ANNUAL AGRICULTURAL PERFORMANCE SURVEY REPORT OF NIGERIA

2009 WET SEASON

BY

NATIONAL AGRICULTURAL EXTENSION AND RESEARCH LIAISON SERVICES (NAERLS)
AND
NATIONAL FOOD RESERVE AGENCY (NFRA)
OF
FEDERAL MINISTRY OF AGRICULTURE AND WATER RESOURCES

IN COLLABORATION WITH

NATIONAL BUREAU OF STATISTICS (NBS),

NIGERIAN METEOROLOGICAL AGENCY (NIMET),
AND
ZONAL COORDINATING RESEARCH INSTITUTES

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PREFACE

Field situation assessment of wet season agricultural Production in Nigeria is an annual evaluation exercise, which this year was jointly conducted in August and September 2009 by the National Agricultural Extension and Research Liaison Services (NAERLS), National Food Reserve Agency (NFRA), National Bureau of Statistics (NBS), Federal Department of Fisheries (FDF), Nigerian Meteorological Agency (NIMET), Planning, Policy Analysis and Statistics Department (PPASD), Federal Department of Agriculture (FDA), and five Zonal Coordinating Research Institutes. Thirteen teams of three scientists each covered all the 36 states of Nigeria and the Federal Capital Territory (FCT).

We wish to express our sincere appreciation to officials of the Ministries of Agriculture and other state parastatals, State Agricultural Development Projects (ADPs), and LGA officials across the country for making all necessary arrangements to facilitate the smooth conduct of the study and for providing the required data. The outputs of the evaluation exercise have been put together into state, zonal and national reports, which are being circulated to all states and relevant Federal agencies and other stakeholders. Although the problems of unavailability and inaccuracy of data persist, the involvement of agencies such as NBS, FDF and NIMET raised the scope that improved the quality of the reports. Weather data used in this report was provided by NIMET. The problems of paucity of livestock and fisheries data in many ADPs still remain. Efforts are being made to build the capacity of ADPs to improve the quality of data to be kept and we hope that this will improve future data capture. We look forward to receiving your comments on this report as they will enhance better reportage and improve the work in future.

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ACRONYMS

ADP	-	Agricultural Development Programme
APSR	-	Agricultural Performance Survey Report
ASC	-	Agro Service Centers
BES	-	Block Extension Agent
CAYS	-	Crop, Area and Yield Survey
EA	-	Extension Agent
FDA	-	Federal Department of Agriculture
FDF	-	Federal Department of Fisheries
FNT	-	Forth Nightly Training
IAR	-	Institute for Agricultural Research
IAR&T	-	Institute of 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
NSS	-	National Seed Service
NSPFS	-	National Special Programme for Food Security
OFAR	-	On Farm Adaptive Research
PPASD	-	Planning Policy Analysis and Statistics Department
PRSD	-	Planning Research and Statistics Department
RID	-	Rural Infrastructure Development
RTEP	-	Root and Tuber Expansion Progamme
SPAT	-	Small Plot Adoption Technique
SSP	-	Single Super Phosphate
T & V	-	Training and Visit
ZEO	-	Zonal Extension Officer

LIST OF RESOURCE PERSONS

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Executive Summary

Preamble

The annual agricultural performance survey was conducted between 24th August and 6th September, 2009. The National Agricultural Extension and Research Liaison Service (NAERLS) and the National Food Reserve Agency (NFRA) conducted the national survey in collaboration with several other Institutions among which are the National Bureau of Statistics (NBS), Federal Department of Fisheries (FDF), Nigeria Meteorological Agency (NIMET), Planning, Policy, Analysis and Statistics Department (PPASD), Federal Department of Agriculture (FDA), and five Zonal Coordinating Research Institutes (IAR, LCRI, NCRI, IAR&T and NRCRI). The expansion in the range of participating institutions was strategic in order to improve the depth, quality and utility of the output of the exercise.

The key objectives of the survey were to assess 2009 wet season agricultural performance and to make forecasts for the season; identify constraints to increased agricultural productivity and effective extension service delivery; and to provide feed back for improved research and policy performance.

A multi-disciplinary team of three scientists conducted the survey in each state using a menu of participatory techniques. Data were collected through questionnaires, field visits/observations and focused group discussions. The team included officials of state Agricultural Development Programmes (ADPs) and Ministries of Agriculture and Natural Resources as well as individual farmers/farmers' groups in four Local Government Areas across two ADP zones in each state. Each of the thirty-six states and the Federal Capital Territory (FCT) were visited for three days. A total of 40 scientists were involved in the survey. A summary of the findings is as follows:

Rainfall Situation

In nearly all the states, the cumulative rainfall up to August in 2009 was lower than that of the same period last year (2008). The rains started between April and May in all the states within the North East Zone except in Yobe State that recorded its first rains in June. There were no reported cases of flooding except in Yobe state where about four cases were recorded. Rainfall started in March but most of the areas received their first rain in May/June. In the North West and North East Zones, Katsina and Borno states received more rainfall in 2009 compared to the amount received in 2008. Floods occurred in Zamfara, Sokoto Kebbi and Kaduna States in August, 2009. The rains established late in FCT, Niger, Kwara and Nasarawa states. In the South East and South West Zones, rain commenced between January and February. Dry spells occurred throughout the northern states and in a few southern states such as Lagos, Ogun, Ekiti Oyo, Osun and in all states of the South East with varying levels that ranged between 15 and 45 days. Total amounts of rainfall were generally higher between the months of July and September in the North Central zone this year than in 2008

Farm Input and Farmers Priority Needs

Fertilizer supply by government agencies was grossly inadequate and was a constraint to farmers across the nation. Fertilizers came late in 2009 and were poorly distributed through special committees in the states. The fertilizers from the LGAs were further subsidized but more difficult to obtain. Farmers had to make up by purchasing from open markets where prices ranged from ₦4,500 to ₦7,000 per 50 kg bag. Fertilizer distribution by the Voucher System in Taraba and Kano States made farmers accesses to the commodity better in 2009 than in 2008, though the consignments arrived late.

Most farmers did not have access to improved seeds hence had to use saved stocks from their previous harvest. The seeds supplied by government agencies arrived late and farmers could not use them. Incidences of fake "improved seeds" assumed wider dimensions in 2009.

Limited procurement and distribution of seeds, cuttings and seedlings were undertaken by the ADPs in some states; while inadequate agrochemicals were reported to have been distributed by Zamfara, Kwara, Niger and Plateau states. Discussion with farmers indicated that they sourced less than actually needed quantity of planting materials and other inputs primarily from the open market with no assurance of product quality at prices that are about one and a half times higher than the official government prices. Most states did not procure inputs for pest and disease control in crops. The use of agrochemicals was very minimal in Benue State and the South East zone.

Agricultural Mechanization

Access to tractors was a serious problem in 2009. Lack of adequate functional tractors to meet the demand in the country re-occurred. The few tractors were of variable models without adequate spare parts. Tractor operators have limited technical skill to handle in the event of any breakdown. The high cost of diesel during the season, and frequent breakdown of tractors during operation further complicated the problem. Usually farmers prefer to patronize private tractor hiring services that readily meet their demands. The average cost of tractor hiring ranged between ₦3,200 – ₦10,000 for ploughing and ₦1, 500 – ₦8,000 for both ridging and harrowing in the South West Zone and less in the North East Zone. In the North Central Zone and North West Zone, the cost of tractor hiring ranges between ₦2,000 – ₦8,000 and ₦4,000 – ₦15,000 for all the farm operations. Between 2008 and 2009, the cost of tractor hiring for harrowing increased by about 36% in the South East and South West Zones and 9% in the North West Zone. The cost of ridging increased by 30% in the South West Zone in 2009; but in the North Central and North East Zone, there were no significant increases in the cost of tractor hiring between 2008 and 2009.

Labour Costs of some Farm Operations

Labour costs of farm operations increased remarkably across the country. While the costs of land clearing increased slightly from ₦2,500 in 2008 to ₦2700/ha in 2009 in the north eastern states, it increased from ₦2,500 to ₦ 3,528.60/ha in north-western states. This year, land clearing cost was as high as ₦ 7,287/ha, ₦ 12,666.70/ha and ₦29,857.10/ha in the north-central states, south western states and south eastern states respectively and underscores the need for improvement in access to farm machineries. On a national level, the percentage changes on mean labour costs (₦ /ha) were 10.8%, 11.5% and 15.4% for land clearing, ploughing and ridging respectively in 2009 compared to 2008.

Food Commodity Prices:

Prices of food commodities increased substantially in 2009. A comparison between January and July 2008 with January –July 2009 showed a 20% increase in the prices of both maize and millet, and11.92% for rice in the north-eastern states. However, the zonal means indicated that, there is a decrease in the prices of maize and rice by -13.58% and -4.24% respectively which probably relates to the growing investments on importation of rice. In the northwestern states rice recorded an increase in price by 170% in Jigawa state, while the zonal mean of north western states showed an increase of 32.71%. In north central states a similar price increase for rice was recorded by 73.1%, and 42.5% and 40% for maize and millet respectively. In the south west, the price of maize increased by 66.6% in Imo, 42.9% in Akwa Ibom and 23.5% in Ebonyi States. The price of rice decreased by 22.76% in Enugu State, but increased by 60% in FCT and 58.6% in Ondo State. It is obvious in Figure 1 that importation of rice increased over the years, while the value for 2007 more than doubles 2002. Prices of cassava tuber, gari and flour increased in 2009 in the northwest zone. The national average increases for these commodities are 20.29%, 16.59% and 9.2% for cassava tuber, gari and flour, respectively. Prices of yam tuber, yam flour and sweet potato increased significantly in 2009 in north central states by 23.06%, 44.76% and 36.59% respectively, while the average national increase is 16%, 12% and 19% for the same commodities.

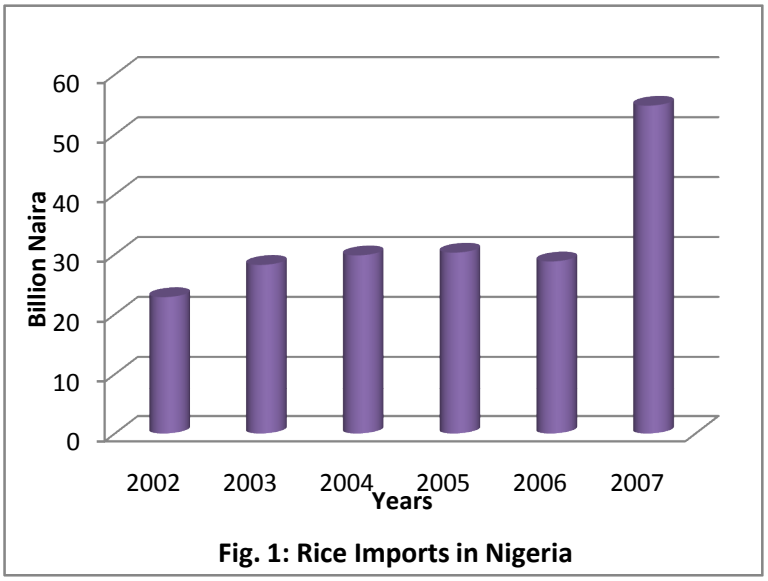

Fig. 1: Rice Imports in Nigeria

The price of melon increased by 51.2% in north central states and Irish potato increased by 27% in the south western states; and national average increase of 13%, 11% and 4% for melon, soybean and Irish potato respectively were reported. The price of tomato increased by over 80% in 2009 while that of pepper increased by over 300%. The national average shows 9%, 12% and 3% increase in prices for mutton, chicken and fresh fish respectively.

Generally, at the national level eggs, smoked and dry fish increased by 16.73%, 4.67% and 3.7% respectively. Other commodities increased marginally between 2% - 6%. The price increases in foodstuffs over a period of one year are not substantial. The stability (with slight changes in some locations) in commodity prices could be as a result of the favourable rainfall experienced within the year as well as low pest and diseases outbreaks. Those who hoarded grains have also released

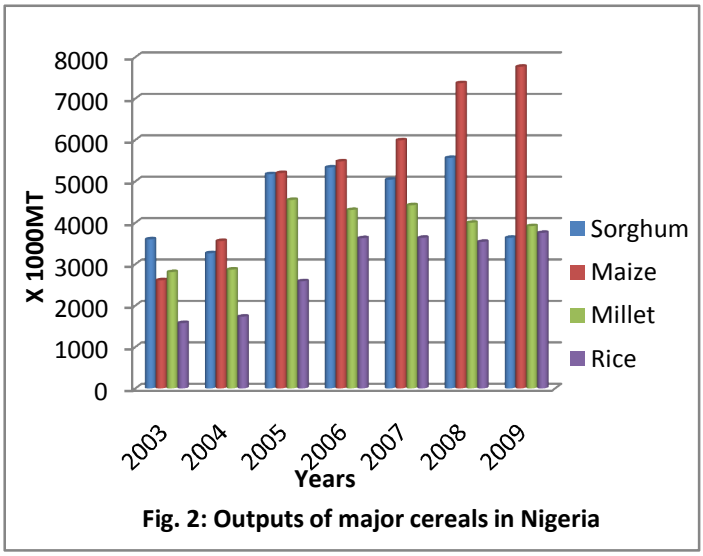

Fig. 2: Outputs of major cereals in Nigeria

most of the grains to the market, thereby resulting in reduction in cost of most food items. This may invariably ensure availability of food at the household level.

Crop Area and Production Estimates

Presented in Figures 2 and 3 are trends of production outputs for major crops. Estimates for many crops show increases while a few decreases in areas cultivated in 2009 were observed when compared with 2008 figures. Most of the increases in cultivated areas were however marginal and largely reflected on the output forecasts for 2009. Significant differences occurred in terms of changes in cultivated areas for each crop in each zone and state and ranged from 2% for rice and millet in Katsina and Zamfara states to 54.71% for millet and 47.60% for maize in Sokoto state. Kebbi state showed a 29.42% of land area cultivated for Sorghum in 2009 compared to that of 2008. Although the prices of cassava and cassava products (cassava-gari and cassava flour) have remained consistently high over the past one year, there is no hope that these prices will come down until the next harvesting season or beyond. Unfortunately, this trend has not yet been very much reflected in the cassava cultivated in 2009, especially in the south-west and south east zones of the country where increase in area cultivated was between 3 – 4.9%. It was also noted that the total land area cultivated in 2009 recorded a decrease of about 3% compared with that of last year. The increase in cotton production over that of 2008 was just about 0.9%.

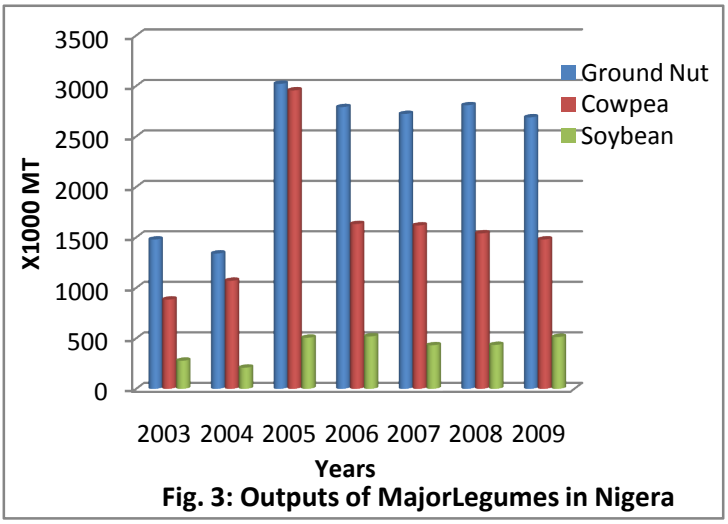

Fig. 3: Outputs of MajorLegumes in Nigera

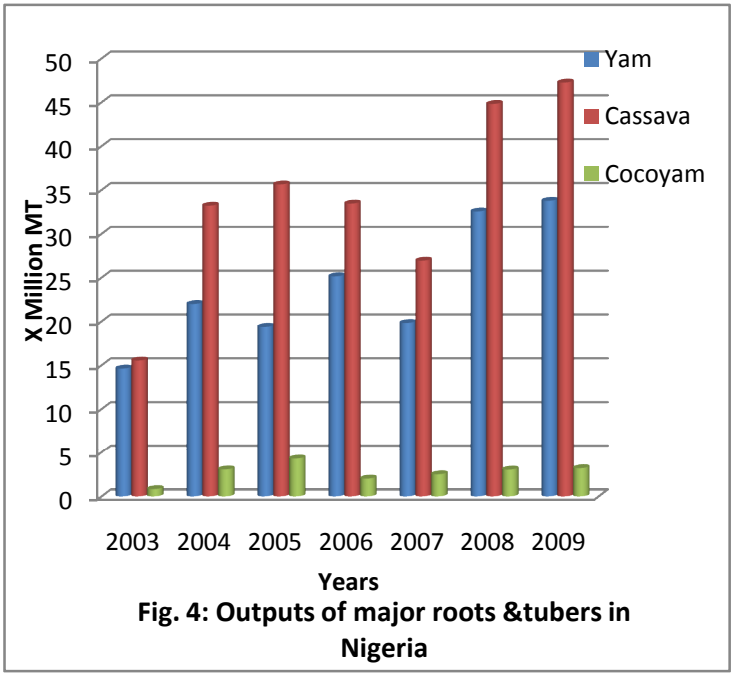

Fig. 4: Outputs of major roots &tubers in Nigeria

Maize production is expected to increase this year by 5.4% from 7.375 million MT in 2008 to over 7.77 million MT. The forecast for rice production is an increase of 6.11% from 3.54 million MT in 2008 to 3.76 million MT in 2009. A slight increase (1.24%) for sorghum from 5.57 million MT in 2008 to 5.64 million MT in 2009 should be anticipated. Similarly, millet output is expected to decrease from 3.45 million MT in 2008 to 3.33 million MT in 2009(3.6%) while that of Cassava may increase slightly from 44.827 million MT in 2008 to 47.274 million in 2009(5.46%). Enforcement of the policy on incorporation of cassava into flour and promotion of its usage in bio-fuel production has the potential of boosting cassava production. The forecast decrease in millet and the slight increase in Sorghum are related to the problem of late arrival of rains and dry spells that occurred in most parts of North East and North West coupled with

a growing interest in the cultivation of maize in the zones where early /extra-early and drought tolerant varieties exist. An increase of 3.14% in yam output (from 32.56 million MT in 2008 to 33.58 million MT in 2009) is forecasted. Cocoyam is expected to increase by 5.39% (3.04 million MT in 2008 to 3.20 million MT in 2009). Soybean and ground nut are expected to have similar margins of increase (2.3%) from 507,450MT to 519,540MT and from 2.48 million MT to 2.54 million MT in 2008 and 2009, respectively. Cowpea is expected to increase by 2.8% (1.28 million MT in 2008 to 1.31 million MT in 2009). The output trends for these crops however show sustained strong growth for maize and a marginal growth for rice over the last seven years; but there has been a decline for millet and soybean. There are indications that the forecast for cowpea this year may change positively due to the extension of rainfalls into October. Melon is expected to increase by 7.61% from (143,750MT in 2008 to 154,690MT in 2009) while cotton may increase by only 1.14% (302,810MT in 2008 to 306,250MT in 2009) suggesting that the campaign on this commodity needs innovative approaches.

Crop Pest Problems

Pest problems were moderate across the country although striga attacks in cereals and legumes, rice blast, bird attacks (especially quelea birds invasion) in North-West, northeast and north central, high Head smut in sorghum, tuber rot in yam, fruit rot in tomato, die back in citrus, black pod in cocoa and insect attacks in cowpea were some of the key challenges that tend to limit the output expectations for the 2009 wet season.

Livestock and Fisheries:

Several states had no data on input use, pests and diseases, production on livestock and fisheries. This could be because data collection on the livestock and fisheries sub-sectors requires special attention that may be beyond what the ADPs can handle. It is technical and expensive. Figure 5 shows the output trends of captured and aquaculture fisheries. Despite the high potential for livestock and fish in several parts of the country, the required inputs are not available and state supports are abysmal in some states. In Kebbi state, where over 50 unemployed youths were trained in New Bussa on aquaculture and fish feed production.

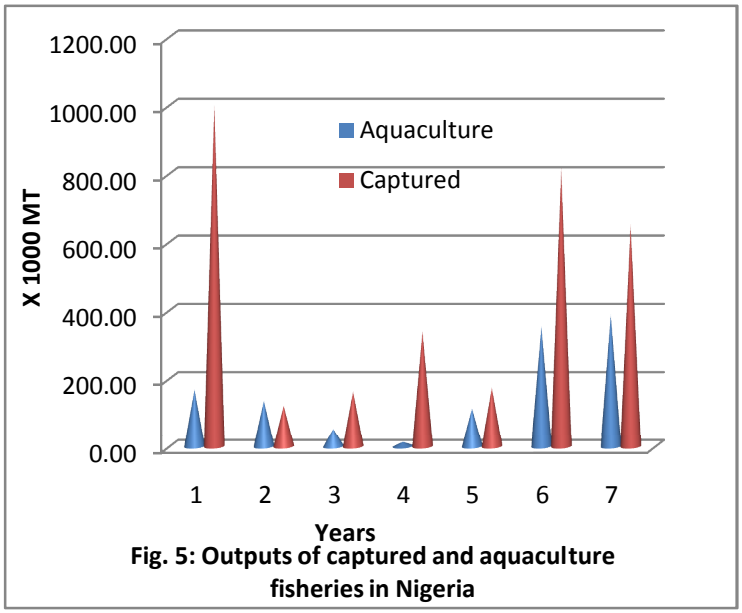

Fig. 5: Outputs of captured and aquaculture fisheries in Nigeria

Very limited quantities of vaccines were made available to farmers in Nasarawa and Kogi states in North Central zone. Most state governments did not provide livestock and/ fisheries input such as improved breeds, feeds, fishing gears, nets and fingerlings. In the north-central zone, only Kwara State procured and distributed fisheries input.

A state-wide incidence of Trypanosomiasis of moderate severity in the Nasarawa and Niger States was reported. Major diseases that occurred during the 2009 wet season include Diarrhoea and PPR, Helmithiasis that affected sheep and goats, New Castle Disease and Coccidiosis in local chickens in

north- -central zone states except Kogi and Niger.In terms of available records on livestock population, Kano State led with over 3 million herds of cattle; followed by Jigawa and Kaduna states, respectively in North-West. North West has high potential for livestock production especially small ruminants and poultry which most farmers integrate into their farming system. In general, conditions for rearing extensively managed animals (cattle, sheep, goats and local poultry) were favourable during the year therefore; marginal increases in population are expected.

There was a 7.54% increase in artisanal fish catch for 2009 (289, 672MT) compared to 269, 351MT in 2008 from 11 States that provided required data. Aquaculture production forecast of 23.66% increase in 2009 (112, 243MT in 2008 to 138, 799.MT) for the 11 states is made. In South-East Zone, aquaculture grew rapidly in Imo state. There is a need to improve market information services that connect the various zones.

Agricultural Development Programs (ADPs) Extension Activities

The 2009 wet season agricultural performance assessment captured among several other indicators, the ADP extension activities in Nigeria. The variables used to assess the extension performance of the ADPs include number of farm families, Subject Matter Specialists (SMS), number of extension workers (BES, BEAs, VEAs), visits to farmers' farms, extension methodologies used to disseminate crops, livestock and fisheries technologies, number of farmer groups and extension agent (EA)-farmer ratio. The number of farm families remained high across the country. Nation-wide average number of farm families per state was 502,000 with the largest being in Kano (849,895), and Kaduna (606,007) States.

Across the states in Nigeria, Kano state had the highest number of VEAs (800), while the lowest number (10) was recorded in Bayelsa state. However, it is important to note that while some state ADPs recorded an increase in number of VEAs in 2009 based on their 2008 figures (Bauchi, Ebonyi, Lagos, Zamfara, Ondo, Nassarawa and Kwara); others recorded a drop in the number of VEAs (Edo, Niger, Taraba, Jigawa, Ekiti, Gombe, Kebbi and Plateau). This is related to dwindling funding by the respective state governments. Regular visits to farmers by extension agent helps in evaluating progress made by the farmers and equally identify problems encountered for feed-back to SMSs. Yobe, Taraba, Ekiti, Cross River, Akwa Ibom, Edo and Enugu States were observed to have records of low or very low visits of EAs to farmers.

Across Nigeria, only 4 states (Gombe, Nassarawa, Benues and Imo) actually achieved stipulated MTRMs/ QTRMs targets in 2009 survey period. Eleven states (29.7%) conducted less than 5 MTRMs/QTRMs; while 12 states (32.4%) conducted 5 or more MTRMs/QTRMs. Most of the technologies under OFAR and SPAT/MTPs in two NE states were crop-based. However in North Central, North-West, South East and South West States attempts were made to conduct OFARs on livestock and fisheries.

An increasing interest in the formation of groups/associations/cooperatives among farmers was recorded across the country although the operations of the groups show considerable scope for improvements. Only 46% of states made efforts to organize farmers' groups. Most of the state ADPs patronized the concept of groups and cooperatives as a strategy to improve farmers access to credits/input and to reduce prevailing dilemma of wide EA: Farm Family ratios across in the country. A proportion of 62% of the states had EA-farmer ratios above 1:1500; whereas only 10.8% reported ratios below 1:1500. About 81% of the states conducted FNTs, MTPs, SPATs and OFARs in 2009 as compared to 86% in 2008.

Recommendations:

The following recommendations are made based on data collected and observations on the field:

1. It is important as a matter of national policy, for Federal and State governments to improve and sustain funding to enable ADPs achieve reasonable standards in extension delivery in Nigeria in order to realize the agricultural growth inherent in the 7-point agenda of Mr. President. To empower agricultural extension in the country in which the ADPs as well as all the other agencies involved in agricultural extension can effectively play their roles, a National Agricultural Extension and Rural Development Policy need to be put in place.

2. A national strategic plan aimed at enhancing access to subsidized production inputs of target groups as well as improving mechanization of farm operations needs to be urgently put in place to stimulate youth's participation in agriculture. The Voucher System which has been adopted by Taraba and Kano States seemed to have some prospects for improving access to fertilizers but it should be decentralized so that each farmer could register at the LGA.

3. Farmers should have access to credit through cooperative groups before the planting season begins to enable them purchase relevant farm inputs such as fertilizers, agro-chemicals and pay for tractor hiring services.

4. Owing to the colossal post-harvest losses in many crops, renewed attention should be accorded value addition and on understanding commodity value chain in order to advance market driven agriculture. Towards this, incentives for development of agro-cottage enterprises should be designed to open new corridors for trade and employment.

5. Improved funding should be put in place for research to develop appropriate technologies for mitigating the effects of climate change, multi-purpose tree species for checking erosion and desertification, and nutrient efficient crop varieties, control of pests and diseases of crops, livestock and fisheries; low cost feeds and feeding techniques for fisheries and livestock as well as labour saving devices.

6. Having correct figures on livestock population and fisheries production is critical to advance the development of the sub-sector. In this regard, Government needs to create a unit for livestock population census and fisheries data collection and handling.

