a	n.a
C/Rivers	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Delta	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Edo	n.a	n.a	n.a	na	na	n.a	n.a	n.a
Rivers	n.a	n.a	n.a	na	na	n.a	n.a	n.a
National	936.89	993.95	6.09	1070.58	1119.66	4.58	0.88	936.89

Benniseed

Benniseed is an important oil crop cultivated mostly in the North Central, North West and North East zones. The major producing States include Nasarawa, Benue, Kogi, Platue and Federal Capital Territory. The estimated land area put to the cultivation of the crop in 2017 was 1,012,700 hectares as against the 928,500 hectares cultivated in 2016. This shows that there was an increase of 6.5% in the land area used in 2017 as compared with that of 2016. The forecast showed that 632,300 metric tons was cultivated in 2017 compared with the 593,600 metric tons cultivated in 2016. This shows that there was an increase in output of about 6.5% over that of 2016. The survey showed that the average national yield for the crop was 0.6 tons per hectare.

Table 10 M: Land area estimate and yield production forecast for **BENNISEED**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	5.94	6.91	16.32	14.74	15.21	3.17	0.40	0.45
Yobe	3.01	3.15	4.42	20.93	26.38	26.07	0.14	0.12
Bauchi	8.90	9.38	5.41	18.29	19.78	8.10	0.49	0.47
Gombe	7.07	7.94	12.36	22.72	25.85	13.75	0.31	0.31
Adamawa	10.60	12.47	17.70	17.99	17.33	-3.67	0.59	0.72
Taraba	39.06	40.77	4.37	53.67	56.92	6.05	0.73	0.72
Jigawa	7.80	8.73	11.93	18.83	17.28	-8.26	0.41	0.51
Katsina	13.07	15.27	16.81	42.80	47.94	12.02	0.31	0.32
Sokoto	12.30	15.03	22.15	16.32	17.35	6.31	0.75	0.87
Kebbi	10.60	11.84	11.71	21.40	25.33	18.35	0.50	0.47
Zamfara	23.43	23.53	0.42	37.53	38.61	2.87	0.62	0.61
Kano	27.14	28.61	5.40	46.38	47.18	1.72	0.59	0.61
Kaduna	32.71	36.25	10.82	35.23	38.73	9.95	0.93	0.94
Plateau	51.01	55.01	7.84	58.67	68.37	16.54	0.87	0.80
Nassarawa	70.12	74.45	6.18	85.88	89.90	4.68	0.82	0.83
FCT	48.71	52.85	8.49	63.88	81.23	27.16	0.76	0.65
Niger	15.81	16.29	3.08	36.19	42.68	17.95	0.44	0.38
Kwara	17.40	17.14	-1.51	20.66	21.22	2.73	0.84	0.81
Kogi	56.55	58.73	3.86	82.45	89.41	8.44	0.69	0.66
Benue	61.37	62.01	1.04	84.26	84.78	0.62	0.73	0.73
Osun	6.04	6.31	4.41	10.00	10.75	7.50	0.60	0.59
Oyo	21.05	22.17	5.31	27.81	29.13	4.75	0.76	0.76
Ekiti	2.63	3.06	16.67	12.32	13.87	12.51	0.21	0.22
Ondo	5.22	6.21	18.84	9.43	9.49	0.57	0.55	0.65
Ogun	2.29	2.42	5.25	9.80	11.20	14.29	0.23	0.22
Lagos	2.73	2.86	4.84	4.58	4.93	7.66	0.60	0.58
Anambra	15.00	15.20	1.33	15.77	16.82	6.66	0.95	0.90
Enugu	7.19	8.26	14.87	18.74	20.75	10.73	0.38	0.40
Ebonyi	8.83	9.46	7.15	21.19	24.34	14.84	0.42	0.39
Abia	na	na	na	na	na	na	na	na
Imo	na	na	na	na	na	na	na	na
Akwa Ibom	na	na	na	na	na	na	na	na
Bayelsa	na	na	na	na	na	na	na	na
C/Rivers	na	na	na	na	na	na	na	na
Delta	na	na	na	na	na	na	na	na
Edo	na	na	na	na	na	na	na	na
Rivers	na	na	na	na	na	na	na	na
National	593.60	632.32	6.52	928.47	1012.73	9.1	0.64	0.62

Vegetables

Vegetables are crops produced for their leaves, stems and roots. Three major vegetables were surveyed in 2017, namely tomato, onion and okra.

Tomato

Tomato is an important vegetable produced in all the States of the country. The total land area devoted to the production of tomato in 2017 was 701,300 hectares as against the 634,660 hectares used in 2016 indicating 10.5% increase. The forecast also shows that a total output of 2,809,230 metric tons was recorded in 2017 over the 2,632,500 metric tons recorded in 2016 showing a significant increase of 6.7%. The average national yield for the crop was 4.0 tons per hectare.

Table 10 N: Land area estimate and yield production forecast for **TOMATO**								
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	199.87	215.86	8.00	29.62	32.58	10.00	6.75	6.63
Yobe	98.52	104.73	6.30	17.88	19.25	7.70	5.51	5.44
Bauchi	171.59	177.59	3.49	32.22	33.85	5.06	5.33	5.25
Gombe	176.65	188.81	6.88	30.57	32.62	6.70	5.78	5.79
Adamawa	91.35	98.16	7.45	30.91	32.53	5.22	2.95	3.02
Taraba	110.02	120.87	9.87	32.67	35.18	7.70	3.37	3.44
Jigawa	68.78	73.34	6.63	27.54	28.61	3.87	2.50	2.56
Katsina	98.39	106.05	7.79	29.96	31.07	3.70	3.28	3.41
Sokoto	154.10	161.48	4.79	16.54	16.77	1.34	9.32	9.63
Kebbi	140.91	154.02	9.30	52.51	58.49	11.39	2.68	2.63
Zamfara	134.30	142.38	6.01	26.02	30.66	17.82	5.16	4.64
Kano	136.87	145.84	6.55	40.74	48.76	19.71	3.36	2.99
Kaduna	164.66	178.31	8.29	30.36	37.34	22.98	5.42	4.78
Plateau	50.26	54.94	9.30	12.68	13.87	9.42	3.96	3.96
Nassarawa	94.82	100.80	6.30	27.53	38.20	38.77	3.44	2.64
FCT	54.09	58.84	8.78	17.08	19.57	14.60	3.17	3.01
Niger	116.68	120.57	3.33	14.00	15.38	9.89	8.34	7.84
Kwara	47.08	50.86	8.03	18.68	21.58	15.57	2.52	2.36
Kogi	73.34	80.61	9.91	15.35	16.81	9.54	4.78	4.79
Benue	70.13	72.98	4.05	14.22	15.34	7.82	4.93	4.76
Osun	31.79	33.64	5.79	4.77	4.92	3.11	6.66	6.83
Oyo	34.05	36.36	6.79	8.44	8.57	1.50	4.03	4.24
Ekiti	22.48	23.87	6.22	4.47	4.77	6.78	5.03	5.00
Ondo	34.86	35.64	2.25	8.58	9.82	14.44	4.06	3.63
Ogun	85.30	89.94	5.44	13.11	13.64	4.02	6.51	6.60
Lagos	27.29	29.96	9.79	2.91	3.03	4.39	9.39	9.87
Anambra	12.44	12.92	3.79	6.44	7.36	14.26	1.93	1.75
Enugu	14.07	14.78	5.03	10.36	12.03	16.20	1.36	1.23
Ebonyi	49.19	51.68	5.06	25.78	32.91	27.67	1.91	1.57
Abia	10.79	11.27	4.48	6.48	6.71	3.58	1.67	1.68
Imo	11.40	11.79	3.45	2.96	1.71	-42.19	3.85	6.88
Akwa Ibom	na	na	na	na	na	na	na	na
Bayelsa	na	na	na	na	na	na	na	na
C/Rivers	na	na	na	4.05	1.94	-52.05	na	na
Delta	25.51	27.38	7.34	7.81	4.87	-37.56	3.27	5.62
Edo	20.92	22.99	9.86	11.44	10.55	-7.78	1.83	2.18
Rivers	na	na	na	na	na	na	na	na
National	2632.52	2809.23	6.71	634.66	701.30	10.50	4.15	4.01

Onion

Onion is mostly cultivated in the northern states of Nigeria. The land area put to the cultivation of onion in 2017 was 550,400 hectares while in 2016, 493,600 hectares was devoted for the cultivation of the crop. The production of onion increased in 2017 by 7.6%. The national average yield for the crop in 2017 was 2.6 tons per hectare.

	Table 10 P: Land area estimate and yield production forecast for ONION							
State	Production ('000MT)			Land ('000ha)			Yield	
	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	68.7	70.3	2.3	16.0	17.9	11.9	4.3	3.9
Yobe	83.0	93.9	13.2	48.3	49.3	2.1	1.7	1.9
Bauchi	85.0	91.4	7.5	43.0	42.3	-1.6	2.0	2.2
Gombe	82.9	86.9	4.8	47.1	47.6	1.1	1.8	1.8
Adamawa	122.7	139.8	14.0	46.1	57.7	25.4	2.7	2.4
Taraba	64.0	68.7	7.2	12.5	12.6	0.5	5.1	5.4
Jigawa	67.8	79.2	16.8	31.1	34.7	11.6	2.2	2.3
Katsina	81.5	94.8	16.4	35.9	38.7	7.9	2.3	2.5
Sokoto	165.4	169.3	2.3	22.7	30.3	33.6	7.3	5.6
Kebbi	119.5	122.3	2.4	40.7	43.4	6.5	2.9	2.8
Zamfara	102.5	111.7	9.1	21.0	26.7	27.1	4.9	4.2
Kano	90.4	99.7	10.3	48.9	50.8	3.8	1.8	2.0
Kaduna	96.1	99.0	2.9	24.8	30.8	24.5	3.9	3.2
Plateau	45.2	47.8	5.8	30.0	37.6	25.4	1.5	1.3
Nassarawa	n.a	n.a	n.a	na	na	na	na	na
FCT	n.a	n.a	n.a	na	na	na	na	na
Niger	n.a	n.a	n.a	na	na	na	na	na
Kwara	n.a	n.a	n.a	na	na	na	na	na
Kogi	n.a	n.a	n.a	na	na	na	na	na
Benue	49.9	50.1	0.4	21.7	26.1	20.0	2.3	1.9
Osun	n.a	n.a	n.a	na	na	na	na	na
Oyo	n.a	n.a	n.a	na	na	na	na	na
Ekiti	n.a	n.a	n.a	na	na	na	na	na
Ondo	n.a	n.a	n.a	na	na	na	na	na
Ogun	n.a	n.a	n.a	na	na	na	na	na
Lagos	7.8	8.1	4.1	3.8	3.9	2.4	2.0	2.1
Anambra	n.a	n.a	n.a	na	na	na	na	na
Enugu	n.a	n.a	n.a	na	na	na	na	na
Ebonyi	n.a	n.a	n.a	na	na	na	na	na
Abia	n.a	n.a	n.a	na	na	na	na	na
Imo	n.a	n.a	n.a	na	na	na	na	na
Akwa Ibom	n.a	n.a	n.a	na	na	na	na	na
Bayelsa	n.a	n.a	n.a	na	na	na	na	na
C/Rivers	n.a	n.a	n.a	na	na	na	na	na
Delta	n.a	n.a	n.a	na	na	na	na	na
Edo	n.a	n.a	n.a	na	na	na	na	na
Rivers	n.a	n.a	n.a	na	na	na	na	na
National	**1332.3**	**1432.9**	**7.6**	**493.6**	**550.4**	**11.5**	**2.7**	**2.6**

Okro

Okro is cultivated in all the States of the country. The land area put to the cultivation of okra in 2017 was 1,301,600 hectares compared with the 1,338,600 hectares in 2016 indicating a decrease of -2.8%. A total crop output of 1,561,900 metric tons was recorded in 2017 as against the 1,461,600 metric tons recorded in 2016. This shows that there was an increase of 6.9% output obtained over that of 2016. The national average yield for the crop in 2017 was 1.2 tons per hectare.

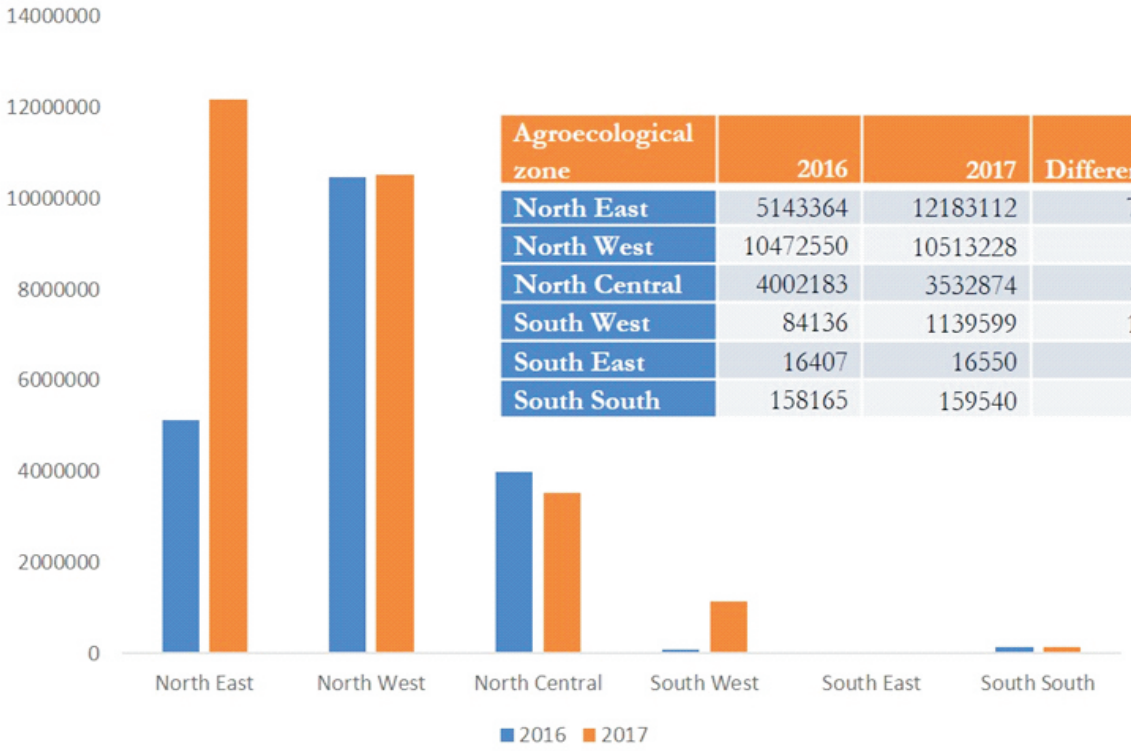
	Okro							
	Production			Land			Yield	
State	2016	2017	% Change	2016	2017	% Change	2016	2017
Borno	25.2	28.4	12.8	27.2	33.2	22.1	0.9	0.9
Yobe	19.1	22.6	18.3	24.4	30.1	23.6	0.8	0.7
Bauchi	20.4	23.6	15.9	14.2	17.7	24.8	1.4	1.3
Gombe	23.2	25.3	9.0	27.7	33.2	20.1	0.8	0.8
Adamawa	14.1	17.3	22.7	24.3	31.3	28.6	0.6	0.6
Taraba	38.7	35.0	-9.7	17.4	19.9	14.2	2.2	1.8
Jigawa	16.6	20.1	20.7	14.5	17.5	20.4	1.1	1.1
Katsina	15.4	17.1	11.5	12.7	14.2	11.6	1.2	1.2
Sokoto	26.8	27.6	3.0	14.4	14.7	2.1	1.9	1.9
Kebbi	39.5	40.9	3.6	31.0	36.8	18.8	1.3	1.1
Zamfara	36.0	39.4	9.6	17.0	21.0	22.9	2.1	1.9
Kano	18.5	19.7	6.2	46.1	48.5	5.1	0.4	0.4
Kaduna	42.0	44.4	5.7	11.7	14.2	21.2	3.6	3.1
Plateau	50.3	52.3	4.0	25.4	30.8	21.2	2.0	1.7
Nassarawa	25.7	28.2	9.9	18.9	22.3	17.8	1.4	1.3
FCT	38.5	39.2	1.8	46.3	51.8	12.0	0.8	0.8
Niger	11.0	13.5	21.9	16.4	8.8	-46.6	0.7	1.5
Kwara	64.8	74.2	14.5	9.1	7.3	-20.2	7.1	10.2
Kogi	77.2	78.2	1.3	33.0	38.6	17.0	2.3	2.0
Benue	54.6	55.0	0.6	33.2	36.8	11.0	1.6	1.5
Osun	18.5	21.8	17.8	34.6	42.0	21.7	0.5	0.5
Oyo	37.4	37.1	-0.9	10.1	6.6	-35.2	3.7	5.7
Ekiti	13.7	13.7	-0.4	19.5	23.5	20.4	0.7	0.6
Ondo	10.4	11.0	5.9	33.4	40.8	22.1	0.3	0.3
Ogun	28.6	28.0	-2.0	15.0	13.5	-10.1	1.9	2.1
Lagos	54.2	60.0	10.6	11.5	10.7	-6.3	4.7	5.6
Anambra	17.9	19.1	6.7	20.4	24.5	20.2	0.9	0.8
Enugu	18.7	20.4	9.3	18.0	20.9	16.0	1.0	1.0
Ebonyi	16.9	15.1	-10.6	11.5	11.1	-3.0	1.5	1.4
Abia	19.5	18.1	-7.3	14.0	14.7	5.3	1.4	1.2
Imo	26.3	26.0	-1.1	52.9	51.1	-3.4	0.5	0.5
Akwa Ibom	94.2	103.7	10.1	127.1	114.6	-9.8	0.7	0.9
Bayelsa	60.1	62.5	4.0	101.4	104.7	3.2	0.6	0.6
C/Rivers	100.1	100.5	0.4	106.6	109.9	3.0	0.9	0.9
Delta	90.6	100.0	10.4	53.1	42.1	-20.7	1.7	2.4
Edo	85.2	99.8	17.2	57.9	35.7	-38.4	1.5	2.8
Rivers	111.6	123.2	10.4	186.6	106.6	-42.9	0.6	1.2
National	**1461.6**	**1561.9**	**6.9**	**1338.6**	**1301.6**		**1.1**	**1.2**

11.0 LIVESTOCK PRODUCTION IN NIGERIA

Livestock, with its enormous contribution to livelihoods of Nigerians, has not been given its rightful position in terms of its contribution to trades and exports. The principal reason for this disposition of livestock industry is attributable to the inability of the subsector to transit from traditional to modern production methods. Similarly, the inability to accurately estimate the populations of livestock and poultry in Nigeria has made planning development programmes in the subsector a herculean task. With these and other challenges facing animal agriculture in Nigeria, the livestock and poultryfarmers have been resilient in pursuing their ventures. The 2017 survey gathered and analysed data to assist in better planning and management of the subsector for increased overall agricultural development.

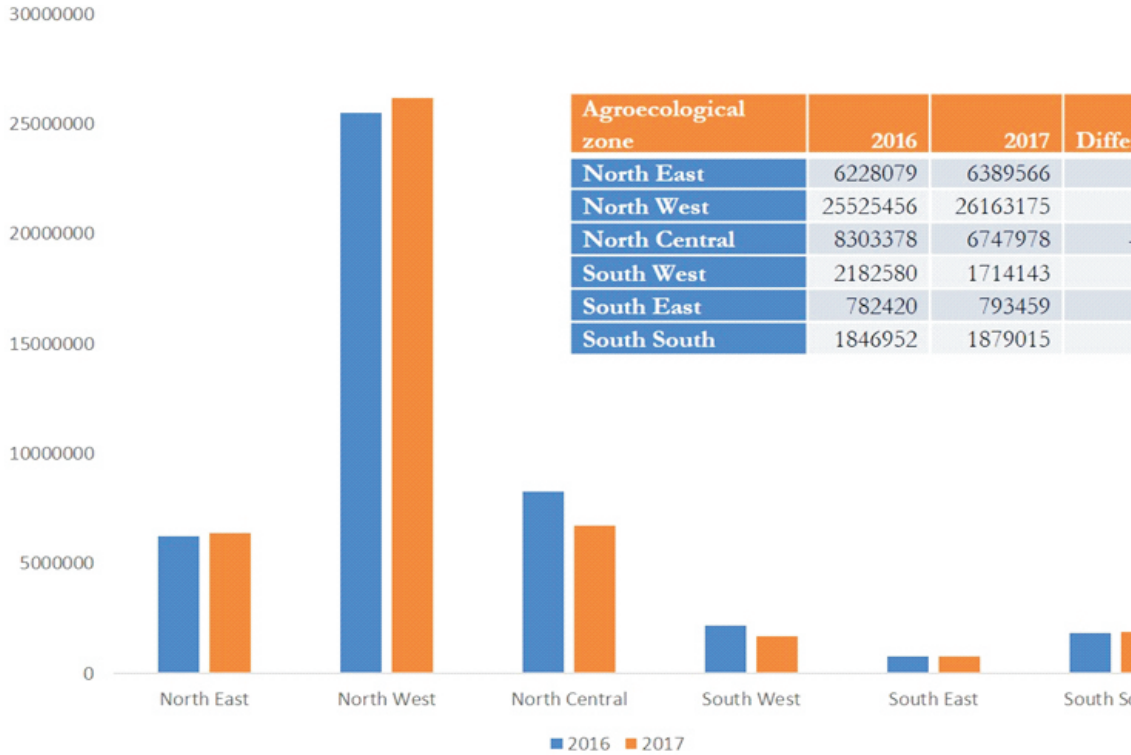
11.1 Livestock Population

This section presents the livestock population and commercial stocks in Nigeria in 2017. Figures11.1 to 11.4 show the population of cattle, sheep, goats and pigs in relation to the six agroecological zones of Nigeria. The total population of the stocks as at 2017 were 27,544,903; 43,687,336; 77,988,136 and 7,348,207 for cattle, sheep, goats and pigs, respectively. The largest population (12,183,112) of cattle was found in Northeast of Nigeria (Figure 11.1). The largest population of sheep (26,163,175) in 2017 was found in Northwest of Nigeria (Figure 11.2). Also, Northwest had the largest population of goats (27,274,225) in 2017 (Figure 11.3). The largest population of pigs (3,459,245) was found in North-Central agroecological zones of Nigeria (Figure 11.4).