7. The growing menace of polyethylene bags scattered across the environment remained an issue inhibiting use of refuse dumps in conservation agriculture and a serious hazard to ruminant livestock. Urgent attention is required from relevant organs of government to tackle this problem. The time is set for government to enact enabling laws for the use of bio-degradable packaging materials in the country.

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1.0 INTRODUCTION

The annual agricultural performance survey was conducted between 24th August and 6th September, 2009. The National Agricultural Extension and Research Liaison Service (NAERLS) and the National Food Reserve Agency (NFRA) conducted the national survey in collaboration with several other Institutions among which are the National Bureau of Statistics (NBS), Federal Department of Fisheries (FDF), Nigerian Meteorological Agency (NIMET), Planning, Policy, Analysis and Statistics Department (PPASD), Federal Department of Agriculture (FDA), and five Zonal Coordinating Research Institutes (LCRI, IAR,NCRI, IAR&T and NRCRI). All these organizations contributed scientists and logistics to facilitate the conduct of the survey. The expansion in the range of participating Institutions was strategic in order to improve the depth, quality and utility of the output of the exercise.

The key objectives of the survey were to:

- Assess 2009 wet season agricultural performance and to make forecasts for the season;
- Identify constraints to increased agricultural productivity and effective extension service delivery; and
- Provide feedback for improved research and policy directive.

2.0 METHODOLOGY

A multi-disciplinary team of three scientists conducted the survey in each state using a menu of participatory techniques. Primary data were collected through questionnaires, field visits/observations and Focused Group Discussions. The team included officials of state Agricultural Development Programmes (ADPs), NIMET and Ministries of Agriculture and Natural Resources as well as individual farmers/farmers groups in 148 Local Government Areas across the country (four LGAs in two ADP zones in each state). Five farmers were interviewed in each LGA. The ADP zones and farmer groups visited were purposefully selected to reflect agro-ecological zones and farmers that are representative of the farmers in the State. Each of the thirty six states and the Federal Capital Territory (FCT) were visited for three days/state. A total of 40 scientists were involved in the survey. On the last day of the visit in each State, wrap up meetings were organized to highlight the team's observations, validate records and to agree on crop production forecasts with State officials. Each team used 2008 Cropped Area Yield Survey (CAYS) report from NFRA as a guide for the forecasts.

3.0 FINDINGS/OBSERVATIONS

3.1 RAINFALL SITUATION

The available data for 33 states including FCT for 2008 and 2009 from January to October 2009 are presented in the table (Table 3.1.1) according to zones. The Tables show that rainfall started early in January in some states of South East zone, February in South West zone, and March in North Central, April in North West and some part of the North East zone.

North East Zone

The rainfall (more of shower) started early in April in almost all the states of the zone except for Yobe and Borno states. However the rain became established between May and July. This shows that there were dry spells in some states like Borno and Yobe. In June, Bauchi had more rainfall of 184.8mm compared with Borno state recording 5.9mm. The rainfall distribution and quantity were more adequate between August and September across the zone. Compared to 2008, the data

shows that rainfall was more in 2009 and adequately distributed. No data was available for October and November in 2008 and 2009.

North West Zone

The rain commenced early in April in Kebbi, Kaduna, Zamfara and Kano. Early rainfall was recorded in May in Zamfara with 109.7mm, Kebbi 76.1mm, Katsina 95mm and Kaduna 71.4mm. The intensity and distribution of rainfall appeared to be higher in August in most of the states, where Kaduna state received an average quantity of 405.4mm, Kebbi state 391.6mm and Kano 321.3. No data was available for October and November in 2008 and 2009.

North Central

The data presented in the table (Table 3.1.1) shows that there were variations in rainfall onset across the zone. It started early in March in Taraba, Kwara, Kogi and Benue states. Poor rainfall distribution was observed in April in some states especially in Taraba and Plateau. Compared to 2008, more rainfall quantity and better distribution were reported.

South West Zone

The rain started early in February across the zone, where Edo state received 108.5mm. Rainfall across the zone was recorded in March, compared to 2008 that had variations in rainfall quantity by states. Some states had more rain this year, however, the data across the zone shows intensity and distribution of rainfall appeared to be higher this year. Rainfall across the zone was generally favourable for good crop production and the intensity and quantity indicate possible occurrence of flood in some states.

South East Zone

Rain came early in January but was established across the states of the zone in March. At the onset of the rain in January, Rivers and Abia states received 66.6mm and 61.1mm respectively. Rainfall intensity and distribution were higher between May and July across the zone, indicating possible flooding and erosion occurrence in the zone. No data was available for October and November in 2008 and 2009.

Table 3.1.1: Comparison of 2008 and 2009 mean total monthly rainfall for all the meteorological stations in Nigeria States

NORTH EAST ZONE

State	Jan(Rr)		Feb(Rr)		Mar.(Rr)		April(Rr)		May(Rr)		June(Rr)		July(Rr)		Aug(Rr)		Sept(Rr)		Oct(Rr)		Nov(Rr)		Dec(Rr)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Adamawa	0	0	0	0	26.8	0	32.3	43.9	84	63.9	41.1	148.3	89.2	122.2	148.5	183.8	46.6	122.3	0	33.7	0	Xxx	0	Xx
Bauchi	0	0	0	0	0	0	9.2	162.6	77.8	106.2	337.1	184.8	214.5	211.6	394.7	403.8	57.1	288.9	42.7	173.4	0	Xx	0	Xx
Borno	0	0	0	0	0	0	0	7.6	26.7	30.8	82.3	10.2	158.6	79.1	264.4	169.3	68.9	210.9	0	81.7	0	Xxx	0	Xx
Gombe	0	0	0	0	0	0	26.9	33.9	125	147.3	110.6	136	107.3	154.1	314.6	220.1	190	125.1	72	82.7	Xx	Xx	0	Xx
Yobe	0	0	0	0	0	0	2.2	TR	38.2	33.25	32.65	32.9	187.7	176.2	198.3	120.05	46.45	122.3	10.6	99.55	Xx	Xx	0.3	Xx
Zonal means	0	0	0	0	5.4	0	14.1	62.0	70.4	76.3	120.8	102.4	151.5	148.6	264.1	219.4	81.8	173.9	25.1	94.2	00	xxx	00	xxx

NORTH WEST ZONE

State	Jan(Rr)		Feb(Rr)		Mar.(Rr)		April(Rr)		May(Rr)		June(Rr)		July(Rr)		Aug(Rr)		Sept(Rr)		Oct(Rr)		Nov(Rr)		Dec(Rr)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Kaduna	0	0	0	0	0	0	22	22.7	112	72.7	93.3	157.9	121.5	189.2	240	402.8	227.3	135.9	24.5	120.3	0	Xx	0	Xx
Kano	0	0	0	0	0	0	0	TR	11	25.2	171.7	84.8	421.7	376	276.8	321.3	146.6	182.7	8.1	2.4	0	Xx	0	Xx
Katsina	0	0	0	0	0	0	16.6	TR	8.5	95	63.3	57.9	182.9	96.5	213.9	123.3	67.7	38.5	4.2	29	0	Xx	0	Xx
Kebbi	0	0	0	0	5	0.7	28	84.9	126.3	76	169.1	137.4	171.2	226.6	337.5	431.2	356.5	194.1	48.7	36	0	Xx	0	Xx
Sokoto	0	0	0	0	0	0	0.7	0	41.3	24.8	94.7	64.1	152.2	114.6	130.2	179.9	93.9	97	1.6	119.9	0	Xx	0	Xx
Zamfara	0	0	0	0	0	0	17.2	0	72.8	109.7	133.9	150.8	187.9	241.9	312.3	315.6	180.3	97.6	49.6	90.4	0	Xx	0	Xx
Zonal means	0	0	0	0	0.8	0.1	14.1	26.9	62.0	67.2	121.0	108.8	206.2	207.5	251.8	295.7	178.7	124.3	22.8	66.3	0	xx	0	

NORTH CENTRAL ZONE

State	Jan(Rr)		Feb(Rr)		Mar.(Rr)		April(Rr)		May(Rr)		June(Rr)		July(Rr)		Aug(Rr)		Sept(Rr)		Oct(Rr)		Nov(Rr)		Dec(Rr)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Benue	3	2.3	0	0	0	3	186.1	180.1	147.4	190.3	186.1	239.6	81.6	85.1	280.2	275.3	83	140.5	81.5	284.1	0	Xx	1.6	Xx
Kogi	0	10.1	0	0	21.8	5	163.4	243.4	161.6	108.4	166.3	220.1	213.9	212.8	274.7	369.8	170.2	255.8	87.8	206.4	0	Xx	0	Xx
Kwara	0	11.1	0	1.2	20.5	17.9	106.1	223.9	42.3	76	241.1	177.2	318.6	313.4	226.3	209.1	270.3	185.7	224.5	122.8	4.8	Xx	14	Xx
Nasarawa	0	0	0	0	14.2	0	91.8	128.3	185.5	190.2	229.4	324.9	188.3	229.9	240.5	192.6	109.4	145.9	76.9	375	0	Xx	2	Xx
Niger	0	0	0	0	0	0	29.3	100.9	108.7	94.8	168.8	157.15	305.4	212.9	248.2	448.55	229.6	247.7	115.9	85.2	0	Xx	0	Xx
Plateau	0	TR	0	0	TR	TR	68.5	87.6	224	137.1	119.4	129.5	272.7	167.8	307.8	298.4	167.5	190.3	93.6	195.8	0	Xx	6.3	Xx
Taraba	26.8	0	0	0	0	18.2	83.7	116.9	74.5	194.2	148.5	157.8	264.9	183.5	252.4	191.4	280.6	266.7	72.4	404.2	0	Xx	4.6	Xx
FCT	0	0	0	5.7	27	TR	35.2	74.6	65.6	121.5	218.9	182.7	183	154.7	370.9	409.4	195	187.5	75.5	226.3	0	Xx	15	Xx
Zonal means	3.7	3.9	.00	0.9	11.9	7.4	95.5	144.5	126.2	139.1	184.8	198.6	228.5	195.0	275.1	299.3	188.2	202.5	103.5	237.5	0.6	xxx	5.4	xxx

SOUTH WEST ZONE

State	Jan(Rr)		Feb(Rr)		Mar.(Rr)		April(Rr)		May(Rr)		June(Rr)		July(Rr)		Aug(Rr)		Sept(Rr)		Oct(Rr)		Nov(Rr)		Dec(Rr)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Delta	23	40.55	5	43.9	22.45	42.7	275.4	102.2	256.9	180.25	449.6	265.4	399.4	415.5	477.0	405.6	394	393.6	187.6	368.8	43.2	xx	12.3	Xx
Edo	10.3	14.6	8.8	124.6	146	69.8	204.8	151.8	202.9	330.5	272.9	171.8	414.6	192.2	319.7	239	745.8	281.3	241.9	342.9	95.4	Xx	7.3	Xx
Lagos	19.3	5.5	11.3	51.6	59.6	49.0	63.9	147.7	144.5	207.6	383.9	453.9	355.2	239.6	129.2	110.55	231.8	134.9	100.6	232.9	86.9	Xx	76.4	Xx
Ogun	0	23.2	5.3	35.85	93	30.85	68.4	212.9	194.6	249.3	228.4	386.5	318.15	260.9	201.5	58.05	340.2	140.4	171.9	114.9	6.8	Xx	13.2	Xx
Ondo	0	26.5	0	43	151.3	142.4	135.3	179.5	103.2	193	315.6	179.3	341.6	300.6	178.5	104.1	223.5	69.1	207.7	141.6	16	Xx	37.1	Xx
Osun	0	0	0	22.7	83.1	38	238	131.6	61.3	248.7	181.8	89.2	313.1	315	255.5	69	277.4	203.2	168.7	125.8	0.1	Xx	31.1	Xx
Oyo	0	5.6	2	51.1	57.5	45.2	124.8	152.0	116.0	124.7	259.0	182.1	237.1	243.3	213.7	137.4	211.1	200.0	124.1	250.5	0.7	Xx	15.3	Xx
Zonal means	7.5	16.6	4.6	53.3	87.6	59.7	158.7	153.9	154.2	219.1	298.7	246.9	339.9	281.0	253.6	160.5	346.3	203.2	171.8	225.3	35.6	xx	27.5	

SOUTH EAST ZONE

State	Jan(Rr)		Feb(Rr)		Mar.(Rr)		April(Rr)		May(Rr)		June(Rr)		July(Rr)		Aug(Rr)		Sept(Rr)		Oct(Rr)		Nov(Rr)		Dec(Rr)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Abia	13.4	62.8	0	61.1	165.6	47.4	161.2	99.9	348.5	418	343.9	239.8	309.8	304.5	330.1	275	401.3	205.2	210.7	307.2	6.5	xx	8.8	xx
A/Ibom	41.7	87.65	0.2	62.I	73.3	145.9	222.1	271.4	376.1	316.3	433.4	184.25	577.75	442.2	584.85	541.9	198.75	214	238.25	91.4	153	Xx	127.85	xx
Anambra	0	112.2	0	0.7	75.7	50.6	331.5	121.1	279.4	233.1	193.4	248.3	216.9	386.5	513.8	283.3	306.9	250.2	127.7	376	3.8	Xx		xx
C/Rivers	17.4	65.9	0.3	11.8	107.5	57.8	218.4	252.1	354.0	412.1	377.6	155.5	347.6	461	440.5	458.1	300.5	305.7	217	352.4	34.2	Xx	76.2	xx
Enugu	1.2	0	0	0	56.7	11.1	191.6	112.4	281.2	347.1	250.6	206	221.3	282.5	338.4	154.3	300.2	231.6	97.2	393.3	0	Xx	0	xx
Imo	6.9	30.3	0	65.0	187	55.7	226.8	197.5	187.6	361.9	352.4	271.7	479.6	413.1	326.2	554.6	447.6	210.9	283.1	270.1	12	Xx	18.2	xx
Rivers	2.9	102.9	0	102.8	113.1	82.2	183.8	210.4	192	382.5	262	270.5	366.1	545.3	390.1	246.5	119.2	213.5	378.8	372.4	69.9	Xx	45	xx
Zonal means	11.9	66.0	0.1	43.4	111.3	64.4	219.3	180.7	288.4	353.0	316.2	225.1	359.9	405.0	417.7	359.1	296.3	233.0	221.8	309.0	39.9	xx	46.0	

Source: NIMET 2009

3.2 2008 AND 2009 RAINY-DAY AT METEOROLOGICAL STATIONS IN NIGERIA

The data of 2008 and 2009 mean rainy-day comparison for all the meteorological stations in Nigeria are summarized in Table 3.2.1, comprising five ecological zones namely; north east zone, north west zone , north central zone , south east zone and south west zone.

North East Zone

The north east zone recorded no rainy-day from January to march in both 2008 and 2009. While in April Adamawa and Gombe states indicated higher rainy-day in 2008 than 2009 but reverse was the case in Bauchi and Borno states. The data obtained in May was higher in 2008 compared to that of 2009. Similar trend of rainy day distribution was observed in July and August across the zone. In the zone, Adamawa and Gombe states showed least rainy-day in 2008 than 2009. While other states in the zone recorded higher rain-day in 2009 than 2008. In all the states in the zone no rainy-day was recorded from October to November, except Gombe that recorded few rain-day compared to others in both 2008 and 2009.

North West Zone

The data obtained showed that there was no rain till April in all the states in the zone with highest rainy-day occurring in Kebbi state in 2008 than 2009. While Kaduna state recorded higher rainy-day in 2009 than others both in May and June. The rainy-day data was found to be higher in 2008 than 2009 across the zone except Kebbi state which indicated higher values in June and July, in 2009. Similar trend was found in August while reverse was the outcome in September. Similarly, in October the rainy-day was consistently higher in 2008 than 2009 in all the states in the zone.

North Central Zone

In this zone, rainy-day started in April with Kwara state having highest number of rain-day in 2009 than 2008 when compared with others. Values of rainy-day obtained in May were higher in 2008 compared to 2009 across the zone with the exception of Kwara state. Considering all the states in the zone, Plateau state recorded the highest number of rainy-day in June, 2009 than 2008. Similar trend was found in July but higher in 2008 than 2009. In August and September the rainy-day values were consistently higher in 2008 compared to 2009. Similar rainy-day distribution pattern was observed in October across the zone.

South East Zone

The data obtained for the zone indicated that the rainy-day started in January with gradual increase as the year progressed in all the states. In March and April, Akwa-Ibom state recorded the highest rainy-day followed in descending order by Rivers and Enugu states in 2008 compared to 2009. While Cross River state recorded higher value of rainy-day in May, 2008 than 2009 compared to other states. Similar distribution of rainy-day was obtained in June except Anambra state which observed more rainy-day in 2009 than 2008. In July, Akwa-Ibom and Anambra states recorded the highest rainy-day in 2009 than 2008 when compared with others while reverse was the outcome in August. Similar trend was found in September but with less rainy-day in 2008 than 2009 in all the states in the zone.

South West Zone

This ecological zone recorded low rainy-day from January to March in all the states but indicated more rainy-day in 2009 than 2008 except in March; while the reverse was the case in April. In May, the highest rainy-day was recorded in Lagos state in 2008 compared to 2009 among the states in the zone. Similar trend was found in June except Delta and Ogun states. Delta state recorded highest rainy-day in July, 2009 than 2008 when compared with other states in the zone. While in August, it was higher in 2008 than 2009 in all the states in the zone except Edo and Delta states which recorded the same values in both years. However, in September Edo state was found to be having highest value of rainy-day than others in 2009 compared to 2008. Similar trend was obtained in October.

Table 3.1.2: Comparison of 2008 and 2009 mean rainy-day for all the meteorological stations in Nigeria States

NORTH EAST ZONE

State	Jan(Rd)		Feb(Rd)		Mar.(Rd)		April(Rd)		May(Rd)		June(Rd)		July(Rd)		Aug(Rd)		Sept(Rd)		Oct(Rd)		Nov(Rd)		Dec(Rd)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Adamawa	0	0	0	0	0	0	4	2	9	6	10	13	9	10	18	4	13	12	5	6	Xx	Xx	Xx	0
Bauchi	0	0	0	0	0	0	3	3	10	4	12	15	14	15	16	14	8	6	5	11	0	Xx	Xx	0
Borno	0	0	0	0	0	0	0	3	6	4	9	3	13	10	22	15	8	7	0	3	0	Xx	Xx	0
Gombe	0	0	0	0	0	0	5	3	10	4	10	13	14	10	14	13	10	7	4	9	0	Xx	Xx	0
Yobe	0	0	0	0	0	0	1	0	4	3	7	5	9	12	17	13	6	9	4	3	0	Xx	Xx	1
Zonal means	**0**	**0**	**0**	**0**	**0**	**0**	**2.6**	**2.2**	**7.8**	**4.2**	**9.6**	**9.8**	**11.8**	**11.4**	**17.4**	**11.8**	**9**	**8.2**	**3.6**	**6.4**	**0**			**0**

NORTH WEST ZONE

State	Jan(Rd)		Feb(Rd)		Mar.(Rd)		April(Rd)		May(Rd)		June(Rd)		July(Rd)		Au(Rd)		Sept(Rd)		Oct(Rd)		Nov(Rd)		Dec(Rd)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Kaduna	0	0	0	0	0	0	3	3	15	9	11	12	15	16	23	22	16	16	9	10	0	Xx	0	xx
Kano	0	0	0	0	0	0	0	0	2	3	8	9	18	14	18	15	10	9	1	1	0	Xx	0	xx
Katsina	0	0	0	0	0	0	1	0	3	4	6	8	11	10	17	13	6	7	2	5	0	Xx	0	xx
Kebbi	0	0	0	0	1	1	3	2	9	6	13	9	15	14	18	17	18	11	8	9	0	Xx	0	Xx
Sokoto	0	0	0	0	0	0	1	0	6	3	9	7	8	9	16	9	9	7	1	5	0	Xx	0	xx
Zamfara	0	0	0	0	0	0	1	1	7	9	7	8	17	12	23	18	14	8.0	3	7	0	Xx	0	xx
Zonal means	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.2**	**1.5**	**1.0**	**7.0**	**5.7**	**9.0**	**8.8**	**14.0**	**12.5**	**19.2**	**15.7**	**12.2**	**9.7**	**4.0**	**6.2**			**0.00**	

NORTH CENTRAL ZONE

State	Jan(Rd)		Feb(Rd)		Mar(Rd)		April(Rd)		May(Rd)		June(Rd)		July(Rd)		Aug(Rd)		Sept(Rd)		Oct(Rd)		Nov(Rd)		Dec(Rd)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Benue	1	1	0	0	0	1	8	9	10	9	13	12	6	15	19	16	9	15	9	20	0	Xx	1	Xx
Kogi	0	1	0	0	1	1	7	11	13	9	12	15	14	13	19	14	15	12	8	16	0	Xx	0	Xx
Kwara	0	2	0	1	3	2	9	13	10	10	15	11	16	16	19	13	20	19	11	13	1	Xx	2	Xx
Nasarawa	0	0	0	0	2	0	6	8	11	8	12	16	11	15	18	15	14	14	7	15	0	Xx	1	Xx
Niger	0	0	0	0	0	0	5	7	12	8	12	10	16	15	22	22	20	20	9	6	0	Xx	0	Xx
Plateau	0	0	0	0	0	0	6	10	15	11	15	17	25	20	26	19	15	16	6	14	0	Xx	1	Xx
Taraba	2	0	0	0	0	1	6	6	7	8	11	10	10	8	13	10	13	14	3	9	0	Xx	2	Xx
FCT	0	0	0	1	4	0	7	9	11	9	12	16	14	15	21	21	17	18	9	19	0	Xx	1	Xx
Zonal means	0.4	0.5	0.0	0.3	1.3	0.6	6.8	9.1	11.1	9.0	12.8	13.4	14.0	14.6	19.6	16.3	15.5	16.0	7.8	14.0	0.1		1	

SOUTH WEST ZONE

State	Jan(Rd)		Feb(Rd)		Mar.(Rd)		April(Rd)		May(Rd)		June(Rd)		July(Rd)		Aug(Rd)		SepRd)		Oct(Rd)		Nov(Rd)		Dec(Rd)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Delta	1	2	2	2	5	2	19	6	15	11	21	10	23	23	20	20	25	19	15	19	9	Xx	4	Xx
Edo	1	2	2	7	10	5	14	11	14	14	18	17	24	20	20	22	17	15	17	15	7	Xx	2	Xx
Lagos	2	1	1	5	5	7	7	9	18	12	19	20	19	17	9	7	16	12	12	15	5	Xx	5	Xx
Ogun	0	1	1	2	11	6	6	11	15	12	16	18	19	18	15	7	16	13	20	13	3	Xx	2	Xx
Ondo	0	2	0	4	12	9	10	9	10	12	16	11	15	17	16	8	19	14	12	17	2	Xx	2	Xx
Osun	0	0	0	5	8	5	9	10	12	13	14	13	18	17	16	11	17	16	18	21	1	Xx	2	Xx
Oyo	0	1	1	2	3	3	6	10	16	9	14	11	15	17	16	13	17	13	9	12	1	Xx	3	Xx
Zonal means	0.6	1.3	1.0	3.9	7.7	5.3	10.1	9.4	14.3	11.9	16.9	14.3	19.0	18.4	16.0	12.6	18.1	14.6	14.7	16.0	4.0		2.9	

SOUTH EAST ZONE

State	Jan(Rd)		Feb(Rd)		Mar.(Rd)		April(Rd)		May(Rd)		June(Rd)		July(Rd)		Aug(Rd)		Sept(Rd)		Oct(Rd)		Nov(Rd)		Dec(Rd)	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Abia	2	2	0	3	7	4	13	13	18	15	18	14	21	19	22	20	19	18	14	14	2	Xx	1	X
A/Ibom	4	5	1	3	15	7	16	10	19	15	24	20	25	23	26	24	24	18	22	7	13	Xx	13	X
Anambra	0	3	0	1	6	2	15	10	16	12	14	24	17	26	24	9	15	19	14	15	2	Xx		Xx
C/Rivers	2	6	1	0	11	2	14	13	22	19	22	18	22	22	27	21	22	18	19	19	9	Xx	5	Xx
Enugu	1	4	0	0	3	1	13	12	15	13	13	6	19	14	25	11	19	21	9	21	0	Xx	0	Xx
Imo	1	6	0	5	9	4	15	13	14	18	19	15	23	23	25	26	21	19	15	19	2	Xx	4	Xx
Rivers	2	5	1	6	10	5	10	10	14	17	14	15	19	20	23	28	15	17	18	15	5	Xx	3	Xx
Zonal means	**1.7**	**4.4**	**0.4**	**2.6**	**8.7**	**3.6**	**13.7**	**11.6**	**16.9**	**15.6**	**17.7**	**16.0**	**20.9**	**21.0**	**24.6**	**19.9**	**19.3**	**18.6**	**15.9**	**15.7**	**4.7**		**4.3**	

Source: NIMET

3.3 FARM INPUTS

Fertilizer Procured and Distributed to Farmers in 2009

Fertilizer procurement and distribution through government agencies is shown in Table 3.2.1. Only twenty seven (27) States and FCT supplied information on fertilizer procurement through government agencies while nine (9) States did not supply. The Table indicated that NPK, Urea and SSP were the main fertilizers procured in North-West, North-East, South-West and Middle-Belt states, while mainly NPK and Urea were procured and distributed in the South-Eastern states. Although the state governments procured distributed fertilizers in the states, most of the farmers interviewed did not get enough quantities for production in 2009 and are of the opinion that fertilizers arrived late. The farmers had to make up by buying fertilizers at the open market with prices ranging from ₦2,000 – ₦ 6,000/bag, depending on the type of fertilizers, location and time of purchase of the commodity. The open market prices were very high when compared with the government prices that ranged from ₦ 1,800 – ₦ 3,500 depending on the state and type of fertilizer. Other farmers who could not afford the fertilizer, used organic manure, or carried out their farming operations without adding any form of nutrients to their crops.

Distribution mechanism for fertilizers differed across the states. In some states, fertilizer distribution was centrally done from the State Ministry of Agriculture, while some other states used Agro-Service Centers and Local Governments as avenues for distribution. In other states, special fertilizer distribution committees were constituted to handle fertilizer distribution. Most of the fertilizers required for crop production by farmers were inadequate and or were distributed late. The voucher system was used for fertilizer distribution in Taraba and Kano States. Though some challenges were associated with it, but it proved to be a better method and farmers had better access to fertilizers in 2009 compared to 2008.

Table 3.3.1: Fertilizer procurement and distribution

North East Agro-Ecological Zone

State	NPK (MT)		Urea (MT)			SSP (MT)
	Qty. Procured	**Qty distributed**	**Qty. Procured**	**Qty distributed**	**Qty. Procured**	**Qty distributed**
Borno	NA	NA	NA	NA	NA	**NA**
Yobe	NA	NA	NA	NA	NA	**NA**
Bauchi	30,461	30,461	6,914	6,914	NA	**NA**
Gombe	11000	11000	6000	6000	NA	**NA**
Adamawa	**6,960**	**5,260**	**4,650**	**3,850**	**300**	**180**

North West Agro-Ecological Zone

State	NPK (MT)		Urea (MT)			SSP (MT)
	Qty. Procured	**Qty distributed**	**Qty. Procured**	**Qty distributed**	**Qty. Procured**	**Qty distributed**
Sokoto	NA	NA	NA	NA	NA	**NA**
Kebbi	38,520	NA	19,800	NA	3,600	**NA**
Zamfara	56,000	56,000	14.000	14,000	NA	**NA**
Katsina	NA	NA	NA	NA	NA	**NA**
Jigawa	400	400	200	200	37	**37**
Kano	19,529	14,525.5	1,539	1.169.05	NA	**NA**
Kaduna	**35,000**	**35,000**	**NA**	**NA**	**NA**	**NA**

North Central Agro-Ecological Zone

State	NPK (MT)		Urea (MT)			SSP (MT)
	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed
Taraba	11,200	9,200	9,600	900	400	**400**
Plateau	16,530	16,530	2,550	2,550	1,200	**1,200**
Nasarawa	24,000	24,000	NA	NA	NA	**NA**
FCT	6,300	NA	3,000	NA	NA	**NA**
Niger	7,100	7,100	7,800	7,800	NA	**NA**
Kwara	300	300	120	120	NA	**NA**
Kogi	3,600	3,600	3,900	3,900	1,500	**1,500**
Benue	**6,600**	**6,600**	**6,000**	**6,000**	**870**	**870**

South West Agro-Ecological Zone

State	NPK (MT)		Urea (MT)			SSP (MT)
	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed
Oyo	3,000	257	3,600	520.9	NA	**NA**
Osun	1,904.80	1,275.35	1,333.90	697.35	NA	**NA**
Ekiti	660	660	500	500	NA	**NA**
Ondo	1,900	1,900	520	520	300	**300**
Ogun	NA	NA	NA	NA	NA	**NA**
Lagos	NA	NA	NA	NA	NA	**NA**
Edo	261	NA	110	NA	NA	**NA**
Delta	**1,440**	**1,440**	**660**	**660**	**150**	**150**

South East Agro-Ecological Zone

State	NPK (MT)		Urea (MT)			SSP (MT)
	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed	Qty. Procured	Qty distributed
Enugu	12,000	11,600				
Ebonyi	3,870	NA	1,500	NA	NA	**NA**
Cross River	NA	NA	NA	NA	NA	**NA**
Akwa Ibom	NA	NA	NA	NA	NA	**NA**
Abia	2,000	2,000	1,500	1,500	NA	**NA**
Anambra	NA	NA	NA	NA	NA	**NA**
Imo	7,807.5	On-going	4,170	On-going	NA	**NA**
Bayelsa	800	NA	NA	NA	NA	**NA**
Rivers	**4000**	**3093.75**	**2000**	**1671.66**	**NA**	**NA**

Use of Improved Farm Inputs: Planting Materials

The availability of improved planting materials through government sources is presented in Table 3.3.2. A proportion of 83% of the states supplied data on the various planting materials procured and distributed to farmers. Agricultural Development Programmes and state input supply companies were involved in the procurement and distribution of improved seeds and planting materials. Sources of improved seeds and planting materials include the various Federal Government intervention programmes of RTEP, NSPFS, and NFRA etc. Other sources of these inputs were private Seed Companies, NSS (now NASC), out growers, NGOs, farmer organizations and the open markets.

The total quantity of improved seeds procured and distributed by the state governments met about 70% of the farmers needs. However, the quantity of seedlings procured and distributed by the states met 55% of the farmers needs. In terms of affordability, only 88% and 82% of the farmers could afford the seeds and seedlings respectively supplied by the various state agencies. The following is a zone-by-zone review.

North East Zone:

In the North-East Agro-Ecological Zone, Adamawa was the only state that supplied data on improved seeds. Adamawa state procured 25MT of cowpea seeds but was unable to distribute any to farmers during the season under review. Only Yobe state procured and distributed tree crop seedlings during the season under review, but they were neither adequate nor affordable to the farmers.

North West:

In the North West Agro-Ecological Zone, Sokoto state procured seeds from NFRA, though affordable were not distributed to the farmers due to late arrival. All seeds procured and distributed by Kebbi state were inadequate in spite of their affordability. Jigawa State procured and distributed seeds and planting materials which were adequate and affordable. Zamfara state did not supply any data on the various planting materials and improved seeds procured and distributed.

North Central:

In the North Central Agro-Ecological Zone, Plateau state was the only state in this zone where both the quantity procured and distributed was inadequate and beyond the affordability of its farmers. All the remaining states procured and distributed adequate quantity of improved seeds and seedlings at affordable prices. Kwara State, for example, procured and distributed 257.3MT of rice seeds at affordable price to farmers. Benue state did not supply any data on the quantity of improved seeds and planting materials procured and distributed to farmers during the period under review.

South East

In the South East Agro-Ecological Zone, the quantity of improved seeds and planting materials procured and distributed in Bayelsa state was both inadequate and not affordable to farmers. Abia state did not supply any data on the quantity of improved seeds and planting materials procured and distributed to farmers during the period under review.

South West:

In the South West Agro-Ecological Zone, all improved seeds and planting materials procured and distributed to the farmers were adequate and at affordable prices with the exception of rice and maize in Lagos state; citrus and guava in Ekiti state where, though the prices were affordable to farmers, the quantity procured and distributed were inadequate. Oyo and Osun states did not supply any data on the quantity of improved seeds and planting materials procured and distributed to their farmers during the period under review.

Table 3.3.2. Use of Improved Farm Inputs: Planting materials

North East Agro-Ecological Zone

		Quantities		Adequacy		Affordability		Source
State	**Seeds/Seedlings/Cuttings**	**Procured**	**Distributed**	**Yes**	**No**	**Yes**	**No**	
Borno								
	Millet	Over 18MT	About 15MT	Yes				LCRI and NFRA
	Maize	Over 10MT	All		No			IITA outgrowers
	Rice	Over 5MT	3MT	Yes				NASC and NFRA
	Cowpea	2MT	All	Yes				IITA
	Sorghum	20MT	5MT	Yes				NFRA
Yobe								
	Millet	N/A						
	Sorghum	N/A						
	Maize	N/A						
	Cowpea	N/A						
	Groundnut	N/A						
	Guava	500	450		No		No	NFRA
	Mango	2000	2		No		No	"
	Citrus	5000	400		No		No	"
Bauchi								
	Maize	13.7MT	All		No	Yes		Premier Seeds Zaria
	Millet	1MT	All		No	Yes		Seed project Ltd Kano
	Sorghum	5MT	All		No	Yes		Outgrowers
	Soybeans	0.51MT	All		No	Yes		Outgrowers
Gombe	NA	NA	NA	NA	NA	NA	NA	
Adamawa								
	Maize	8.24MT	3.4MT	Yes		Yes		Sebore Farm and Masalaha Gusau
	Rice	16.95MT	4.17MT	Yes		Yes		Masalaha Gusau
	Cowpea	25MT	Nil	Yes		Yes		"

Sokoto								
	Millet	2.1	Not distributed, Late arrival	Yes		Yes		NFRA
	Sorghum	10	Not distributed, Late arrival	Yes		Yes		NFRA
	Cowpea	2.25	Not distributed, Late arrival	Yes		Yes		NFRA
	Maize	12	Not distributed, Late arrival	Yes		Yes		NFRA
Kebbi								
	Rice	27WITA 4	27WITA 4		No	Yes		NASC/MASALAHA
	Maize	19SDM	19SDM		No	Yes		NASC/MASALAHA
	Sorghum	11SK5912	11SK5912		No	Yes		NASC/MASALAHA
	Cowpea	8 Kananado	8Kananado		No	Yes		NASC/MASALAHA
	Groundnut	8	8		No	Yes		NASC/MASALAHA
	Soybeans	5 Sam-soy	5 Sam-soy		No	Yes		NASC/MASALAHA
Zamfara	NA	NA	NA	NA	NA	NA	NA	NA
Katsina								
	Millet	50kg	9.15kg	Yes		Yes		LCRI
	Maize	350kg	17.68kg	Yes		Yes		IAR
	Sorghum	75kg	11.26kg	Yes		Yes		IAR
	Cowpea	300kg	3.91kg	Yes		Yes		IAR
	Soybeans	250kg	5kg	Yes		Yes		IAR
	Cotton	200Kg	-	Yes		Yes		NASC
	Guava	1602	1602		No	Yes		NPFS
	Mango	580	580		No	Yes		NPFS
	Citrus	277	277		No	Yes		NPFS
Jigawa								
	Millet	75.45	75.45	Yes		Yes		IAR/NASC
	Maize	51.45	51.45	Yes		Yes		IAR/NASC
	Rice	163.59	163.59	Yes		Yes		IAR/NASC
	Sesame	20.03	20.03	Yes		Yes		IAR/NASC
	Cowpea	23.46	23.46	Yes		Yes		IAR/NASC
	G/nut	12.47	12.47	Yes		Yes		IAR/NASC
	Neem	600,000	600,000	Yes		Yes		Ministry of Environment
	Eucalyptus	400,000	400,000	Yes		Yes		Ministry of Environment
	Cassava	400,000	400,000	Yes		Yes		Ministry of Environment
	Moringa	800,000	800,000	Yes		Yes		Ministry of Environment
	Others	200,000	200,000	Yes		Yes		Ministry of Environment
Kano								
	Cotton	-	0.5	Yes		Yes		ADP
	Soybeans	-	3.3	Yes		Yes		ADP
	Millet	-	11.16	Yes		Yes		ADP
	Groundnuts	-	2.39	Yes		Yes		ADP
	Rice (upland)	-	9.6	Yes		Yes		ADP
	Rice (lowland)	-	121.2	Yes		Yes		ADP
	Maize	-	129.86	Yes		Yes		ADP
	Cowpea	-	2.84	Yes		Yes		ADP
	Mangoes	7,739	7,739		No	Yes		Paradise Farm/Mai Zube Farm
	Citrus	1,649	1,649		No	Yes		Paradise Farm/Mai Zube Farm
	Guava	2,489	2,489		No	Yes		Paradise Farm/Mai Zube Farm
	Pawpaw	1,500	1,500		No	Yes		Paradise Farm/Mai Zube Farm
	Others	1,500	1,500		No	Yes		Paradise Farm/Mai Zube Farm

Kaduna								
	Maize	105.3mt	30.3mt		No	Yes		ADP/MOA
	Rice	86.76mt	28.8mt	Yes		Yes		ADP/MOA
	Sorghum	45mt	2.5mt		No	Yes		ADP/MOA
	Cowpea	2mt	2mt		No	Yes		ADP/MOA
	Soybeans	3.5mt	3.5mt		No	Yes		ADP/MOA
	Oil palm	2000 (no)	200 9 (no)	Yes		Yes		NIFOR
	Cassava (cuttings)	180 bundles	180bundles		No	Yes		ADP

North Central Ecological Zone

Taraba								
	Maize	22MT	-	Yes		Yes		Maslaha Seeds
	Soybeans	4MT	-	Yes		Yes		
	Rice	5.7MT	2MT	Yes		Yes		NASC, ADRDMC
Plateau								
	Tomato	450g	2800g		No		No	Kafin-Kafin ltd Kano
	Carrots	1000kg	5,025g		No		No	"
	Cabbage	-	1040g		No		No	"
	Soybean	35.6MT	27.5MT		No		No	"
	Rice	100MT	15.8MT		No		No	"
	Maize	2500kg	2500kg		No		No	Premier seeds
	Coffee	16,000 seedlings	-		No		No	ADP
Nasarawa								
	Maize	18MT	18MT	Yes		Yes		Contract farmers
	Rice	1.9MT	1.9Mt	Yes		Yes		"
	Cowpea	0.6MT	0.6MT	Yes		Yes		"
	Soybeans	0.4MT	0.4MT	Yes		Yes		"
	Cassava	990 bundles	990 bundles		No	Yes		RTEB/ADP/outgrowers
	Oil palm	5000 seedlings	4000 seedlings	Yes		Yes		NIFOR
	Coconut	900 seedlings	900 seedlings	Yes		Yes		"
	Guava	5000 seedlings	2000 seedlings	Yes		Yes		Lynshack, Kaduna
	Pawpaw	5000 seedlings	2000 seedlings	Yes		Yes		"
	Mango	3000 seedlings	2800 seedlings	Yes		Yes		Locally
FCT								
	Sesame	20kg	1MT	Yes		Yes		NA
	Oil palm	5500 seedlings	2500 seedlings		No	Yes		NA
	Citrus	12000 seedlings	1000 seedlings		No	Yes		NA
	Guava	1000 seedlings	800 seedlings		No	Yes		NA
Niger								
	Rice	16.5MT	9.54MT	Yes		Yes		NFRA
	Maize	11MT	2.14MT	Yes		Yes		"
	Sorghum	5.7MT	0.71MT	Yes		Yes		"
	Soybean	4MT	Nil	Yes		Yes		"
	Cowpea	1MT	0.04MT	Yes		Yes		"
	Millet	4.76MT	Nil	Yes		Yes		"
	Cassava	6000 bundles	6000 bundles		No	Yes		RTEP
Kwara								
	Maize	15MT	15MT	Yes		Yes		ADP, Fadama Project
	Cowpea	0.25MT	0.25MT		No	Yes		ADP
	Soybeans	0.25MT	0.25MT		No	Yes		"
	Rice	257.3MT	257.3MT	Yes		Yes		"
	Sorghum	0.5MT	0.5MT		No	Yes		"
	Groundnut	0.25MT	0.25MT		No	Yes		"
	Vegetables	0.283MT	0.283MT		No	Yes		"

Kogi								
	Maize	107MT	60MT	Yes		Yes		NFRA
	Rice	52MT	4.5MT	Yes		Yes		NFRA and MANR
	Okro	350kg	320kg	Yes		Yes		MANR
	Tomato	500kg	450kg	Yes		Yes		"
	Sorghum	5MT	4.5MT	Yes		Yes		"
	Cassava	1600 bundles	1600 bundles	Yes		Yes		RTEB
	Yam	15,000 setts	15,000 setts		No		No	Outgrowers
	Citrus	1920 seedlings	1920 seedlings	Yes		Yes		Yandev, Gboko
	Guava	771 seedlings	771 seedlings	Yes		Yes		NFRA
	Oil palm	2000 seedlings	2000seedlings		No	Yes		NIFOR
	Coconut	680 seedlings	680 seedlings		No	Yes		"
	Mango	704 seedlings	704 seedlings	Yes		Yes		Yandev, Gboko.
Benue	NA	NA	NA	NA	NA	NA		

South West Agro-Ecological Zone

South West Agro-Ecological Zone								
Oyo	NA	NA	NA	NA	NA	NA	NA	NA
Osun	NA	NA	NA	NA	NA	NA	NA	NA
Ondo								
	Maize	19.698MT	15.5MT	Yes		Yes		ADP
	Rice	38.176MT	-	-		Yes		ADP
	Cowpea	360kg	360kg	Yes			No	NASC
	Cassava	-	2,500 bundles	Yes		Yes		ADP
Ogun								
	Maize	9196MT	7654MT	Yes		Yes		OGADEP and Premier seeds
	Vegetables	2800MT	1565	Yes		Yes		NIHORT
Lagos								
	Maize	5MT	5MT		No	N/A		Premier Seeds
	Rice	10MT	10MT		No	N/A		"
Ekiti								
	Maize	12MT	4.5MT	Yes		Yes		NFRA, NASC and ADP
	Rice	28MT	-	Yes		Yes		NASC Ibadan
	Cassava	101,000 bundles	101,000 bundles	Yes		Yes		RTEP Ijebu Ife
	Citrus	500	500		No	Yes		NFRA
	Guava	600	600		No	Yes		"
Edo								
	Maize	15.7MT	0.7MT	Yes		Yes		Premier seeds and FMA&NR
	Cassava	1000 bundles	1000 bundles	Yes		Yes		Contact farmers
Delta								
	Maize	20.5MT	20.5MT	Yes		Yes		Premier Seeds

South East Agro-Ecological Zone

Enugu								
	Maize	8 tons	8 tons		No	Yes		Premier Seeds
	Rice	9.2 tons	3.2 tons	Yes		Yes		"
	Cassava	35,000 bundles	30,000 bundles		No		No	ADP out growers
	Coconut	2000	1980		No		No	NIFOR
	Oil palm	3000	3000		No		No	"
Ebonyi								
	Maize	11 MT	6.40MT	Yes		Yes		NFRA/ADP
	Rice	90 MT	4.63MT	Yes			No	"
	Citrus	670	670	Yes		Yes		FGN
	Guava	960	960	Yes		Yes		"
	Mango	980	980	Yes		Yes		"
Cross River								
	Rice	6MT	6MT	-	-	-	-	NFRA
	Maize	5MT	-	-	-	-	-	"
	Mango	2404 seedlings	2404 seedlings	-	-	-	-	"
	Citrus	96 seedlings	96 seedlings	-	-	-	-	"
	Cocoa	NA	NA	NA	NA	NA	NA	NA
	Oil palm	NA	NA	NA	NA	NA	NA	NA
	Cassava	NA	NA	NA	NA	NA	NA	NA
Akwa Ibom								
	Cassava	-	200 bundles		No	Yes		ADP
Abia								
	Rice	60MT	60 MT		No		No	NASC
	Maize	60MT	60 MT		No	Yes		"
	Cassava	1350 bundles	1350 bundles		No		No	NACRI, IITA, Out growers
	Citrus	918 seedlings	918 seedlings		No	Yes		NFRA
	Ogbono	2900 seedlings	2900 seedlings		No	Yes		NFRA
	Guava	918 seedlings	918 seedlings		Yes	Yes		"
Anambra								
	Maize	13.5MT	-	Yes			No	Premier Seeds Ltd
	Rice	5.5MT	-	Yes			No	Premier Seeds Ltd
Imo								
	Maize	10.5MT	10.5MT	Yes		Yes		Imo ADP
	Rice	144MT	9MT	Yes		Yes		"
	Okra	500kg	500kg		No	Yes		"
	Cassava	6,800 bundles	6,800 bundles		No	Yes		"
Bayelsa								
	Yam	29,715	29,715		No		No	Local Market
	Cocoyam	10,200	10,200		No		No	Local market
	Cassava	3,995	3,995 bundles		No		No	ADP farmers/seed farms
	Sweet potato	-	166 bundles		No		No	"
Rivers								
	Maize	5MT	0.01MT	Yes			No	Premier Seeds
	Rice	6MT	5MT	Yes		Yes		"

3.4 Use of Agro-chemicals and some farm equipment

The purchase and distribution of agro-chemicals and some farm equipment are presented in Table 3.4.1. Nineteen states and the FCT did not supply any data on the use of agro-chemicals and farm equipment during the period under review; nine states supplied incomplete data and only eight states supplied complete data. These states procured and distributed agro-chemicals and some farm equipment mainly through Agricultural Development Programmes and input supply companies; Federal Government agencies and private agro-chemical companies. Farm equipment supplied to farmers includes knapsack sprayers, water pumps, storage bins, agro-processing equipment, Ox-drawn ploughs, tractors, work-bulls, generators, etc. These farm equipment and agro-chemicals were mostly procured and distributed to farmers at quantities that were "inadequate but at prices that were affordable to the farmers". This contradicts a basic economic principle, that in a free market, the prices of items high in demand and scarce in supply are far from affordable.

In the North East Agro-Ecological Zone, Borno and Yobe states did not supply any data on the use of agro-chemicals and farm equipment. Bauchi state procured and distributed inadequate quantities of pesticides and herbicides at affordable prices to its farmers. Adamawa state procured and distributed adequate quantities of herbicides, pesticides, Ox-drawn ploughs, silos and sprayers at affordable prices to its farmers.

In the North West Agro-Ecological Zone, Katsina, Kebbi, Sokoto and Zamfara did not supply any data on the use of agro-chemicals and farm equipment. Kano state procured and distributed adequate quantities of herbicides and pesticides at affordable prices. Kaduna state procured and distributed inadequate quantities of herbicides, pesticides, work-bulls, sprayers, storage bins and AP centres at affordable prices to farmers; but no water pumps.

In the North Central Agro-Ecological Zone, Benue, Kogi, Nasarawa, Taraba and the FCT did not supply any data on the use of agro-chemicals and farm equipment. Kwara state procured and distributed inadequate quantities of herbicides, sprayers, water pumps and tractors though at affordable prices. Herbicides, pesticides, tractors and generators were procured and distributed by Plateau State were not adequate and unaffordable.

In the South-West Agro-Ecological Zone, Oyo, Osun, Lagos, and Edo states did not supply any data on the use of agro-chemicals and farm equipment. Delta state procured and distributed adequate quantities of pesticides, tractors and sprayers at affordable prices to its farmers.

In the South-East Agro-Ecological Zone, Abia, Akwa Ibom, Anambra, Cross River and Ebonyi states did not supply any data on the use of agro-chemicals and farm equipment. Only Enugu state procured and distributed adequate quantities of herbicides and pesticides, though, not at affordable prices to the farmers. Imo State supplied data for herbicides only.

Table 3.4.1: Use of Agro-Chemicals and Some Farm Equipment

North East Agro-Ecological Zone

State		Quantities		Adequacy		Affordability		Source
	Agro-Chemicals e.t.c.	Procured	Distributed	Yes	No			
Borno	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Yobe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bauchi								
	Herbicides	10,554lts	10,554lts		No	Yes		Locally
	Pesticides	2080kg	2080kg		No	Yes		"
	Farm equipment (water pump)	1000 units	641 units	Yes			No	MANR Bauchi
Gombe								
	Herbicides	N/A	N/A	N/A	N/A	N/A	N/A	
	Pesticides	N/A	N/A	N/A	N/A	N/A	N/A	
	Farm equipment (knapsack sprayers)	250	226		No		Yes	State Government
Adamawa	Herbicides	362lts	306lts	Yes		Yes		Zee Agro, Dizengoff, WACO
	Pesticides	413kg	252kg	Yes		Yes		"
	Farm equipment							
	(a) Ox-Drawn ploughs	44 units	Nil	Yes		Yes		Green Pedals
	(b) Silos	800 units	343 units	Yes		Yes		FGN
	(c) Sprayers	50 units	38 units	Yes		Yes		WACOT Co.

North West Agro-Ecological Zone

State		Quantities		Adequacy		Affordability		Source
	Agro-Chemicals e.t.c.	Procured	Distributed	Yes	No			
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
Katsina	NA	NA	NA	NA	NA	NA	NA	NA
Jigawa	Tractors	75 (no)	75(no)		No	Yes		FMANR
	Work-bulls	2870(no)	2870(no)		No	Yes		FMANR
	Storage bins	798(no)	798(no)	Yes		Yes		FMANR
Kano	Herbicides(maize)	43,287ltrs	43,287ltrs	Yes		Yes		ADP
	Herbicides(rice)	12,476ltrs	12,476ltrs	Yes		Yes		ADP
	Pesticides	803ltrs	803ltrs	Yes		Yes		ADP
Kaduna	Herbicides	16,860 ltrs	16,860ltrs		No	Yes		ADP
	Pesticides	6,210ltrs	6,210ltrs		No	Yes		ADP
	Farm Equipment:							
	(a) Workbulls	46 pairs	46 pairs		No	Yes		ADP
	(b) Sprayers	3,000 (no)	3,000 (no)		No	Yes		ADP
	(c) Storage bin	2,000(no)	1,800 (no)		No	Yes		ADP
	(d) Water pump	7,000 (no)	5,000 (no)	Yes		Yes		ADP
	(e) AP Centre	18(no)	18(no)		No	Yes		ADP

North Central Agro-Ecological Zone

State		Quantities	Adequacy	Affordability	Source	State		Quantities
	Agro-Chemicals e.t.c.	**Procured**	**Distributed**	**Yes**	**No**			
Taraba	NA	NA	NA	NA	NA	NA	NA	
Plateau								
	Herbicides	76lts	361lts		No		No	Private Owners
	Pesticides	-	147lts		No		No	"
	Farm equipment							
	(a) Tractors	2	2		No		No	PLSG
	(b) Generators	4	4		No		No	ADP
	(c) Storage Bin (Metal)	778	778		No	Yes		FGN
	(d) Storage Bin (concrete)	150	40		No	Yes		FGN
	Agro Pro Centre	8	6		No	Yes		ATEP/IFAD/FGN/PLSG
Nasarawa	NA	NA	NA	NA	NA	NA	NA	NA
FCT	NA	NA	NA	NA	NA	NA	NA	NA
Niger								
	Herbicides	NA	NA	NA	NA	NA	NA	NA
	Pesticides	NA	NA	NA	NA	NA	NA	NA
	Farm equipment CP 15 Knapsack sprayers	45 units	-		No	Yes		CZARD A buja.
Kwara								
	Herbicides	8080lts	8080lts		No	Yes		NA
	Pesticides	31.2MT	31.2MT	Yes		Yes		NA
	Farm equipment							
	(a) Sprayers	24 units	24 units		No		Yes	NA
	(b) Pump	25 units	25 units		No		Yes	NA
	(c) Rice Distorners	2 units	2 units		No		Yes	NA
	(d)Tractor	2 units	2 units		No		Yes	NA
Kogi	NA	NA	NA	NA	NA	NA	NA	NA
Benue	NA	NA	NA	NA	NA	NA	NA	NA

South West Agro-Ecological Zone

State		Quantities	Adequacy	Affordability	Source	State		Quantities
	Agro-Chemicals e.t.c.	**Procured**	**Distributed**	**Yes**	**No**			
Oyo	NA	NA	NA	NA	NA	NA	NA	NA
Osun	NA	NA	NA	NA	NA	NA	NA	NA
Ondo								
	Herbicides	52140lts	All	Yes				Agro-Chemical co.
	Pesticides	8200lts and 53000 sachets	All	Yes				"
	Farm equipment	N/A	N/A	N/A	N/A	N/A	N/A	"
Ogun								

	Herbicides	2500lts	630lts	Yes		Yes		Private Co.
	Pesticides	2500lts	65	Yes		Yes		"
	Farm equipment				No		No	Fadama II
	(a) Water pump	19 units	6 units		No		No	Private Co.
	(b) Sprayers	120 units	120 units					
Lagos	NA	NA	NA	NA	NA	NA	NA	
Ekiti	Herbicides	5000lts	5000lts		No		No	FITSCO, CANDEL and CAPL
	Pesticides	2000lts and 2000kg	2000lts and 2000kg		No		No	FITSCO and CANDEL
	Farm equipment	N/A	N/A	N/A	N/A	N/A	N/A	
Edo	NA	NA	NA	NA	NA	NA	NA	
Delta	Herbicides	NA	NA	NA	NA	NA	NA	
	Pesticides	4142lts	4142lts	Yes		Yes		Candel, Saro Co, Dizengoff
	Farm equipment							
	(a) Tractor	50 units	50 units	Yes		Yes		Dizengoff
	(b) Sprayers	50 units	50 units	Yes		Yes		"

South East Agro-Ecological Zone

State	Agro-Chemicals e.t.c.	Quantities Procured	Adequacy Distributed	Affordability Yes	Source No	State		Quantities
Enugu								
	Herbicides	7000lts	1980	Yes			No	Candil African AGRO
	Pesticides	2200 lts	3000	Yes			No	"
	Sprayers	120	110		No		No	"
Ebonyi	NA	NA	NA	NA	NA	NA	NA	NA
Cross River	NA	NA	NA	NA	NA	NA	NA	NA
Akwa Ibom	NA	NA	NA	NA	NA	NA	NA	NA
Abia								
	Herbicides	150 lts	150 lts		No		No	Sygenta
	Pesticides	450 lts	450 lts		No		No	Agrotech
	Jacto	4	4		No	Yes		Sygenta
	CP 15	8	8		No	Yes		CAPL
	Hand Sprayers	20	20		No	Yes		Volpi
	Tree Sprayers	40	40		No	Yes		Butterfly-Aba
Anambra	NA	NA	NA	NA	NA	NA	NA	NA
Imo								
	Herbicides	250lts	250lts		No		Yes	
	Pesticides	N/A						
	Farm equipment	N/A						
Bayelsa								
	Herbicides	600lts	600lts		No		No	Open market
	Pesticides	N/A						
	Farm Equipment (Tractor)	-	5		No		No	State Government
Rivers								
	Herbicides	79lts	73lts		No		No	Agro-allied dealer
	Pesticides	NA	NA	NA	NA	NA	NA	NA
	Farm equipment (Tractor)	3			No	Yes		State Government, NDDC

3.5 CROP PESTS AND DISEASES

The occurrence of pests and diseases on crops for the year 2009 is presented in Table 3.5. The results revealed that maize was affected by different types of pests and diseases across the states; of which stem borer disease was reported by 38% of the states, yam beetles (30%) and cassava rodents (27%) of all the states. Maize was infested with 15 different pests/diseases, rice, 14; cassava and cowpea, 13 each; yam, 12; sorghum and melon, 8 each; cocoyam and sweet potato, each with 7. Severity of most of these pests and diseases across the states were moderate or light and may be reflected on the crop yields of farmers.