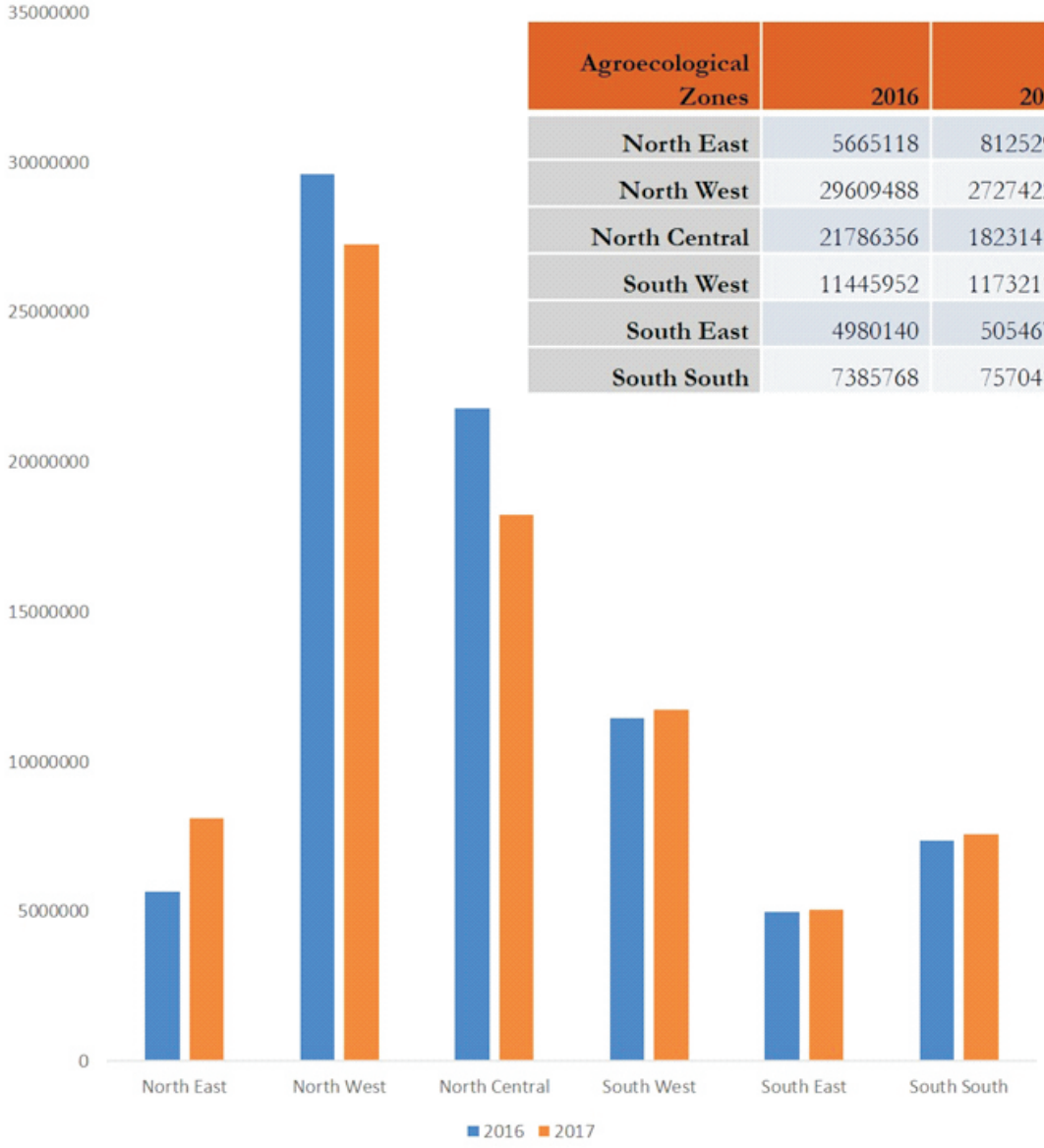
Agroecological zone	2016	2017	Difference
North East	5143364	12183112	7039748
North West	10472550	10513228	40678
North Central	4002183	3532874	-469309
South West	84136	1139599	1055463
South East	16407	16550	143
South South	158165	159540	1375

Figure 11.1: Cattle population in Nigeria (2016 and 2017)
Source: Federal Department of Animal Production
and Husbandry Services, FMARD, Abuja



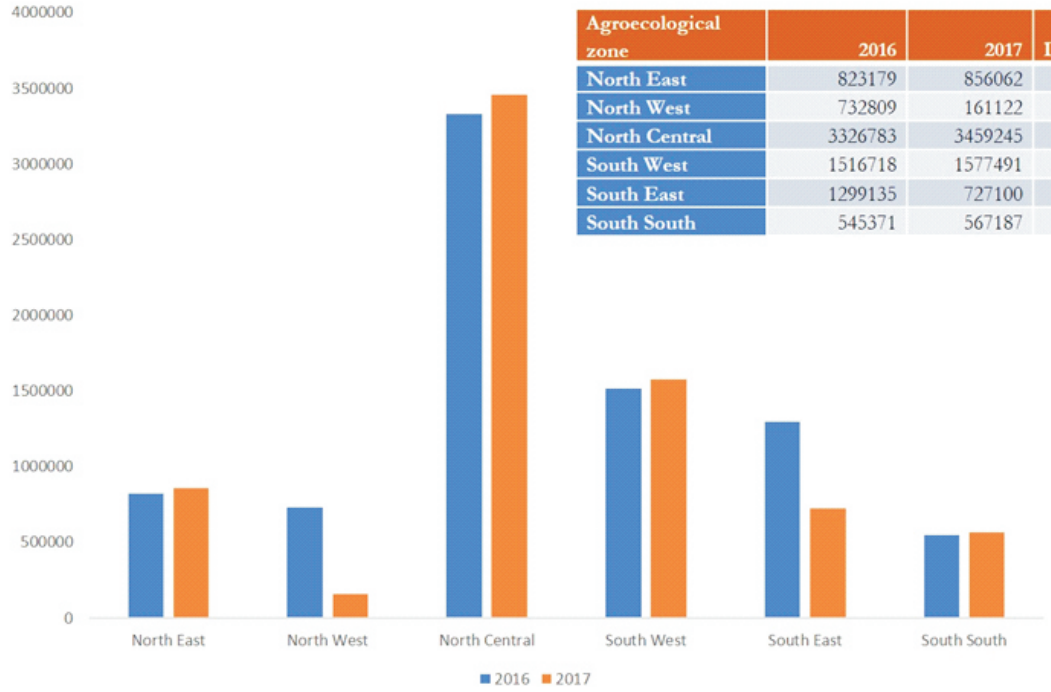
Agroecological zone	2016	2017	Difference
North East	6228079	6389566	161487
North West	25525456	26163175	637719
North Central	8303378	6747978	-1555400
South West	2182580	1714143	-468437
South East	782420	793459	11039
South South	1846952	1879015	32063

Figure 11.2: Sheep population in Nigeria (2016 and 2017)
Source: Federal Department of Animal Production
and Husbandry Services, FMARD, Abuja



Agroecological Zones	2016	2017	Difference
North East	5665118	8125291	2460173
North West	29609488	27274225	-2335263
North Central	21786356	18231418	-3554938
South West	11445952	11732112	286160
South East	4980140	5054679	74539
South South	7385768	7570411	184643

Figure 11.3: Goat population in Nigeria (2016 and 2017)
Source: Federal Department of Animal Production
and Husbandry Services, FMARD, Abuja



Agroecological zone	2016	2017	Difference
North East	823179	856062	32883
North West	732809	161122	-571687
North Central	3326783	3459245	132462
South West	1516718	1577491	60773
South East	1299135	727100	-572035
South South	545371	567187	21816

Figure 11.4: Pig population in Nigeria (2016 and 2017)
Source: Federal Department of Animal Production
and Husbandry Services, FMARD, Abuja

11.2 LIVESTOCK PESTS AND DISEASES

11.2.1 CATTLE

Tables11.2a and b show pests and diseases of cattle as observed in 2017. Contagious Bovine Pleuropneumonia was reported in seven (7) States- Adamawa, Bauchi and Gombe, in the Northeast; Kaduna and Kebbi in Northwest; and Kwara and Nasarawa in the North-Central. Foot and mouth disease (FMD), a severe and highly contagious viral disease of cattle and swine was also reported among cattle in many States.. It also affects sheep and goats. In 2017, it affected cattle in Adamawa, Gombe, Kwara and Osun. Other diseases that affected cattle in 2017 were brucellosis and anthrax in Plateau State; *kirchi* in Kwara and Plateau states. Some parasites also affected cattle during the year, including liver fluke, worms, ticks and other helminths. Mange, a skin disease caused by several species of tiny mites, was reported to have affected some cattle in Ondo State.

11.2.2 SHEEP, GOATS AND POULTRY

Pests and diseases that affected sheep, goats and poultry are presented in Table 11.3. *Peste des petitsruminants* (PPR) affected sheep and goats in all the agroecological zones. The disease was reported in sheep and goats in Adamawa, Bauchi, Gombe, Kaduna, Kebbi, Nasarawa, Niger, Plateau, Ondo, Osun, and Imo states. Other pests and diseases that affected sheep and goats were helminth worms and mange.

Newcastle disease (NCD) affected poultry in nearly all the agroecological zones, being reported in Adamawa (Northeast), Kaduna and Kebbi (Northwest), Kwara and Niger (North-Central), Ondo and Osun (Southwest) and Rivers (South-South). Other diseases that affected poultry were gumboro (infectious bursal diseases), coccidiosis and chicken pox. A new strain of avian influenza, popularly known as bird flu reoccurred in January. The outbreak of this highly pathogenic avian influenza (H5N1), initially confirmed at a single farm on 8 February 2017, spread to 26 states and the FCT, with over 3.5 million birds affected in more than 130 farms across the country. The reported control measures included culling, disinfection and safe disposal of carcasses.

TABLE 11.2a: LIVESTOCK PEST AND DISEASE (CATTLE)

LIVESTOCK PEST AND DISEASES								
CATTLE								
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**	**REMARKS**
Northeast								
Adamawa	CBPP; FMD; Helminths; PIROP	Statewide	1.4 million	785,625 656,217 85,621 91,367		562,561	82,561	
Bauchi	CBPP	Alkaleri		15		90		15 affected animals died
Gombe	FMD; CBPP	Dukku; Dukku Balanga		63 245 80		48 58,392 16,080		8 63 and 20 animals d ied because of the disease.
Northwest								
Kaduna	CBPP	Kafanchan		5000		3500		25% of the affected animals died
Kebbi	CBPP Worms	Birnin Kebbi Birnin Kebbi	2700 1650	50 800		2200 1650	50	40% of the affected animals died
North-Central								
Kwara	FMD CBPP Kirchi	Ilorin Lafiaji; Kaima and Pategi; Illorin	430 4700 198			430 4700 196		

Nasarawa	CBPP	All over the state						
Niger	Helminthiasis Liver fluke Tryoernosomiasis	Agaie Bida Kotangora	8500 17000 31000					
Plateau	Brucellosis Anthrax CBPP Kirchi	Mikang Kanam Kanke Bassa LGA And Lantang	17 40 58 34			40		

TABLE 11.2b: LIVESTOCK PEST AND DISEASE (CATTLE)

LIVESTOCK PEST AND DISEASES								
CATTLE								
	Disease or Pest	**Location of incidence**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**	**REMARKS**
Southwest								
Ondo	Mange	Akure	50					
Osun	FMD	Ede	180	Ede	180	250		18 cattle dead
South-South								
Akwa Ibom	Ticks	Uyo	200					
Rivers	Foot rot		200	50				

TABLE 11.3: LIVESTOCK PEST AND DISEASE (SHEEP GOATS AND POULTRY)

LIVESTOCK PEST AND DISEASES							
SHEEP, GOAT AND POULTRY							
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**
Northeast							
Adamawa	**Sheep and goat**						
	PPR	Statewide	1.4	46,051		8,000,000	26,000
	Helminth	Statewide	1.2	65,161		-	-
	Ectoparasite	Statewide	1.8	87,215		-	-
	Poultry						
	NCD	Statewide	3,000,000	82,651		65,216	27,600
	ICD	Statewide	1,300,000	72,520		42,562	13,000
	FP	Statewide	1,200,000	52,432		26.561	14,621
Bauchi	**Sheep and goat**						
	PPR	Ningi		1350			
	Poultry						
	Pox	Misau		332			
	HPI	Toro		250,000			
Gombe	**Sheep and goat**						
	PPR	Akko	-	2175		-	--
	PPR	Balanga	-	867		-	--
	PPR	Dukku	-	195		-	--
	Poultry						
	Gumboro	Gombe	-	60,13		40,084	-
	Gumboro	Akko	-	16,03		10.689	-
	Cocsidiosis	Gombe	-	47,55		-	-

LIVESTOCK PESTS AND DISEASES							
SHEEP, GOAT AND POULTRY							
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**
Kaduna	**Sheep and goat**						
	PPR	Zaria		-	-	593	-
	Poultry						
	NCD	Kaduna		24,950	70	-	16600
Kebbi	**Sheep and goat**						
	PPR	Kebbi	950	70		950	70
	Worm	Kebbi	3690	750		3,690	-
	Poultry						
	NCD	Kebbi	2,000	2,750		18,000	2,350
	Gumboro	Kebbi	3,600	5,600		3,000	5,000
	Avian Influenza	Kebbi	3,600	3,600		-	3,600
Kwara	**Sheep and goat**						
	Mange	Afo edu	3,100	2,700		3,050	50
	Mange	Ilorin	4,100	2,800		2,800	-
	Poultry						
	Pox	Ilorin	8,000	4.300		8,000	150
	Pox	Offa	9,510	9,510		9,510	-
	NCD	Oke oyi	7,500	7,500		7,500	-
Niger	**Sheep and goat**						
	PPR	Minna	-	2,100		3,500	-
	Poultry						
	NCD	Minna	-	25,000		49,500	-
	Gumboro	Suleja	-	18,500		26,000	-
Plateau	**Sheep and goat**						
	PPR	Bosso	-	18		Treated	
		Langtang North	-	60			
		Bokkos	-	135			
		Jos north	-	10			
		Kanke	-	34			

LIVESTOCK PEST AND DISEASES							
SHEEP, GOAT AND POULTRY							
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**
Southwest							
Ogun	Poultry Avian influenza	Ifo, sagamu, ota	93,360	85,360	-	85,360	-
Ondo	**Sheep and goat**						
	PPR	Akure	-	100		-	
	Poultry						
	NCD	Akure	-	10,000		50,000	
	Gumboro	Akure	-	500		50,000	
Osun	**Sheep and goat**						
	FMD	Ede	-	50		70	
	PPR	Ede	-	30		34	
	PPR	Osogbo	-	15		25	
	Poultry						
	NCD	Ikerun	-	800		5,000	
	Gumboro	Ede	-	4,000		4,500	
	Coccidiosis	Ilesha	-	1,000		2,000	

LIVESTOCK PEST AND DISEASES								
SHEEP, GOAT AND POULTRY								
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**	**REMARKS**
Southeast								
Enugu	**Sheep and goat** - - **Poultry** - -	 - - - -		 - - - -	 - - - -	 - - - -	 - - -	Lack of fund to undertake data collection by enumerators in the state ADP
Imo	**Sheep and goat** PPR **Poultry** Avian influenza	 All over the state Okigwe	 - 10,000	 - 7,000	 - -	 - -	 - 10,000	

LIVESTOCK PEST AND DISEASES							
SHEEP, GOAT AND POULTRY							
	Disease or Pest	**Location of incidences**	**Total stock of Animal**	**Number of Animal Affected**	**%**	**No Vaccinated or Treated**	**Number Culled due to infection**
South-South							
Akwa Ibom	**Sheep and goat**						
	PPR	-	15	7		7	
	Poultry						
	Avian influenza	Uyo	2,000	700		2,000	
Rivers	**Sheep and goat**						
	Helminths	-	250,000	60,000		10,000	-
	Mange	-	250,000	50,000		30,000	-
	Poultry						
	Coccidiosis	-	300,000	160,000		100,000	-
	NCD	-	200,000	70,000		150,000	10,000
	Pox	-	206,000	70,000		50,000	10,000

11.3 LIVESTOCK INPUTS

Livestock production input data is as presented in 11.4. In the Northeast zone, Adamawa and Gombe States procured and distributed doses of CBPP vaccines and anti-rabies to farmers in 2016 but there was no information on similar procurement and distribution in 2017. In Bauchi State, feed ingredients- cotton seed cakes, wheat offal and potash were procured and distributed to livestock farmers. Some states in the south invested in poultry inputs, like day old chicks, feeds and battery cages. Cross River State in the South-South invested in construction of poultry pens in 2017.

LIVESTOCK TABLE 11.4: LIVESTOCK PRODUCTION INPUTS FOR 2016 AND 2017

State	Type of inputs	Quantity procured		Quantity Distributed	
		2016	2017	2016	2017
Northeast					
Adamawa	CBPP Vaccine Anti-rabies	2,000 doses 1,000 doses		2,000 doses 1,000 doses	
Bauchi	Cotton seed cake Wheat offal Potash	360 bags 480 bags 120 bags	420 bags 525 bags 157.5 bags	360 bags 480 bags 120 bags	420 bags 525 bags 157.5 bags
Gombe	CBPP Vaccine Anti-rabies vaccine	225,569 doses 1,000 doses		225,569 doses 1,000 doses	
Southwest					
Ogun	CRD Vaccine	20 doses		20 doses	
Oyo	Day old chicks Yearling bulls	1500 100		1500 100	
Southeast					
Abia	Day old chicks Feeds		1,000,000 32.8 tons		975,000 32.8 tons
Ebonyi	Day old chicks		3,000,000		908,500
South-South					
Cross River	Housing (pens) Battery cages Day old chicks Feeds	300 units 1,000 units 50,000 17,280 bags		300 units 1,000 units 50,000 17,280 bags	

11.5 FISHERIES AND AQUACULTURE PRODUCTION IN NIGERIA

Nigeria's total annual fish demand is estimated at 2.7 million metric tonnes. Only 30% of this demand is met domestically, resulting in an annual expenditure of N125bn on fish imports. Nigeria's per capita fish consumption is 11kg which is significantly lower than the global average of 21kg and just less than the estimated 13.5kg for Cote d'lvoire. Given the fish supply gap domestically as well as across the West African sub-region, Nigeria is capable of becoming not only self-reliant for its aquaculture needs but also serving as an export hub for other countries in the sub-region. The slowdown in the rate of expansion mirrors the macro challenges for the national economy.

11.5.1 AQUACULTURE AND ARTISANAL FISH PRODUCTION

Aquaculture and artisanal fish production in 2017 was compared with that of 2016 in Table 11.5.1. The production in 2017 was 10,000 MT as against 20,000 MT of 2016 in Adamawa State. Though the state government provided extension services on fish production to the farmers, the high cost of feeds had forced a lot of farmers out of fish culture business in the state in 2017. There was also a slight reduction (6.76%) in fish production in 2017. High cost of feeds and poor market for fish products posed challenges to farmers. A twenty percent increase in aquaculture production was recorded in Gombe State.