Rice fields in Anambra state were affected by an obnoxious weed that looks like rice which may cause considerable loss in yield. As compared to 2008 wet season report, there was an increase in the number of pests/ diseases that affected yam, cocoyam, sweet potato, melon and tomato across the states.

Table **3.5.1: Incidence of Pests, Diseases and Hazards on Crops in 2009**

Crops Infested	Pests / Diseases/Hazards	Affected States	Severity	Control measure(s) undertaken
Maize	Streak	Ebonyi, Ondo	Moderate	Herbicide, chemicals
Maize	Stem borer	Akwa, Ibom, Anambra, Bayelsa, Ekiti, Enugu, Ebonyi, Imo,Kano, Kaduna, Lagos, Edo, Cross River, Bauchi, Plateau	Moderate, Light	Use of furadan, insecticides, resistant cultivars, treated seed, seed dressing with Apron-plus, application of Zap, Karate, adoption of recommended practices, soil treatment, early planting, crop rotation, roughing
Maize	Rodent	Enugu, Ekiti, Cross River, Nasarawa, Kogi	Light	Trapping
Maize	Wilting	Rivers	Heavy	Allowed to establish
Maize	Scorching	Rivers	Light	Rain
Maize	Weaver birds	Akwa Ibom, Bayelsa, Edo	Moderate	Timely harvesting, Scaring tactics
Maize	Blight	Imo	Light	Resistant varieties
Maize	Dry spell	Borno, Zamfara Jigawa , Kebbi, Taraba, Abia	Moderate Heavy Light	Drought tolerant varieties, replanting
Maize	Quelea bird	Katsina, Gombe	Heavy Moderate	Scaring tatics Spraying
Maize	Termite	Lagos, Adamawa, Kogi	Light	Insecticide
Maize	Crickets	Lagos	Moderate	Insecticides
Maize	Striga	Kwara, Nasarawa, Niger FCT	Light Heavy	Tolerant variety
Maize	Grasshopper	Kwara, Ekiti, Cross River, Kogi, Niger	Heavy Light	Chemicals
Maize	Army worm	Kogi	Light	
Maize	Snail	Kogi	Light	
Millet	Dry spell	Borno, Zamfara Jigawa, Kebbi, Taraba	Moderate Heavy Light	Drought resistant varieties
Millet	Quelea bird	Borno, Gombe Sokoto	Light Moderate Heavy	Traditional bird scaring, spraying
Millet	Downey mildew	Kano	Light	Rogueing
Millet	Stem borer	Bauchi, Plateau, Sokoto	Moderate Light	Insecticides, crop rotation, seed dressing, rougeing

Millet	Grasshopper	Bauchi	Light	Insecticides
Sorghum	Dry spell	Borno, Kebbi, Zamfara Jigawa	Light Moderate	Improved variety drought resistant varieties
Sorghum	Head smut	Kano, Yobe	Light	Rogueing
Sorghum	Stem borer	Kaduna, Bauchi	Light	Upper cott application
Sorghum	Striga	Kwara, Niger FCT	Light Moderate	Avoid contaminated area
Sorghum	Spittle bugs	Bauchi	Light	Wood ash
Sorghum	Grasshopper	Plateau Niger	Moderate Light	Chemical
Sorghum	Rodent	Kebbi	Light	
Sorghum	Army worm	Niger	Light	
Groundnut	Rodent	Enugu	Light	
Groundnut	Dry spell	Borno, Jigawa	Moderate	Drought resistant varieties
Groundnut	Termite	Borno, Kano	Light Moderate	Upper cott
Groundnut	Yellowing of leaves	Kwara	Moderate	
Groundnut	Rosette	FCT	Light	Resistant variety
Groundnut	Aphid	Kano, Jigawa, Taraba, Zamfara	Moderate Light	Upper cott, insecticides
Cowpea	Leave beetles	Enugu	Light	
Cowpea	Striga	Borno, Kano Kwara	Moderate Light	Hand pulling
Cowpea	Aphids	Katsina Jigawa Adamawa	Heavy Moderate Light	Spray with insecticides, Cypermethrin
Cowpea	Brown blotch	Oyo	Moderate	Chemicals
Cowpea	Pod suckers	Oyo	Moderate	Chemicals
Cowpea	Flower Thrips	Oyo, Kano, Benue Ekiti	Moderate Heavy	Chemicals, Upper cott
Cowpea	Blight	Ogun	Light	Pesticides
Cowpea	Weevils	Ekiti Sokoto	Heavy Light	Chemicals
Cowpea	Leaf mixer	FCT	Moderate	
Cowpea	Bruchid	FCT	Moderate	
Cowpea	Stainer	FCT	Moderate	
Cowpea	Aphid	Plateau, Jigawa Katsina	Light Moderate Heavy	Chemicals
Cowpea	Dry spell	Jigawa	Moderate	Drought resistant variety
Soybean	Dry spell	Borno	Moderate	
Rice	Quelea Bird	Anambra, Sokoto Taraba	Moderate Light	Human scares/setting traps, chemicals
Rice	Fire outbreak	Anambra	Moderate	-
Rice	Stem borer	Akwa Ibom, Bayelsa, Ekiti Enugu, Ebonyi,	Moderate, Light, Heavy	Furadan, use of insecticides, farm hygiene, cultivation of improved variety, early planting
Rice	Weaver birds	Rivers	Heavy	
Rice	Birds	Ogun, Edo, Ondo Ekiti	Moderate Heavy	Scaring tactics

		Delta	Light	
Rice	Weevil	Rivers	Heavy	
Rice	Blast	Akwa Ibom, Bayelsa, Bauchi Imo, Kano, Osun, Plateau	Moderate, Light	Diethane M45, use of fungicides, application of Zap, Karate, resistant variety, IPM, cultural practices
Rice	Gull Midge	Ebonyi, Imo	Light	farm hygiene, cultivation of improved variety
Rice	Termite	Imo	Light	Nil
Rice	Flood	Ebonyi, Kebbi FCT	Light Heavy	Replanting
Rice	Dry spell	Borno, Jigawa	Moderate Heavy	Drought resistant varieties
Rice	Grass cutter	Ondo	Moderate	Traps
Rice	Rodents	Ekiti, Plateau	Light	Trapping
Rice	Caterpillar	Cross River	Light	
Yams	Premature senescence	Anambra	Moderare	Still under investigation
Yams	Die back	Anambra	Moderate	Still under investigation
Yams	Wilting of leaves & vines	Enugu	Light	
Yams	Cricket	Rivers	Moderate	Hand picking
Yams	Termite	Rivers, Imo	Moderate, Light	Use Apron star, early weeding, hand picking
Yams	Dry rot	Delta, Anambra	Light	
Yams	Beetles	Akwa Ibom, Bayelsa, Rivers, Ondo, Ekiti ,Imo, Oyo, Ogun, Edo, Adamawa, Delta	Moderate, Light	Use Apron star, early weeding, hand picking, /tolerant variety, chemicals, seed treatment, soil fumigation
Yams	Millipede	Akwa Ibom, Bayelsa	Moderate	Use of perfecthion
Yams	Grasshoppers	Imo	Light	Hand picking
Yams	Leaf spot	Edo	Light	Soil treatment
Yams	Nematode	Ekiti, FCT	Light	
Yams	Mealy bug	Plateau	Light	Insecticides
Cocoyam	Leaf blight	Anambra	Heavy	Still under investigation
Cocoyam	Die back	Anambra, Imo, Abia	Heavy	Still under investigation
Cocoyam	Tuber/corm rot	Enugu, Ekiti	Moderate Heavy	
Cocoyam	Rodents	Akwa Ibom , Rivers, Plateau	Moderate, Light	Sanitation, Trap
Cocoyam	Goat & Sheep	Akwa Ibom	Moderate	Confinement/ fencing of farm
Cocoyam	Termite	Akwa Ibom	Moderate	Use of termex
Cocoyam	Root rot	Imo	Light	Chemicals
Cassava	Mealy bug	Anambra, Enugu, Abia	Heavy, Light	Resistant variety, use of treated seeds, pesticides
Cassava	Root rot	Anambra, Edo	Moderate	Resistant variety, soil treatment
Cassava	CMD	Anambra	Moderate	Resistant variety
Cassava	Millipede	Rivers, Imo	Moderate, Light	Use Apron star, replanting
Cassava	Mosaic	Rivers, Cross River, Kano	Light Moderate	Timely weeding, good sanitation Rougeing, chemicals
Cassava	Goat & Sheep	Akwa Ibom, Bayelsa	Moderate	Confinement/ fencing of farm
Cassava	Rodents	Abia , Akwa Ibom, Bayelsa, Ekiti, Ogun , Nasarawa, Kogi, Delta	Moderate, light	Sanitation, Trap, Replanting

Cassava	Termites	Akwa Ibom, Bayelsa	Moderate	Use of termex
Cassava	Anthracnose	Imo	Light	Use of resistant variety
Cassava	Grasshopper	Imo, Ogun, Ekiti, Kogi, Delta Kwara	Light, Moderate	Hand picking, Insecticides
Cassava	Leaf curl	Ondo	Moderate	Chemicals
Cassava	Green spider/ Mealy bug	Plateau	Light	Chemical
Cassava	Mite	Plateau	Light	Chemical
Sweet Potato	Weevils	Enugu Ekiti	Light Moderate	
Sweet Potato	Squirrel	Rivers	Light	Timely harvesting
Sweet potato	Flooding	Rivers	Moderate	Timely harvesting
Sweet Potato	Cricket	Imo	Light	Hand picking
Sweet Potato	Bettles	Imo, Bauchi	Light	Hand picking, Karate EC
Sweet Potato	Silas	Plateau	Light	Insecticides, cultural control
Sweet potato	Worms	Kebbi	Moderate	Chemicals
Irish Potato	Tuber moth	Plateau	Moderate	Cultural control, chemicals, resistant variety
Irish Potato	Blight	Plateau	Heavy	Early planting
Cotton	Stainer	Ekiti	Moderate	Chemicals
Cotton	Poor germination	FCT	Light	Replanting
Cotton	Boll worm	Kano	Moderate	Zap /karate, Team
Cotton	Leaf spot	Kano	Moderate	Zap /karate, Team
Cotton	Leaf roller	Zamfara	Light	
Melon	Beetles	Enugu Sokoto	Light Moderate	Chemicals
Melon	Rodent	Akwa Ibom, Bayelsa Abia	Moderate Light	Farm sanitation, trapping
Melon	Aphid	Imo, Cross River, Bauchi	Light	Hand picking, Karate5EC , Imdacot
Melon	Lady beetles	Imo	Light	Use of chemicals
Melon	Dry spell	Taraba, Abia	Light	Replanting
Melon	Millipede	Taraba	Light	Chemicals
Melon	Army worm	Niger	Light	
Melon	Weevil	Sokoto	Moderate	Chemicals
Vegetable **Pum kin** **Cabbage** **Cabbage**	 Crickets Leaf beetles Insects	 Imo Bauchi Plateau	 Light Moderate Light	 Hand picking, Imdacot, Insecticides
Telfaria	Beetle	Akwa Ibom, Bayelsa	Moderate	Use of Karate and Decis
Plantain	Eel worm	Rivers	Light	Treat before Planting
Cocoa	Mired/caps	Ekiti	Light	Insecticides

Cocoa	Black pod	Cross River	Heavy	
Water melon	NA	NA	NA	NA
Tomato	Wilt	Oyo, Ekiti Edo	Heavy, Moderate	Tolerant variety, soil treatment,sanitation
Tomato	Nematodes	Plateau	Light	Crop rotation, insecticides
Pepper	Fruit drop	Oyo	Moderate	Tolerant variety

3.6 AGRICULTURAL MECHANIZATION

Animal traction remained popular

Generally data on tractor availability, usage and Animal traction were scanty. The data on cost of tractor hire services for some basic farm operations (ploughing, ridging and harrowing) across the States of the federation is presented in Table 3.4. Majority of the states maintained the same charges for the farm operations in 2008 and 2009; other states had an increase in costs of operation in 2009 as compared to 2008. However, only Imo State recorded a decrease of 40% in cost of operation when compared to 2008. The increase in the cost of tractor hire ranges from a maximum of 300% for ploughing operation in Katsina State a minimum of 12.5% for ridging operation in Kebbi State (see table 3.6.1).

Unserviceable tractors remained the lot of many farmers

The major problems associated with tractor use in the States of the federation include inadequate number of tractors, constant breakdown during operations and high cost of diesel/spare parts at peak period of demand. Some of the problems affecting animal traction were unavailability of some traction equipments (plough, cultivator, ridger etc.), increasing number of non-functional animal traction training centres, inadequate/high cost of work-bulls and in-effectiveness of animal traction on some soil that are not sandy.

Table 3.6.1: Cost of tractor hire services for some farm operations in the states and FCT

North East Agro-Ecological Zone

State	Ploughing (N/Ha)			Ridging (N/Ha)			Harrowing (N/Ha)		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
Borno	7000	7000	0.0	7000	7000	0.0	7000	7000	0.0
Yobe	7000	7000	0.0	7000	7000	0.0	7000	7000	0.0
Bauchi	2500	2500	0.0	2500	2500	0.0	2500	2500	0.0
Gombe	1000	1000	0.0	1000	1000	0.0	1000	1000	0.0
Adamawa	5000	5000	0.0	-	-	-	3500	3500	0.0
Zonal Mean	**4500**	**4500**	0.0	**4375**	**4375**	0.0	**4200**	**4200**	**0.0**

North West Agro-Ecological Zone

State	Ploughing (N/Ha)			Ridging (N/Ha)			Harrowing (N/Ha)		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
Sokoto	6000	6000	0.0	6000	6000	0.0	6000	6000	0.0
Kebbi	4200	4800	14.2	4000	4500	12.5	-	-	-
Zamfara	5000	5000	0.0	5500	5500	0.0	4000	4000	0.0
Katsina	3000	12000	300	5000	6500	30	10000	12000	20
Jigawa	6000	7500	25	6000	8000	33.3	5000	6000	20
Kano	10000	10000	0.0	7500	8750	16.6	7500	8750	16.6
Kaduna	-	15000	-	-	10000	-	-	10000	-
Zonal Mean	**5700**	**8614**	**56.5**	**5667**	**7036**	**92.4**	**6500**	**7792**	**11.3**

North Central Agro-Ecological Zone

State	Ploughing (N/Ha)			Ridging (N/Ha)			Harrowing (N/Ha)		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
Taraba	4000	4000	0.0	-	-	-	4000	4000	0.0
Plateau	3000	2000	-50	2500	2000	-20	2500	2000	20
Nasarawa	2000	3000	50	8000	8000	0.0	2000	3000	50
FCT	3000	-	-	2800	-	-	2800	-	-
Niger	8000	8000	0.0	8000	8000	0.0	8000	8000	0.0
Kwara	-	-	-	-	-	-	-	-	-
Kogi	4000	5000	25	4000	4000	0.0	2000	2000	0.0
Benue	2000	2000	0.0	2000	2000	0.0	2000	2000	0.0
Zonal Mean	**3714**	**4000**	**7.7**	**4550**	4800	5.5	2663	3500	31.4

South West Agro-Ecological Zone

State	Ploughing (N/Ha)			Ridging (N/Ha)			Harrowing (N/Ha)		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
Osun	3500	3500	0.0	3500	3500	0.0	3500	3500	0.0
Oyo	5000	6000	20	2500	2500	0.0	2500	2500	0.0
Ekiti	5000	5000	0.0	1500	1500	0.0	1500	1500	0.0
Ondo	3000	4000	33.3	3000	3000	0.0	2000	3000	50
Ogun	2500	3200	28	2000	3000	50	2000	3000	50
Lagos	6000	6000	0.0	6000	6000	0.0	6000	6000	0.0
Edo	4000	6000	50	4000	6000	50	4000	6000	50
Delta	-	1000	-	-	8000	-	-	8000	-
Zonal Mean	**4143**	**4338**	4.7	**3214**	**4188**	**33.3**	**3071**	**4188**	**36.3**

South East Agro-Ecological Zone

State	Ploughing (N/Ha)			Ridging (N/Ha)			Harrowing (N/Ha)		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
Enugu	5000	5500	10	4000	4000	0.0	4500	4500	0.0
Ebonyi	6500	9000	38.5	6500	9000	38.5	6500	9000	38.5
Cross River	15000	-	-	15000	-	-	12000	-	-
Akwa Ibom	5000	5000	0.0	5000	5000	0.0	5000	5000	0.0
Abia	10000	10000	0.0	6000	6000	0.0	6000	6000	0.0
Anambra	12000	12000	20	12000	12000	0.0	12000	12000	0.0
Imo	10000	6000	-40	10000	6000	-40	10000	6000	-40
Bayelsa	-	-	-	-	-	-	-	-	-
Rivers	4000	4000	0.0	4000	4000	0.0	4000	4000	0.0
Zonal Mean	**8438**	**7357**	**1.2**	**7813**	**6571**	-0.2	**7500**	**6643**	**-0.2**

3.7 FARM MANAGEMENT

3.7.1 Cost of Production

The cost of production of major crops increased considerably as can be observed from the Tables 3.7.1.1 to 3.7.1.5. Production cost for maize increased in 2009 over that of 2008 by about 43% in Kano State, but decrease by -3% in Zamfara State probably due to heavy subsidy on maize inputs in the latter state. An increase of 60% in production cost was observed for cassava in Sokoto State, compared with decreases of -10% and -4% that were recorded in Benue and Taraba States.

Crops like groundnut, soybeans and melon also recorded significant increases in costs of production. For instance, groundnut had an increase of 50% and 33% in Sokoto and Kebbi States respectively. Soybeans recorded an increase of 34% and 30% cost of production in Kebbi and Kano States respectively. Cocoyam, yam and plantain also recorded increases in their costs of production by 16%, 20% and 10% in Bayelsa, Kwara and Rivers States respectively.

It may be noted that wide variations occurred in levels of change in the cost of production across the zones between the two years under reference. These wide changes might be attributed to relative scarcity and price differences of the inputs of production across the five agro-ecological zones that worsened in 2009 when compared with 2008. The cost of producing melon was highest in Imo State and lowest in Benue and Edo States.

System of manual labour use for post-harvest processing

One of the factors responsible for the general high cost of production is the dependence on manual labour and inadequacy of labour saving devices that are prevalent among over 90% farmers. High price and scarcity of inputs such as fertilizer, improved seeds, agrochemicals for the control of disease and pests and mechanized farm implements are among the other factors that greatly contributed to the increased cost of production across the states.

Table 3.5.1: Cost of Production of Maize, Millet and Rice (N/kg)

		Maize (₦ /Kg)			Millet (₦ /Kg)			Rice (₦ /Kg)		
S/N	State	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	45,000	50,000	11.11	40,000	45,000	12.50	50,000	60,000	20
3	Bauchi	38,006.91	45,608.29	19.94	25,231.41	27,754.55	9.94	47,674.54	59,593.18	25.00
4	Gombe	60,000	60,000	0	50,000	50,000	0	70,000	70,000	0
5	Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**47,668.97**	**51,869.43**	**10.35**	**38,410.47**	**40,918.18**	**7.48**	**55,891.51**	**63,197.73**	**15.00**
6	Jigawa	26,000	31,000	19.23	23,700	28,000	18.14	24,500	29,000	18.36
7	Katsina	62,750	81,500	29.83	46,060	53,000	15.06	68,000	NA	
8	Sokoto	65,000	80,000	23.08	45,000	70,000	55.56	90,000	120,000	33.33
9	Kebbi	75,000	100,000	33.33	50,000	65,000	30.00	80,000	100,000	25.00
10	Zamfara	72,691	70,246	-3.36	43,916.30	42,719.10	-2.74	70,290	69,067.80	-1.70
11	Kano	70,000	100,000	42.86	40,000	50,000	25.00	90,000	120,000	33.33
12	Kaduna	95,000	96,806	1.90	60,000	61,200	2.00	105,000	106,890	1.80
	Zonal Mean	**576,770.12**	**79,936.00**	**20.98**	**44,096.60**	**52,845.59**	**20.43**	**75398..57**	**90,826.30**	**10.36**
13	Taraba	93,000	97,000	4.50	90,000	91,000	1.11	139,000	130,000	-6.48
14	Plateau	85,600	88,750	3.68	40,500	47,500	17.23	58,900	79,750	35.34
15	Nasarawa	72,600	72,600	0.00	NA	NA	NA	90,900	92,300	1.54
16	FCT	65,000	70,000	7.63	55,000	60,500	10	80,000	87,000	8.75
17	Niger	52,264.81	57,491.29	9.94	42,601.00	46,073.88	8.15	71,874	80,498.88	12.00
18	Kwara	70,000	80,000	14..24	NA	NA	NA	70,000	80,000	14.24
19	Kogi	59,900	59,900	0	50,000	50,000	0	68,850	69,750	1.31
20	Benue	21,000	25,000	19.05	NA	NA	NA	32,500	33,500	3.08
	Zonal Mean	**64,920.60**	**68,842.66**	**7.36**	**55,620.20**	**59,014.78**	**7.30**	**76,503**	**81,599.86**	**8.72**
21	Osun	60, 000	68, 000	13	NA	NA	NA	75, 000	85, 000	13.3
22	Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Ekiti	96,300	120,006	24.62	NA	NA	NA	168,100	180,100	7.14
24	Ondo	87,600	92,400	5.48	NA	NA	NA	192,550	198,250	2.95
25	Ogun	65,780	68,594	4.28	NA	NA	NA	NA	NA	NA
26	Lagos	86,800	90,000	3.64	NA	NA	NA	200,000	200,000	0.00
27	Edo	22,000	25,000	13.64	NA	NA	NA	NA	NA	NA
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**71,696**	**57,600**	**10.33**	NA	NA	NA	**186,883.30**	**192,783.33**	**3.36**
29	Anambra	100,000	100,000	0.00	NA	NA	NA	120,000	125,000	4.16
30	Enugu	93,000	95,000	2.15	NA	NA	NA	106,000	109,000	2.83
31	Ebonyi	82,000	90,000	9.76	NA	NA	NA	175,000	180,000	2.86
32	C/River	65, 000	67, 000	2.99	NA	NA	NA	70, 000	76, 000	7.14
33	Abia	204, 000	228, 000	12.0	NA	NA	NA	195, 000	219, 000	12
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	145,000	145,000	0.00	NA	NA	NA	165,000	165,000	0.00
36	Bayelsa	55,675	56,750	1.93	NA	NA	NA	NA	NA	NA
37	Rivers	130,000	140,400	8.00	NA	NA	NA	NA	NA	NA
	Zonal Mean	**104,279.17**	**104,525.00**	**3.64**	NA	NA	NA	**141,500**	**144,750**	**2.46**
	National Mean	**69,246.97**	**72,554.62**	**10.53**	**46,042.42**	**50,926.18**	**11.74**	**209,595.28**	**114,631.44**	**22.92**

Table 3.7.1.2: Cost of Production of Sorghum, Cowpea and Groundnuts (N/kg)

		Sorghum (₦ /Ha)			Cowpea (₦ /Ha)			Groundnut (₦ /Ha)		
S/N	State	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	40,000	45,000	12.50	30,000	40,000	33.33	35,000	45,000	28.57
3	Bauchi	31,074.63	34,182.09	9.94	29,446.81	38,280.85	29.94	26,927.28	31,504.92	17
4	Gombe	50,000	50,000	0	45,000	45,000	0	NA	NA	NA
5	Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**121,074.63**	**43,060.70**	**7.48**	**34,815.60**	**41,093.62**	**21.09**	**30,963.64**	**38,252.46**	**22.79**
6	Jigawa	23,700	28,000	18.14	20,000	22,000	10	26,500	32,000	20.76
7	Katsina	47,160	61,350	30.04	42,680	41,460	-2.86	61,500.00	NA	
8	Sokoto	45,000	70,000	55.56	60,000	90,000	50	60,000	90,000	50
9	Kebbi	70,000	93,000	32.86	32,000	43,000	34.38	45,000	60,000	33.33
10	Zamfara	NA	NA		51,139.75	50,324.80	-1.59	55,824	55,009.80	16.66
11	Kano	45,000	50,000	11.11	50,000	60,000	20.00	60,000	70,000.00	0.43
12	Kaduna	70,000	70,840	1.20	75,000	76,425	1.90	65,000	65,320.00	0.43
	Zonal Mean	**50,143.33**	**62,198.33**	**24.82**	**47,259.96**	**54,744.26**	**15.98**	**53,403.43**	**62,054.97**	**19.95**
13	Taraba	93,000	95,000	2.15	NA	NA	NA	NA	NA	NA
14	Plateau	49,850	50,900	22.11	NA	NA	NA	52,900	66,000	24.76
15	Nasarawa	NA	NA	NA	47,250	47,250	0	50,350	50,350	0
16	FCT	60,000	67,000	11.66	70,000	75,000	7.14	70,000	76,000	8.57
17	Niger	47,619.77	54,762.74	15.00	43,451.10	47,796.21	10	35,065.80	37,871.06	7.94
18	Kwara	70,000	85,000	21.44	65,000	70,000	7.63	50,000	65,000	30
19	Kogi	54,750	54,750	0	63,500	63,500	0	NA	NA	NA
20	Benue	21,500	21,300	-0.93	NA	NA	NA	16,000	18,000	12.50
	Zonal Mean	**56,674.25**	**61,244.68**	**10.20**	**57,840.22**	**60,709.24**	**4.95**	**45,719.30**	**52,203.51**	**13.96**
21	Osun	NA	NA	NA	85, 000	88, 000	3.53	NA	NA	NA
22	Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Ekiti	NA	NA	NA	69,230	71,100	2.70	NA	NA	NA
24	Ondo	NA	NA	NA	90,500	100,010	10.51	NA	NA	NA
25	Ogun	NA	NA	NA	NA	NA	NA	NA	NA	NA
26	Lagos	NA	NA	NA	NA	NA	NA	NA	NA	NA
27	Edo	NA	NA	NA	NA	NA	NA	18,000	23,000	27.78
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean				**79,865**	**85,555**	**6.61**	**18,000**	**23,000**	**27.78**
29	Anambra	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Enugu	NA	NA	NA	NA	NA	NA	NA	NA	NA
31	Ebonyi	NA	NA	NA	NA	NA	NA	50,000	75,000	50
32	C/River	NA	NA	NA	47, 000	48, 000	2.13	47, 000	50, 000	6.38
33	Abia	NA	NA	NA	NA	NA	NA	NA	NA	NA
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	NA	NA	NA	NA	NA	NA	NA	NA	NA
36	Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Rivers	NA	NA	NA	133,900	136,578	2	NA	NA	NA
	Zonal Mean				**133,900**	**136,578**	**2**	**50,000**	**75,000**	**50**
	National Mean	**49,058.60**	**55,501.24**	**14.17**	**70,736.16**	**75,736.02**	**10.13**	**39,617.27**	**50,102.19**	**26.90**

Table 3.7.1.3: Cost of Production of Sweet Potato, Irish Potato and Plantain (N/kg)

	State	Sweet Potato (₦ /Ha)			Irish Potato (₦ /Ha)			Plantain (₦ /Ha)		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Bauchi	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Gombe	40,000	40,000	0	NA	NA	NA	NA	NA	NA
5	Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**40,000**	**40,000**	**0**						
6	Jigawa	18,000	19,000	5.56	NA	NA	NA	NA	NA	NA
7	Katsina	32,000	NA	NA	NA	NA	NA	NA	NA	NA
8	Sokoto	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Kebbi	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Zamfara	26,325	26,390	0.25	NA	NA	NA	NA	NA	NA
11	Kano	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Kaduna	55,000	55,495	0.90	NA	NA	NA	NA	NA	NA
	Zonal Mean	**32,831.25**	**33,628.33**	**2.24**						
13	Taraba	73,000	75,000	2.74	NA	NA	NA	NA	NA	NA
14	Plateau	37,900	49,000	29.24	210,250	245,700	16.86	NA	NA	NA
15	Nasarawa	33,750	33,700	-0.15	NA	NA	NA	NA	NA	NA
16	FCT	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Niger	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Kwara	75,000	85,000	13.33	NA	NA	NA	NA	NA	NA
19	Kogi	60,000	60,250	0.42	NA	NA	NA	NA	NA	NA
20	Benue	15,000	16,000	6.67	NA	NA	NA	NA	NA	NA
	Zonal Mean	**49,109.33**	**53,158.33**	**8.71**	**210,250**	**245,700**	**16.86**			
21	Osun	75, 000	75, 000	0.0	NA	NA	NA	NA	NA	NA
22	Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Ekiti	65,150	66,200	1.61	NA	NA	NA	NA	NA	NA
24	Ondo	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	Ogun	88,850	92,774	14.42	NA	NA	NA	NA	NA	NA
26	Lagos	71,800	80,000	11.42	NA	NA	NA	NA	NA	NA
27	Edo	19,500	22,500	15.34	NA	NA	NA	NA	NA	NA
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**61,325**	**65,368.50**	**8.09**						
29	Anambra	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Enugu	NA	NA	NA	NA	NA	NA	NA	NA	NA
31	Ebonyi	85,000	96,000	12.94	NA	NA	NA	NA	NA	NA
32	C/River	54, 000	55, 000	1.85	NA	NA	NA	NA	NA	NA
33	Abia	103, 600	106, 600	3.0	NA	NA	NA	NA	NA	NA
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	170,000	180,000	5.83	NA	NA	NA	NA	NA	NA
36	Bayelsa	243,285	243,500	0.04	NA	NA	NA	490,200	490,200	0
37	Rivers	NA	NA	NA	NA	NA	NA	895,300	984,830	10
	Zonal Mean	**166,095**	**173,166.67**	**9.39**	**210,250**	**245,700**	**16.86**	**692,750**	**737,515**	**10**
	National Mean	**69,871.92**	**73,064.37**	**5.69**	**210,250**	**245,700**	**16.86**	**692,750**	**737,515**	**10**

Table 3.7.1.4: Cost of Production of Melon, Soyabean and Cotton (N/kg)

S/No	State	Melon (₦ /Ha)			Soybean (₦ /Ha)			Cotton (₦ /Ha)		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Bauchi	NA	NA	NA	26,847.35	30,874.45	14.94	NA	NA	NA
4	Gombe	NA	NA	NA	50,000	50,000	0	NA	NA	NA
5	Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean				**38,423.68**	**40,437.33**	**8.64**			
6	Jigawa	19,000	20,000	5.75	23,000	25,000	8.64	NA	NA	NA
7	Katsina	NA	NA	NA	41,000	46,050	12.32	68,000	70,600	3.83
8	Sokoto	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Kebbi	NA	NA	NA	32,000	43,000	34.38	NA	NA	NA
10	Zamfara	NA	NA	NA	NA	NA	NA	47,084.31	46,269.30	-1.73
11	Kano	NA	NA	NA	50,000	65,000	30.00	NA	NA	NA
12	Kaduna	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**19,000**	**29,000**	**5.75**	**36,500**	**44,762.50**	**21.34**	**57,542.16**	**58,434.65**	**2.10**
13	Taraba	NA	NA	NA	80,000	85,000	6.25	NA	NA	NA
14	Plateau	NA	NA	NA	43,860	50,650	15.48	NA	NA	NA
15	Nasarawa	47,250	47,250	0.00	NA	NA	NA	NA	NA	NA
16	FCT	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Niger	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Kwara	50,000	60,000	20.00	70,000	80,000	14.24	NA	NA	NA
19	Kogi	42,500	43,150	1.53	NA	NA	NA	NA	NA	NA
20	Benue	15,000	16,000	6.66	27,000	30,000	11.11	NA	NA	NA
	Zonal Mean	**38,687.50**	**41,600**	**7.05**	**55,215**	**61,412.50**	**11.17**			
21	Osun	50, 000	55, 000	10.0	NA	NA	NA	NA	NA	NA
22	Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Ekiti	50,000	55,000	10	58,900	62,800	6.52	NA	NA	NA
24	Ondo	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	Ogun	186,050	192,500	3	NA	NA	NA	NA	NA	NA
26	Lagos	70,000	75,000	7	NA	NA	NA	NA	NA	NA
27	Edo	20,000	22,000	10	NA	NA	NA	NA	NA	NA
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**81,512.50**	**86,125**	**7.65**	**58,900**	**62,800**	**6.52**			
29	Anambra	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Enugu	NA	NA	NA	NA	NA	NA	NA	NA	NA
31	Ebonyi	NA	NA	NA	NA	NA	NA	NA	NA	NA
32	C/River	20, 000	23, 000	10.0	NA	NA	NA	NA	NA	NA
33	Abia	NA	NA	NA	NA	NA	NA	NA	NA	NA
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	145,000	145,000	0	NA	NA	NA	NA	NA	NA
36	Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**145,000**	**145,000**	**0**						
	National Mean	**71,050**	**73,181.25**	**5.10**	**49,759.67**	**52,353.06**	**13.64**	**57,542.16**	**58,434.65**	**2.10**

Table 3.7.1.5: Cost of Production of Cassava, Cocoyam and Yam (N/kg)

S/N	State	Cassava (₦ /Ha)			Cocoyam (₦ /Ha)			Yam (₦ /Ha)		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Bauchi	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Gombe	50,000	50,000	0	45,000	45,000	0	NA	NA	NA
5	Adamawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**50,000**	**50,000**	**0**	**45,000**	**45,000**	**0**			
6	Jigawa	24,000	25,000	4.17	NA	NA	NA	NA	NA	NA
7	Katsina	38,000	NA	NA	NA	NA	NA	NA	NA	NA
8	Sokoto	75,000	120,000	60.00	NA	NA	NA	NA	NA	NA
9	Kebbi	42,000	50,000	19.05	NA	NA	NA	NA	NA	NA
10	Zamfara	24,086.17	25,026.84	3.31	NA	NA	NA	NA	NA	NA
11	Kano	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Kaduna	95,000	95,950	1.0	NA	NA	NA	120,000	122,400	2
	Zonal Mean	**49,681.03**	**63,195.37**	**17.51**				**120,000**	**122,400**	**2**
13	Taraba	105,000	100,000	-4.76	94,000	95,000	1.06	125,000	125,000	0
14	Plateau	80,400	90,050	12.00	NA	NA	NA	NA	NA	NA
15	Nasarawa	83,500	83,500	0.00	NA	NA	NA	256,500	280,200	9.24
16	FCT	120,000	125,000	4.17	NA	NA	NA	270,000	290,000	7.41
17	Niger	39,729.69	42,908.07	8.00	NA	NA	NA	182,080	209,392	15.00
18	Kwara	120,000	150,000	25.00	NA	NA	NA	200,000	240,000	20.00
19	Kogi	64,500	67,500	4.65	81,500	85,000	4.29	220,000	250,000	13.64
20	Benue	20,000	18,000	-10.00	NA	NA	NA	42,000	45,000	7.14
	Zonal Mean	**79,141.21**	**84,619.76**	**4.88**	**87,750**	**90,000**	**2.65**	**185,082.86**	**205,656**	**10.35**
21	Osun	80, 000	85, 000	6.25	NA	NA	NA	150, 000	160, 000	6.67
22	Oyo	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Ekiti	92,200	112,000	21.48	90,200	95,200	5.54	128,710	150,000	16.54
24	Ondo	138,000	142,250	3.08	NA	NA	NA	NA	NA	NA
25	Ogun	122,850	128,460	4.57	122,450	125,824	2.76	312,616	343,411	9.51
26	Lagos	130,000	180,000	38.46	168,500	170,325	1.03	485,100	520,000	7.13
27	Edo	35,000	41,000	17.14	27,000	30,500	12.96	50,000	52,000	4.00
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zonal Mean	**103,610**	**120,730**	**16.95**	**102,037.50**	**105,462.25**	**5.57**	**244,106.50**	**253,325.75**	**9.30**
29	Anambra	100,000	110,000	10	50,000	50,000	0	400,000	400,000	0
30	Enugu	162,000	164,000	1.24	85,000	88,000	3.53	162,000	164,000	1.24
31	Ebonyi	80,000	95,000	18.75	75,000	85,000	13.33	200,000	240,000	20
32	C/River	90, 000	93, 00	3.33	33, 000	35, 000	6.06	120, 000	140, 000	16.67
33	Abia	218, 000	242, 000	11.0	212, 000	228, 000	8.0	650, 000	700, 000	8.0
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	200,000	200,000	0	165,000	165,000	0	460,000	460,000	0
36	Bayelsa	173,460	183,460	5.77	207,435	239,610	15.51	460,365	470,365	2.17
37	Rivers	143,550	165,083	15.16	239,160	253,509	5.94	690,528	718,149	3.94
	Zonal Mean	**143,168.33**	**152,923.83**	**8.49**	**136,932.50**	**146,853.17**	**6.39**	**395,482.17**	**408,752.33**	**4.56**
	National Mean	**85,120.11**	**94,293.79**	**1.70**	**931,439.00**	**77,463.08**	**1.28**	**236,167.88**	**247,540.27**	**6.55**

3.7.2 LABOUR COSTS OF SOME FARM OPERATIONS

Labour costs of some farm operations such as land clearing, ploughing and ridging, were collected from all the states of Nigeria during the 2009 survey. The mean labour costs (naira per hectare and naira per man day) and their percentage changes were computed on zonal basis for North East, North West, North Central, South West and South East States (Table 3.7.2.1).

Cost in naira per hectare (₦/ha) for the farm operations shows a general increase from the Northern States to the Southern States (Table 3.7.2.2). For example, the mean costs of land clearing in 2009 were ₦2700/ha in north eastern states; ₦4,157.10/ha in north western states; ₦9,660.7/ha in north central states; ₦13, 500/ha in south western states and ₦28, 000.10/ha in south eastern states. On a national level, the percentage change from the mean figures between 2008 and 2009 shows an increase for all the farm operations. The percentage change for mean labour costs (₦/ha) were 10.8%, 11.5% and 15.4% for land clearing, ploughing and ridging respectively. The highest percentage change (27%) was recorded for ridging operations in south western states; while the lowest percentage change (0.27%) was recorded for ridging in south eastern states.

The results of the mean labour costs in naira per man day (₦ day) revealed a similar trend of an increase across the states from north to south for land clearing. However, this trend was reversed for ploughing and ridging operations. For example, a decreasing mean costs for ridging per man day from North West states (₦10, 750/day) to South East States (₦5,388.10/day) was observed. The highest percentage change (60%) was observed for ridging in south western states; while the lowest change (3.4%) was recorded for ploughing in North West States.

Presented in Table 3.7.2.3 are labour cost of aquacultural operations (₦/ha). In Plateau states there was a significant increase in the labour cost in 2009 compared to 2008. This was in respect land clearing, ploughing and ridging operations.

Table 3.7.2.1: Labour Costs for some Farm Operations (₦/ha)

S.No	State	Land Clearing (₦ /Ha)			Ploughing (₦ //Ha)			Ridging (₦ //Ha)		
		2008	2009	%Change	2008	2009	%Change	2008	2009	%Change
1	Borno	2,500.00	3,000.00	20.00	4,000.00	5,000.00	25.00	NA	NA	NA
2	Yobe	4,000.00	4,000.00	0.00	5,000.00	4,000.00	-20.00	5,000.00	5,000.00	0.00
3	Bauchi	3,050.00	3,500.00	14.75	5,245.00	6,000.00	14.39	5,245.00	6,000.00	14.39
4	Gombe	1,500.00	1,000.00	-33.33	2,500.00	2,500.00	0.00	2,000.00	2,000.00	0.00
5	Adamawa	1,500.00	2,000.00	33.33	5,000.00	5,500.00	10.00	2,000.00	2,500.00	25.00
	Z Mean	**2,510.00**	**2,700.00**	**6.95**	**4,349.00**	**4,600.00**	**5.88**	**3,561.25**	**3,875.00**	**9.85**
6	Jigawa	700.00	1,000.00	42.86	4,500.00	5,000.00	11.11	4,000.00	4,500.00	12.50
7	Katsina	1,500.00	1,100.00	-26.67	5,000.00	5,500.00	10.00	3,000.00	3,250.00	8.33
8	Sokoto	3,000.00	5,000.00	66.67	15,000.00	20,000.00	33.33	4,000.00	6,500.00	62.50
9	Kebbi	2,000.00	2,500.00	25.00	4,000.00	5,000.00	25.00	3,500.00	4,000.00	14.29
10	Zamfara	4,500.00	6,000.00	33.33	4,500.00	6,000.00	33.33	6,000.00	7,500.00	25.00
11	Kano	7,500.00	7,500.00	0.00	7,500.00	7,500.00	0.00	5,000.00	5,000.00	0.00
12	Kaduna	5,500.00	6,000.00	9.09	10,000.00	11,500.00	15.00	NA	NA	NA
	Z Mean	**3,528.57**	**4,157.14**	**21.47**	**7,214.29**	**8,642.86**	**18.25**	**4,250.00**	**5,125.00**	**20.44**

13	Taraba	3,000.00	3,000.00	0.00	4,500.00	5,000.00	11.11	3,000.00	3,000.00	0.00
14	Plateau	2,500.00	4,500.00	80.00	3,000.00	5,000.00	66.67	2,500.00	5,000.00	100.00
15	Nasarawa	7,000.00	7,000.00	0.00	10,500.00	12,000.00	14.29	6,000.00	7,000.00	16.67
16	FCT	12,000.00	12,000.00	0.00	6,500.00	7,000.00	7.69	13,500.00	14,000.00	3.70
17	Niger	1,800.00	NA	NA	NA	NA	NA	4,500.00	6,000.00	33.33
18	Kwara	24,000.00	24,000.00	0.00	5,000.00	5,000.00	0.00	18,000.00	18,000.00	0.00
19	Kogi	1,000.00	NA	NA	NA	NA	NA	12,500.00	12,500.00	0.00
20	Benue	7,000.00	7,500.00	7.14	5,000.00	5,000.00	0.00	6,000.00	6,000.00	0.00
	Z Mean	**7,287.50**	**9,666.67**	**14.52**	**5,750.00**	**6,500.00**	**13.04**	**8,250.00**	**8,937.50**	**19.21**
21	Osun	15, 000	20, 000	33.33	NA	NA	NA	18, 750	20, 000	6.66
22	Oyo	15, 000	20, 000	33.33	5, 500	7, 500	36.36	15, 000	20, 000	33.33
23	Ekiti	5, 000	5, 000	0.0	5, 000	5,000	0.0	3, 000	3, 000	0.0
24	Ondo	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	Ogun	10,000.00	12,500.00	25.00	2,500.00	3,000.00	20.00	2,000.00	3,000.00	50.00
26	Lagos	20,000.00	20,000.00	0.00	8,000.00	9,000.00	12.50	25,000.00	26,000.00	4.00
27	Edo	8,000.00	8,000.00	0.00	NA	NA	NA	NA	NA	NA
28	Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Z Mean	**12,666.67**	**13,500.00**	**8.33**	**5,250.00**	**6,000.00**	**16.25**	**13,500.00**	**14,500.00**	**27.00**
29	Anambra	20,000.00	20,000.00	0.00	NA	NA	NA	35,000.00	35,000.00	0.00
30	Enugu	15,000.00	15,000.00	0.00	15,000.00	15,200.00	1.33	15,000.00	15,200.00	1.33
31	Ebonyi	25,000.00	30,000.00	20.00	8,000.00	9,500.00	18.75	NA	NA	NA
32	C/Rivers	7, 000	8, 000	14.28	6, 500	8, 000	23.07	7, 000	8, 000	14.28
33	Abia	10,000.00	10,000.00	0.00	10,000.00	10,000.00	0.00	10,000.00	10,000.00	0.00
34	AK/Ibom	80,000.00	80,000.00	0.00	NA	NA	NA	NA	NA	NA
35	Imo	30,000.00	30,000.00	0.00	15,000.00	15,000.00	0.00	50,000.00	50,000.00	0.00
36	Bayelsa	14,000.00	14,000.00	0.00	21,000.00	21,000.00	0.00	18,000.00	18,000.00	0.00
37	Rivers	25,000.00	25,000.00	0.00	4,000.00	4,000.00	0.00	4,000.00	4,000.00	0.00
	Z Mean	**27,375.00**	**28,000.00**	**2.50**	**12,166.67**	**12,450.00**	**3.35**	**22,000.00**	**22,033.33**	**0.22**
	N Mean	**10,673.55**	**11,604.76**	**10.76**	**6,945.99**	**7,638.57**	**11.35**	**10,312.25**	**10,894.17**	**15.34**

Table 3.7.3.2: Labour Costs for some Farm Operations (₦/day)

		Land Clearing ((₦ /Day)			Ploughing ((₦ /Day)			Ridging ((₦ /Day)		
S.No	State	2008	2009	%Change	2008	2009	%Change	2008	2009	% Change
1	Borno	400.00	500.00	25.00	1,200.00	1,500.00	25.00	NA	NA	NA
2	Yobe	1,000.00	1,000.00	0.00	1,000.00	1,000.00	0.00	1,000.00	1,000.00	0.00
3	Bauchi	300.00	400.00	33.33	400.00	600.00	50.00	400.00	600.00	50.00
4	Gombe	250.00	200.00	-20.00	1,500.00	1,500.00	0.00	1,500.00	1,500.00	0.00
5	Adamawa	800.00	800.00	0.00	800.00	800.00	0.00	800.00	800.00	0.00
	Z Mean	**550.00**	**580.00**	**7.67**	**980.00**	**1,080.00**	**15.00**	**925.00**	**975.00**	**12.50**
6	Jigawa	NA	NA	NA	NA	NA		NA	NA	NA
7	Katsina	NA	250.00	NA	NA	450.00		NA	400.00	NA
8	Sokoto	400.00	500.00	25.00	600.00	650.00	8.33	500.00	700.00	40.00
9	Kebbi	400.00	600.00	50.00	400.00	600.00	50.00	600.00	800.00	33.33
10	Zamfara	300.00	400.00	33.33	300.00	400.00	33.33	400.00	500.00	25.00
11	Kano	10,000.00	10,000.00	0.00	10,000.00	10,000.00	0.00	7,500.00	8,750.00	16.67
12	Kaduna	450.00	450.00	0.00	600.00	700.00	8.33	NA	NA	NA
	Z Mean	**11,550.00**	**11,950.00**	**3.46**	**11,900.00**	**12,350.00**	**3.78**	**9,000.00**	**10,750.00**	**19.44**
13	Taraba	500.00	600.00	20.00	NA	NA	NA	NA	NA	NA
14	Plateau	250.00	400.00	60.00	350.00	500.00	42.86	350.00	500.00	42.86
15	Nasarawa	500.00	500.00	0.00	500.00	500.00	0.00	500.00	700.00	40.00
16	FCT	600.00	650.00	8.33	600.00	650.00	8.33	600.00	700.00	16.67
17	Niger	300.00	400.00	33.33	300.00	400.00	33.33	300.00	400.00	33.33
18	Kwara	1,200.00	1,200.00	0.00	NA	NA	NA	1,200.00	1,200.00	0.00
19	Kogi	500.00	NA	NA	NA	NA	NA	12,500.00	500.00	-96.00
20	Benue	400.00	750.00	87.50	1,500.00	1,500.00	0.00	1,400.00	1,500.00	7.14
	Z Mean	**531.25**	**642.86**	**29.88**	**650.00**	**710.00**	**16.90**	**2,407.14**	**785.71**	**6.29**
21	Osun	750	1, 000	33.33	NA	NA	NA	1, 000	1, 200	20.0
22	Oyo	800	1, 000	25.00	NA	NA	NA	800	1, 000	25.0
23	Ekiti	500	500	0.0	NA	NA	NA	NA	NA	NA
24	Ondo	500.00	600.00	20.00	NA	NA	NA	500.00	600.00	20.00
25	Ogun	600.00	750.00	25.00	600.00	750.00	25.00	NA	NA	NA
26	Lagos	40,000.00	40,000.00	0.00	16,000.00	16,000.00	0.00	5,000.00	10,000.00	100.00
27	Edo	800.00	800.00	0.00	NA	NA	NA	NA	NA	NA
28	Delta	NA	1,200.00	NA	NA	10,000.00	NA	NA	10,000.00	NA
	Z Mean	**10,475.00**	**8,670.00**	**11.25**	**8,300.00**	**8,916.67**	**12.50**	**2,750.00**	**6,866.67**	**60.00**
29	Anambra	1,000.00	1,000.00	0.00	NA	NA	NA	1,750.00	1,750.00	0.00
30	Enugu	6,200.00	6,200.00	0.00	7,500.00	7,500.00	0.00	6,000.00	6,000.00	0.00
31	Ebonyi	6,200.00	7,500.00	20.97	1,000.00	1,500.00	50.00	NA	NA	NA
32	C/Rivers	700	800	14.29	650	800	23.08	700	800	14.29
33	Abia	32,000.00	40,000.00	25.00	NA	NA	NA	32,000.00	40,000.00	25.00
34	AK/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	1,500.00	1,500.00	0.00	1,500.00	1,500.00	0.00	2,500.00	2,500.00	0.00
36	Bayelsa	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Rivers	250.00	250.00	0.00	NA	NA	NA	NA	NA	NA
	Z Mean	**9,047.73**	**9,039.17**	**9.29**	**5,816.67**	**6,595.24**	**14.58**	**7,214.29**	**9,714.58**	**29.29**
	N Mean	**6,430.80**	**6,176.40**	**12.31**	**5,529.33**	**5,930.38**	**12.55**	**4,459.29**	**5,818.39**	**25.50**

Table 3.7.2.3: Labour Cost of Aquacultural operations in 2008 and 2009 (Plateau and Taraba States)

Aquacultural Operation	Per ha (₦)			Per Day/ Man hour (₦)		
Plateau State	2008	2009	% Change	2008	2009	% Change
Aquaculture						
• **Land clearing**	5,000	6,000	20.0	500	600	**20.0**
• **Land excavation**	20,000	22,000	10.0	1,000	1,100	**10.0**
• **Pond treatment**	3,000	4,000	33.33	1,200	1,300	**8.33**
• **Stocking**	5,600	6,000	7.14	300	400	**33.33**
• **Feeding**	20,000	22,000	10.0	1,000	1,100	**10.0**
• **Harvesting**	5,000	6,000	20.0	500	600	**20.0**
Others (list them)						
Taraba State						
Aquaculture						
• **Land clearing**	5,000	6,000	20.0			
• **Land excavation**	8,000	8,000	0.0			
• **Pond treatment**	NA	NA	NA			
• **Stocking**	10, 000	11, 000	10.0			
• **Feeding**	5, 000	5, 000	0.0			
• **Harvesting**	1, 000	1, 500	50.0			
Others (list them)						

3.8 GRAINS RESERVES

3.8.1 State Grain Reserves

Drought tolerant maize variety under on-farm trial

Some states have grain policy while others do not. Information presented in Table 3.8.1.1 shows that 19 states and FCT have reserves where they store grains to sell to farmers during the lean period. Different quantities were stored by states in the North East, North West, Middle Belt States, which produce cereals and legumes, including millet, sorghum, rice, maize and cowpea. Different states had different selling prices for the commodities; for example, Kebbi state sold its grains at N18,000/MT and N25,000/MT in 2008 and 2009 respectively giving a 28% increase in price; while Nasarawa State sold at N14,000/MT for 2008 and between N17,000 –N18,000 in 2009 (representing an increase of between 21% - 29%). FCT sold at between N30,000 – N40,00/MT and N34,000 – N36000/MT for 2008 and 2009 respectively . However, only Gombe state gave their grains free to farmers in 2009.