The quantity of fish production in the Northwest was not reported. In the North-Central Zone, FCT had a decrease of 71% in aquaculture production between 2016 and 2017. The mid-year report of 20,955MT of aquaculture production in Kogi State in 2017 was very low, compared to the annual production of 271,315.11 MT of 2016. There was inadequacy of fisheries extension staff in Kogi State. Despite the increase of 10.8% in aquaculture production in Kwara State from 2016 to 2017, the high cost of feeds and non-access to credit facilities affected fish farmers in the State.

Cluster farming was the key project of government in Ogun State in the Southwest of Nigeria. Government gave support to fish farmers through provision of credit facilities. The State also supported marine police for the protection of submarine fish production through enforcement of fisheries laws and regulations. Fish farmers in Osun and Oyo States engaged in the culture of many fish species. Such fish included electric fish (mainly for aesthetics), Heterodox, prawns, Synodontes, Crysichtys, Bargus, Hepsetus, Gymnarchus, Lates, etc. Fish farmers in Oyo State had access to loan from Bank of Agriculture (BOA) and Agricultural Credit Corporation of Oyo State (ACCOS). Public-private partnership policy was also used to engage about 2 investors to boost fish production in the state.

In the Southeast, Abia State reported 2,700MT of aquaculture production in 2017. However, records of the 2016 production were not available for the state. Fish from aquaculture had 46% reduction in production from 2016 to 2017 in Akwa Ibom State, South-South Nigeria. No particular reason was provided for the reduction.
Generally, there was evidence of large volumes of artisanal fish farming across the six agroecological zones (Table 11.5.2). There was reduction in the quantity of fish obtained from artisanal fish farming in Adamawa (6.67%) and Bauchi (21.62%). Artisanal fishing reduced tremendously (79%) in FCT, while the report of 11,846 MT of artisanal fish production in Kogi State was a mid-year report for 2017. However, the state

recorded 270,613.42MT in 2016 for artisanal fish production. Kwara State recorded a 5.8% increase in artisanal fish production in 2017. In Ogun State, there was an increase of 11.05% in artisanal fish production when the production in 2016 (33,542.7 MT) was compared with that of 37,250 MT obtained in 2017. In Abia State, there was no information on the production of fish from artisanal venture in 2016. However, 15,010MT fish were captured in 2017. Recorda from Akwa Ibom indicated that there was 46% decrease in artisanal fish production from 2016 to 2017.

TABLE 11.5.1: AQUACULTURE PRODUCTION IN 2017 AS COMPARED WITH 2016

Northeast				
State	**Production in 2016 (MT)**	**Production in 2017 (MT)**	**Government intervention**	**Remarks**
Adamawa	20,000	10,000	Extension services provided by ADP and Ministry of Agriculture.	High cost of feeds has forced a lot of fish farmers out of fish culture business in the State.
Bauchi	10,210	9,520		High cost of feeds and poor market for fish products is experienced by fish farmers.
Gombe	39,886 kg	47,863 kg		20% increase in production
Northwest				
Kebbi	The last survey conducted was around 1990 with a total production of 90 metric tonnes of fish of which 90% were captured (artisanal) fishes.			
North-Central				
FCT	341.83	98.85		71% decrease
Kogi	271,315.11	20,955 as at July, 2017	Youth empowerment programme in aquaculture	Inadequate fisheries extension staff. Lack of funding. Lack of extension tools and equipment.
Kwara	78,957	87,454.15	10.8% increase in production	High cost of feeds and non-access to credit facilities affected fish farmers in Kwara State
Southwest				
Ogun	35,477	35,219	Cluster farming is the key project of government in the State. Government is giving support to farmers through provision of credit facilities. The support of marine police by the government of the State is of tremendous benefits to fish production because of enforcement of fisheries laws and regulations.	
Osun *Clarias sp.* Tilapia Carps Heterodox Electric fish	 475.0 1.0 1.5 7.0 0.5			No particular alternative for fish meal in the feed.

State	Production in 2016 (MT)	Production in 2017 (MT)	Government intervention	Remarks
Southwest Central				
Oyo	25,871.90	30,200	Fish farmers have access to loan from Bank of Agriculture (BOA), Agriculture Credit Corporation of Oyo State (ACCOS). Public Private Partnership with two investors to boost fish production in the State	
Clarias sp.	1,200.28	1,600		
Tilapia	31.91	25		
Carp	500.91	700.85		
Heterotis	4,400.80	3,272.86		
Lates	3,300.60	2,454.65		
Gymnarchus	220.04	163.64		
Hepsetus	143.03	106.37		
Bargus	1,650.30	1,227.32		
Crysichtys	275.05	204.55		
Synodontes	462.084	343.65		
Prawn				
Southeast				
Abia	-	2,700		No information for 2016
South-South				
Akwa Ibom	178,871	96,590.34		

TABLE 11.5.2: ARTISANAL FISH PRODUCTION IN 2017 AS COMPARED WITH 2016

Northeast				
State	**Production in 2016 (MT)**	**Production in 2017 (MT)**	**Remarks/ Government intervention**	**Remarks**
Adamawa	15,000	14,000		
Bauchi	37,000	29,000		
Northwest				
Kebbi	The last survey conducted was around 1990 with a total production of 90 metric tonnes of fish of which 90% were captured (artisanal) fishes.			

North-Central				
FCT	212.05	45.20	79% decrease	
Kogi	270613.42	11,846 as at July 2017	Youth empowerment programme in aquaculture	Inadequate fisheries extension staff. Lack of funding. Lack of extension tools and equipment.
Kwara	60,813.8	64,340.96	5.8% increase in production	
Southwest				
Ogun	33,542.7	37,250	11.05% increase	
Southeast				
Abia	-	15,010	No information for 2016	
South-South				
Akwa Ibom	178,871	96,590.34	46% decrease	

11.5.2 FISHERIES PEST AND DISEASES

Data on fish pests and diseases are presented in Table 11.5.3. Most of the diseases and pests of culture and artisanal fish production reported in 2017 across most States of Nigeria were those that affected *Clarias geriepinus* (catfish). In the Northeast, fin rot and abdominal swellings affected *Clarias gariepinus* with moderate severity of about 30%. The expected losses due to the diseases were 50 to 60% of stockings due to fin rot and 40 to 50% for abdominal swellings. Fish louse affected catfish in Bauchi State with mild severity of between 10 to 20%. The expected loss of the fish was reported to be within 5% of the stock of fish at the farm where the pest was reported. In Gombe State, variants of bacterial diseases were reported. Kaduna State was the only State that reported fish diseases in the Northwest. Abdominal dropsy and broken head disease was reported at Kaduna metropolis. The severity of these diseases was moderate for dropsy (12%) and severe for broken head disease (23%). Similarly, only Kogi State reported the occurrences of fish diseases and pests in the North-Central. Bacterial diseases were reported among the stocks of *Heterobrancus sp* Birds and reptiles affected *Clarias sp* and *Heterobracus sp*, respectively.

Highly severe fin rot and calcium-related infections, which caused mortality after 2 weeks of spawning, was reported in Ogun State. The disease and nutrient deficiency caused a lot of mortality of hatched fish statewide. The government of the state, however, provided technical support to fish farmers in the form of fish hatchery management training workshop. Tilapia was also affected by dropsy in Abeokuta, Ijebu Ode and Ilaro areas of the state. The severity was moderate with an expected loss of 20%. There was report of bruised mouth and body in catfish at Omi Adio, Oyo State; sunken eyes, white barbells, fin rot and white spots also in catfish in Egbeda, Oluyole, Akobo and Moniya areas Oyo State. In Calabar South and Calabar Municipal LGAs of Cross River State, *Clarias sp* were affected by *Trichodinea*, *Costria*, nematode and *Aerosomonas*.

TABLE 11.5.3: FISH PESTS AND DISEASES

State	Type of fish	Pests or disease	Location of incidence	Severity	Estimated losses (%)	Remarks/ Government intervention
Northeast						
Adamawa	*Clarias gariepinus*	Fin rot Abdominal swellings		>30% >30%	50-60 40-50	Yes Yes
Bauchi	*Clarias gariepinus*	Fish louse	Gubi Farm	10-20%	5	
Gombe	*Clarias gariepinus*	Bacterial diseases				
Northwest						
Kaduna	*Clarias gariepinus*	Abdominal dropsy Broken head disease	Kaduna Kaduna	Moderate (12%) Severe (23%)	12 23	
North-Central						
Kogi	*Heterobracus sp.* *Clarias sp.* *Heterobracus sp.*	Bacterial diseases Birds Reptiles		18% 10% 8%	10 7 6	

Southwest						
Ogun	*Clarias sp.* Tilapia	Fin rot and calcium related infections which caused mortality after 2 weeks of spawning and resulted in mass causality at hatchery Dropsy	Statewide Abeokuta, Ijebu Ode and Ilaro	Highly severe Moderate	80 20	Technical support in terms of fish hatchery workshop.
Oyo	*Clarias gariepinus* (Catfish)	Bruised mouth and body Sunken eyes White barbels Gill rot White spots	Omi-Adio Egbeda Oluyole Akobo Moniya	2.5% 1 5 5 5	2 1 1.5 1.2 2	Through extension services, farmers were advised on use of Best Management Practices (BMP) on their farm to prevent disease outbreak
South-South						
Cross River	*Clarias sp.*	Trichodinea Costria Nematode Aerosomonas	Calabar South and Municipal LGA	Mild	5 3 5 3	

11.5.6 FISHERIES AND AQUACULTURE INPUTS

The procurement and distribution of fisheries inputs in 2016 and 2017 are presented in Table 11.5.4. In the Northeast, Bauchi and Gombe State were the only states that procured and distributed fisheries inputs. Four rolls of fencing wires were purchased in 2016 and 2017 and were distributed among fish farmers in Bauchi state. Although Gombe State did not procure fisheries inputs in 2017, it procured and distributed the followings in 2016: 10 bundles of nets, 30 sheets of lead, 200 units of floats, 50 rolls of thrine and 32 rolls of rope (12 x 16mm). Benue State procured fishing nets. Fish fingerlings (255,000) and feeds (30,000) were procured and distributed by Abia State in 2017.

TABLE 11.5.4: FISHERIES INPUT

Northeast						
State	**Type of input**	**Quantity procured**		**Quantity distributed**		**Remarks**
		2016	2017	2016	2017	
Bauchi	Fencing wire	4 rolls	4 rolls	4 rolls	4 rolls	
Gombe	Nets Lead Float Trine Rope (12x16mm)	10 bundles 30 sheets 2000 units 50 rolls 32 rolls		10 bundles 30 sheets 2000 units 50 rolls 32 rolls		
North-Central						
Benue	Fishing net	Lack of fund, mobility, data collection materials, etc, militated enumeration of fisheries information.				
Southeast						
Abia	Fingerlings Feeds		255,000 30,000		255,000 30,000	No information for 2016
Enugu	Lack of fund to undertake data collection by enumerators in the State ADP and Ministry of Agriculture.					

12.0 ADP EXTENSION ACTIVITIES IN 2017

12.1 ADP Funding Situation in 2017

Most of the ADPs identified poor funding as a critical challenge to their performance over the years. Fund is very critical to the performance of extension activities in the ADPs. As the extension arm of the State Ministry of Agriculture, the State Government remained the major source of fund for the ADPs. Only 3 State ADPs -Lagos (91.3%), Rivers (91.3%) and Plateau (59.5%) obtained over 50% of the targeted fund from their respective State Governments. In the Northeast Zone, Yobe obtained 100% of the target in 2016. Similarly, Gombe recorded 74.5% targeted fund in 2016, while Adamawa obtained just 20% of the target fund. In the Northwest Zone, only Sokoto State provided data relating to funding status. The state obtained only 1.5% of the target funds in 2016 but there was a significant improvement in 2017.

Table 12.1: Status of ADP Funding in 2016 and 2017

	Northeast Zone funding						
	2016			2017			
	Target	Achieved	%	Target	Achieved	%	
Adamawa	12,000,000	2,400,000	20.0	12,000,000	3,500,000	29.2	9.2
Gombe	314,196,000	234,197,041	74.5	316,030,108	111,410,074	35.3	-39.3
Yobe	12,000,000	12,000,000	100.0	12,000,000	700,000	5.8	-94.2
	Northwest Zone funding						
Sokoto	300,000,000	45,651,500	15	400,000,000	42,000,000	10.5	-4.5
	North Central Zone funding						
FCT	-	18, 375,000		-	-		
Kwara	39, 214, 021	8,695,775.00		6, 312, 000	3,550,500		
Nasarawa	24,000,000	0		24,000,000	-		
Niger	24,000,000	0	0.0	50,000,000	0	0.0	0.0
Plateau	493,234,443.25	453,275,713.50	91.9	406,420,008	241,903,134.30	59.5	-32.4
	Southwest Zone Funding						
Ekiti	31,400,000	0	0.0	82,800,000	0	0.0	0.0
Ogun	851,000,000	373,668,207	43.9	941,000,000	220,556,100	23.4	-20.5
Ondo	85,500,000	1,340,000	1.6	100,000,000	2,000,000	2.0	0.4
Osun	264,550,000	0	0.0	264,550,000	0	0.0	0.0
Oyo	335000000	273217372	81.6	516545754	130359734	25.2	-56.3
Lagos	138,000,000	125,960,000	91.3	138,000,000	125,960,000	91.3	0.0
	Southeast Zone funding						
Abia	12,000,000	12,000,000	100.0	12,000,000	7,000,000	58.3	-41.7

Ebonyi	371,550,000	0	0.0	251,700,000	42,000,000	16.7	16.7
Enugu	30,000,000	0	0.0	30,000,000	100,000	0.3	0.3
Imo	180,000,000	0	0.0	200,000,000	0	0.0	0.0
South-South Zone Funding							
	Target	**Achieved**	**%**	**Target**	**Achieved**	**%**	
Akwa-Ibom	31,400,000	0	0.0	82,800,000	0	0.0	0.0
Bayelsa	851,000,000	373,668,207	43.9	941,000,000	220,556,100	23.4	-20.5
Cross River	85,500,000	1,340,000	1.6	100,000,000	2,000,000	2.0	0.4
Delta	264,550,000	-	0.0	264,550,000	-	0.0	0.0
Edo	60,950,000	24,400.00	0.0	66,300,000	16,000,000	24.1	24.1
Rivers	138,000,000	125,960,000	91.3	138,000,000	125,960,000	91.3	0.0

12.2 Performance indicators of ADPs

The performance indicators of ADPs across the country in 2016 and 2017 is presented in Table 12.2 The indicators are grouped as: technology dissemination strategies (OFAR, SPAT, and MTP); number of extension workers (SMS, BES, BEA (WIA), and VEA); number of farm families reached; training of farmers; group development; technology/knowledge sharing; transfer and feedback (MTRM and FNT); extension agent farm family ratio; and farmer field school activities.

12.2.1 Number of Farm Families Reached

One of the major performance indicators of the ADP is the number of farm families reached. Farm families are the basic units of agricultural technology uptake. To a large extent, the number of families served by the ADPs is a function of the number of extension agents as well as their mobility. Among the states that provided data on number of farm families in 2017, Kano state had the highest, with 1,620,000 followed by Bauchi (987,925), Katsina (965,536), Niger (816,575), and Akwa-Ibom State (685,095). Bayelsa recorded the least of 95,465 farm families. Compared with 2016 figures, only Ogun state and the FCT recorded slight improvements in the number of farm families.

12.2.2 Number of Extension Workers (SMS, BES, BEA (WIA) and VEA)

The effectiveness of any extension service largely depends on the adequacy of committed and active Village Extension Agents (VEAs). Reports from various States revealed that Edo has 654 VEAs while Enugu reported 352. Other States that reported number of VEAs include Taraba (288), Niger (280), Borno (271) Kebbi (190) and Yobe (147). Kano State which had the highest record of the number of VEA (over 700, as at 2015) did not provide data for 2017. Generally, decrease in the number of VEAs was observed for many States between 2016 and 2017. This development suggests the dwindling interest of State Governments in supporting Agricultural Extension Service. The dwindling number of frontline extension agents in the ADPs across the country is quite alarming. The Federal Government intervention under N-Power (Agro) has assisted the ADPs. The inability of the state governments to employ extension personnel was partially responsible for the low number of VEAs. In most States, the number of SMSs, BESs and BEA (WIA) remained as in 2016.

12.2.3 Village Extension Visits

Contacts with extension agents afford the farmers the opportunity of sharing ideas and information on modern production practices. This year, Ebonyi, Niger and Gombe states recorded the highest number (over 50,000) of extension visit to farmers. Borno, Taraba, Bayelsa and Abia conducted only 6, 28, 32, and 32 extension visits, respectively in 2017.

12.2.4 Technology Dissemination Strategies (OFAR, SPAT, and MTP)

Only seven (7) States reported activities on OFAR for 2017. Kaduna conducted 4,022 OFARs while Abia conducted 918, Lagos (8), Zamfara (4), Kogi (6) and Kwara (4). Kano conducted the highest

(1840) number of MTPs, Abia 765 and Yobe conducted 120 MTPs. Record from other states indicated Ebonyi (100), Akwa-Ibom (56) while Bayelsa State conducted 2. Less than 30% of the States conducted SPAT in 2017. For SPATs, Ebonyi conducted 12,000, Akwa-Ibom 1463, Taraba 1020, Imo 800, Rivers 565, Edo 510, Enugu 176, Kaduna 98, Lagos 7, Bayelsa 6, and Kogi 2.

12.2.5 Technology/Knowledge Sharing, Transfer and Feedback (MTRM and FNT)

The targets and achievements of the ADPs in respect of MTRM and FNT are presented table 12.2

12.2.6 Farmers' Group Development and Training

Formation and efficient management of group is an important function of the ADPs.Participatory extension approaches are being deployed to promote farmer group formation in order to enhance access to farm services. 19 states provided data on number of groups formed in 2017. Gombe State recorded the highest (5,222) number of farmer groups. Ebonyi and Edo States recorded 5,000 and 4,813 farmers groups, respectively while Abia and Kwara States recorded 18 and 2 farmers groups, respectively.

12.2.7 Extension Agent, Farm Family Ratio (EA:Farmer)

The EA farmer ratio defines the number of farmers managed by an extension agent. A lower ratio ensures better quality of extension service, since an extension agent will need to contact few farmers during his/her regular visit. The recommended FAO ratio is 1:500-800. However, a ratio of 1:1,000 can be ideal for developing countries like Nigeria. In 2017, States with high EA: farmer ratio include Enugu (1:12,114), Osun (1:8,792), Rivers (1:8,429), Anambra (1:6000), Katsina (1:4500), Kwara (4,300), and Kogi (1:4000). There were improvements in the ratio across States between 2016 and 2017. This may be due to inclusion of N-Power (Agro) volunteers in the extension activities in most States.

12.2.8 Training of Farmers

Enhancing the capacity of farmers through regular training is a major activity of the state ADPs. Only fifteen States provided data on number of farmers trained. Reports indicate that Ebonyi trained the highest number of farmers (100,000) in 2017. This was followed by Osun (59,320 farmers), Ekiti (50,000 farmers), Katsina (15,000) and Kano (11,780 farmers). Kebbi trained only 10 farmers within the year under review. Generally, there was improvement in the number of farmers trained by the State ADPs from 2016 to 2017.

12.2.9 Farmer Field Schools (FFSs) Activities

Farmer Field Schools provides a platform for experiential learning and encourages farmer to farmer information sharing. Only eight (8) states provided data on the number of FFSs operated in 2017. Of these, Edo State operated 1,620 FFSs, Lagos (81), Imo (55 FFSs) and Oyo (55 FFSs).