New variety of Sorghum under on-farm trial

Table 3.8.1.1: State Grain Reserves

State	Types of grain	Quantity stored MT		Quantity Distributed MT		Selling Price (N/MT)	
		2007/2008	2008/2009	2008	2009	2008	2009
Borno	NA	NA	NA	NA	NA	NA	NA
Yobe	NA	NA	NA	NA	NA	NA	NA
Bauchi	Maize	NA	4,000	NA	All	NA	30,000
	Sorghum	NA	4,000	NA	All	NA	30,000
	Millet	NA	4,000	NA	All	NA	30,000
Gombe	Maize	1,200	500	All	NA	FREE	FREE
	Millet	150	300	All	NA	FREE	FREE
Adamawa	Maize	NA	2,260	NA	860	NA	30,000
	Sorghum	NA	340	NA	All	NA	28,000
	Rice	NA	130	NA	NA	NA	NA
Jigawa	Sorghum	NA	1630.5	NA	NA	NA	NA
	Millet	NA	543.5	NA	NA	NA	NA
Katsina	Sorghum	1000	3,737.94	55	479	NA	N24,000
	Maize	940	3,324.25	44.75	1,499	NA	N32,000
	Millet	60	896.56	34.5	541	NA	N32,000
Sokoto	NA	NA	NA	NA	NA	NA	NA
Kebbi	Millet	15.8	10.04.0	7.7	13.36	N18,000	N25,000
	Sorghum	23.85	15.03	5.775	10.02	N18,000	N25,000
	Paddy	35.9	20.02	3.85	6.68	N18,000	N25,000
	rice	7.95	5.01	1.925	3.34	N18,000	N25,000
	Maize						
Zamfara	Maize	278.9	NA	278.9	NA	N25,000	NA
	G/Corn	455.6	NA	455.6	NA	N25,000	NA
	Rice	16.5	NA	16.5	NA	N20,000	NA
	Millet	87.2	NA	87.2	NA	N25,000	NA
	Beans	15.3	NA	15.3	NA	N35,000	NA
Kano	Maize	4043.9	NA	2700	NA	N15,000	NA
	Millet	4043.9	NA	2700	NA	N15,000	NA
	Sorghum	4043.9	NA	2700	NA	N15,000	NA
Kaduna	Maize	NA	26,000	NA	All	NA	69,533
	Millet	NA	26,000	NA	All	NA	74,000
Taraba	Maize	909.2	NA	NA	NA	NA	NA
	Sorghum	360.5	NA	NA	NA	NA	NA
	Millet	50.8	NA	NA	NA	NA	NA
	Paddy rice	368.9	NA	NA	NA	NA	NA
Plateau	Maize	NA	510	NA	All	NA	N17,000
	Sorghum	NA	690	NA	All	NA	N18,000
Nasarawa	Maize	NA	750.7	500.7	210	N14,000	N18,000
	Sorghum	NA	726.1	726.1	690	N14,000	N17,000
FCT	Maize	50	240	All	240	30,000	36,000
	G/corn	13	13	All	NA	38,000	34,000
	Millet	14	14	All	NA	40,000	NA

Niger	Maize	NA	1097.2	NA	847.6	NA	42,000
	G/corn	NA	1752.1	NA	1183.9	NA	40,000
	Millet	NA	512.9	NA	259.3	NA	42,000
	Cowpea	NA	587.2	NA	413.6	NA	70,000
	Rice	NA	650	NA	620.9	NA	60,000
Kwara	NA	NA	NA	NA	NA	NA	NA
Kogi	G/corn	NA	611	NA	All	NA	18,000
Benue	NA	NA	NA	NA	NA	NA	NA
Osun	Maize	288.75	240	All	All	17,500	20,250
	Sorghum	211.25	360	All	All	16,500	19,250
Oyo	Maize	625MT	300	625	300	N33,000	N44,500
	Sorghum	NA	300	NA	300	NA	42,500
Ekiti	NA	NA	NA	NA	NA	NA	NA
Ondo	NA	NA	NA	NA	NA	NA	NA
Ogun	NA	NA	NA	NA	NA	NA	NA
Lagos	NA	NA	NA	NA	NA	NA	NA
Edo	NA	NA	NA	NA	NA	NA	NA
Delta	NA	NA	NA	NA	NA	NA	NA
Anambra	NA	NA	NA	NA	NA	NA	NA
Enugu	NA	NA	NA	NA	NA	NA	NA
Ebonyi	NA	NA	NA	NA	NA	NA	NA
C/River	NA	NA	NA	NA	NA	NA	NA
Abia	NA	NA	NA	NA	NA	NA	NA
A/Ibom	NA	NA	NA	NA	NA	NA	NA
Imo	NA	NA	NA	NA	NA	NA	NA
Bayelsa	Maize	0.48	6.2	NA	0.256	NA	29,6875
	Rice	NA	9	NA	NA	NA	NA
Rivers	NA	NA	NA	NA	NA	NA	NA

3.8.2 Federal Government Grains Distributed to States in 2008

Data in federal grains stock across the country in 2009 was not available. The record for 2008 however showed considerably emphasis on sorghum and maize as strategic food reserve grains. In 2008, Kaduna State received the biggest stock of sorghum grains followed by Bauchi State that received 6, 300MT. Other states received less. Osun and Oyo States were the only Southern States that received maize and sorghum grains as strategic food reserve grains (Table 3.6.1).

Table 3.8.2.1 Federal Government Grains Received by States in 2008 and 2009

State	Type of grain	Quantities Received (MT)	
		2008	**2009**
Borno	Maize Millet Sorghum	820 180 1700	-
Yobe	NA	NA	-
Bauchi	Maize Sorghum	3600 6300	-
Gombe	Maize Millet Sorghum	600 180 1,920	-
Adamawa	Sorghum Paddy rice	340 130	-
Jigawa	Millet Sorghum Maize	180 2,610 660	-
Katsina	NA	NA	-
Sokoto	NA	NA	-
Kebbi	Millet G/Corn	360 1,830	-
Zamfara	NA	NA	-
Kano	Maize Millet Sorghum	1200 1200 1200	-
Kaduna	Sorghum	41,000	-
Taraba	NA	NA	-
Plateau	Maize Sorghum	510 690	-
Nasarawa	Maize Sorghum	210 690	-
FCT	Maize G/Corn	240 660	-
Niger	Maize G/Corn	510 840	-
Kwara	NA	NA	-
Kogi	G/Corn	611	-
Benue	NA	NA	-
Osun	Maize Sorghum	240 360	-
Oyo	Maize Sorghum	300 300	-
Ekiti	NA	NA	-
Ondo	NA	NA	-
Ogun	NA	NA	-
Lagos	NA	NA	-
Edo	NA	NA	-

Delta	NA	NA	-
Anambra	NA	NA	-
Enugu	NA	NA	-
Ebonyi	NA	NA	-
C/River	NA	NA	-
Abia	NA	NA	-
Akwa/Ibom	NA	NA	-
Imo	NA	NA	-
Bayelsa	NA	NA	-
Rivers	NA	NA	-

3.9 FOOD COMMODITY PRICES

Market prices of major food commodities are presented per kilogram and comparisons were made for July 2008 and July 2009.The prices of maize, millet and rice are presented in Table 3.9.1. The data show increase in the prices of these commodities by 20% for both maize and millet, and 11.92% for rice in some locations of the North East states. However, the North West zonal means indicated that, there is a decrease in the prices of maize and rice by -13.58% and -4.24% respectively. In North West zone, rice recorded an increase in price by 170% in Jigawa state, while the zonal means showed an increase of 32.71%. In the North Central zone, similar price increases were recorded for rice by 73.1%, and 42.5% and 40% for maize and millet respectively. In the South East zone, the price of maize increased by 66.6% in Imo State,42.9% in Akwa Ibom and 23.5% in Ebonyi States. The prices of rice decreased by 22.76% in Enugu State, but increased by 60% in FCT and 58% in Ondo State. Prices of cassava tuber, gari and flour increased from 2008 to 2009 in the North West zone (Table 3.9.3). The national average increases for these commodities were 20.29%, 16.59% and 9.2%. Prices of yam tuber, yam flour and sweet potato increased in 2009 in north central states by 23.06%, 44.76% and 36.59% respectively, while the average national increase was 16%, 12% and 19% for the same commodities (Table 3.9.4).

Prices of melon, soybean and Irish potato are presented in Table 3.9.5. The price of melon increased by 51.2% in North Central states and Irish potato increased by 27% in the South West states. The table shows a national average increase of 13%, 11% and 4% for melon, soybean and Irish potato respectively. The increases in the prices of beef, goat meat and pork were marginal and ranged between 2%, and 7% (Table 3.9.6). Prices of mutton, chicken and fresh fish increased at zonal level by 31.95%, for mutton at North East states and 25.27% and 23.14% for chicken at North West and North Central states respectively. There was 9.5% price increase for fresh fish in the South East zone; in Imo and Bayelsa State fish price increased by 44.4% and 42.56% respectively, but a 47.67 price decrease was observed in Akwa Ibom. The national average presented in Table 3.9.7 shows 9%, 12 % and 3% increase in price of mutton, chicken and fresh fish respectively.

Prices of eggs (crates) increased by 41.68%, 13.25 % and 11.13% in the North Central, South West and South East states respectively (Table 3.9.8). Generally these commodities at national level increased by 16.73%, 4.67% and 3.7% for eggs, smoked and dry fish respectively. Other commodities increased marginally between 2% - 6% over a period of one year and probably were affordable to many consumers. No doubt, the slight price changes in some locations is as a result of the favourable rainfall experienced within the year, moderate pest and diseases outbreaks; which boosted farmers' prospects of a good harvest this year. Thus hoarders have released most of the grains stored to the market thereby reduction in the cost of most food item.

Table 3.9.1: Commodity Prices for maize, millet and Rice

S/No	State	Maize			Millet			Rice		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	68.00	72.00	5.88	56.00	56.00	0.00	160.00	140.00	-12.50
2	Yobe	82.50	66.67	-19.19	70.17	60.86	-013.27	NA	NA	NA
3	Bauchi	76.65	91.98	20.00	67.41	87.64	20.00	192.27	215.19	11.92
4	Gombe	69.00	58.00	-70.00	62.00	58.00	-7.00	207.00	214.00	-8.00
5	Adamawa	77.89	74.30	-4.61	87.22	90.50	3.76	144.56	126.25	-012.61
	Zonal means	**74.81**	**72.59**	**-13.58**	**68.56**	**70.60**	**0.70**	**140.77**	**139.09**	**-4.24**
6	Jigawa	80.77	69.23	17.00	69.23	56.00	-24.00	59.26	160.00	170.00
7	Katsina	61.67	43.9	-28.81	55	36.34	-33.92	116.67	98	-16
8	Sokoto	56.48	NA	NA	53.63	NA	NA	NA	NA	NA
9	Kebbi	88.75	72	18.87	92.5	70	-24.34	172.5	280	62.32
10	Zamfara	74.00	64	-13.51	60	60	0	176.84	193.88	9.64
11	Kano	66.00	60.19	8.8	63	51.38	-18.44	124.73	124.12	0.49
12	Kaduna	72.66	59.89	-17.96	76.9	61.95	-19.44	221.66	227.33	2.54
	Zonal means	**71.48**	**52.74**	**-2.23**	**67.18**	**47.95**	**-017.16**	**124.52**	**154.76**	**32.71**
13	Taraba	63.63	90	28.5	50	82.00	64	150	150.02	0
14	Platuea	84.89	74.04	-12.78	88.84	86.36	-2.8	158.32	225.75	42.61
15	Nasarawa	83.40	241.27	19	89.73	77.92	-13	152.03	148.23	-2
16	FCT	70.00	100	42.8	100	140	40	208	360	73.1
17	Niger	66.01	66.04	2.8	62.95	71.95	0.03	134.68	140.27	14.94
18	Kwara	88.14	76.16	-13.5	70	84.74	21	147.3	168.26	14.2
19	Kogi	78.46	85.71	9.24	95.25	107.17	12.51	142.15	200	40.7
20	Benue	102.37	80.15	21.7	107.19	116.27	8.47	190	190	0
	Zonal means	**79.61**	**101.67**	**12.22**	**83.00**	**95.80**	**16.28**	**160.31**	**197.82**	**22.94**
21	Osun	57.8	64.59	11.7	NA	NA	NA	143.15	167.19	16.8
22	Oyo	463.27	297.39	-38.8	92.30	67.45	-26.9	128.64	141.54	10.0
23	Ekiti	120.00	150	25	NA	NA	NA	185	200	8.11
24	Ondo	117.08	113.5	-3.58	113.26	145	31.74	245	269.69	26.5
25	Ogun	78.24	84.11	7.5	93.74	99.24	5.9	152.66	172.24	5.9
26	Lagos	64.75	83.3	28.44	NA	NA	NA	247.5	180.2	-27.19
27	Edo	180.60	118.25	-34	NA	NA	NA	243.37	175.38	28.3
28	Delta	134.12	146.2	9,01	NA	NA	NA	152.1	195.38	28.45
	Zonal means	**86.85**	**86.92**	**2.92**	**025.88**	**030.53**	**004.71**	**153.20**	**149.11**	**008.76**

29	Anambra	64.00	65	1.6	NA	NA	NA	118.5	127.05	7.2
30	Enugu	82.76	78.13	-5.6	NA	NA	NA	174.75	134.97	-22.76
31	Ebonyi	85.00	105	23.53	NA	NA	NA	225	246.3	9.47
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	72.60	74.0	1.93	NA	NA	NA	147.5	195.0	32.2
34	Ak/Ibom	140.00	200	42.86	NA	NA	NA	205	200	-244
35	Imo	78.00	125	66.6	NA	NA	NA	100	150	50
36	Bayelsa	107.22	128.34	19.7	NA	NA	NA	174.75	174.75	0
37	Rivers	160.00	120	-25	NA	NA	NA	160	230	43.25
	Zonal means	**89.62**	**102.68**	**15.46**	**000.00**	**000.00**	**000.00**	**144.75**	**157.88**	**-019.61**
	National means	**80.47**	**83.32**	**2.96**	**48.92**	**48.98**	**00.90**	**144.71**	**159.73**	**08.11**

Table 3.9.2 Commodity Prices for sorghum, cowpea and groundnut

S/No.	State	Sorghum			Cowpea			Groundnut		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	68.00	68	0	120	140	-12.5	160	200	25
2	Yobe	65.56	58.7		12.5	136.36		145.22	155	6.74
3	Bauchi	68.53	82.24	20	123.87	161.04	30	77.63	192.69	40
4	Gombe	67.00	53	-26.4	333	180	-85	150	139	-80
5	Adamawa	72.70	74	1.79	132.27	132.85	0.42	110.1	100	-9.17
	Zonal means	**68.36**	**67.19**	**-000.92**	**144.33**	**150.05**	**-013.42**	**128.59**	**157.34**	**-003.49**
6	Jigawa	76.92	57.69	33	141.67123.08	123.08	15	53.88	53.85	8
7	Katsina	55.71	42	-24.61	110	72.5	-34.09	115	125	8.69
8	Sokoto	58.21	NA	NA	84.74	NA	NA	91.55	NA	NA
9	Kebbi	85.00	70	-17.65	133.75	110	17.76	60	45.83	-23.62
10	Zamfara	65.00	58	7.94	112	120	7.14	160	92	-42.5
11	Kano	63.67	52	18.33	119.98	137.12	14.29	NA	NA	NA
12	Kaduna	73.51	56.O1	-24.31	118.53	123.81	4.48	159.03	113.46	-28.64
	Zonal means	**68.29**	**39.96**	**-001.04**	**097.00**	**098.07**	**003.51**	**091.35**	**061.45**	**-011.15**
13	Taraba	70.00	90	28.5	93.75	100	26	131..57	120	8.7
14	Platuea	82.03	82.68	0.79	132.69	139.19	4.9	136.94	128.91	-5.86
15	Nasarawa	84.25	135.47	61	137.62	136.48	-1	134.16	136.75	2
16	FCT	83.20	108	29.8	121.42	192	58.1	125.2	200	60.1
17	Niger	66.12	58.88	3.54	124..04	174.98	-103.99	143.69	116.97	54.27
18	Kwara	85.96	73.89	-14	140.54	138,16	-1.6	170	176.22	-3.7

19	Kogi	93.23	95.86	2.82	95.25	107.17	12.51	142.15	200	40.7
20	Benue	103.12	86.92	15	151.82	151.92	0.06	98	111.11	13.37
	Zonal means	**83.49**	**91.46**	**015.93**	**109.14**	**125.22**	**-000.63**	**118.77**	**148.75**	**021.20**
21	Osun	49.75	63.64	27.9	79.97	132.82	66.1	117.07	150.0	28.1
22	Oyo	71.48	72.94	2.0	98.32	307.36	212.6	122.76	192.22	76.6
23	Ekiti	NA	NA	NA	200	230	15	NA	NA	NA
24	Ondo	NA	NA	NA	143.16	172.5	29.34	185.41	244	58.59
25	Ogun	95.21	103.44	8.6	129.24	133.14	3	140.11	143.11	2.1
26	Lagos	NA	NA	NA	130	173	33.08	NA	84	NA
27	Edo	NA	NA	NA	130.56	125	4.3	402.73	175.9	56.3
28	Delta	NA	NA	NA	153.72	165.99	7.98	158.26	189.15	19.52
	Zonal means	**11.90**	**012.93**	**001.08**	**110.84**	**124.95**	**011.59**	**110.81**	**104.52**	**017.06**
29	Anambra	NA	NA	NA	117.9	123.2	4.5	185	192.4	4
30	Enugu	NA	NA	NA	125.38	95.1	-24.15	117.13	112.5	-3.95
31	Ebonyi	NA	NA	NA	200	240	20	240	260	8.33
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	NA	NA	NA	135.0	170.0	25.93	217.83	293.15	34.58
34	Ak/Ibom	NA	NA	NA	114.4	330	188.46	235	320	36.17
35	Imo	NIL	NIL	NIL	NIL	NIL	NIL	170	160	9.41
36	Bayelsa	NIL	NIL	NIL	155.5	136.93	11.94	NIL	NIL	NIL
37	Rivers	NIL	NIL	NIL	120	190	58.3	160	230	43.75
	Zonal means	**00.00**	**00.00**	**000.00**	**104.15**	**139.40**	**032.38**	**138.39**	**159.36**	**011.04**
	Nationalmeans	**46.41**	**42.31**	**03.01**	**113.09**	**127.54**	**06.69**	**117.58**	**126.28**	**06.93**

Table 3.9.3 Commodity Prices for cassava (tuber), cassava(gari) and flour

S/No.	State	Cassava(tuber)			Cassava gari			Cassava flour		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	49.10	65.99	33.7	25.37	27.5		NA	NA	NA
3	Bauchi	34.02	76.92	126.1	72.83	108.42	48.87	91.07	NA	NA
4	Gombe	NA	NA	NA	120	100	-20.0	200	210	O.50
5	Adamawa	46.75	66,26	46.0	93.13	112.5	20.8	123.77	107.53	-13.12
	Zonal means	**25.97**	**28.58**	**025.22**	**062.27**	**069.68**	**005.77**	**082.97**	**063.51**	**-004.00**
6	Jigawa	55.55	50	11	71.43	69.57	3	NA	NA	NA
7	Katsina	120.00	52	-56.67	83.33	100	20	47	29	-38.29
8	Sokoto	46.73	NA	NA	60.61	NA	NA	128.46	NA	NA
9	Kebbi	NIL	NIL	NIL	112.5	108.3	-3.73	NIL	NIL	NIL
10	Zamfara	NA	NA	NA	84.09	118.18	40.54	NA	NA	NA
11	Kano	45.84	59	28.71	89.56	113.23	26.43	87.17	72.05	17.35
12	Kaduna	59.18	32.96	-44.16	73.27	86.36	17.87	45.79	97.5	112.93
	Zonal means	**46.76**	**27.71**	**-008.73**	**082.11**	**085.09**	**014.87**	**044.06**	**028.36**	**013.14**
13	Taraba	40.00	45	12	100	100	0	60	62.31	3
14	Platuea	79.37	64.6	-18.61	94.78	116.06	22.45	51.56	71.24	38.17
15	Nasarawa	20.42	28.24	38	87.71	113.12	29	49.49	75.38	52
16	FCT	50.00	65	30	66.5	60.05	9.7	58.2	80	37.5
17	Niger	38.95	93.07	38.95	67.75	106.93	-6.82	80	91.15	18.16
18	Kwara	5.42	NA	NA	59.82	100.94	68.7	52.5	72.15	37.4
19	Kogi	7.35	21.43	191.56	53.53	100.35	87.46	90.98	185.71	104.12
20	Benue	NA	NA	NA	63.07	66.67	5.7	43.5	57.19	31.47
	Zonal means	**30.19**	**39.67**	**036.49**	**074.15**	**095.52**	**027.02**	**060.78**	**086.89**	**040.23**
21	Osun	42.60	42.25	-0.80	61.32	110.09	79.50	51.0	93.64	83.6
22	Oyo	15.62	20.40	30.7	62.50	156.23	150.0	75.0	156.25	108.3
23	Ekiti	5.00	10	100	50	95	90	200	230	15
24	Ondo	18.50	36.16	97.55	68.45	121.6	63.15	115.75	144.5	30.75
25	Ogun	15.01	19.21	28	63.24	65.11	2.9	67.76	70.24	2.9
26	Lagos	11.14	14.2	27.47	65.18	121.8	86.81	NA	385	NA
27	Edo	19.25	22.39	-16.3	66.67	113.5	-70.2	102.78	169.5	-64.9
28	Delta	15.20	15.6	2.63	78.69	105.39	74.59	NA	NA	NA
	Zonal means	**10.51**	**14.70**	**029.92**	**049.03**	**077.80**	**030.91**	**060.79**	**124.91**	**-002.03**

29	Anambra	27.50	32.51	18.2	96.5	94.18	-2.4	64.25	69.47	8.5
30	Enugu	37.15	37.5	0.94	76.54	79.07	3.31	NA	NA	NA
31	Ebonyi	13.45	11.4	-15.24	68.7	85	23.73	48	38.5	-19.79
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	9.83	23.15	22.44	61.89	133.33	115.4	NA	NA	NA
34	Ak/Ibom	49.50	230	364	NA	150	NA	NA	NA	NA
35	Imo	30.40	80	163.16	150	160	10	NA	NA	NA
36	Bayelsa	21.89	19.35	11.56	78.22	112.67	44.04	115.33	115.33	0
37	Rivers	130.00	95	-30	160	90	-43.75	NA	NA	NA
	Zonal means	**38.74**	**63.22**	**018.58**	**078.75**	**096.37**	**004.37**	**028.45**	**027.91**	**-001.41**
	Nationalmeans	**30.43**	**34.77**	**20.29**	**69.26**	**84.89**	**16.59**	**55.41**	**66.32**	**09.19**

Table 3.9.4 Commodity Prices for yam(tuber), yam(flour) and sweet potato

S/No.	State	Yam tubers			Yam flour			Sweet potato		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	83.33	65.33		NA	NA	NA	52.13	53	
3	Bauchi	NA	NA	NA	NA	NA	NA	46.22	49.48	7.05
4	Gombe	96.00	82	-11	NA	NA	NA	NA	NA	NA
5	Adamawa	236.00	13O.0		NA	NA	NA	NA	NA	215
	Zonal means	**83.07**	**29.47**	**-002.20**	**000.00**	**000.00**	**000.00**	**019.67**	**020.50**	**044.41**
6	Jigawa	92.59	200	116	NA	NA	NA	58.33	53'85	8
7	Katsina	161.00	200	24.22	NA	NA	NA	NA	75	0
8	Sokoto	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Kebbi	342.50	250	-27.01	NA	NA	NA	107.5	61.53	-42.76
10	Zamfara	92.50	123	32.97	NA	NA	NA	51.46	57	10.77
11	Kano	45.84	59	28.71	NA	NA	NA	77.38	64.1	17.16
12	Kaduna	77.64	66.67	-14.53	NA	96.55		57.14	28.57	-50
	Zonal means	**116.01**	**128.38**	**022.91**	**000.00**	**013.79**	**000.00**	**050.26**	**040.89**	**-008.12**
13	Taraba	200.00	250	25	NA	NA	NA	67.5	120	77
14	Platuea	104.49	152.89	46.32	50.9	116.88	129.63	49.67	77.21	28.17
15	Nasarawa	58.10	64.83	12	63.96	77.5	21	50.99	87.42	71
16	FCT	120.02	135.1	12.5	195.2	120	38.5	45.25	80.5	77.9
17	Niger	120.37	141.8	11.88	97.78	NA	97.78	61.4	77.37	-13.42

18	Kwara	61.28	53.85	-12.1	140.3	NA	NA	60.85	93.75	54.1
19	Kogi	58.95	93.83	59.17	61.58	105.1	71.16	51.24	50.21	-2.01
20	Benue	113.10	79.54	29.67	NA	NA	NA	NA	NA	NA
	Zonal means	**104.54**	**121.48**	**023.06**	**076.22**	**052.44**	**44.76**	**048.36**	**073.31**	**036.59**
21	Osun	58.29	51.51	-11.6	106.86	188.92	48.9	41,70	45.45	9.0
22	Oyo	45.29	46.12	1.8	159.21	204.25	28.3	NA	NA	NA
23	Ekiti	50.00	70	40	140	150	7.14	40	50	25
24	Ondo	73.20	86.38	13.18	145.90	161.0	-10.4	45	100	55
25	Ogun	93.54	98.29	5.1	115.62	131.46	13.7	45.62	49.24	7.9
26	Lagos	80.23	102.2	27.33	NA	280	NA	125.29	102.25	-18.38
27	Edo	86.39	152.91	-76.9	123.89	102.22	17.5	86.67	104.5	-20.5
28	Delta	101.67	119.64	8.82	200.06	349.29	74.59	136..27	145.54	6.8
	Zonal means	**60.63**	**78.68**	**002.19**	**072.45**	**126.62**	**014.12**	**042.82**	**068.94**	**009.28**
29	Anambra	64.50	71.5	10.9	NA	NA	NA	63.4	62..58	-1.3
30	Enugu	115.00	113.75	1.09	NA	NA	NA	68.89	47.5	-31.05
31	Ebonyi	84.50	83.5	-11.83	NA	NA	NA	52.3	48	-8.22
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	163.34	200.0	22.4	NA	NA	NA	55.0	NA	NA
34	Ak/Ibom	183.75	475	158.5	NA	NA	NA	55	NA	NA
35	Imo	61.80	61.8	0.0	NA	NA	NA	55.25	100	80.99
36	Bayelsa	141.56	188.52	33.17	NA	NA	NA	72.68	90.56	24.6
37	Rivers	300.00	380	26.6	NA	NA	NA	275	300	10
	Zonal means	**118.89**	**217.10**	**034.59**	**000.00**	**000.00**	**000.00**	**096.52**	**097.68**	**012.72**
	Nationalmeans	**00097**	**00115**	**00016**	**00030**	**00039**	**00012**	**00052**	**00060**	**00019**