Table 12.2 EXTENSION ACTIVITIES/WORKERS

NORTHEAST ZONE

State	Years	Target/Achievement	No of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRMs / QTRMs	FNTs/MTs	No of Groups /Coops	EA/Farmer Ratio	No of farmers Trained	No of farmers field schools
Adamawa	2016	Tar	Na	64	84	Na	168	858	Na	28,000	400	2	46	Na	1:286	Na	4
		Ach	Na	Na	48	Na	86	Na	Na	30	Na	1	Na	Na	Na	Na	Na
	2017	Tar	Na	Na	84	Na	168	858	Na	30,000	460	4	46	Na	1:286	Na	Na
		Ach	Na	Na	48	Na	82	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Bauchi	2016	Tar	-	21	48	60	600	Na	Na	Na	Na	12	12	12,500	Na	Na	90
		Ach	987,925	21	48	21	309	37,250	Na	Na	Na	2	0	7,500	Na	Na	Na
	2017	Tar	Na	Na	Na	Na	Na	23,414	Na	Na	Na	12	12	Na	Na	Na	Na
		Ach	987,925	Na	Na	Na	Na	40,256	Na	Na	Na	0	0	Na	Na	Na	Na
Borno	2016	Tar	700,000	15	100	120	670	52	36	2680	2680*	12	24	98	1:800	100	3
		Ach	536,322	15	46	46	271	10	0	0	0	0	0	123	1:1972	0	0
	2017	Tar	566,322	15	100	120	670	56	36	2680	2680	12	24	98	1:1000	100	3
		Ach	536,322	15	46	46	271	6	0	0	0	0	0	123	1:1971	0	0
Gombe	2016	Tar	308,800	8	56	56	279	50,688	Na	Na	Na	12	24	Na	1:800	Na	81
		Ach	309,366	6	15	15	46	50,688	Na	Na	Na	1	2	Na	1:4000	Na	Na
	2017	Tar	309,366	8	66	66	528	50,68	21	Na	Na	12	24	Na	1:800	Na	81

								8									
		Ach	309,366	6	15	15	46	Na	Na	Na	Na	Na	Na	5,222	1:4200	Na	Na
Yobe	2016	Tar	407,824	12	32	32	350	12	Na	-	15	12	24	54	1:1000	Na	Na
		Ach	407,824	12	32	8	260	-	Na	-	-	-	-	54	1:1000	Na	Na
	2017	Tar	407,824	18	40	32	420	12	Na	-	180	4	12	54	-	Na	Na
		Ach	407,824	18	34	10	147	-	Na	-	120	-	-	54	-	Na	Na

NORTHWEST ZONE

State	Years	Target/Achievement	№ of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRMs /QTRMs	FNTs/MTs	№ of Groups /Coops	EA/Farmer Ratio	№ of farmers Trained	№ of farmers field schools
Jigawa	2016	Tar	1,000,000	32	53	Na	320	Na	Na	Na	Na	Na	Na	Na	1:800	Na	Na
		Ach	628,010	32	53	Na	320	Na	Na	Na	Na	Na	Na	Na	1:1,500	Na	Na
	2017	Tar	1,000,000	32	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	1:800	Na	Na
		Ach	628,010	32	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	1:1,500	Na	Na
Kaduna	2016	Tar	606,007	25	60	132	606	7050	5000	2000	40	12	24	120	1:800	Na	Na
		Ach	606,007	25	25	35	148	4065	3750	156	25	Na	24	80	1:5000	Na	Na
	2017	Tar	606,007	20	3	132	606	5620	5000	2006	40	12	24	NA	1:800	NA	Na
		Ach	606,007	25	25	35	148	4022	2467	98	21	NA	24	NA	1:6500	NA	Na
Kano	2016	Tar	Na	9	176	176	Na	1000	Na	Na	11,000	4	Na	Na	1:800	Na	Na
		Ach	1620000	9	134	127	Na	490	Na	Na	644	3	Na	Na	1:1926	18000	Na
	2017	Tar	Na	9	176	176	Na	1000	Na	Na	11000	4	Na	Na	1:800	18900	Na
		Ach	1620000	9	134	127	Na	650	Na	Na	1840	1	Na	Na	1:1926	11780	Na
Katsina	2016	Tar	965,536	Na	34	500	46	120,000	Na	Na	Na	4	36	Na	1:1000	Na	Na

		Ach	965,536	Na	25	89	12	40,000	Na	Na	Na	1	36	Na	1:3700	Na	Na
	2017	Tar	965,536	25	34	500	46	Na	Na	Na	Na	4	36	Na	1:1000	10,000	Na
		Ach	965,536	10	25	89	12	Na	Na	Na	Na	0	36	Na	1:4500	15,000	Na
Kebbi	2016	Tar	525000	25	32	40	205	-	19	Na	262	4	12	560	1:800	30	Na
		Ach	525000	20	25	30	197	-	Na	Na	Na	Na	Na	Na	1:800	10	Na
	2017	Tar	525000	25	32	40	205	-	19	Na	262	4	12	560	1:800	40	Na
		Ach	525000	18	23	30	190	-	Na	Na	Na	Na	Na	Na	1:2270	Na	10
Sokoto	2016	Tar															
		Ach															
	2017	Tar															
		Ach															
Zamfara	2016	Tar	560,000	18	34	36	248	-	5	Na	Na	12	12	Na	1:250	27	14
		Ach	352,000	8	28	30	114	-	3	Na	Na	Na	12	Na	1:3088	27	9
	2017	Tar	Na	18	34	36	240	-	5	Na	Na	12	12	Na	Na	27	14
		Ach	352,000	8	28	30	114	-	4	Na	Na	Na	12	Na	Na	27	9

NORTH-CENTRAL ZONE

State	Years	Target/Achievement	No of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRMs /QTRMs	FNTs/MTs	No of Groups /Coops	EA/Farmer Ratio	No of farmers Trained	No of farmers field schools
Benue	2016	Tar	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
		Ach	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
	2017	Tar	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
		Ach	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na

FCT	2016	Tar	170,000	NA	26	26	131	2096	Na	18	Na	12	24	Na	1:1000	Na	Na
		Ach	NA	NA	26	15	46	96	Na	0	Na	0	0	Na	1:3587	Na	Na
	2017	Tar	NA	42	26	26	131	2096	Na	18	Na	12	24	Na	1:1000	Na	Na
		Ach	NA	27	26	26	46	0	Na	0	Na	0	0	Na	1:3587	Na	Na
Kogi	2016	Tar	473,143	20	24	24	192	11,904	4	Na	384	12	24	Na	1:1000	Na	Na
		Ach	473,143	15	24	20	123	6,000	2	Na	520	4	24	Na	1:4000	Na	Na
	2017	Tar	473,143	20	24	24	192	11,904	4	4	960	12	24	Na	1:1000	Na	Na
		Ach	473,143	15	24	20	123	2,976	6	2	0	1	24	Na	1:4000	Na	Na
Kwara	2016	Tar	344,000	16	25	50	400	Na	4	Na	Na	12	Na	70	1:1000	1000	Na
		Ach	344,000	16	0	6	100	Na	4	Na	Na	0	Na	58	1:4300	750	Na
	2017	Tar	354,518	16	25	50	420	Na	4	Na	Na	12	Na	15	1:1000	3000	Na
		Ach	354,518	16	1	6	120	Na	4	Na	Na	0	Na	2	1:914	3600	Na
Nasarawa	2016	Tar	180,433	18	26	26	153	24,960	Na	Na	100	12	26	Na	1:1000	Na	Na
		Ach	180,433	18	26	19	114	15,681	Na	Na	100	0	26	Na	1:1611	Na	Na
	2017	Tar	180,433	18	26	26	153	24,960	Na	Na	100	12	26	Na	1:1000	Na	Na
		Ach	180,433	18	26	18	105	6,768	Na	Na	0	1	26	Na	1:1700	Na	Na
Niger	2016	Tar		15	40	40	376	60,000	16	Na	Na	12	24	150	Na	18	Na
		Ach	816,575	15	40	31	**292**	37,507	0	Na	Na	5	10	161	Na	12	Na
	2017	Tar		15	40	40	376	60,000	6	Na	Na	12	24	150	Na	18	Na
		Ach	816,575	15	40	35	**280**	Na	0	Na	Na	4	8	161	Na	NA	Na
Plateau	2016	Tar	Na	18	32	32	192	36,864	Na	Na	Na	11	26	Na	1:1000	Na	Na

		Ach	325,082	12	23	4	57	NA	Na	Na	Na	NA	11	Na	1:1500	Na	Na
	2017	Tar	Na	18	32	32	192	36,864	Na	Na	Na	11	26	Na	1:1000	Na	Na
		Ach	325,082	12	23	4	50	NA	Na	Na	Na	NA	8	Na	1:1500	Na	Na
Taraba	2016	Tar	288,000	20	30	30	288	60	12	3200	160	4	24	NA	1:1000	214	45
		Ach	288,000	10	25	5	288	27	0	1200	20	2	0	NA	1:3,000	102	27
	2017	Tar	288,000	20	30	30	96	60	12	3200	160	4	24	NA	1:1000	214	45
		Ach	288,000	20	20	5	288	32	0	1020	NA	1	0	NA	1:3,000	102	27

SOUTHWEST ZONE

State	Years	Target/Achievement	No of Farm Families	SMSs	FBS	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRMs / QTRMs	FNTs/MTs	No of Groups /Coops	EA/Farmer Ratio	No of farmers Trained	No of farmers field schools
Ekiti	2016	Tar	300,000	13	16	16	128	Na	6	Na	Na	12	24	Na		40,000	294
		Ach	238,470	13	14	11	35	Na	Na	Na	Na	2	12	Na		10,000	16
	2017	Tar	280,000	13	16	16	128	29,120	10	Na	Na	12	26	100		280,000	160
		Ach	200,000	13	14	11	128	4,420	2	Na	Na	1	13	48		50,000	51
Lagos	2016	Tar	332,401	36	16	16	128	12,672	12	18	30	12	26	500	1:1000	250	81
		Ach	128,925	28	16	10	59	8,997	6	12	22	1	20	475	1:2350	78	61
	2017	Tar	332,401	36	16	16	128	12,672	12	13	30	12	26	500	1:1000	250	81
		Ach	128925	34	16	10	90	7357	8	7	18	1	18	482	1:1612	142	81
Ogun	2016	Tar	360,300	20	20	20	120	10080	6	Na	1638	12	24	552	1:800	504	Na
		Ach	Na	13	20	10	69	5000	2	Na	897	3	24	240	1:4,000	200	Na
	2017	Tar	Na	20	20	20	126	1080	6	Na	1638	12	24	552	1:800	504	Na
		Ach	Na	13	20	10	69	Na	Na	Na	Na	Na	Na	240	1:4,000	Na	Na
Ondo	2016	Tar	3,500	22	36	18	144	4002	Na	Na	36	12	104	1302	1:1800	500	Na

		Ach	2,100	11	18	18	65	2074	Na	Na	Na	4	104	1002	1:16000	200	Na
	2017	Tar	3,600	22	36	18	144	4530	Na	Na	30	12	104	1476	1:1800	700	Na
		Ach	1,980	11	18	18	65	2091	Na	Na	Na	1	104	1084	1:1600	Na	Na
Osun	2016	Tar	198,400	12	3	9	248	47,616	4	Na	Na	12	26	1,984	1:1028	1,984	0
		Ach	20,400	6	2	0	26	5,376	0	Na	Na	0	17	208	1:18213	20,800	0
	2017	Tar	198,400	15	3	9	248	71,184	4	Na	Na	12	26	1,984	1:1028	118,640	0
		Ach	118,640	3	2	0	26	35,592	0	Na	Na	0	17	1186	1:8792	59,320	0
Oyo	2016	Tar	415,030	20	Na	NA	NA	28,302	6	Na	Na	12	26	Na	1:800	Na	-
		Ach	Na	12	Na	NA	NA	-	0	Na	Na	-	21	Na	1:6917	Na	27
	2017	Tar	415,030	20	33	33	264	-	-	Na	Na	12	26	Na	1:800	Na	27
		Ach	Na	12	28	NA	56	-	-	Na	Na	-	22	Na	-	Na	54

SOUTHEAST ZONE

State	Years	Target/Achievement	№ of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRM /OTRMs	FNTs/MTs	№ of Groups /Coops	EA/Farmer Ratio	№ of farmers Trained	№ of farmers field schools
Abia	2016	Tar	410,345	18	38	38	38	1224	Na	1020	153	12	24	Na		68,000	81
		Ach	307,758	3	18	32	32	32	918	Na	165	3	Na	18	Na	4025	Na
	2017	Tar	410,345	3	18	38	38	38	1224	Na	1020	153	12	24	Na	68,000	81
		Ach	307758	3	18	32	32	32	918	Na	765	3	Na	18	Na	4025	Na
Anambra	2016	Tar	50,000	20	21	21	117	Na	Na	Na	8	12	26	Na	1:1000	Na	75
		Ach	32,000	20	19	4	38	Na	Na	Na	8	2	18	Na	1:6000	Na	Na
	2017	Tar	Na	20	21	21	117	Na	Na	Na	8	12	26	Na	1:1000	Na	75
		Ach	Na	20	19	4	38	Na	Na	Na	8	2	16	Na	1:6000	Na	Na
Ebonyi	2016	Tar	1,000,000	15	24	24	300	28133	Na	23000	230	12	26	5600	1:1000	522395	Na
		Ach	522,395	5	24	6	115	15711	Na	11500	60	Na	26	2800	1:4542	50000	Na

	2017	Tar	1,000,000	15	24	24	300	28133	Na	23000	300	12	26	25000	1:1000	522395	Na
		Ach	522,395	5	24	6	129	160000	Na	12000	100	Na	26	5000	1:4542	100000	Na
Enugu	2016	Tar	600,000	30	17	17	300	396	NA	754	66	12	72	Na	1:800	5,000	Na
		Ach	246,542	13	13	12	38	97	Na	91	35	3	24	Na	1:6163	4,214	Na
	2017	Tar	600,000	30	17	17	300	396	Na	754	66	12	72	Na	1:800	Na	Na
		Ach	246,542	30	17	17	352	219	Na	176	17	4	24	Na	1:12114	Na	Na
Imo	2016	Tar	603,333	25	40	40	260	28,896	Na	3800	Na	Na	24	6500	1:1000	Na	66
		Ach	303,333	15	27	27	120	23,875	Na	1000	Na	Na	12	6500	1:3333	Na	Na
	2017	Tar	603,333	30	40	40	260	28,896	Na	1,880	Na	Na	24	7000	1:1000	Na	66
		Ach	303,333	15	27	27	120	8,825	Na	800	Na	Na	12	3100	1:3333	Na	55

SOUTH-SOUTH ZONE

State	Years	Target/Achievement	No of Farm Families	SMSs	BES	BEA's/WIA	VEAs	VEA Visits	OFARs	SPATs	MTPs	MTRMs / QTRMs	FNTs/MTs	No of Groups /Coops	EA/Farmer Ratio	No of farmers Trained	No of farmers field schools
Ak/Ibom	2016	Tar	685,095	30	40	40	274	33, 600	NA			6	26	1288	1:2500	26	Na
		Ach	685,095	30	40	34	166	1540	NA			6	26	362	1:4127	26	Na
	2017	Tar	685,095	30	40	40	274	33, 600	NA			6	26	1288	1:2500	26	Na
		Ach	685,095	30	40	34	158	9384	NA	1463	56	6	17	278	1:4336	17	Na
Bayelsa	2016	Tar	120,0000	4	4	Na	8	120	Na	120	30	12	26	1000	1:1000	300	81
		Ach	95465	1	3	Na	8	32	Na	Na	2	Na	Na	1250	1:4665	450	Na
	2017	Tar	100000	4	4	Na	8	120	6	150	30	12	Na	1000	1:1000	300	Na
		Ach	95465	1	3	Na	8	28	Na	6	2	Na	Na	1260	1:4665	180	Na
C/River	2016	Tar	Na	15	18	18	144	Na	4	Na	Na	12	26	3600	1:3343	20,000	116
		Ach	481,506	14	18	18	91	Na	Na	Na	Na	Na	16	1200	1:4046	14969	116
	2017	Tar	Na	15	18	18	144	Na	4	Na	Na	12	26	3600	1:1000	20000	Na
		Ach	481,506	15	18	18	106	Na	Na	Na	Na	Na	16	Na	1:4542	Na	Na
Delta	2016	Tar	179,256	12	25	25	200	Na	Na	Na	Na	12	26	Na	1:800	Na	Na

Table 12.3: List of Technologies under OFAR, MTPs, SPAT

Northeast Zone			
State	OFAR	MTP	SPAT
Adamawa	-	-	-
Bauchi	Millet variety trial (proposal)		
	Sesame planting method		
	AG-Zyme soil conditioner		
	AO-Zyme NPK		
	Nut plant organis VS inorganic		
Borno	-	-	-
Gombe	Multi- Location Testing of insect resisting (BOLLGARD II) Cotton hybrid for variety registration in Nigeria (20)	Technology Adaptation Plot (525)	Community Demonstration Plot (140)
	Effect of herbicide and insecticide on cotton by BAYER/ IAR (1)	Model Adaptation (35)	
Yobe		1. Super Sosat (Millet) 180	
		2. SAM NUT 24 (Groundnuts) 50	
		3. ICSV 400 (Sorghum) 110	
		4. Drought Tolerant for Africa (Maize) 20	
Northwest Zone			
State	OFAR	MTP	SPAT
Jigawa	-	-	-
Kaduna	Nutrient plan organic fertilizer demonstration (4)	Spacing (Sassakawa)	
	Natural Bio-organic Fertilizer demonstration (2)	Timely weeding	
	Bio-wish- organic fertilizer demonstration (3)	Timely fertilizer application	
	SARO- SC Maize project (10 LGAs)	Use of inoculant	
		Use of organic fertilizers	

Kano	On- Farm Demonstration of SAMAZ 40 (2)	Value chain (44)	-
	Multi- Location Trial of G/Nut (2)	ISSFM (500)	
	Hybrid Tomato Variety Tri al (3)		
	Hybrid Pepper Variety Trial (3)		
Katsina	Irrigated wheat yield trials under Lake Chad		
Kebbi	-	Aflotoxin (12)	Groundnut (50)
		Varietal (38)	Rice (6)
		GAP (6)	Sorghum (10)
		GAP (10)	
Sokoto	Sorghum Demo/Varietal Intro (8)	Varietal (16)	Varietal (46)
	Extra Early Maize (1)		Fertilizer AOP (10)
	Varietal (2)		
Zamfara	On farm evaluation of soybean/maize mixture and N&P rate	Promotion plant population (spacing closer)	
	On-farm evaluation of maize varieties trial	Promotion of short duration varieties of millet	
		Promotion of drought tolerant maize (DTM)	
		Promotion of rosette resistant g/nut variety	
		Conservation farming (zero tillage) for improved soil Conservation.	
		Continues use of vetiver frats for erosion control	
		Upgrading of undegent poultry using imported cockerel	
		Improved cowpea/cereals mixtures for improved soil fertility	
North-Central Zone			
State	OFAR	MTP	SPAT
Benue	-	-	

FCT	-	-	-
Kogi	-	-	-
Kwara	Maize varietal trial	-	-
Nasarawa	-	-	-
Niger	Rice transplanting using one seedling per stand/ plant (3)	Rice transplanting at one seedling per stand (15)	
		Treatment of cassava stem with Apron-plus (15)	
Plateau	Rice variety trial (1)	-	-
Taraba	-	-	-
Southwest Zone			
State	OFAR	MTP	SPAT
Ekiti		Vitamin A cassava Vitamin A orange NERICA 788 rice CRIN-CT-1-8 citrus Production HQCF FARO 44 lowland rice Micro vegetable (igbagba and ugwu)	
Lagos	Evaluation of the yield and performance of two improved maize varieties (1)	Use of cassava peels inclusion for growth performance in the diets of broiler chicken (6)	Use of improvised drip irrigation system in vegetable production
	Evaluation of mono-sex culture of Tilapia in concrete ponds (1)	Introduction of pen system into flood prone areas of Lagos state (3)	Use of rice husk as heat source on the quality of smoke dried catfish (6)
	Performance of goats fed cassava peels – leaf meal (CPLM) pelletized feed (1)	Popularization of new cassava varieties TMS98/0518 (50)	Planting of vitamin A cassava variety (20)
	Demonstration on Cassava pressing options		
	Demonstration of simple biomass single lever chamber and 25 chambers hydraulic briquette press (1)		

	Evaluation of quality rice flour produced from two processing methods (polished and unpolished) (1)		
Ogun	-	-	-
Ondo	Evaluation of performance of newly released Hybrid Maize		
	Evaluation of local fish waste as a replacement for imported Fish meal		
	Demonstration of Smoking kaolin to artisanal folk		
	Evaluating the use organic and inorganic Fertilizer		
	Evaluation of sun dry poultry litters as feed		
	Increasing yield of Tomato using Bioclean		
	Demonstration of preventing and utilization of soy meal for snails		
Osun	-	-	-
Oyo	-	of Vitamin A Cassava and Vitamin A Maize	-

Southeast Zone			
State	OFAR	MTP	SPAT
Abia		C/M/E (35)	C/M/E (36)
		C/M/T (32)	C/M/T (32)
		C/M/SP (20	C/M/SP
		C/M/Cocoyam	C/M/Cocoyam (25)
		Y/C/M/E or T	Y/C/M/E or T
		Late C/M Fb cp (25)	Late C/M Fb cp
		Yam miniset/MFB CP	Yam miniset

Anambra	-	Yam/ Cassava alternate row (25)	Yam /cassava alternate in heap
		Best agronomic practices in rice production (11)	Plantain/Banana (210)
		Plantain (6)	Brooding of chicks (200)
		Brooding of chicks (30)	Poultry feed formulation (25)
		Poultry feed formulation (10)	Best practices in cassava production (240)
		Best practices on cassava production (50)	Yam miniset (320)
		Fish production (10)	
		Yam minisett (25)	
Ebonyi	-	Swamp rice production (30)	Dry season rice and vegetable (1500)
		Bee keeping (10)	Low land rice production (2500)
		Home stead fish production (15)	Bee keeping (850)
		Cassava processing (40)	C/M/SP or vegetable (1500)
		Sweet potato production (20)	Home stead fish production (500)
		Poultry management (15)	Sheep/goat platform (1000)
		Sheep/goat management (30)	Nursery management in rice (2000)
		Miniset hybrid yam multiplication (50)	Yam miniset multiplication (1300)
			Crop processing and utilization (2000)
			Late M/C/SP (1300)
Enugu	-	Line planting	Y/M/C (28)
		Belting	Yam minisetts/Maize (23)
			C/Maize intercrop (264)
			Swamps rice (400)
			Up land rice (12)
			Sole Maize (509)
			Bee keeping (8)
Imo	Distribution of Vitamin-A cassava cuttings (Yellow-roots) to all the 368 communities of the state about 6600 BLDS till date	Agro-forestry (1200)	
		Snail-rearing	
		Bee-keeping	
		Homestead fisheries (1500)	

		Livestock (1000)	
		Poultry/piggery	
		W.I.A and processing (1200)	
		HIV/AIDS/Health programmes	
South-South Zone			
State	OFAR	MTP	SPAT
Ak/Ibom		Ca/m/veg (10)	Cassava/maize/veg (599)
		Poultry production (8)	Poultry production (151)
		Fisheries (3)	Artificial brooding (89)
		Piggery production (2)	Forest veg (98)
		Plantain production (7)	Sole cassava (39)
		Yam/m/veg (5)	Yam/maize/veg (260)
		Forest veg (5)	Swamp rice/upland (27)
		Dry season veg (16)	Dry season veg (60)
			Homestead fish production (31)
			Pig production (78)
			Processing/ utilization of grain (9)
			Processing/ utilization of palm oil (22)
Bayelsa	-	Cassava sole pro vitamin A (2)	Cassava, Telferia, Maize Intercrop (6)
		Introduction to improved variety of rice (2)	Plantain/cocoyam intercrop (6)
C/River		Yam miniseh/maize (106)	Yam miniseh (106)
		yam based (75)	Yam based (120)
		Cassava sole (108)	Cassava sole (147)
		Cassava/maize (108)	C.M.E.T (120)
		Cassava/sweet potatoes (91)	Sole maize (97)
		Swamp rice (210)	Vegetable (200)
		Sheep/goat upgrading (70)	
		Poultry (200)	
		Home stead fish pond (85)	
		Plantain/banana (72)	
Delta	-	Hybrid maize	-
		Pro-vitamin A cassava	
		Tomato production	
		Rice varieties	.

Edo	Evaluation of productivity & acceptability	Cassava (variety/spacing) (1)	Yam (staking/fertilizer application (15)
	Demonstration of confectionaries	Rice (post harvesting handling and use of false bottom in parboiling (7)	Cowpea/soyabean (spacing/pest control)
		Yam (staking/Fertilizer Application	Cassava(variety/spacing) (36)
			Water melon (spacing/pest control)
			Ginger(spacing/pest control)
Rivers			Yam minisett/Maize (11)
			Yam/cassava/maize/egusi (40)
			Cassava/maize/egusi int. (11)
			Cassava/maize intercrop (97)
			Plantain/cocoyam intercrop (25)
			Introduction of Improved cassava variety (67)
			Cassava/cowpea intercrop (6)
			Cassava/maize/cocoyam (1)
			Cassava/maize/sweet potatoes (9)
			Sheep/goat confinement (37)
			Rabbit rearing (7)
			Homestead fish pond (79)
			Fish gear maintainance (23)
			Processing of cassava roots into ordourless fufu flour (20)
			Processing of cassava root into ordourless fufu mesh (9)
			Processing of cassava roots into cassava doughnuts (9)
			Soya bean processing/utilization into milk (15)
			Processing/utilization of sweet potato roots into sweet potato doughnut (23)
			Processing/utilization of sweet potato roots into sweet potato juice (1)
			Dry season vegetables production (59)

12.3 Challenges of ADPs in Nigeria

The APS examined the major challenges faced by the state ADPS in achieving their set goals and objectives of increased agricultural productivity, economic growth and rural development. The major problems reported to be hindering the activities of the ADPs in the country are common and inter-related. They include: inadequate funding; shortage of personnel; inadequate staff training and capacity building; and shortage/ ineffective transportation and communication facilities.

Table 12.4: Technical problems and Challenges to the performance of ADPs in Nigeria

NORTHWEST ZONE		
States	**Problems**	**Nature of problem**
JIGAWA	1) Funding 2) Staffing	1) Inadequate funding for full operation of all activities 2) Extension agent to farmers ration is very low
KATSINA	1) Funding 2) Shortage of staff 3) Capacity building	1) There is shortage of fund to carryout field work and visits 3) Extension agent to farmers ration is below the standard recommendation. 4) Lack of capacity building
KANO	1) Extension agents 2) Lack of capacity building	1) Inadequate frontline extension agents 2) Inadequate capacity building
SOKOTO	1) Shortage of funds 2) Shortage extension agents	1) No sufficient funds for field work 2) Extension agents to farmers ratio is very low
KEBBI	1) Lack of funds	1) No fund has been received by the ADP in more than 5 years
ZAMFARA	Not indicated	Not indicated

Source: NAERLS, Agricultural Performance Survey, 2017

NORTHEAST ZONE		
States	**Problems**	**Nature of problem**
BORNO	1) Poor Funding 2) Low staffing level 3) Transportation	1) Shortage of funds 2) Insufficient staff 3) Lack of vehicles for field work
YOBE	Not indicated	Not indicated
BAUCHI	1) Staffing 2) Funding	1) Shortage of extension agents in the state 2) Insufficient funds for fieldwork
GOMBE	1) Extension agents 2) Funding	1) Shortage of extension agent in the state 2) Inadequate funding for field activities
ADAMAWA	1) Funding	1) No enough funds for research and field work

Source: NAERLS, Agricultural Performance Survey, 2017

NORTH-CENTRAL ZONE		
States	**Problems**	**Nature of problem**
PLATEAU	1) Funding 2) Staffing	1) Funding of ADP activities has been very poor 2) Shortage of extension staff
NASARAWA	1) Funding 2) Staffing 3) Transportation	1) Shortage of fund 2) Shortage of extension staff 3) Lack of project vehicles
FCT	1) Funding	1) No fund was released to the ADP in the year 2017
NIGER	1) Funding 2) Staffing 3) Transportation	1) Lack of sufficient fund 2) Shortage of extension agents 3) Lack of project monitoring vehicles
KWARA	1) Funding & Staffing	1) Lack of sufficient fund and shortage of staff
KOGI	1) Funding 2) Staffing 3) Transportation	1) Shortage of funds 2) Staff not enough 3) Lack of project vehicles
BENUE	Not indicated	
TARABA	1) Funding 2) Extension agents 3) Transportation	1) Insufficient funds for fieldwork 2) Extension agent to farmer ratio is very low. 3) Lack of project vehicles

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHWEST ZONE		
States	**Problems**	**Nature of problem**
OSUN	1) Funding & Staffing	1) There was no enough funds for the year 2017. There was also shortage of extension agents to reach farmers
OYO	1) Funding 2) Staffing	1) Shortage of funds for research and field work 2) Low Extension Agents to farmers ratio
EKITI	1) Funding	1) Budget was mad e but funds yet to be release
ONDO	1) Funding 2) Staffing 3) Transportation	1) Insufficient funding for effective extension service 2) Inadequate field staff 3) Inadequate vehicles for research and field visits
OGUN	1) Extension 2) Funding 3) Transportation	1) Inadequate staff for extension delivery 2) Paucity of funds to carry out extension services 3) Very poor mobility
LAGOS	1) Funding 2) Staffing 3) Transportation 4) Collaboration projects	1) Inadequate funds 2) Shortage of staff 3) Lack of sufficient vehicles for field visit 4) Low participation of NGOs and other supporting partners

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHEAST ZONE		
States	**Problems**	**Nature of problem**
ABIA	Crops	- How to reduce the cost and impact of weeding in crop production - How to control the incidence of diseases and pests currently ravaging the crops especially maize, tomato and cocoyam.
	Livestock	- How to reduce the cost of feeding - Use of improve breeding stock
	Fisheries	- Reduction of cost of feed in fish production
	Agro-forestry	- Improve method of checking rodents and glasscutter
	Irrigation	- Irrigation facilities operations - Maintenance of irrigation sites/management
	Agricultural mechanization	- Operations and handling of tractor facilities

	Women in agriculture (WIA)	- Women development centre - Capacity building on farm equipment uses and maintenance
ANAMBRA	Crops	- Incidence of yam beetles and cricket attack - Premature yellowing of leaves and die back in cocoyam. - Cocoyam fungal leaf rots.
	Livestock	- Scarcity and high cost of Poultry DOC and feeds. - Stock improvement in pig, goat, sheep and rabbits through upgrading and artificial insemination.
	Fisheries	- Floating fish feed production (Dryer) - Equipment for fish processing. - Getting all male tilapia fish.
	Agro-forestry	NA
	Irrigation	NA
	Agricultural mechanization	NA
	Extension	NA
	Women in agriculture (WIA)	NA
EBONYI	Crops	- Line transplanting - Disease in rice especially African gall midge - Pests in rice like stem borer
	Livestock	- Cost of feedings - Incident of disease outbreak - Low Veterinary services
	Fisheries	- Cost of feed in fish production - Cost of fingerlings - Slow in maturity in fish and fertility
	Agro-forestry	- Abortion of forestry reserved management
	Irrigation	- Irrigation facilities operations - High cost maintenance of irrigation sites/management - Cost of equipment
	Agricultural mechanization	- Fragmentation of farm land - Problem of land ownership (tenure) - Undulating terrain
	Extension	- Capacity building on e-extension services - Capacity building on climate change
	Women in agriculture (WIA)	- Insufficient funding - Awareness of women and youth in agriculture (farming) - Capacity building on women in processing and utilization

ENUGU	Crops	- Cocoyam fungal disease - Papaya mealy bug pest
	Livestock	- Guava fruit abortion - Coconut fruit abortion
	Fisheries	
	Agro-forestry	- Guava fruit abortion - Coconut fruit abortion
	Irrigation	
	Agricultural mechanization	- High cost of tractors - No existing of hiring service providers
	Extension	- Lack of extension materials - Fund to establish skill plots - Lack of visit to research institutions
	Women in agriculture (WIA)	
IMO	Crops	- Cocoyam wilt - Fruit abortion on coconut/bread fruit trees - Fusarium wilts of Banana/plantains - Fruit blight of guava
	Livestock	NA
	Fisheries	NA
	Agro-forestry	NA
	Irrigation	NA
	Agricultural mechanization	NA
	Extension	NA
	Women in agriculture (WIA)	NA

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTH-SOUTH ZONE		
States	**Problems**	**Nature of problem**
A-IBOM	Crops	- Utilization of sweet potatoes and banana in production of foods
	Livestock	NA
	Fisheries	NA
	Agro-forestry	- Simple snail egg hatching incubator - Commercial snail feed formulation from local source - Production of substrate for mushroom growth from local raw material
	Irrigation	NA
	Agricultural mechanization	NA
	Extension	NA

	Women in agriculture (WIA)	- Improvement on shelf life of soybeans milk introduction - Improvement on the use of cassava flour and popcorn grits for confectionaries
BAYELSA	Crops	- Cocoyam tubers rotten before harvest - Die back of hot pepper variety
	Livestock	NA
	Fisheries	NA
	Agro-forestry	NA
	Irrigation	NA
	Agricultural mechanization	- Land clearing machines and planters that can be used in the forest zones
	Extension	- Extension Training Bulletins in Local Language of Bayelsa
	Women in agriculture (WIA)	NA
C/RIVERS	Crops	- Further research into the use of organic materials in the control of crop pest and diseases
	Livestock	- Genetic influences (breeding management), and environment conditions on the growth performance of broilers
	Fisheries	- Production of floating fish feed using available local feed ingredient
	Agro-forestry	- The principles and practice of Agro-forestry - Harvesting, processing and packaging of products for local and international markets
	Irrigation	NA
	Agricultural mechanization	NA
	Extension	NA
	Women in agriculture (WIA)	- Improved methods of postharvest management - Value addition and processing of Agricultural products - Potential of vitamin A cassava flour - Potential of yellow maize and soya beans processing
DELTA	Crops	- Tuta absoluta of Tomatoes - Army worm in maize
	Livestock	- Bird flu to be further researched on - Swine fever
	Fisheries	NA
	Agro-forestry	- Black sigatoka disease in plantation - Fruit abortion and premature rotting
	Irrigation	NA

.	Agricultural mechanization	NA
	Extension	- Proper integration of T&V, FFs and the participatory extension models into one unit.
	Women in agriculture (WIA)	- Alternative storage devices for vegetable production.
EDO	Crops	- Tomato wilt control - Yam beetle control
	Livestock	- Management in Poultry, Sheep, Goat and Cane rat
	Fisheries	- Feed Formulation - Fingerlings production
	Agro-forestry	- Adoption of selective herbicides - Best practice of vegetative propagation - Adoption of Agro-Forestry technology e.g. use of leguminous plant as hedge roll
	Irrigation	- Dry season crop production - Tomato production in Green house
	Agricultural mechanization	- Mechanization of weeding - Mechanized palm oil production for small palm oil processor - Storage of Agricultural crops.
	Extension	- Mainstreaming Community Development Driven (CDD) in Extension.
	Women in agriculture (WIA)	- Preservation of fruits and vegetables through synchronize.
RIVERS	Crops	NA
	Livestock	- Research into alternative sources of feed ingredients that are not in competition with man to reduce cost of production
	Fisheries	- Research into alternative cost effective fish feed
	Agro-forestry	NA
	Irrigation	NA
	Agricultural mechanization	NA
	Extension	NA
	Women in agriculture (WIA)	NA

Source: NAERLS, Agricultural Performance Survey, 2017

12.4: NGOs and IDAs in Agricultural Extension in Nigeria

The 2017 survey identified the level of engagement and participation of NGOs in extension service delivery system in all the six agricultural zones of the country. Data was obtained on the number, names, scale of operation and agricultural extension activities of available NGOs in the states. Most ADPs depend on third party projects due to poor funding. Table 12.5 presents the number of NGOs involved in agricultural extension services in all the 36 States of the federation including FCT. Some of the most active NGOs across the zones are: SAA- SG2000, OXFAM and USAID MARKET II which focused on various supportive and agricultural extension service delivery systems like GAP training, production and up-scaling of various agricultural products. International Research Centers and Development Organisations such as IITA, ICRISAT, IFPRI, GIZ, DFiD, etc also have an appreciable presence in the states with various interventions (Table 12.5).

Table 12.5.: NGOs IDAs and IR&DCs participation in extension activities in states

NORTHWEST ZONE		
States	**NGO's Name**	**Activities in the state**
JIGAWA	Not indicated	Not indicated
KEBBI	1) OXFAM	1) Training and Distribution of inputs
KATSINA	1) Dangote Ginning Co. 2) Katsina Oil Mills Ltd 3) Lawmax Ltd	1) Inputs supply and agro-allied services (2 LGAs) 2) Agric. Products processing (whole state) 3) Commodity trading (whole state)
KANO	**1)** SG2000 **2)** ICRISAT **3)** IITA **4)** GIZ and **5)** USAIDMARKET II	1) GAP Training (44 LGAs) 2) GAP Training (6 LGAs) 3) Cowpea up-scaling (5 LGAs) 4) GAP Training (16 LGAs) 5) GAP Training (18 LGAs)
SOKOTO	1) Feed The Future 2) USAID 3) ICRISAT 4) IFDC	1) Training & Extension service delivery 2) Training & Extension service delivery 3) Training & Extension service delivery 4) Training & Extension service delivery
ZAMFARA	Not indicated	Not indicated

Source: NAERLS 2017, APS

NORTHEAST ZONE		
States	**NGO's Name**	**Activities in the state**
ADAMAWA	No data provided	No data provided
BAUCHI	1) ICRISAT 2) IITA 3) UNICEF 4) USAID 5) OCP AFRICA	1) Input supply, Training and extension service 2) Input supply, Training and extension service 3) Input supply, Training and extension service 4) Input supply, Training and extension service 5) Input supply, Training and extension service
BORNO	1) FADAMA III 2) IFAD 3) FAO	1) Support with inputs, projects and Training 2) Support with inputs, projects and Training 3) Support with inputs, projects and Training
GOMBE	1) Sassakawa (SG2000)	1) Field demonstration and extension service delivery
YOBE	1) FAO	1) Input Support in 15 LGAs

Source: NAERLS 2017, APS

NORTH-CENTRAL ZONE		
States	**NGO's Name**	**Activities in the state**
BENUE	1) **Synergos**	1) Supplied grading machines and trained farmers
FCT	1) JICA	1) Improved Rice Parboiling
KOGI	Not indicated	Not indicated
KWARA	1) Action aid and CCEPE	1) Training empowerment on processing of cassava, maize and shelterbelt
NASARAWA	1) **YMCS Ikposogye**	1) Training on Livestock rearing, Agro - forestry and Bee-keeping
NIGER	1) GATE (N2 Africa)	1) Demonstrations on cowpea, soybean and groundnut.
PLATEAU	1) **CRUDAN** 2) **GIZ**	1) Extension Services delivery 2) Farmers training
TARABA	1) Indorama Fertilizer Company 2) JICA	1) Extension Services delivery 2) Extension Services delivery

Source: NAERLS 2017, APS

SOUTHWEST ZONE		
States	**NGO's Name**	**Activities in the state**
EKITI	1) German development cooperation 2) Japan inter.coop. agency (JICA)	1) Training on FBS and GAP. 10 LGAs 2) Rice processing technology,16 LGAs
LAGOS	1) Dangote Foundation 2) BATCO 3) Alk AQUA 4) COWAN	1) Product Empowerment 2) Product Empowerment 3) Feed support 4) Loan and empowerment
OGUN	1) AGRI OUT 2) JDPC 3) CAVAH 4) SG 2000 5) GI3	1) Extension service 2) Extension service 3) Extension service 4) Extension service 5) Extension service
ONDO	1) COWAN 2) Catholic Mission	1) Women Empowerment , the Entire Ondo state 2) Agricultural mechanization
OSUN	Not indicated	Not indicated
OYO	1) USAID 2) CAVA	1) Support and Collaboration 2) Support and Collaboration

Source: NAERLS 2017, APS

SOUTHEAST ZONE		
States	**NGO's Name**	**Activities in the state**
ABIA	GIZ	Training of farmers on cocoa production and business school
ANAMBRA	USAID market	rice chain approach covering Ayamelum, Anambra East and it has been expanded to cover additional areas or sites in the state.
		Gender issues covering Ufuma and Orumba North LGA
	National Association of Women In Agriculture (NAWIAL)	Gender issues and fish farming covering Onitsha North LGA
EBONYI	Participatory Dev. alternative	Food and agricultural programme
ENUGU	CIDJAP	Credit & Training of farmers and staff
	Women for Women	Women empowerment
	ASRUDE	Extension activities
IMO	Development dynamics	Production of crop/extension services covering 2,700 farm families
	Forward Africa	Extension services reaching out to 3,000 farming families
	British-America	Oil palm extension covering 3,000 farming families

Source: NAERLS 2017, APS

SOUTH-SOUTH ZONE		
States	**NGO's Name**	**Activities in the state**
A-IBOM	1) Domita farms 2) Vika farms 3) Isubaras farm 4) Edet farms	1) Crops/fisheries 2) Integrated farm 3) Crops 4) crops
BAYELSA	NA	NA
C/RIVERS	1) GIZ 2) USAID MKTS 3) SG 2000 4) ACAI	1) Cocoa FFS 2) Rice & cocoa 3) Rice & cassava 4) Cassava & maize trials
DELTA	1) Market II	1) Training and empowering of women groups 2) Training of youths in fish of farming
EDO	1) USAID 2) LAPO 3) MADE 4) GIZ	1) Work with farmers 2) Loan to farmers 3) Sponsorship of processing equipment 4) Training farmers.
RIVERS	NA	NA

Source: NAERLS, Agricultural Performance Survey, 2017

12.5: Field Problems and Problems Needing Research in Nigerian Agricultural Sector

The 2017 Agricultural Performance Survey (APS) documented major problems needing research from all sectors including crops, livestock, fisheries, agro-forestry, extension services, agricultural mechanization, youth and women in agriculture. The specific areas needing research on each of the specific agricultural sectors from all states of the six agricultural zones of the federation are presented in the Table 12.6. The commonest problems observed across the zones are; Crop pest and diseases (e.g. Tuta absoluta in tomato, Armyworms, inadequate improved crop varieties e.t.c.), Livestock (Lack of techniques and skills of cross breeding, animal pests and diseases, high cost of animal feeds and medication), Fisheries (Research on cross breeding, formulation of floating fish feeds, Training of fisheries extension staff), Extension services (Training of EAs on new extension techniques, Seminars and workshops for subject matter specialists), Women in Agriculture (research on gender issues, training women on commodity processing and value addition) and Agro-forestry (seedlings with soil borne disease resistant varieties).