Table 3.9.5 Commodity Prices for melon, soyabean and irish potato

S/No.	State	Melon			Soya bean			Irish potato		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	NA	NA	NA	NA	NA	NA	74.37	141.02	89.6
3	Bauchi	307.11	400	30	83.81	92.24	40	78.67	90.72	15.21
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Adamawa	99.37	95	4.4	NA	215	NA	97.75	105	7.4
	Zonal means	**081.30**	**099.00**	**6.00**	**016.76**	**061.45**	**008.00**	**050.16**	**067.35**	**003.04**
6	Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Katsina	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Sokoto	NA	NA	NA	50	NA	NA	NA	NA	NA
9	Kebbi	NA	NA	NA	98.75	100	1.27	262.5	183.3	-30.17
10	Zamfara	NA	NA	NA	79	82	4	97	99	2.06
11	Kano	71.88	53.57	25.47	87.91	73.81	16.04	97.79	77.16	21.1
12	Kaduna	377.86	200	-47.07	83.57	63.07	-24.5	124.17	85.71	-00.97
	Zonal means	**64.25**	**36.22**	**3.64**	**057.03**	**045.55**	**003.04**	**083.07**	**063.60**	**-001.00**
13	Taraba	170.00	180	14	90	90	0	100	100	0
14	Platuea	83.33	187.13	124.56	79.63	123.98	55.7	82.24	96.87	17.79
15	Nasarawa	249.18	211.57	-15	87.94	87.54	0	70.71	116.79	65
16	FCT	200.00	250	25	65.58	120	60.1	NA	NA	NA
17	Niger	150.52	NA	150.52	77.51	81.18	5.36	121.43	83.08	24.88
18	Kwara	295.74	200.15	32.3	101.26	102.23	0.95	178.91	NA	NA
19	Kogi	200.00	250	25	96.43	86.11	-10.7	NA	NA	NA
20	Benue	428.36	200	53.31	122.5	135.16	10.33	NA	NA	NA
	Zonal means	**222.14**	**184.86**	**51.21**	**090.11**	**103.28**	**015.22**	**069.16**	**049.59**	**013.46**
21	Osun	237.62	246.64	4.8	NA	NA	NA	NA	NA	NA
22	Oyo	463.21	297.39	-35.8	72.97	87.70	20.2	150.0	150.0	0.0
23	Ekiti	850.00	850.0	0.0	NA	NA	NA	NA	NA	NA
24	Ondo	296.00	NA	NA	117.53	296.7	179.17	NA	75	NA
25	Ogun	78.62	82.49	4.9	70.24	83.46	18.8	NA	NA	NA
26	Lagos	431.68	420.7	25.44	NA	NA	NA	NA	NA	NA
27	Edo	422.75	433.75	-2.5	130.1	135	-3.8	NA	NA	NA
28	Delta	403.26	410.71	1.85	NA	NA	NA	NA	NA	NA
	Zonal means	**310.29**	**899.71**	**003.71**	**039.73**	**064.40**	**024.27**	**000.00**	**009.38**	**000.00**

29	Anambra	603.00	605	0.5	83.77	85.18	17	71.45	72.45	1.4
30	Enugu	220.63	212.5	-3.68	123.55	120.1	-2.79	NA	NA	NA
31	Ebonyi	1200.00	1540	28.33	120	150	25	NA	NA	NA
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	298.0	355.0	18.95	132.1	139.65	5.72	NA	NA	NA
34	Ak/Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	Imo	558.00	550	-10.39	NA	NA	NA	100	110	10
36	Bayelsa	442.29	403.95	-8.77	NA	NA	NA	118.75	112.03	5.66
37	Rivers	090.00	100	8.3	NA	NA	NA	NA	NA	NA
	Zonal means	**389.24**	**426.43**	**1.79**	**40.92**	**44.41**	**4.90**	**36.28**	**36.81**	**2.13**
	National means	**213**	**329**	**13**	**49**	**64**	**11**	**48**	**45**	**4**

Table 3.9.6 Commodity Prices for beef, goat meat and pork

S/No.	State	Beef			Goat meat			Pork		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	450.00	400	-11.11	400	450	11.11	NA	NA	NA
3	Bauchi	300.18	626.89	1088	250.77	443.9	77.01	NA	NA	NA
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Adamawa	407.00	285	-30.0	371.26	388	4.5	NA	NA	NA
	Zonal means	**231.44**	**262.38**	**0.00**	**204.41**	**256.38**	**15.40**	**0.00**	**0.00**	**0.00**
6	Jigawa	600.00	500	20	450	388.89	16	NA	NA	NA
7	Katsina	400.00	550'00	37.5	350	450	28.57	NA	NA	NA
8	Sokoto	218.90	NA	NA	175.66	NA	NA	NA	NA	NA
9	Kebbi	1550.00	400	-74.19	700	400	-42.86	NA	NA	NA
10	Zamfara	600.00	1000	16.67	535	600	12.15	NA	NA	NA
11	Kano	NA	NA	NA	313.1	307.82	1.69	NA	NA	NA
12	Kaduna	550.00	600	9.091	500	400	-36	550	850	54.55
	Zonal means	**559.84**	**357.14**	**1.30**	**431.97**	**363.82**	**-2.92**	**78.57**	**121.43**	**7.79**
13	Taraba	400.00	410	2.5	200	240	20	201.11	230	14
14	Platuea	575.00	613.24	6.65	468.73	538.33	14.85	489.76	636.8	30.02
15	Nasarawa	493.87	463.41	-6	463.62	537.5	16	205.42	353.55	72
16	FCT	650.00	800	23.1	650	900	38.5	NA	NA	NA
17	Niger	418.20	683.04	-83.49	344.11	599.23	-76.55	NA	NA	NA
18	Kwara	500.00	745.08	49	NA	NA	NA	NA	NA	NA

19	Kogi	520.00	800	53.85	NA	850	NA	NA	450	NA
20	Benue	675.60	700	3.64	533.6	700	31.18	525	580	10.47
	Zonal means	**529.08**	**651.85**	**6.16**	**332.51**	**545.63**	**005.50**	**177.66**	**281.29**	**015.81**
21	Osun	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Oyo	516.85	716.27	38.5	581.11	807.58	39.0	225.0	375.0	66.6
23	Ekiti	500.00	550	10	400	400	0.0	400	400	0.0
24	Ondo	631.25	736.67	16.7	440	583.33	32.6	243	363.75	49.7
25	Ogun	500.11	527.26	5.5	675.25	721.39	6.8	400.62	453.11	13.1
26	Lagos	517.50	573.2	10.75	450	525	16.67	332.5	360.65	8.46
27	Edo	550.00	562.5	-2.3	370	400	8.1	310	350	10.3
28	Delta	839.11	943.22	12.41	470.14	500.22	6.4	448.1	466.25	4.05
	Zonal means	**442.25**	**486.61**	**4.55**	**350.67**	**391.24**	**4.75**	**266.78**	**299.22**	**4.49**
29	Anambra	349.50	362.69	3.8	343.76	338.56	-1.5	281.38	283.62	0.8
30	Enugu	725.00	762.5	5.17	437.5	450	2.86	NA	NA	NA
31	Ebonyi	700.00	800	14.29	500	550	10	500	600	20
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	556.0	498.0	-10.35	513.0	374.16	-27.06	400.0	400.0	0.0
34	Ak/Ibom	350.00	500	42.86	NA	NA	NA	NA	NA	NA
35	Imo	600.00	650	8.33	818	820	0.0	500	550	10
36	Bayelsa	578.13	579.25	0.19	644.45	638.89	0.86	449.42	408.9	9.02
37	Rivers	1300.00	450	-64.6	900	450	-50	450	490	8.8
	Zonal means	**575.33**	**513.06**	**-4.10**	**455.46**	**405.93**	**-004.72**	**272.60**	**291.57**	**6.08**
	National means	**468**	**454**	**2**	**355**	**393**	**4**	**159**	**199**	**7**

Table 3.9.7 Commodity prices for mutton, chickens and fresh fish

S/No.	State	Mutton			Chickens			Fresh fish		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	400.00	450	12.5	600	755		NA	NA	NA
3	Bauchi	268.84	456.39	159.76	281.97	342.11	21.32	500	600	20
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Adamawa	365	240	-34.25	420.93	565	34.22	600	600	0.0
	Zonal means	**206.84**	**229.28**	**31.95**	**260.58**	**332.42**	**004.26**	**220.00**	**240.00**	**4.00**
6	Jigawa	550.00	420	31	600	371.43	-62	NA	NA	NA
7	Katsina	400.00	600'00	50	450	600	33.33	250	300	20
8	Sokoto	225.25	NA	NA	310.39	NA	NA	NA	NA	NA
9	Kebbi	700.00	400	-42.86	375	750	100	675	500	-25.92
10	Zamfara	535.00	650	21.5	385	750	94.81	225	280	24.44
11	Kano	319.71	362.87	13.5	461.54	412.06	10.72	NA	NA	NA
12	Kaduna	525.00	500	4.8	450	650	44.44	263	250	-4.94
	Zonal means	**464.99**	**333.27**	**10.45**	**433.13**	**504.78**	**25.27**	**201.86**	**190.00**	**2.65**
13	Taraba	200.00	205	2.5	1000	1000	0	882.35	919.18	4
14	Platuea	405.20	610.75	50.75	488.59	655.71	34.2	483.43	550	13.77
15	Nasarawa	445.83	425	-5	504.17	1000	98	242.38	187.5	-23
16	FCT	NA	NA	NA	1500	1600	6.7	NA	650	NC
17	Niger	364.29	619.65	-55.75	200	580.89	-11.12	352.72	474.21	-34.58
18	Kwara	NA	NA	NA	447.47	NA	NA	450	400	-11.1
19	Kogi	NA	NA	NA	606.15	950	56.73	550	600	20
20	Benue	NA	NA	NA	875	880	0.57	875	880	0.57
	Zonal means	**176.92**	**232.55**	**-0.94**	**702.67**	**833.33**	**023.14**	**479.49**	**582.61**	**-3.79**
21	Osun	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Oyo	NA	NA	NA	365.88	460.23	29.3	382.44	520.91	36.2
23	Ekiti	NA	NA	NA	500	600	20	400	400	0
24	Ondo	NA	NA	NA	797.5	1096	37.42	599	511.67	14.58
25	Ogun	NA	NA	NA	700.25	724.64	3.5	385.24	399.46	3.7
26	Lagos	NA	NA	NA	750	850	14.69	650	620	-4.62
27	Edo	NA	NA	NA	650.1	655	-0.75	611	581.11	4.9
28	Delta	NA	NA	NA	577.4	610.2	5.68	267.21	328.28	22.85
	Zonal means	**00.00**	**0.00**	**0.00**	**496.91**	**566.98**	**5.39**	**364.06**	**355.07**	**2.74**

29	Anambra	267.82	278.9	4.1	NA	NA	NA	NA	NA	NA
30	Enugu	NA	NA	NA	665	643	-3.31	238.63	256.15	7.34
31	Ebonyi	450.00	500	11.11	600	800	33.33	NA	NA	NA
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	NA	NA	NA	403.13	428.1	6.19	203.63	175.2	-13.96
34	Ak/Ibom	NA	NA	NA	NA	1000	NA	573.3	300	-47.67
35	Imo	NIL	NIL	NIL	600	650	8.33	450	650	44.4
36	Bayelsa	NA	NA	NA	502.73	595.71	0.21	331.94	473.2	42.56
37	Rivers	NA	NA	NA	100	620	-38	500	645	29
	Zonal means	**89.73**	**97.36**	**1.90**	**308.47**	**538.59**	**0.07**	**261.73**	**290.54**	**9.45**
	National means	**188**	**178**	**9**	**440**	**555**	**12**	**305**	**332**	**3**

Table 3.9.8 Commodity prices for eggs, smoked fish and dry fish

S/No.	State	Eggs			Smoked fish			Dry fish		
		July-08	July-09	% Change	July-08	July-09	% Change	July-08	July-09	% Change
1	Borno	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Yobe	650.00	730	12.3	NA	NA	NA	356	378	6.17
3	Bauchi	284.40	453.9	59.6	1500	1500	0.0	600	700	16.67
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Adamawa	650	700	7.69	433.45	260.07	-400.1	NA	NA	NA
	Zonal means	**316.88**	**236.78**	**11.92**	**386.69**	**352.01**	**0.00**	**724.00**	**770.00**	**3.33**
6	Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Katsina	550.00	700	27.27	300	400	33.33	450	450	0
8	Sokoto	NA	NA	NA	NA	NA	NA	195.47	NA	NA
9	Kebbi	NA	NA	NA	1400	1450	3.57	662.5	571.4	-13.75
10	Zamfara	600.00	650	8.33	NA	NA	NA	NA	NA	NA
11	Kano	750.00	780	4	300	291.27	2.91	291.3	298.81	2.58
12	Kaduna	NA	NA	NA	250	350	40	335	500	49.25
13	Taraba	600.00	740	23	952.38	1021.31	7	NA	NA	NA
14	Platuea	483.43	550	13.77	480.75	711.96	48.09	NA	NA	NA
15	Nasarawa	368.65	372.98	1	1144	848.7	-26	500	NA	100
16	FCT	650.00	650	0	NA	650	NC	NA	750	NC
17	Niger	243.33	NA	243.33	662.04	666.19	32.41	NA	666.19	NC

18	Kwara	625.00	900	44	420	315.7	-24.8	420	315.7	-24.8
19	Kogi	600.00	650	8.33	NA	NA	NA	987.5	1050	6.33
20	Benue	NA	NA	NA	820	950	15.85	NA	NA	NA
	Zonal means	**446.30**	**482.87**	**41.68**	**559.89**	**645.48**	**006.57**	**238.44**	**347.74**	**010.19**
21	Osun	565.0	650.0	15.0	NA	NA	NA	NA	NA	NA
22	Oyo	256.94	279.88	9.0	317.8	347.45	9.3	571.16	527.96	-11.0
23	Ekiti	550.00	700	27.27	350	350	0	500	550	10
24	Ondo	244.20	268.75	24.55	238.75	295.78	59.02	460	687.5	49.46
25	Ogun	450.51	490.71	8.9	385.11	424.11	10.1	250.62	300.48	19.9
26	Lagos	525.00	645	22.86	200	190	-5	NA	NA	NA
27	Edo	600.00	720	20	888.08	860	-3.2	811.11	790.55	-2.5
28	Delta	544.15	557.29	2.41	520.1	521.2	0.21	NA	NA	NA
	Zonal means	**364.23**	**422.72**	**13.25**	**322.76**	**330.14**	**007.64**	**770.22**	**291.07**	**3.43**
29	Anambra	00450	650	44.4	NA	NA	NA	352.8	360.02	2
30	Enugu	NA	NA	NA	NA	NA	NA	314.089	299.38	-4.68
31	Ebonyi	NA	NA	NA	650	750	15.39	520	650	25
32	C/Rivers	NA	NA	NA	NA	NA	NA	NA	NA	NA
33	Abia	NA	NA	NA	NA	NA	NA	301.41	473.0	56.91
34	Ak/Ibom	NA	750	NA	NA	NA	NA	NA	NA	NA
35	Imo	450.00	650	44.4	710	850	12.68	780	800	20
36	Bayelsa	319.39	318.71	0.21	823.82	634.14	23.02	1204.2	1309.34	8.73
37	Rivers	NA	NA	NA	1550	480	-69	1700	350	-79.4
	Zonal means	**152.42**	**296.09**	**11.13**	**466.73**	**339.27**	**-002.24**	**608.89**	**471.09**	**-03.54**
	National means	**310.25**	**348.55**	**16.73**	**411.50**	**404.56**	**04.67**	**1826.77**	**1813.99**	**03.77**

3.10 FARMERS ASSESSMENT OF CROPPING PERFORMANCE

A total of 1168 farmers were interviewed during the survey, of which 685 were individually interviewed and 483 farmers participated in 43 focused group discussion sessions held across the country.

Mixed cropping remained the practice among 73% of the farmers interviewed while 24% are engaged in mixed farming; keeping livestock such as sheep and goats, poultry and swine. Only 3% and 6% of the farmers interviewed were keeping cattle and engaged in fish farming and fishing respectively.

Maize cultivation increased in popularity in North East and North West zones especially in Sokoto, Zamfara, Kano, Bauchi and Borno States. Although farm size per farmer remained small ranging between 0.5ha/farmer to 3.5ha/farmers, average grain yields for many crops are expected to decline due to, poor distributions of rainfall, high cost/lack of access of fertilizers, incidence of pests and diseases and lack of access to improved seeds.

Average grain yield of millet among the most progressive farmers is anticipated to decline from 1.1t/ha to 0.95t/ha while most millet farmers may have yield figures of less than 600kg/ha. The average yield of sorghum may however remain the same as in 2008 while that of maize may increase marginally from 1.58t/ha obtained in 2008 to about 1.6t/ha. The yield of yam is likely to remain less than 10t/ha while that of cassava may increase slightly from about 12.9t/ha to 13.03t/ha this year.

3.10.1 RAINFALL AND CROP PRODUCTION

Farmers confirmed that the rains started between April and May in all the states in the North East zones except Yobe State that recorded its first rain in June. The rains started much earlier in the Southern zones than the Northern zones. Dry spells occurred throughout the northern states, a few southern states such as Lagos, Ogun, Ekiti Oyo, Osun and in all states of the SE with varying levels that ranged between 15 and 45 days. Flood occurred in Zamfara, Sokoto, Kebbi and Kaduna states in August. Rainfall extended into October across the country even for the drier ecological zones. Farmers predicted bumper harvest of cocoyam, cassava, rice, maize and cowpea.

3.10.2 ALLOCATION OF FUND TO FACTORS OF PRODUCTION

Farmers' questionnaires from 33 states were analyzed. A total of 542 farmers responded to the questionnaires.

Table 3.10.2.1: Fertilizer Source Quantity Bought by Farmers in 2009

Category of farmers	No.	%	No of bags fertilizer	No of bags per farmer
Farmers who bought fertilizer	462	85.2	2772	6
Bought from government and open market sources	369	68.1	2538	7
Bought from government source	32	5.9	89	3
Bought only from open market	61	11.3	305	5
Did not use fertilizer	8	14.8		

Across the country, farmers demonstrated increasing reliance on chemical fertilizers in their farm enterprise. About 85.2% bought different grades of fertilizers they used against 14.8% that did not use this input this year. This probably accounts for the apprehension that farmers express when the input either arrives late or too expensive for them. Farmers appeared to be more motivated to augment their fertilizer need when they are able to buy from government sources at a subsidized rate. The farmers that were able to secure more fertilizers from government and the open market used more fertilizers than those who buy only from the open market. Interestingly, farmers that relied on the open market use up to 5 bags compared with 3 bags used by farmers who rely solely on government sources Table 3.10.2.1).

Many farmers in Kano, Zamfara and Taraba States were able to buy in excess of 10 bags from government sources; and this reflected on the average number of bags/farmer of 3 bags. Most of the farmers rarely had access to more than 1–2 bags and in some cases, less than 1bag/farmer. Most farmers interviewed in Benue, Bayelsa, Delta and Edo States were unable to buy any fertilizer from government source.

Table 3.10.3: Allocation of Financial Resources for Farm Production in 2009 Wet Season

Production factor	Amount (₦)	% Total cost	No. of Farm	% farmers
1. Fertilizer	241,365,670	39.5	462	85.2
2. Seed/seedling/cutting	68,437,860	11.2	542	100
3. Herbicides/pesticides	18,331,569	3	218	40.2
4. Labour	250,351,454	41.0	535	98.8
5. Others	30,552,616	5.0		
Total	611,052,327	100		

Farmers reported heavy investments on farm inputs and farm operations (Table 3.10.3.1). Labour accounted for 41% (Table 3.10.3.1 and Fig. 6 of the cost of production followed by fertilizers cost. This is probably responsible for farmer ovate desire for credit support. About 8.3% of the Total Variable Cost (TVC) of production expended on pesticides justifies technical training on pesticide usage/handling in order ensure efficient use. A proportion of 11.2% was expended on seeds and seedling. Instances where farmers do not have access to credit, this cost on seeds and seedlings are circumvented by farmers depending on saved seeds which may lead to reduced average yields.

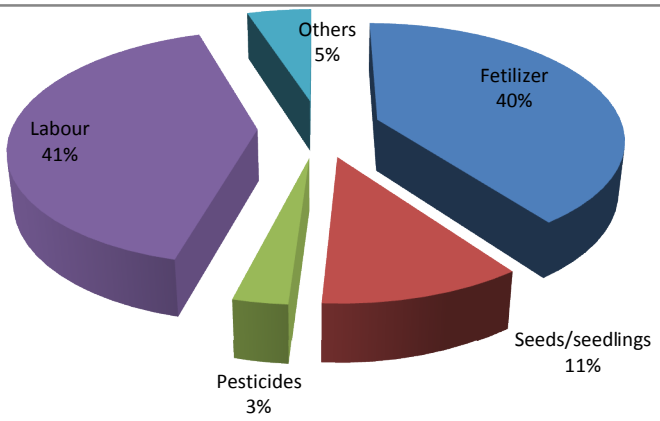

Figure 6: Financial allocation of resources by farmers in 2009 wet season

3.11 FARMERS PRIORITY NEEDS

Among 542 farmers interviewed, extension services to farmers were ranked the most critical element for sustainable agricultural growth in the country (Table 3.11.1 and Fig. 7) followed by access to credit and fertilizers respectively. Improvement in the price of commodities at farmers' level was ranked the same as access to fertilizer. Apparently, farmers desire a stronger linkage to the output market than currently prevails. It was posited that improvement in value addition and development of new trade corridors for farm produce would induce fair farm gate price that can enhance farmers' income and livelihood. The control of HIV-AID is the least concern of farmers interviewed perhaps because the disease is not yet a major issue at most of the study locations. The study underscores the need to revitalize extension service and enhance farmers linkage to input and output markets.

Table 3.11.1 Ranking of Farmers Needs by Farmers from 33 States

Ranking of farmers needs by farmers from 33 states	Score	Rank
Revival of the ADP extension service system	1.2	1
Access to credit for farm inputs procurement	1.6	2
Timely access to fertilizer	2.1	3
Government intervention to improve farmer gate price of commodities	2.1	3
Affordable tractor	2.8	4
Access to improved seeds	3.0	5
Good road for movement of farm produce	3.5	6
Portable water	4	7
HIV-AID CONTROL	5	8

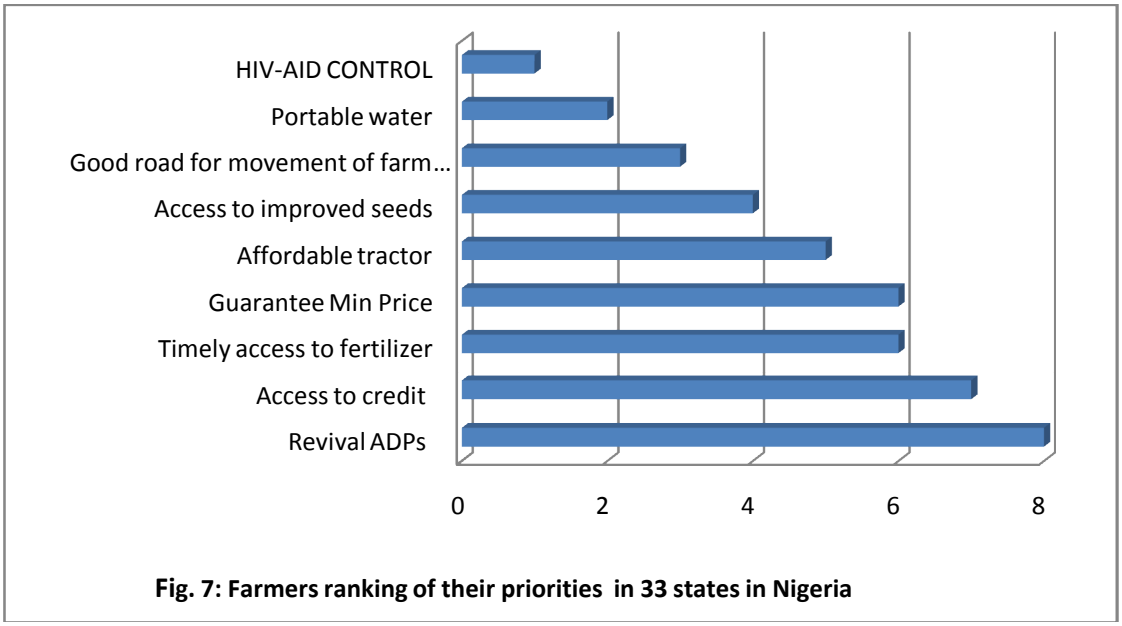

Fig. 7: Farmers ranking of their priorities in 33 states in Nigeria

3.12 LAND AREA CULTIVATED AND CROP PRODUCTION ESTIMATES

The state ADPs in collaboration with NFRA provided the data on the area cultivated and crop production for each crop in 2008 based on the 2008 Cropped Area Yield Survey (CAYS) results by NFRA. Forecasts for land area cultivated and crop production estimates for year 2009 were made by the relevant staff of the ADPs and the scientists involved in the survey. The 2008 estimates were compiled alongside with the 2009 forecasts by states and by crops.

Figures 3.12.1 to 3.12.8 show the land area cultivated for each of the major crops in 2008 and 2009 as well as the percentage increases in area cultivated between the two years. Tables 3.12.1 -3.12.8 show the production output for the crop in 2008 and the forecasts in 2009. The percentage increases in production output between the two years were computed. A summary of the national estimated land area cultivated, production output, and yield (ton/ha) for each crop is given in Tables 3.12.9. Tables 3.13.1 – 3.13.8 present the zonal summary of the land area cultivated and production output for each crop for 2008 and 2009.

FACTORS INFLUENCING CROP PRODUCTION

The rainfall in terms of quantity and distribution were generally adequate for good crop performance during the season. The incidences of pests and diseases reported were limited and not severe. They are not likely to adversely affect crop production during the season. Scarcity and high costs of farm inputs were problems of farmers across the country, but many farmers re-adjusted to cope with these and other problems. The specific details for each crop based on the findings of the field survey are given below.

Maize

Maize is the most widely cultivated grain in the country. Apart from having some industrial uses, it is one of the staple food crops in the country. Its area of cultivation has extended into the drier zones (Fig. 8) of the country because of the introduction of drought resistant early maturing varieties. Given the effects of dry spells on the early planted crop, the problems of access to fertilizers and other problems earlier mentioned, the area planted up with maize mostly by small holder farmers was estimated as 4,862,620ha which represents an increase of about 4.2% compared with 4,668,780 ha in 2008. The expected crop output was about 7,771,770MT representing an increase of about 5.4% compared with 7,375,450MT obtained last year. The yield of 1.598 ton/ha obtained in 2009 was slightly higher (1.13%) than the yield of 1.58ton/ha obtained in the previous year. Maize is however gaining popularity in some states such as Borno, Katsina, Zamfara etc use early maturing drought resistant varieties of maize.

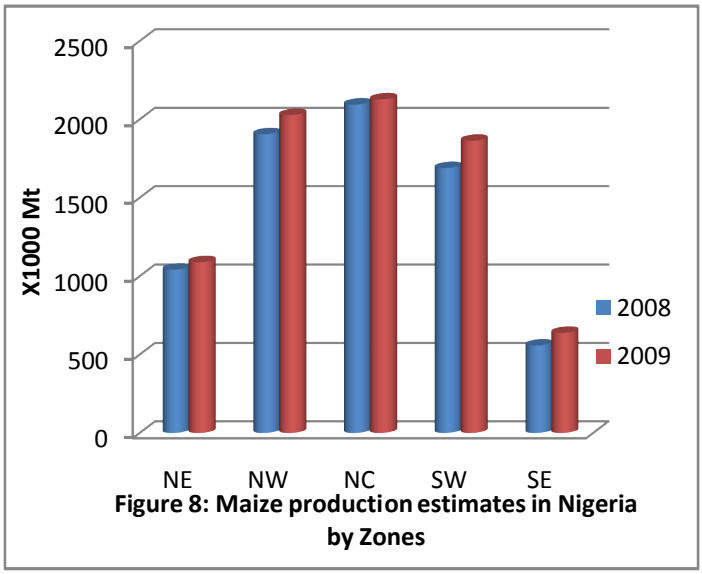

Figure 8: Maize production estimates in Nigeria by Zones

Millet

The area planted up with millet mostly by small holder farmers in the country was estimated at 4,110, 480ha. This represents an increase of about 12.92% compared with 3,640,020ha cultivated in 2008. The expected crop output of 3,922,470MT means a decrease of about 2% compared with 4,004,130MT produced last year. The crop yield of 0.95ton/ha was also about 13.6% lower than what was obtained last year. The lower output as well as the lower yield could be attributed to the occurrence of drought or prolonged dry spells in the millet growing areas of Sokoto, Kebbi, Yobe and Borno States.