Table 12.6: Problems Needing Research in each state

NORTHWEST ZONE		
States	**Problem**	**Areas needing research**
JIGAWA	Not indicated	- Not indicated
KEBBI	Crops	- Areas of biotechnology should be stepped down to ADP personnel - Varieties of crops planted should be improved
	Livestock	- Techniques of cross breeding and small ruminants - Techniques of controlling pests and diseases - Cost of animal feeds should be addressed
	Fisheries	- Improve farmers skill on modern preservation techniques - Pond management - High cost of fish feeds - High mortality rate
KATSINA	Crops	- Die back disease in pepper - Tutaabsoluta in tomato - Promotion of drought tolerant varieties
	Livestock	- Cross breeding - Animal feed and medication
	Fisheries	- Production of improved fingerlings - Fish feed and medication
	Agro-forestry	- Improve varietal trials
	Extension	- Training of EAs on extension techniques - Seminars and workshops for subject matter specialists
	Women in Agric (WIA)	- Training on processing and value addition
KANO	Crop	- Breeding of Tomato seed resistant to Tuta Absoluta pest - Research on enhancement and adoption of Sesame production technology in Kano state
	Livestock	- Research on Milk Pasteurization and passing down the funding to Dairy producers
	Fisheries	- Fish feed formulation using available raw materials - Tilapia culture techniques
	Agro-Forestry	- Research on soil born disease resistant varieties
	Irrigation	- Formation and strengthening of functional WUAs for enhance equity and sufficient water allocation
SOKOTO	Not provided	- Not provided
ZAMFARA	Crops	- Pest and diseases
	Livestock	- Pest (Antihelininthes) and diseases
	Fisheries	- Breeding of Claris sp - characterization of crosses with the best growth performance - formulation of floating fish feeds
	Irrigation and Eng.	- Underground water monitoring for effective utilization

Source: NAERLS, Agricultural Performance Survey, 2017

NORTHEAST ZONE		
States	**Problem**	**Areas needing research**
ADAMAWA	Not indicated	Not indicated
BAUCHI	Crops	Research on striga resistance crop varieties (Legumes, Cereals) OFAR Research on drought tolerant early maturing varieties Research on rice blast Soil nutrient requirement
	Livestock	Research on genetic potentiality of our local breed of livestock Research on nutritional value of our pasture species of grasse Research on the effect of climate change on the posture of our livestock
	Fisheries	Research on common carb spp fingerlings production Research on cross breeding claries spp and heterobracus breed spp Recyclotomy aquaculture (re-circulatory system)
	Agroforestry	soil posts and diseases test analysis Need for irrigation facility
	Irrigation	Provision of single and affordable irrigation technique General crop water requirement To conduct trials on efficient water use by crops
	Agricultural Mechanization	Inadequate means of farm visits Not enough agricultural mechanization extension workers Inadequate availability of agricultural mechanization
	Extension Services	Evaluate the rate of adoption of past technology passed to the farmers
	Women in Agriculture (WIA)	Research on traditional receipts of Bauchi state that have high nutrients density for promotional improving dietary finding Impact of appropriate complementary food on some selected commodity introduced to infant and young child feeding practices
BORNO	Crop	Seed: drought tolerant/ resistance Soil fertility management Post-harvest management (cowpea) Fertilizer application method and Rates
	Livestock	Upgrading of local breeds Feed conservation and efficiency in fattening animals Livestock feed formulation Disease resistance
	Fisheries	Fish feeds formulation (using local materials) Fingerlings production Post-harvest management (e.g. control of insect infestation)

	Agro-forestry	Seedling production of economic trees Mixed cropping (tree and food crops) Pest management
	Extension service	Training methodology Demonstration Mass media presentations REFILLS, FFS and YFC
GOMBE	Crops	Insect resistance cowpea variety
	Livestock	Heat resistance vaccines Hay and silage making Endo and Ecto parasite control
	Fisheries	Fingerling production
YOBE	Crops	Integrated Pest Management and Control
	Livestock	Disease Control in Ruminants
	Fisheries	Training of Extension Staff
	Agro- Forestry	Improvement of Technology
	Irrigation	Improvement of Technology
	Mechanization	Machineries
	Extension Services	Training of Personnel and Extension Staff
	Women in Agric. (WIA)	Training in various categories

Source: NAERLS, Agricultural Performance Survey, 2017

NORTH-CENTRAL ZONE		
States	Problem	Areas needing research
BENUE	Livestock	Lack of fund to conduct cross breeding of local and improved breeding of livestock for high performance
	Fisheries	Lack of fund to conduct fish OFARS and skill plots
FCT	Crops	Post-harvest losses in crops. Field and storage pests' attacks.
	Livestock	Prevention and management of diseases in livestock and poultry. Vaccination of small ruminants.
	Agro-forestry	Production of improved varieties of seedlings.
	Irrigation	Poor quality water pumps. Desalting of boreholes and tube-wells
	Agricultural Mechanization	High cost of tractor hiring Non-availability of tractors
	Extension Service	Inadequate extension workers. Inadequate mobility for extension staff.
	WIA	Inadequate WIA staff.

KOGI	Crops	Incidence of Striga on Cereals Incidence of army worm and shoot fly infestation
	Livestock	Local feed preparation for Livestock production Preparation of local fish feed that floats Poultry and small ruminants disease Hatchery development for fish and poultry Improvement of performance of local birds
	Extension services	Effective extension communication techniques Effective implementation of the FFS
	Mechanization	Development of simple cost saving tools for oil extraction
KWARA	Crops	Cassava Virus
	Livestock	Poultry feed production Artificial Insemination for rural farmers
	Fisheries	Production of extruded (floating) feeds locally
	Agro forestry	Problems of fruits flies in Citrus orchard
	Irrigation	Reducing health hazard and other health risk associated with Irrigation
	Extension Services	Introducing more rice varieties rather than Nerica
	Women in Agriculture	Vegetable processing and preservation to extend shelf-life Women friendly user machines for cassava, Yam and sweet potatoes processing
NASARAWA	Crops	Climate smart crop varieties that thrive well in all climatic fluctuation Tomatoes resistant to soil diseases
	Livestock	Indigenous knowledge on feed research and animal health Hatchery techniques on mono sex fingerlings production
	Irrigation	Evaluation of different irrigation methods under farmers condition
	Extension Services	How to improve farmers knowledge on internet services Knowledge on storage facilities of perishable crops vegetables/fruits that are affordable
	Mechanization	Agricultural machinery that are relevant to enhance food security such as tractors, farm implements and equipment, agro-processing equipment and storage facilities
NIGER	Crops	Effect of rice variety in control of gall midge Integrated soil management in rice production
	Livestock	Management of Avian influenza Feed formulation in poultry to reduce total cost of production
	Fisheries	Techniques of fish cage culture Fish feed formulation using local raw materials
	Agro forestry	Techniques in oil palm plantation establishment and management Disease management

PLATEAU	Crops	early maturing crops to cope with climate change problem
	Livestock	local hatcher technology
	Fisheries	Not indicated
	Agro forestry	Not indicated
	Irrigation	water harvesting technology
	Extension Services	
	Women in Agriculture	
TARABA	Crop	Emergence of army worms on maize (itching) Post-harvest handling
	Livestock	Disease management and control
	Fisheries	fish feeds for multiplication
	Agro-forestry	sustainable land management practices
	Irrigation	accessing of irrigation facilities to the farmers
	Mechanization	processing activities and equipments
	Extension Services	best practices in Agric. Extension delivery
	Women in Agric. (WIA)	recipes development

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHWEST ZONE		
States	**Problem**	**Areas needing research**
EKITI	**Crops**	- Effective control of army worm - Preservation of excess farm produce during wet season
	Livestock	- In-breeding in rabbit production - KATA (PPR) in small ruminants
	Fisheries	- Fish disease and water management - Fish feed formulation
	Agro forestry	- Effective control of fruit piercing moth in citrus
	Irrigation	- The research should be based on training of engineers and technicians in order to actualize the practice of irrigation system through tube wells and wash holes in downward streams (farm areas)
	Mechanization	- Training on the use of power tiller for Tractor operations

	Extension Services	- participatory extension delivery approach
	Women in Agriculture	- Food processing, recipe development on rice, maize, soybean, cassava, cocoyam and fruit juice production
LAGOS	**Crops**	- Tomato fruit abortion and die back - Banana top bunch - Army worm eradication
	Livestock	- Alternative cheap sources of energy/protein level in feed ingredients for all animals
	Fisheries	- Alternative cheap sources of protein in fish ingredients - Cheap and affordable fishing gears - Cheap and affordable research on Tilapia rearing in pond system
	Agro forestry	- Improved technology for teak, melania and other tree crops - Appropriate fertilizer requirement for tree crops e g. Kolanut, citrus etc. - Improved knowledge on quick growth in snail rearing and feeding
	Irrigation	- Alternative water requirement for crops from production to harvest - Cheap and improved methods for attaining good quality wash-bores irrigation facilities
	Extension Services	- Agricultural production exports - Research into simple methods of technology dissemination using all available packages
	Mechanization	- Alternative methods to achieve high quality and affordable agricultural machineries
	Women in Agriculture	- Nutritional benefits of all agricultural crops - Revalidation of new technologies in gender equality - Specific nutritional programmes/projects for women and girls

OGUN	**Crops**	- Effective control measures for army worms - Birds control measures on rice production - Weeds management in crops e.g. Cassava
	Livestock	- Fattening of sheep and goats - Upgrading local sheep and goats
	Fisheries	- Feed formulation in catfish production - Brood-stock issues
	Mechanization	- Land clearing (Land development), - Opening of new land for farming and - Cassava planters and harvesters
	Irrigation	- Water management in rice production - Mini irrigation technology/technologies for small holder farms
	Extension Services	- Inadequate capacity building of staff on ICT - No conducive extension offices - Non-payment of mileage claims
	Women in Agriculture	- Inadequate capacity building on value addition (postharvest)
ONDO	**Crops**	- The need to increase the yield of sweet potatoes available - Adoption of organic fertilizer for Yam production - Cassava, Cowpea- New varieties
	Livestock	- Fattening ratio using locally available ingredient
	Fisheries	- Fish fry mortality - Inadequate local fish meal
	Mechanization	- Inadequate Local fabrication of Agricultural Implements
	Irrigation	- High cost of irrigation Equipment and implementation
	Extension Services	- Inadequate field Staff - Inadequate Mobility for field staff and supervision
	Women in Agriculture	- Innovative processing of vegetable and storage for export aid
OSUN	**Crops**	- Pepper wilting, stem borer, tomato bacterial wilting and bacterial blight
	Livestock	- High incidence of salmonellosis in poultry
	Fisheries	- Marketing outlet for fish and control of floating feeds

	Irrigation	- Not indicated
	Extension Services	- Negative effect of high extension farmers ratio on agricultural development
	Women in Agriculture	- Not indicated
OYO	**Crops**	- Armyworms control on Maize crop - Control of TUTA Absoluta
	Livestock	- Guide against Fulani herdsmen feud - Thorough establishment of ranches and other animal feed resources
	Fisheries	- Sourcing for low alternative for fish meal in fish feed
	Agro forestry	- Not indicated
	Mechanization	- Fabrication of low cost pelletizing machine for floating feed
	Irrigation	- Not indicated
	Extension Services	- Not indicated
	Women in Agriculture	- Not indicated

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHEAST ZONE		
States	**Problem**	**Areas needing research**
ABIA	Crops	- How to reduce the cost and impact of weeding in crop production - How to control the incidence of diseases and pests currently ravaging the crops especially maize, tomato and cocoyam.
	Livestock	- How to reduce the cost of feeding - Use of improve breeding stock
	Fisheries	- Reduction of cost of feed in fish production
	Agro forestry	- Improve method of checking rodents and glasscutter
	Mechanization	- Operations and handling of tractor facilities
	Irrigation	- Irrigation facilities operations - Maintenance of irrigation sites/management
	Extension Services	- Capacity building on subject master specialist - Control of cocoyam blight and army worm in maize

	Women in Agriculture	- Women development centre - Capacity building on farm equipment uses and maintenance
ANAMBRA	Crops	- Incidence of yam beetles and cricket attack - Premature yellowing of leaves and die back in cocoyam. - Cocoyam fungal leaf rots.
	Livestock	- Scarcity and high cost of Poultry DOC and feeds. - Stock improvement in pig, goat, sheep and rabbits through upgrading and artificial insemination.
	Fisheries	- Floating fish feed production (Dryer) - Equipment for fish processing. - Getting all male tilapia fish.
	Agro forestry	NA
	Mechanization	NA
	Irrigation	NA
	Extension Services	NA
	Women in Agriculture	
EBONYI	Crops	- Line transplanting - Disease in rice especially African gall midge - Pests in rice like stem borer
	Livestock	- Cost of feedings - Incident of disease outbreak - Low Veterinary services
	Fisheries	- Cost of feed in fish production - Cost of fingerlings - Slow in maturity in fish and fertility
	Agro forestry	- Abortion of forestry reserved management
	Mechanization	- Fragmentation of farm land - Problem of land ownership (tenure) - Undulating terrain
	Irrigation	- Irrigation facilities operations - High cost maintenance of irrigation sites/management - Cost of equipment
	Extension Services	- Capacity building on e-extension services - Capacity building on climate change
	Women in Agriculture	- Insufficient funding - Awareness of women and youth in agriculture (farming) - Capacity building on women in processing and utilization

ENUGU	Crop	- Cocoyam fungal disease - Papaya mealy bug pest
	Livestock	- Guava fruit abortion - Coconut fruit abortion
	Fisheries	NA
	Agro forestry	NA
	Mechanization	- High cost of tractors - No existing of hiring service providers
	Irrigation	
	Extension Services	- Lack of extension materials - Fund to establish skill plots - Lack of visit to research institutions
	Women in Agriculture	
IMO	Crop	- Cocoyam Leaf and Root Rots. - Black Spot on Guava Fruits - Fruit Abortions on Bread Fruits; Coconuts. - Die Backs on Banana and Plantain Trees.
	Livestock	- Sheep and goat upgrading - Preservation of fodder
	Fisheries	- Value Addition in Fish Production via the use of modern Smoking kiln machine.
	Agro forestry	- Climate change effects on crops and wildlife
	Mechanization	- Land tenure management effect. - Construction of locally fabricated machines that is suitable/affordable to the local farmers.
	Irrigation	- Massive erosional effects across the state (ecological) climatic changes.
	Extension Services	- Nonpayment of hazard allowance to extension agents. - Inconsistencies of government policies and evaluation towards extension work.
	Women in Agriculture	- Value addition to some perishable local foods eg tomato, teleferia (Ugu leaf) etc.

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTH-SOUTH ZONE		
States	**Problem**	**Areas needing research**
A-IBOM	Crop	NA
	Livestock	- Fabrication of simple local egg incubation technology for poultry
	Fisheries	- Floating fish feeds formulation from local source
	Agro forestry	- Simple snail egg hatching incubator - Commercial snail feed formulation from local source - Production of substrate for mushroom growth from local raw material

	Mechanization	NA
	Irrigation	NA
	Extension Services	NA
	Women in Agriculture	- Improvement on shelf life of soybeans milk introduction - Improvement on the use of cassava flour and popcorn grits for confectionaries
BAYELSA	Crop	- Cocoyam tubers rotten before harvest - Die back of hot pepper variety
	Livestock	NA
	Fisheries	NA
	Agro forestry	NA
	Mechanization	- Land clearing machines and planters that can be used in the forest zones
	Irrigation	NA
	Extension Services	- Extension Training Bulletins in Local Language of Bayelsa
	Women in Agriculture	NA
C/RIVERS	Crop	- Further research into the use of organic materials in the control of crop pest and diseases
	Livestock	- Genetic influences (breeding management), and environment conditions on the growth performance of broilers
	Fisheries	- Production of floating fish feed using available local feed ingredient
	Agro forestry	- The principles and practice of Agro-forestry - Harvesting, processing and packaging of products for local and international markets
	Mechanization	NA
	Irrigation	NA
	Extension Services	NA
	Women in Agriculture	- Improved methods of postharvest management - Value addition and processing of Agricultural products - Potential of vitamin A cassava flour - Potential of yellow maize and soya beans processing
DELTA	Crop	- Tuta absoluta of Tomatoes - Army worm in maize
	Livestock	- Bird flu to be further researched on - Swine fever
	Fisheries	NA
	Agro forestry	- Black sigatoka disease in plantation - Fruit abortion and premature rotting
	Mechanization	NA
	Irrigation	NA

	Extension Services	- Proper integration of T&V, FFs and the participatory extension models into one unit.
	Women in Agriculture	- Alternative storage devices for vegetable production.
EDO	Crop	- Tomato wilt control - Yam beetle control
	Livestock	- Management in Poultry, Sheep, Goat and Cane rat
	Fisheries	- Feed Formulation - Fingerlings production
	Agro forestry	- Adoption of selective herbicides - Best practice of vegetative propagation - Adoption of Agro-Forestry technology e.g. use of leguminous plant as hedge roll
	Mechanization	- Mechanization of weeding - Mechanized palm oil production for small palm oil processor - Storage of Agricultural crops.
	Irrigation	- Dry season crop production - Tomato production in Green house
	Extension Services	- Mainstreaming Community Development Driven (CDD) in Extension.
	Women in Agriculture	- Preservation of fruits and vegetables through synchronize.
RIVERS	Crop	NA
	Livestock	- Research into alternative sources of feed ingredients that are not in competition with man to reduce cost of production
	Fisheries	- Research into alternative cost effective fish feed
	Irrigation	NA
	Extension Services	NA
	Women in Agriculture	NA

Source: NAERLS, Agricultural Performance Survey, 2017

12.6: TRAINING NEEDS

Needs for training all categories of personnel was identified in all ADPs. The most common training listed across the six zones are; use of ICT in agriculture; use and application of GPS and statistical packages for data capture, analysis and processing; pre- and post-season training on crop, livestock production, and value chain respectively etc. All the training needs are presented in Table 12.7.

Table 12.7: Trainings and training needs in Nigeria

NORTHWEST ZONE				
States	Training Subject Matter	Category of personnel in need of training	Number of personnel	
			2016	2017
JIGAWA	Extension service advisory for effective super vision	All category of staff	Extension staff of all categories	Extension staff of all categories
KEBBI	Computer technology	Intermediate	5	5
	GPS usage		5	5
	Statistical package		5	5
KATSINA	Modern production techniques	BES/EAs	30	
	Value addition			
	Post harvest losses	BES/EAs	30	
KANO	Pre-season	EAs/Enumerators		NA
	Induction	New staff		729
	Fishery	VEAs/Farmers		440/88
	Management workshop	AACs		44
	Senior management staff	Deputy Directors/CAOs		40
	Management courses	Directors		8
SOKOTO	data collection and recording,		30	
	pre- and post-season training on crop		100	
	livestock production		200	
	value chain			
ZAMFARA	Gap analysis	All category of staff		
	value chain	All category of staff		

Source: NAERLS, Agricultural Performance Survey, 2017

NORTHEAST ZONE				
States	Training Subject Matter	Category of personnel in need of training	Number of personnel	
			2016	2017
ADAMAWA	ICT Computer skills	Finance		
	Management skill development programme	HRD		
	Seed management for sustainable agric. Production	Agric. Tech. Service		
	Monitoring and evaluation programme management	PME		
	Role of extension in agric. Tech. programme	Extension Department		
BAUCHI	NA	NA	NA	NA
BORNO	NA	NA	NA	NA

GOMBE	Long Term Training	Extension, PMT, Admin & Finance	45	
	Training on Retirement	All Staff	45	
	Pre-season Training	Extension Agent and Enumerators	85	
YOBE	Pest Management in Inter Crops	EA's/SMS	30	35
	Disease Control in Ruminants	EA's/SMS	30	35
	Training on direct data capture platform	EA/SMS	30	45

Source: NAERLS, Agricultural Performance Survey, 2017

NORTH-CENTRAL ZONE				
		Category of personnel in need of training	Number of personnel	
States	Training Subject Matter		2016	2017
BENUE	NA	NA	NA	NA
FCT	Policy development and leadership skills	GL 15 – 17	19	
	Management skills	GL 12 – 16	146	
	Participatory Extension	GL 07 – 14	224	
	Management Consulting	GL 10 – 15	154	
	Proposal cording	GL 09 – 14	153	
	ICT skills	GL 07 – 17	243	
	Administrative principle	GL 04 – 07	49	
	Defensive driving skills	GL 04 – 07	10	
KOGI	ICT training			
	Effective extension communication			
	Graphic arts			
	Publications and radio programmes production			
KWARA	NA	NA	NA	NA
NASARAWA	In-House Training	All staff		
	Long term courses			
	National Diploma	Junior	3	3
	HND	Intermediate	4	4
	PGD, BSc, MSc	Senior	3	3
NIGER	Promotion of Yam mini setts technology	EAs and Block Extension Agents	NA	
	Post-harvest losses control in rice	EAs	NA	
	Planting of maize using ideal seed per hole	NA	NA	
	Planting of soybean using drilling method			
	Complimentary feeding of infants	WIA/ BEA	NA	
PLATEAU	NA	NA	NA	NA

TARABA	Extension trainings	E.AS	-	309
	Training on OFAR	E.A.S	-	309
	WIA trainings	SMS (WIA) BEA (WIA)	-	10
	Facilitation	SMS	-	20
	Post harvest handling	SMS/Extension	-	37
	Media training	COM/ACOM/MO	-	3

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHWEST ZONE				
			Number of personnel	
States	Training Subject Matter	Category of personnel in need of training	2016	2017
EKITI	Control of fruit piercing moth in citrus	NA	NA	NA
	Disease prevention and control of livestock	NA	NA	NA
	Preservation of perishable crops and ICT use	NA	NA	NA
LAGOS	E – extension on interactive voice system	All extension personnel	15	20
	Proper extension reporting	All extension personnel	31	31
	Extension Communication	All extension personnel	90	15
	Use of GPS in farm activities	All extension personnel	-	90
	Advance management courses in extension methodology	Head, Extension and field activities and UIA	3	3
OGUN	ICT	Staff	80	80
	Integrated post management	SMS, Head of crops	5	5
	Impact of climate change on crops and livestock	All SMS	20	20
	Post-Harvest Technology	BEAs and SMS	30	30
	Value addition to produce	BEAs, VEAs and SMS	50	50
ONDO	M & E Training on report format and writing	Planning, Monitoring and Evaluation	25	
	Extension Training	Extension Office	250	
	Post-harvest training	Agric . office	250	
OSUN	Methods of extension delivery system	Deputy directors (extension, crop, livestock, fisheries)	6	
	Crop Protection	Same as above	9	
	Techniques of handling fish	Same as above	8	
OYO	Training of Ext. delivery	GL08-GL16	-	-
	Basic computer training	GL01-GL09	-	-
	Communication Training	GL08-GL14	3	3
	Training on food processing	-	-	-
	Agricultural project planning	GL14-GL16	-	-

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHEAST ZONE				
States	Training Subject Matter	Category of personnel in need of training	Number of personnel	
			2016	2017
ABIA	C/M/E	EAs	51	51
	C/M/E/SP	EAs	51	51
	Y/M/C/T	EAs	51	51
	Oil palm	EAs	51	51
	Cashew nut	EAs	51	51
ANAMBRA	NA	NA	NA	NA
ENUGU	ICT Technology	Media personnel	6	
	Script writing	Media personnel	6	
	Programme production/ Documentory	Media personnel	6	
IMO	Data capturing using android tablet/ GPS Systems	M&E staff	20	
		Enumerators		
		Extension agents		
EBONYI	Extension technology	EAs, ZEO, BES	200	250
	ICT	EAs, Management planning and accountant	25	25
	Project management	EAs, management staff	11	11

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTH-SOUTH ZONE				
States	Training Subject Matter	Category in need of training	Number of personnel	
			2016	2017
A-IBOM	Organic farming	Extension staff	100	120
	Mushroom farming	Extension staff	100	120
C/RIVERS	Organic farming	Extension staff	100	120
	Mushroom farming	Extension staff	100	120
DELTA	Pest and diseases control	To all staff involved in extension matter		
	Radio and TV program production	Communication and PME staff.		
	ICT	All extension PME Officer		
EDO	Lesson plan preparation	SMS		
	Cat fish production	Farmers		
	Industrial training on Agric. production	Nigerian Armed forces Staff		
	Water quality control and pig	Students of AAU and NOUN		
	Step Down on Catfish	PFO and 8 I.T Students		
	Cost infectiveness Extension GAP and cocoa production	EAs and Technical staff		

	Fertilizer Optimization Tool	DAES		
	Training of Trainers on Cat fish production/processing	EAs, CPO and I.T students		
	Aquaculture value chain	Warri, Delta state		
	Hatching of claries fingerlings	40 students on industrial Training, 4 corper, 6 staff & farmers		
	Fishery & pig production	Farmers		
	Crop product & Animal Husbandry	Farmers		
	Snail Production	Farmers & I.T students		
	Cassava stem multiplication	Farmers		
	Integrated soil fertility Management	Farmers, EAs & DAES		
	Weather Report Training	Enumerators		
	Market survey Training	Enumerators		
	Audio-visual media production Tech for Agric & Rural Development	CCO/Cameraman		
	Training of trainers on value chain Dev	Director of Extension		
	Design & Mgt of surface irrigation system	Director of Engineering services		
	Effective Mgt of micro-credit & finance scheme	DRID & credit & marking officer		
	Training of trainers on Group formation	Extension Agents		
	Account control, Audit Risk & whist blowing	Audit clerk		
	Skill Improvement course for internal Auditors	Internal Auditor		
	General Mgt course for Executives	Programme Manager	1	1
	Participatory Mgt of Agricultural & Rural Development progrmme	Programme Manager	1	1
	Leadership & Management skills for project Managers	Programme Manager	1	1
	Emerging Trends in secretarial Duties & computing skills	Secretaries/computer operators	9	9
	Record Management, Document Tracking & Mail Handing	Registry staff (clerks)	4	4
	Value re-orientation, Ethics & Altitudinal change in the world place	Admin-officers	1	1
	Office Equipment maintenance & management	Operators & Technicians	2	2
	Managing & Training function	Training Executive co-coordinator	1	1
	Techniques for Advance record keeping, Registry Mgt & correspondence	Clerical staff (Registry)	4	4
	Defensive Driving, safe monitoring & communication skills for Drivers	Drivers	6	6
	Understanding stores, Inventory, E-procurement & Logistics Management	Store officer	1	1

	Security & safety skills for security personnel	Security Guards	3	3
	Training Needs Analysis	Training officer	1	1
	Fundamental of office Administration for effective leadership in an organization	Director of Administration & Training	1	1
	Understanding payroll, salaries, wages & pension Administration & Account	Accounts clerks	5	5
	Total cost Mgt & control for organizational probity	Accountant	1	1
	Financial Management for Heads of Account	Director of Finance & Accounts	1	1
	e-payment system challenges & Implementation strategy	Cashier	1	1
	Computer Network & Internet connectivity	MIS	2	2
	Budget preparation skills	Director of planning Monitoring & Eval/MIS	2	2
	Monitoring & Evaluation in Agric Business	Evaluation officer	1	1
	Public information Mgt & Media relations	Chief communications officer	1	1
	Mainstreaming gender & the invulnerable groups into Developmental programmes	Head women in Agriculture	1	1
RIVERS	Capacity Building	SMS	25	
BAYELSA	NA	NA	NA	NA

Source: NAERLS, Agricultural Performance Survey, 2017

Media Service

The survey noted that most ADPs proposed extension activities using radio, television and internet services in both 2016 and 2017 but very few of the proposed programmes were achieved. This is possibly linked to the paucity of funds in the state ADPs and the increased cost of air time in most broadcasting stations. The northwest zone reported the highest number of radio and TV programmes for extension delivery services especially in Kano state as presented in Table 12. There was no data on radio and TV programme from the states in the North East zone. Findings from Focus Group Discussion during the survey excersize reveals that majority of the respondents used friends, families and extension agents as the main media for sourcing agricultural information. These media were rated to be generally good as per the perception of the farmers. For radio programmes, the respondents expressed the airing time as the main constraint to receiving agricultural information.

Use of Social Media in extension

The advent of smart phones and social media presents a great potential for easy and effective means of communication. However, there was no report of the use of social media platforms like; whatsApp, twitter, facebook, skype, youtube, linkedn, e.t.c. for extension service delivery activities in the country. This may be

attributed to many factors such as lack of skills, ineffective internet and GSM services, insufficient funds and unstable power supply.

Table 12.8: Radio Programmes

NORTHWEST									
State	**Programmes**	**No. Proposed**		**No. achieved**		**Station Aired**	**Programme duration**	**Cost of Airing per annum**	**Sponsor**
		2016	**2017**	**2016**	**2017**				
JIGAWA		NA	NA	NA	NA	NA	NA	NA	NA
KATSINA	*Kartau Sarkin Noma*	52	52	32	33	State radio	30min	N120, 000	KNARDA
KANO	*Harama Manoma*	52 Slots	NA	13 Slots	NA	Radio Kano	30 Minutes	150,000	KNARDA
SOKOTO	*NA*	NA	NA	NA	NA	NA	NA	NA	NA
KEBBI	*Naduke*	52	52	52	52	KB Radio	30 mins	NA	NA
	Sallama	52	52	52	52	KB Radio	30 mins	NA	NA
	Don Manoma	52	52	52	52	KB Radio	30 mins	NA	NA
	IFAD take kira	52	52	52	52	KB Radio	30 mins	NA	NA
ZAMFARA	Zamfara Project								ZADP
	Fadama Na Iii								25FCO
	Kifi Baya Samuwa Kan Dutse								IFAD Zamfara
	Na Duke tsohon Ci niki								Zamfara Radio
	Don Makiyaya								Zamfara Radio

Source: NAERLS, Agricultural Performance Survey, 2017

NORTH CENTERAL									
State	**Programmes**	**No. Proposed**		**No. achieved**		**Station Aired**	**Programme duration**	**Cost of Airing per annum**	**Sponsor**
		2016	**2017**	**2016**	**2017**				
PLATEAU	NA	NA	NA	NA	NA	NA	NA	NA	NA
NASARAWA	Radio programme	24	24	7	3	NBS	3hrs	Free aired	-
FCT	Agric Radio prog.	32	52	20	12	Kapital FM	30 mins	NIL	32
NIGER	NA	NA	NA	NA	NA	NA	NA	NA	NA
KWARA	NA	NA	NA	NA	NA	NA	NA	NA	NA
KOGI	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENUE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TARABA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHWEST									
State	**Programmes**	**No. Proposed**		**No. achieved**		**Station Aired**	**Programme duration**	**Cost of Airing per annum**	**Sponsor**
		2016	**2017**	**2016**	**2017**				
OSUN	NA	NA	NA	NA	NA	NA	NA	NA	NA
OYO	NA	NA	NA	NA	NA	NA	NA	NA	NA
EKITI	Agbeloba	305	305	305	193	BSZS Radio station	10mins	1.2m	
ONDO	Kaje Kayo	104	104	0	0	Positive FM 102.5	30minutes	1M	
	Boluyo (TV)	104	104	0	0	OSRC	30minutes	1M	
OGUN	NA	NA	NA	NA	NA	NA	NA	NA	NA
LAGOS	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTHEAST									
State	**Programmes**	**No. Proposed**		**No. achieved**		**Station Aired**	**Programme duration**	**Cost of Airing per annum**	**Sponsor**
		2016	**2017**	**2016**	**2017**				
ABIA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANAMBRA	OGE-Olugbo	10	52	7	21	NA	NA	NA	NA
EBONYI	OgeNdiOrubi (Radio & TV)	48	48	Nil	Ni				
ENUGU	Oge Olu Ugba	52	-	-	-	ESBS	30mins	-	
	Radio Farmer	52				Radio Nig/ESBS	30mins	-	
	Preparation for Farming Season	2	-	1	-	Dream Fm	30mins	-	
IMO	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: NAERLS, Agricultural Performance Survey, 2017

SOUTH-SOUTH									
State	**Programmes**	**No. Proposed**		**No. achieved**		**Station Aired**	**Programme duration**	**Cost of Airing per annum**	**Sponsor**
		2016	**2017**	**2016**	**2017**				
A-IBOM	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAYELSA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C/RIVERS	Discussion programme (Radio & TV)	24	24	4	4	CRBC	15 mins	720,000	NA
DELTA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EDO	Farming Hints	52	52	52	35	EBS	25 mins	N1,800,000.00	EDO ADP
RIVERS	Yam mini set technology	-	-	-	1	RV. TV	15 minutes	Free	Free
	Potentials of cassava roots	-	-	-	1	RV. TV	15 minutes	Free	Free

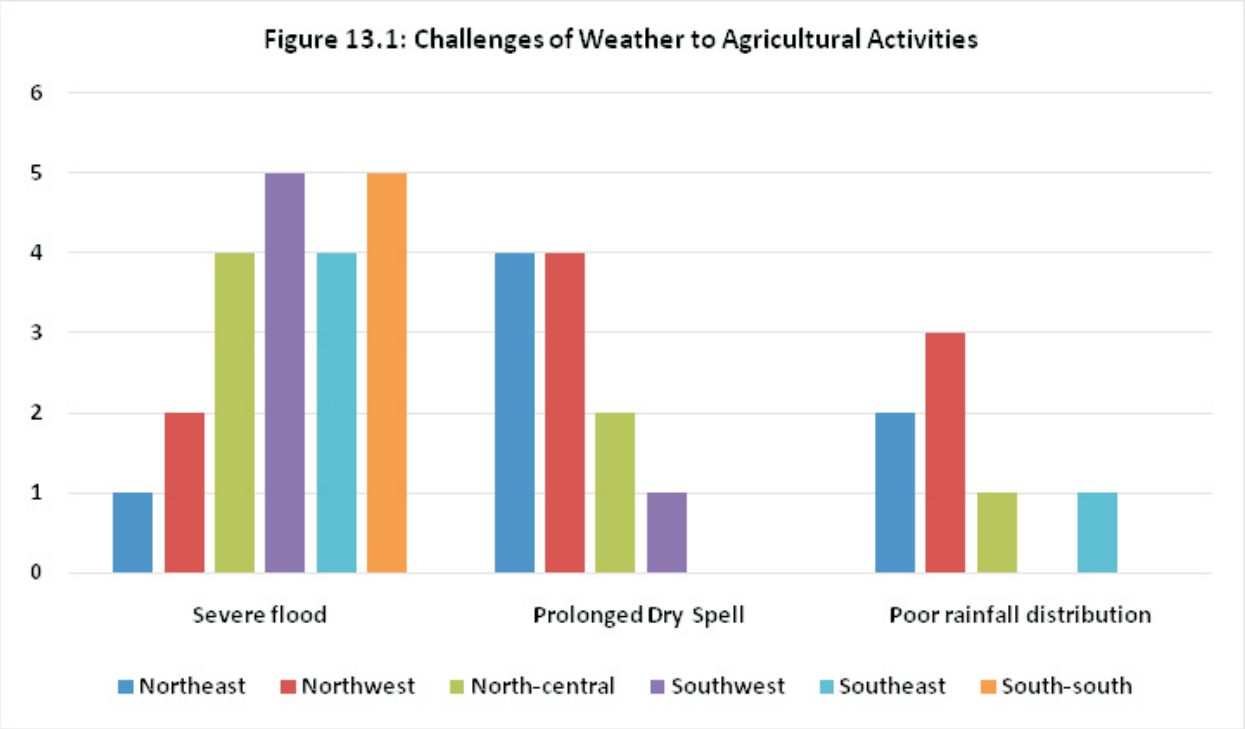
Source: NAERLS, Agricultural Performance Survey, 2017

13.0: General Constraints to Agricultural Production

The general constraints/ challenges to agricultural production in the year are presented under the following: weather, inputs, mechanization, extension activities, agricultural broadcasts, e-extension and others.

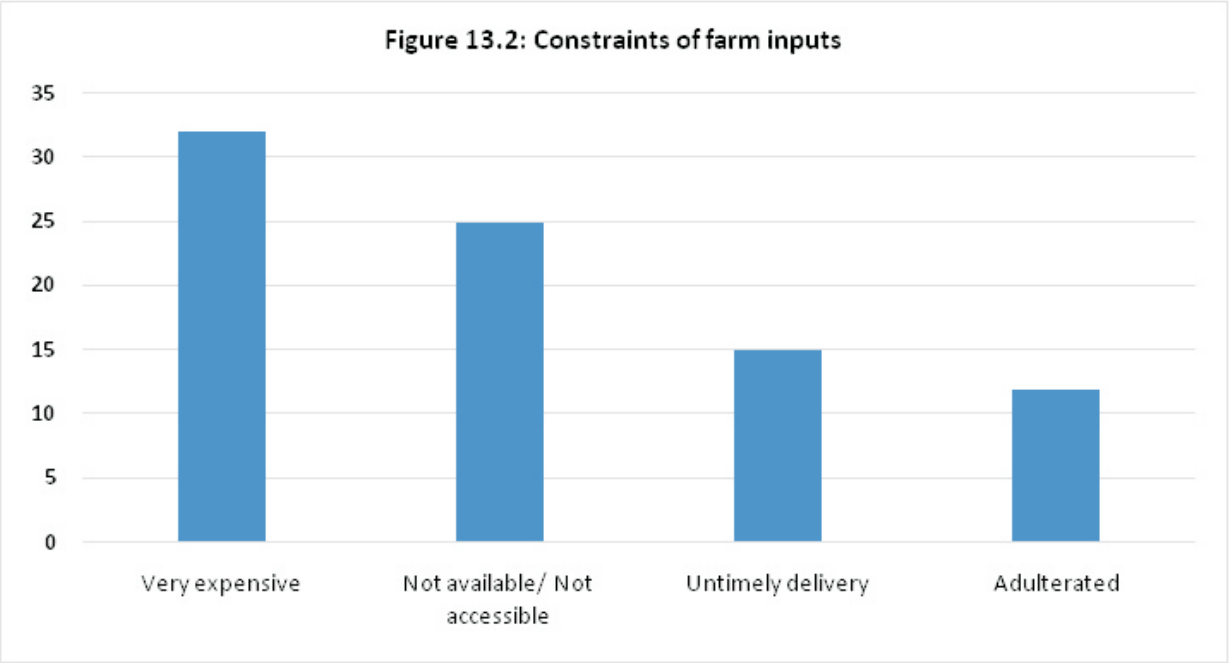
1. Challenges of weather to agricultural activities

Figure 1 shows that the most common weather constraint was flooding. Severe flooding was recorded in 21 states in 2017, with the southwest and south-south zones suffering the most from the consequences of severe flooding, with 5 states recording high incidences in each zone; while the northeast had the least (one state). Dry spells which affected crops were reported across the zones, except in the southeast and south-south. Moreover, poor rainfall distribution patterns were reported for all zones, except southwest and south-south.



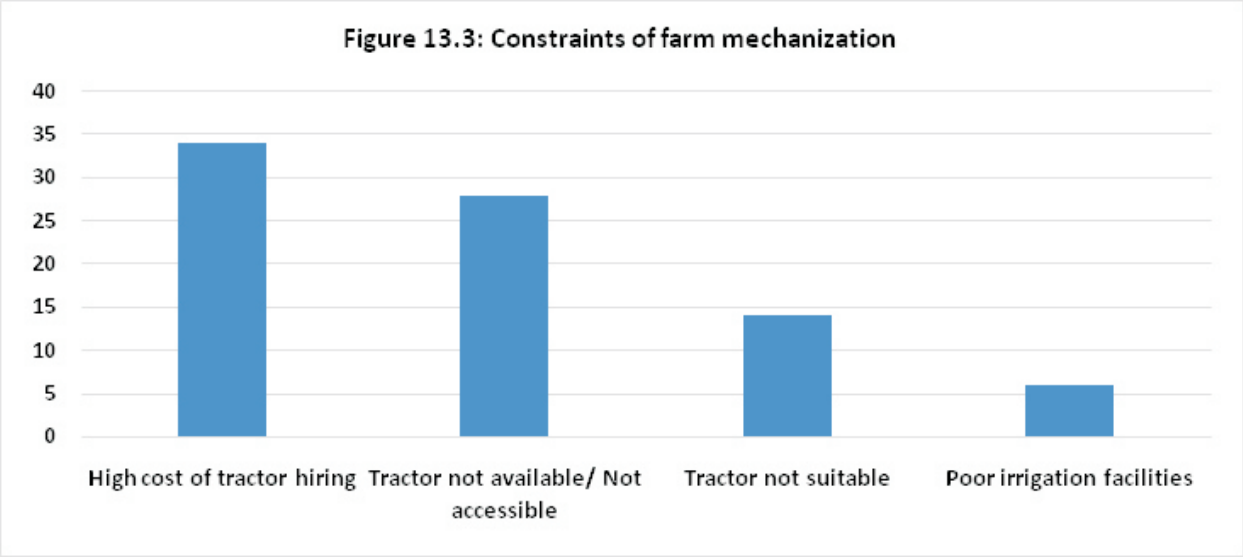
2. Farm Input provision, availability and accessibility

In 2017, farm inputs were largely considered expensive by the farmers in 32 states. Figure 13.2 presents the global picture of inputs availability and accessibility this year.



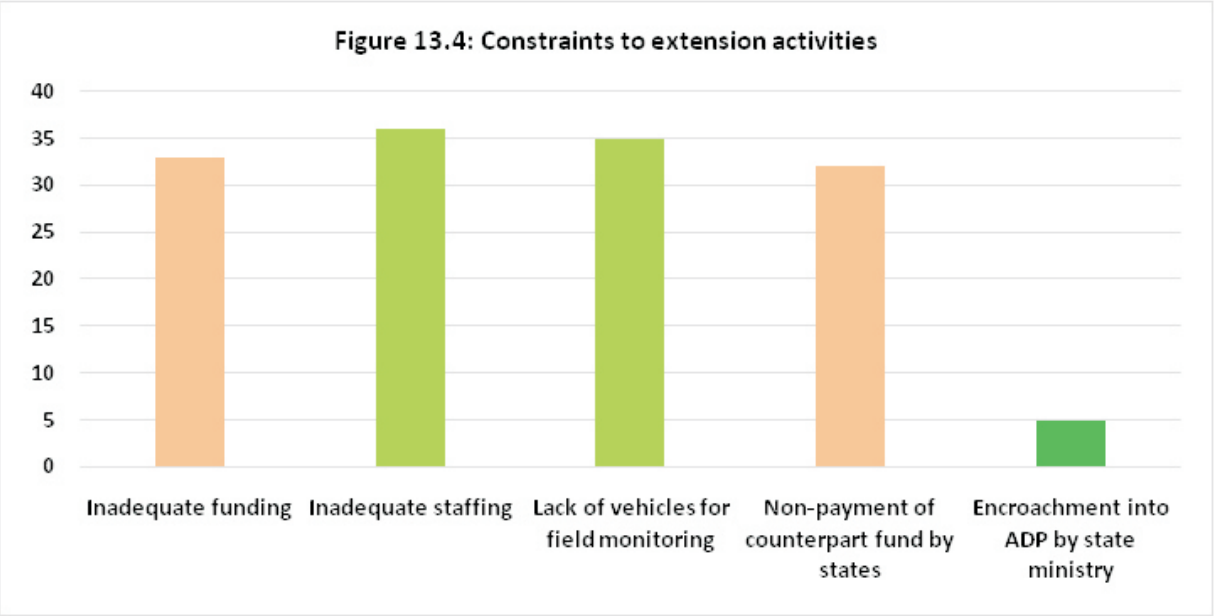
3. Agricultural mechanization

Figure 13.3 reveals that farmers in 34states could not access tractor services in 2017 due to high cost of tractor hiring services; while about 28 (75%) states could not access tractor services for their wet season agricultural production activities due to unavailability. Other reasons which prevented farmers from accessing tractor services in 2017 are indicated in Figure 13.3



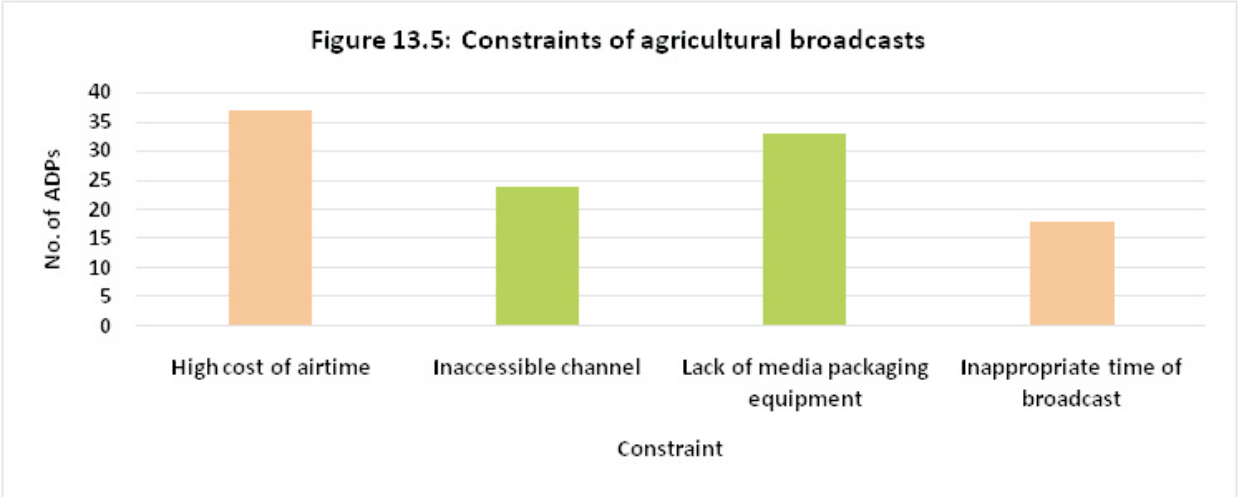
4. Poor Extension Support

The 2017 survey data showed that there was inadequate funding and personnel to support extension service delivery in most states as presented in Figure 13.4. The figure shows that 36 ADPs representing 97% of the 37 ADPs were highly under-staffed while95%were not mobilized enough to play their facilitation role and 89% were underfunded. Moreover, the extension work of 5 (14%) of the ADPs had been practically taken over by the State ministries of agriculture.



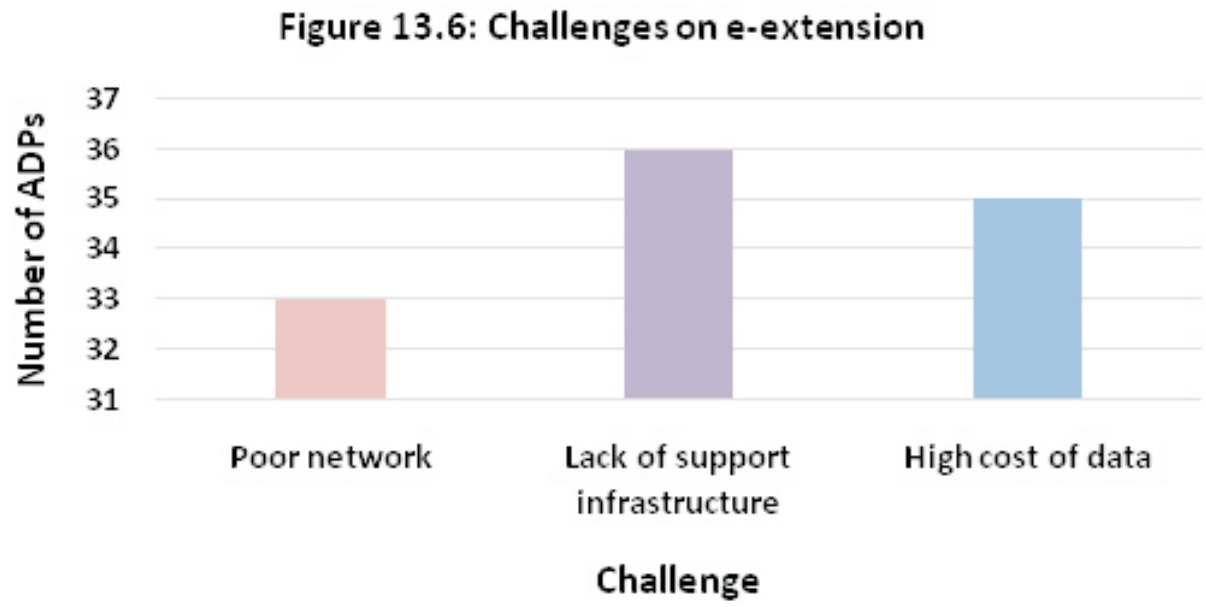
5. Agricultural Broadcast

The survey data presented in Figure 13.5 show that all the ADPs complained of the high cost of airtime as a major constraint to airing their programmes. Other constraints to agricultural broadcasts as captured include lack of equipment(89%), poor access by farmers, 24 ADPs (65%), and inappropriate broadcast times in 18 ADPs (49%).



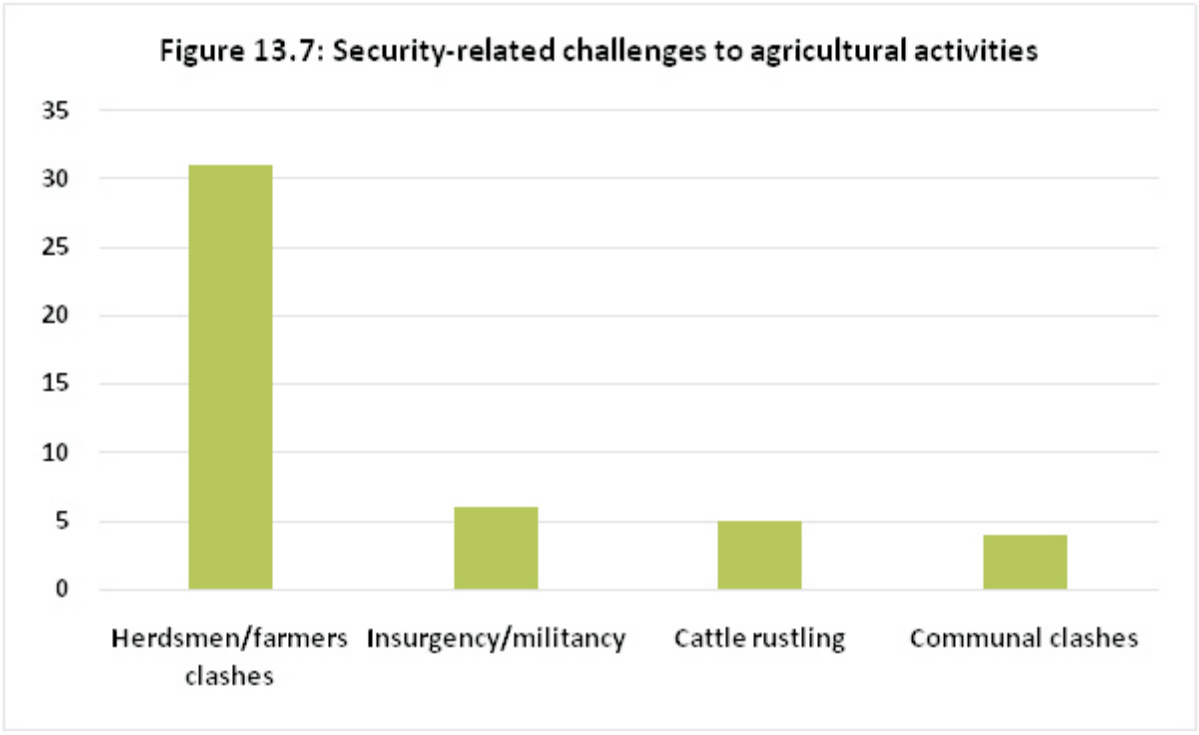
6. E-Extension

E-Extension is a veritable platform for real-time access to agricultural information and technologies using ICT. Majority of the ADPs were unable to use the e-platform for their extension delivery services due to constraints presented in Figure 13.6.



7. Security-related Constraints

Information on increasing security challenges to agricultural production was captured in the 2017 survey. Figure 13.7 shows the spread of various challenges across the states. 31 states reported frequent incidences of herdsmen/farmers conflict; 6 States (16%) reported activities related to insurgency and kidnapping while 5 and 4 states reported cattle rustling and communal clashes respectively. This situation has caused a lot of farming communities to abandon their homes, farmlands and other agricultural ventures out of fear for their lives while potential investors were scared away.



14.0 Conclusion and Recommendations

The 2017 Wet Season Agricultural Performance Survey in Nigeria was conducted with the support and collaboration of all state Agricultural Development Programmes and Ministries of Agriculture. The study documented several constraints, ranging from the challenges of climate change and absence of government input support, through insecurity and kidnapping, to those of poor support for agricultural extension activities. These constraints affected all the subsectors of agriculture (crops, livestock, fisheries and aquaculture, and agroforestry) along the value chains. These challenges, notwithstanding, the study noted increased land area for production. The survey forecasts production increase of at least 35% above that of 2016 in all areas of agriculture. However, this is expected to be marginal for livestock and aquaculture. Nevertheless, overall farm yields would remain below global and African averages for all the subsectors.

Based on the various observations, findings and challenges from the field, the following recommendations are made:

i. **Promotion of research and extension responses to the challenges of climate change**: The impact of climate change on agricultural production in the country is becoming more apparent each year. In 2017, Nigeria witnessed excess rainfall with irregular distribution and severe incidences of flooding, erosion, dry spell, diseases and pests, which affected crop, livestock, and fisheries productivity. This situation raises the scope for increased funding for and focus on research and extension activities towards mitigating the effects of climate change

ii. **Strenghtening the capacity of ADPs and all other agencies involved with Agricultural data capture.** The importance of data in planning cannot be overemphasized. The level of accuracy of data generated however has a direct bearing on the appropriateness and effectiveness of plans and policies generated/ formulated based on the data. Data capture at the grassroot level by the ADPs is currently very weak and needs to be supported for improved results. A collective action of relevant stakeholders is highly desirable.

iii. **Effective subsidy as strategy for enhancing agricultural production**: The study recorded appreciable government support and intervention programmes in several states. However, many of the supports were ineffective as majority of the farmers could not access such supports. Therefore, a cost-effective and efficient subsidy application system across the value chains is recommended.

iv. **Conscientious promotion of agricultural mechanization as a national priority**: The survey observed that about five states acquired new tractors to increase mechanization. Despite this and the Federal Gvernment's effort at providing mechanization inputs nationwide, the survey noted that most farmers are still using hand-tools for farm operations. There is the need for government to intensify efforts, using the Public-Private

Partnership platform to promote the use of appropriate mechanization technologies especially small-scale tillage and processing machineries. Concerted efforts should be made to repair and maintain the huge number of non-functional tractors across the nation.

v. **The need to open virgin lands for agribusiness**: The cost of opening new land for agriculture is high and in some cases such as Rivers, Bayelsa, Ogun, Edo and Benue State, prohibitive. For example, it took as much as N120,000 to N150,000 to manually clear one hectare, in Ijebu land because of huge tree felling and de-stumping. To achieve the desired field crop expansion and promote up profitable farming, therefore, government land clearing units should be revived to open up more arable land.

vi. **Improve Funding and Recruitment of Extension Personnel:** Dwindling funding for capital projects, shortage of staff, inadequate training and lack of mobility were observed as the major challenges of extension delivery nationwide. There was also the problem of inadequate extension delivery packages (in the form of broadcasts, prints, field demonstrations, visits, etc). Therefore, there is an urgent need for the State Governments to provide needed funds, recruit more personnel and build their capacity to strengthen extension service delivery in the States.

vii. **Recruitment of N-Power (Agro) Volunteers:** The survey observed that N-Power (Agro) volunteers in many states are actively participating in extension advisory services. States are encouraged to actively engage them for their volunteer period. This category of personnel is a potential pool for recruitment by the states as agric extension staff

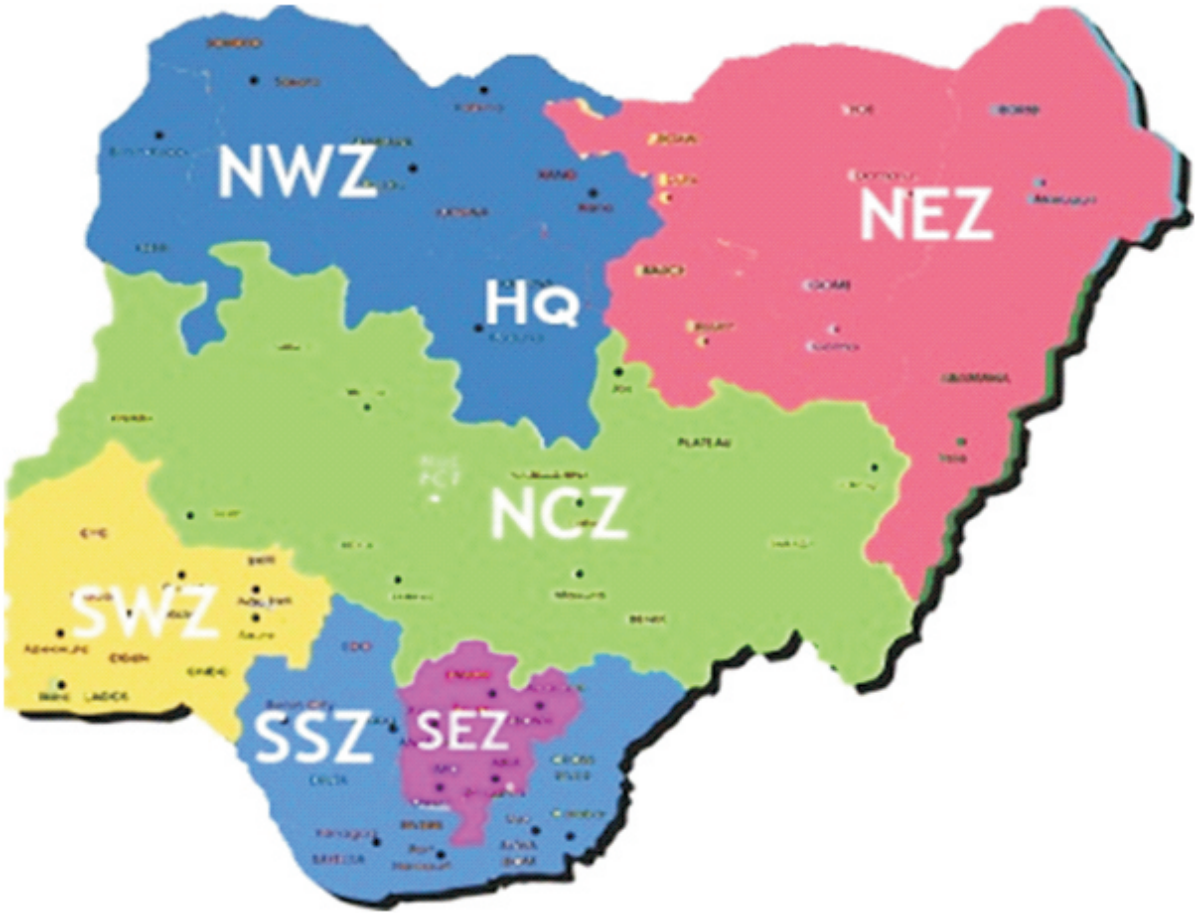
viii. **Collaboration and policies to strengthen agricultural broadcasts**: Agricultural media packages and broadcasts in the country are gradually fading out due to inability of many producers to pay for the air time. The costs of production and airtime are far beyond what the State ADPs can bear. It takes, for example, about N6 million to produce and air a 30-minute programme on state radio for one year. With almost zero capital budget release for ADPs, 34 states could not produce or air a single radio programme in 2017. This has been the trend for a while. Government should partner and collaborate with Private Sector to extend agricultural information through expanded broadcasting objectives. The government should also make appropriate policies on broadcasting, through the National Broadcasting Commission (NBC) that would mandate radio and television houses to dedicate a certain percentage of their programming to agriculture towards transforming the sector.

ix. **Strengthening of e-Extension centres to boost agricultural advisory delivery**: The survey found that the zeal of farmers to expand agricultural activities was not equally matched with the requisite knowledge for improved farm management practices. Besides, the the average ratio of extension agent to farm families has remained astronomically high— up to 1:17,000 for some states, instead of the FAO recommended

1:500-800. Nigeria should leverage on use of ICT to reach out to teeming farming population real-time online. In this regard, the National Farmers' Helpline Centre and the zonal hubs should be urgently and adequately supported to be fully operational.

x. **Dealing with the scourge of insecurity:** One of the outstanding findings of this survey was the threat of insecurity to the business of agriculture across the country. This threat was mainly in the forms of farmers/herdsmen conflicts, kidnaping, militancy/insurgency, cattle rustling and communal clashes/land disputes. The menace was first strongly reported in the 2011 survey, and since then in subsequent surveys. Proactive strategies involving all stakeholders towards controlling and eventual elimination of these security challenges should be developed and implemented.

Cars packed full with rice, ready to be smuggled into Nigeria at the Ilaro border town, Ogun State Smuggling of agricultural produce is a disincentive to farmers in the country



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