Sorghum

Sorghum is one of the most widely cultivated grains in the country, especially in the drier northern states (Fig. 9). The area cropped with sorghum was estimated as 4,793,840ha. This represents an increase of about 1.42% compared with 2008 figure. This crop output was estimated as 5,638,190MT representing an increase of about 1.24% over the 2008 output of 5,568,980MT. The yield of about 1.176ton/ha obtained remained the same as that of last year. The hectarage of the crop established as well as the production output were also affected by drought as in the case of millet.

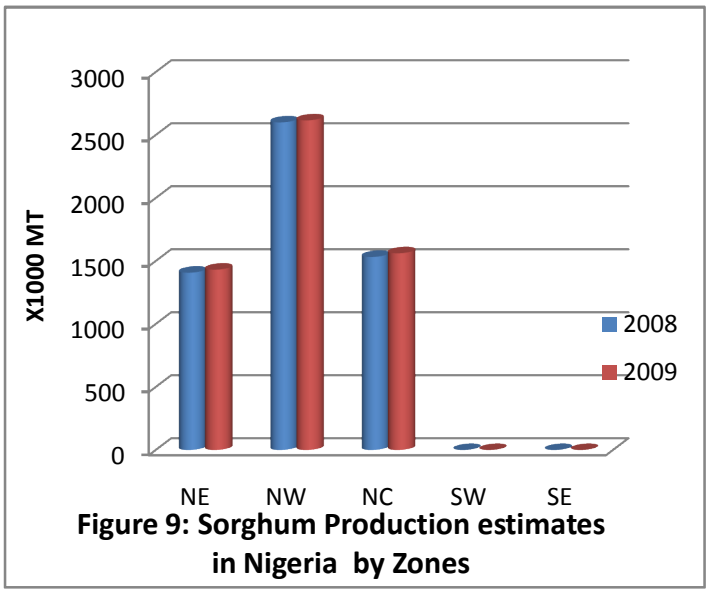

Figure 9: Sorghum Production estimates in Nigeria by Zones

Rice

The estimated land area for rice of 2,140,820ha is an increase of about 6.56% over the 2008 figure of 2,009,040ha. The production output estimate of 3,759,950MT represents an increase of 6.11% over the 2008 figure of 3,543,510MT. The crop yield (1.756 ton/ha) was almost the same as for the previous year. The highest rice producing zone is the North Central zone (Fig. 10) with a cultivated area of about 802,550ha and a production output of about 1,866,960MT (49.7% of total national output as at 2009, Table 3.12.2).

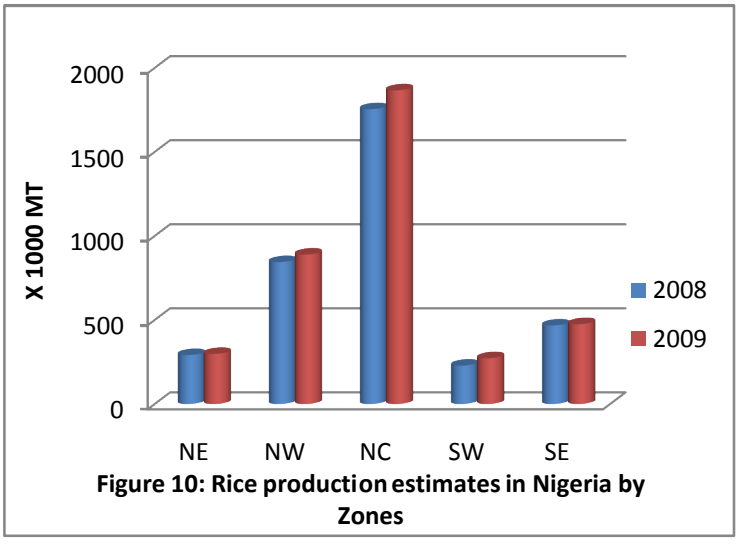

Figure 10: Rice production estimates in Nigeria by Zones

Soybeans

The area planted up with soybeans was estimated as 368,340ha. This represents an increase of about 1.6% over the hectarage of 362,560ha planted in year 2008. The expected output of 519,540MT represents an increase of about 2.38% over the output of 507,450MT obtained in 2008. The crop yield remained at about 1.4ton/ha for both 2008 and 2009. The North Central zone and the North-West zone accounted for over 90% of the soybean output both in 2008 and 2009 (Fig. 11).

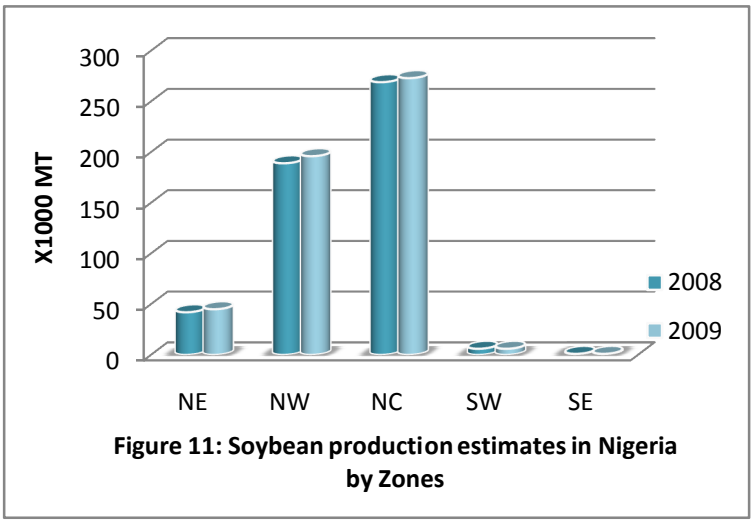

Figure 11: Soybean production estimates in Nigeria by Zones

Cowpea

Cowpea is an important crop famous for the supply of plant protein in food diets. The area of the crop cultivated mostly by small scale farmers in the country was estimated as 2,560,030ha. This represents an increase of about 1.97% over the hecterage of 2,510,480ha raised in the previous year. The estimated production output was 1,480,960MT representing an increase of about 3.1% over the production output of 1,436,420MT obtained in the previous year. The crop yield of 0.578 ton/ha was slightly higher (1.0%) than that of 2008. Although cowpea is cultivated in all the zones of the country, the North West Zone and the North East zone accounted for over 80% (Fig. 12) of the crop output both in 2008 and 2009. (Table 3.12.4)

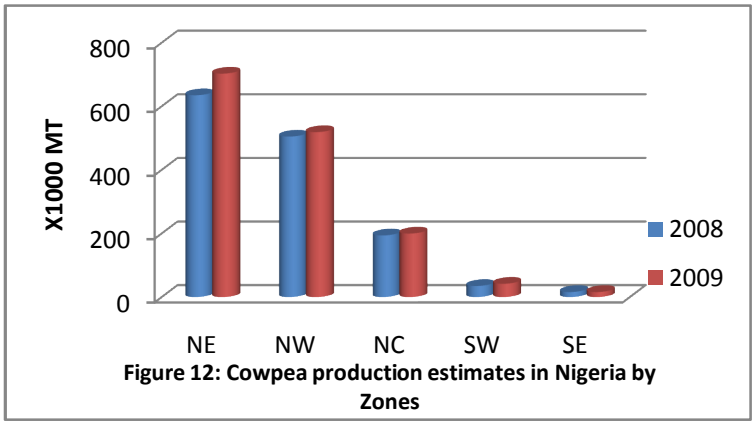

Figure 12: Cowpea production estimates in Nigeria by Zones

Groundnut

Groundnut can be eaten directly after boiling or roasting and for the production of groundnut oil where the residual groundnut cake is used in the livestock industry. The area of the crop cultivated was estimated as 2,186,410ha. This was an increase of about 2.6% over the 2,130,940ha of 2008. The expected production output

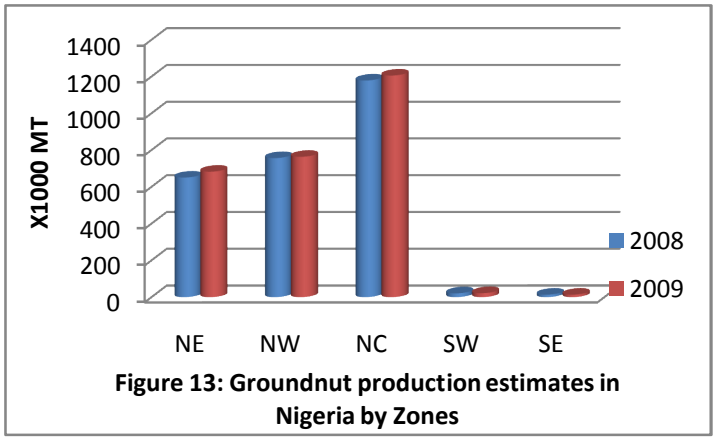

Figure 13: Groundnut production estimates in Nigeria by Zones

was estimated as 2,690,520MT representing an increase of about 2.61% over the production output of about 2,622,150MT obtained in the previous year. The crop yield remained about 1.230 ton/ha as 2008. The North Central Zone has been playing a leading role (Fig. 13) in groundnut production and has accounted for over 47% of the total production both in 2008 and 2009; the North West Zone and North-East zone accounted for about 30% and 20% of the production respectively.

Cassava

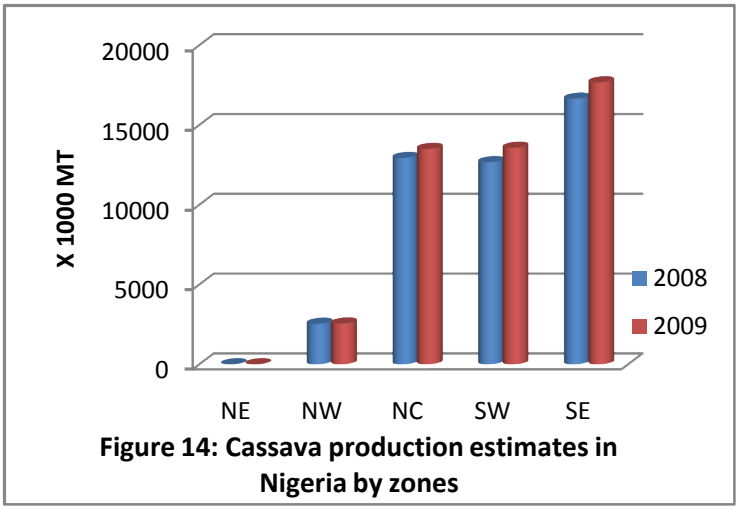

Figure 14: Cassava production estimates in Nigeria by zones

Cassava plays an important role in energy supplying diets of many Nigerians. It is being processed into many cassava products such as gari, flour, starch etc. Nigeria is the largest world producer of cassava. The estimated land area put under cassava was 3,629,040ha which is an increase of 4.16% over 3,484,080ha cropped in the previous year. The expected production output is 47,274,320MT, an increase of about 5.46% over the production output of 44,827,570MT obtained in 2008. The crop yield of about 13.027 ton/ha obtained was slightly higher (1.25%) than that of the previous year. The South East zone is leading in cassava production (Fig. 14), accounting over 37% of the national production while the South East zone, the South West zone and the North Central Zone accounted for over 94% of the country's total production.

The prices of cassava and cassava products (cassava gari and cassava flour) have remained consistently high for the past one year. The fact that there was no reduction in the prices of these items from July this year suggests that these prices may not reduce until the next harvesting season.

Yam

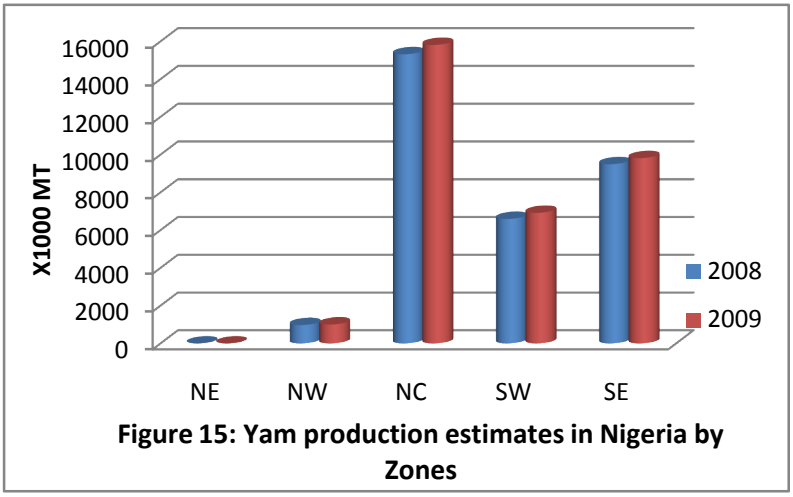

Figure 15: Yam production estimates in Nigeria by Zones

Yam is another favourite staple food among many Nigerians just as cassava. The land area planted up with yam was estimated as 3,478,370ha. This was an increase of about 3.2% over 3,370,540 ha raised in 2008. The expected production output was estimated as 33,577,880MT which represents an increase of about 3.14% over the production output of about 32,556,640MT obtained in the previous year. The crop yield of about 9.65ton/ha obtained remained the same as that of the previous year. The North Central and South East Zones (Fig. 15) combined produce over 75% of the yam in the country.

Cocoyam

Cocoyam is another staple food in the country, though not as popular and widely marketed as yam and cassava. The land area cropped was estimated as 406,150ha, an increase of about 5.11% over 386,420ha in 2008. The expected production output is 3,203,500MT which represents an increase of about 5.39% over the previous year output of 3,039,7000MT. The crop yield of 7.887 ton/ha obtained was slightly higher (0.27%) than that of the previous year. The South East and South West Zones produce about 90% of the cocoyam in the country (Fig.16).

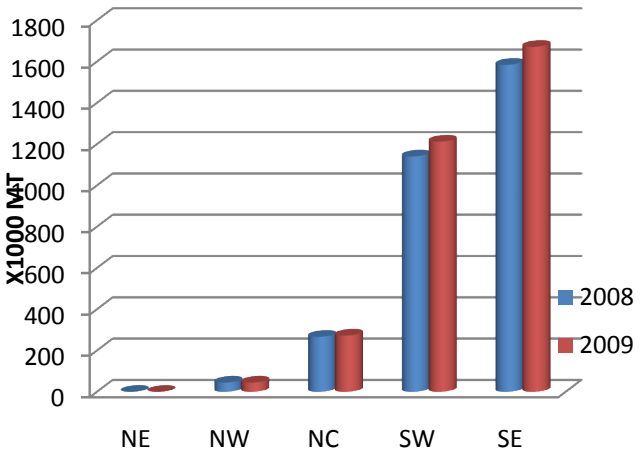

Figure 16: Cocoyam production estimates in Nigeria by zones

Cotton

Cotton is an industrial crop supplying fibres used in the textile industries. The estimated land area put under cotton is 1,043,420ha and represents an increase of about 0.31% over 1,040,170ha in 2008. The expected output is 306,250MT and represents an increase of about 1.14% over the production output of 302,810MT obtained in 2008. The low increase in cotton production is expected as farmers would not want to continue confronting a situation of cotton market glut which is fast becoming a perennial problem. Cotton is one of the commodities being promoted under the National Accelerated Industrial Crops (NAICP) project of the Federal Government.

Melon

This is a protein rich spice used as soup ingredient by many communities in the country. It is a cover crop and this helps to control erosion and conserve soil moisture. The estimated land area put under melon was 315,660ha and represents an increase of about 3.82% over 304,060ha cropped in 2008. The expected production output is 154.690 MT and this represents an increase of about 7.61% over the output of 143,750MT obtained in 2008.

Table 3.12.1: Land Area Cultivated for Sorghum, Maize And Rice in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	773.16	773.16	0.00	351.58	351.58	0.00	110.00	110.00	0.00
2	Yobe	184.00	185.60	0.90	10.40	10.40	0.00	24.66	27.13	10.00
3	Bauchi	257.74	275.74	4.00	205.76	224.28	9.27	29.53	31.01	5.01
4	Gombe	140.09	145.60	4.00	135.08	143.00	6.00	171.06	179.50	5.00
5	Adamawa	128.58	129.80	1.00	69.11	72.63	5.00	121.25	126.00	4.00
	Total	1483.57	1509.90	1.77	771.93	801.89	3.88	456.50	473.64	3.75

Table 3.12.2: Production Estimate for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000MT)

S/NO	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	853.77	853.77	0.00	402.25	402.25	0.00	126.74	126.74	0.00
2	Yobe	1.33	1.38	4.00	1.49	1.57	5.00	1.28	1.47	15.00
3	Bauchi	292.01	309.53	6.00	346.00	380.60	10.00	49.66	53.63	8.00
4	Gombe	141.23	145.40	3.00	171.06	179.50	5.00	90.01	92.70	3.00
5	Adamawa	119.68	122.00	2.00	121.25	126.00	4.00	24.31	24.80	2.00
	Total	1408.02	1432.08	1.71	1042.05	1089.92	4.59	292.00	299.34	2.50

Table 3.12.1: Land Area Cultivated for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
6	Jigawa	209.88	230.87	10.00	14.92	16.41	10.00	63.86	70.25	10.00
7	Katsina	347.03	357.44	3.00	173.63	185.78	7.00	56.44	57.57	2.00
8	Sokoto	172.11	183.21	6.45	14.43	17.25	19.50	31.40	32.28	2.80
9	Kebbi	206.46	145.73	-29.42	33.58	35.20	4.80	30.82	32.67	6.00
10	Zamfara	315.82	318.90	0.98	41.12	42.15	2.50	25.20	25.23	0.10
11	Kano	455.01	477.76	5.00	225.47	239.00	6.00	97.77	102.66	5.10
12	Kaduna	269.76	273.36	1.30	438.75	460.49	5.00	138.00	143.52	4.00
	Total	1976.07	1987.27	0.57	941.90	996.28	5.80	443.49	464.18	4.66

Table 3.12.2: Production Estimates For Sorghum, Maize And Rice In 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
6	Jigawa	180.17	198.19	10.00	30.19	33.21	10.00	56.83	62.51	10.00
7	Katsina	368.09	382.81	4.00	233.95	245.65	5.00	63.42	63.98	2.50
8	Sokoto	189.35	109.12	-42.40	15.19	11.25	-26.00	78.57	83.94	6.80
9	Kebbi	224.34	233.16	3.90	40.74	63.36	55.50	52.53	62.25	18.50
10	Zamfara	600.06	605.91	1.00	47.73	48.92	2.51	36.32	36.33	0.00
11	Kano	603.89	646.10	7.00	559.39	598.55	7.00	207.27	217.63	5.00
12	Kaduna	435.45	441.87	1.50	979.00	1027.79	5.00	350.12	364.17	4.00
	Total	2601.35	2617.16	0.61	1906.19	2028.73	6.43	845.06	890.81	5.30

Table 3.12.1: Land Area Cultivated for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season (`000ha)

S/No		Sorghum			Maize			Rice		
	STATE	2008	2009	% CHANGE	2008	2009	% CHANGE	2008	2009	% CHANGE
13	Taraba	171.50	NA	0.00	253.00	257.00	5.00	169.40	176.18	4.00
14	Plateau	180.93	183.34	1.50	179.52	182.21	1.50	62.38	63.32	1.50
15	Nasarawa	64.41	66.34	3.00	68.63	70.69	3.00	41.19	43.25	5.00
16	FCT	29.85	30.45	2.00	19.68	19.68	20.49	20.29	20.53	1.20
17	Niger	523.78	531.64	1.50	390.87	394.78	1.00	163.12	166.38	2.00
18	Kwara	80.50	84.53	4.90	114.13	115.27	1.00	135.04	137.74	2.00
19	Kogi	84.89	85.99	1.29	183.65	191.00	4.00	53.34	54.67	2.50
20	Benue	110.66	111.36	0.63	105.21	106.47	1.20	137.50	140.48	2.20
	Total	1246.52	1093.65		1314.69	1337.10	1.77	782.26	802.55	2.60
	ENP		1268.00	1.73						

Table 3.12.2: Production Estimates for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
13	Taraba	165.61	NA	NA	364.15	376.90	3.50	260.12	275.73	6.00
14	Plateau	276.41	284.70	3.00	456.85	470.56	3.00	112.08	115.44	3.00
15	Nasarawa	104.34	106.43	2.00	140.00	142.80	2.00	91.03	93.76	3.00
16	FCT	49.18	50.21	2.10	37.08	37.64	1.50	40.42	41.15	1.80
17	Niger	539.49	544.88	1.00	498.92	496.43	-0.50	505.69	518.33	2.50
18	Kwara	112.70	119.46	5.90	163.20	176.26	8.00	345.69	397.19	14.90
19	Kogi	94.49	95.86	1.45	296.82	308.69	4.00	125.18	128.94	3.00
20	Benue	191.44	207.00	8.12	138.88	139.31	0.31	275.00	296.42	7.80
	Total	1533.66	1408.54		2095.90	2148.59	2.51	1755.21	1866.96	6.40
	ENP*		1562.75	1.90						

*Means total Estimated national production figure taking into consideration all missing production figures in 2009 for which 2008 figures were available

This was achieved by using the average percentage increase of the set of data available for both 2008 and 2009.

Table 3.12.1: Land Area Cultivated for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	Na	Na	0.00	62.80	62.92	0.20	15.80	17.38	9.90
22	Oyo	28.00	28.21	0.75	181.83	183.00	0.64	Na	Na	0.00
23	Ekiti	Na	Na	0.00	151.74	161.00	6.10	52.00	97.11	86.75
24	Ondo	Na	Na	0.00	165.53	182.08	10.00	29.22	36.90	26.30
25	Ogun	Na	Na	0.00	295.41	324.95	10.00	16.55	20.69	25.00
26	Lagos	Na	Na	0.00	68.68	69.52	1.20	6.20	7.16	15.50
27	Edo	Na	Na	0.00	69.12	68.20	-1.30	Na	Na	0.00
28	Delta	Na	Na	0.00	81.40	99.50	12.20	6.12	6.40	5.00
	Total	28.00	28.21	0.75	1076.51	1151.17	6.94	125.89	185.64	47.50

Table 3.12.2: Production Estimates for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	Na	Na	0.00	109.03	119.93	10.00	28.76	31.64	10.00
22	Oyo	26.00	26.20	0.75	240.79	242.04	0.80	0.00	0.00	0.00
23	Ekiti	Na	Na	0.00	180.65	193.80	7.28	100.00	133.10	33.13
24	Ondo	Na	Na	0.00	373.04	373.58	0.00	53.58	55.29	3.20
25	Ogun	Na	Na	0.00	389.94	438.69	13.00	21.31	26.63	25.00
26	Lagos	Na	Na	0.00	177.88	188.60	6.00	16.12	16.26	0.87
27	Edo	Na	Na	0.00	5.70	9.40	64.91	0.00	0.00	0.00
28	Delta	Na	Na	0.00	213.68	298.58	39.70	9.84	10.33	5.00
	Total	26.00	26.20	0.77	1690.71	1864.62	6.00	229.61	273.25	19.00

Table 3.12.1: Land Area Cultivated for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	**State**	**Sorghum**			**Maize**			**Rice**		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
29	Anambra	Na	Na	0.00	40.44	40.34	0.00	14.49	14.51	**0.10**
30	Enugu	Na	Na	0.00	67.11	70.46	5.00	19.69	20.87	**6.00**
31	Ebonyi	Na	Na	0.00	18.39	18.42	0.20	97.89	108.14	**10.50**
32	C/River	Na	Na	0.00	77.83	77.83	0.00	20.10	20.10	**0.00**
33	Abia	Na	Na	0.00	61.00	61.02	0.00	10.01	10.01	**0.00**
34	Akwa Ibom	Na	Na	0.00	52.59	52.59	0.00	36.67	37.45	**5.00**
35	Imo	Na	Na	0.00	Na	0.00	0.00	0.45	0.83	**84.40**
36	Bayelsa	Na	Na	0.00	43.50	45.00	3.40	1.63	1.93	**18.40**
37	Rivers	Na	Na	0.00	203.60	209.71	3.00	0.97	0.97	**0.00**
	Σ	**Na**	**Na**	**0.00**	**564.46**	**575.37**	**1.90**	**200.93**	**214.81**	**6.90**

Table 3.12.2: Production Estimates for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season ('000mt)

S/No	State	Sorghum			Maize			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
29	Anambra	Na	Na	0.00	83.19	84.85	2.00	35.68	36.21	**1.50**
30	Enugu	Na	Na	0.00	113.44	107.78	-4.90	54.37	57.63	**6.00**
31	Ebonyi	Na	Na	0.00	44.13	45.06	2.10	293.67	296.35	**0.90**
32	C/River	Na	Na	0.00	127.08	127.08	0.00	45.93	45.93	**0.00**
33	Abia	Na	Na	0.00	82.44	82.52	0.10	22.28	22.28	**0.00**
34	Akwa Ibom	Na	Na	0.00	62.71	62.71	0.00	10.49	11.19	**6.70**
35	Imo	Na	Na	0.00	0.00	Na	0.00	0.28	0.52	**85.70**
36	Bayelsa	Na	Na	0.00	44.61	45.25	1.40	3.78	4.32	**14.30**
37	Rivers	Na	Na	0.00	83.00	84.74	2.10	1.08	1.09	**0.92**
	Total	**0.00**	**0.00**	**0.00**	**557.60**	**639.99**	**0.00**	**467.56**	**475.52**	**1.90**

Table 3.12.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000ha)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	257.55	257.55	0.00	632.91	632.91	0.00	180.50	182.31	1.00
2	Yobe	347.46	389.15	12.00	120.00	123.00	2.50	65.81	65.81	0.00
3	Bauchi	191.56	203.95	6.00	151.49	163.61	8.00	276.50	293.09	6.00
4	Gombe	110.30	111.40	1.00	137.02	141.00	3.00	30.70	31.90	4.00
5	Adamawa	4.53	4.62	2.00	68.66	69.35	1.00	66.59	67.92	2.00
	Total	911.40	966.67	6.06	1110.08	1129.87	1.78	620.35	641.03	3.38

Table 3.12.4: Production Estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000mt)

S/No	State	Millet			Cowpea			Rice		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	337.69	337.69	0.00	411.68	411.68	0.00	167.48	172.50	3.00
2	Yobe	442.36	452.14	2.21	80.0	90.0	4.60	86.75	86.75	0.00
3	Bauchi	247.14	266.91	8.00	59.86	65.25	9.00	280.25	305.47	9.00
4	Gombe	130.00	131.30	1.00	77.01	79.32	3.00	37.67	38.40	2.00
5	Adamawa	3.99	4.11	3.00	56.76	56.88	0.20	79.01	80.75	2.20
	Total	1161.18	1192.15	2.67	685.31	703.13	2.60	651.16	683.87	5.02

Table 3.12.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000Ha)

S/N	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
6	Jigawa	320.32	352.35	10.00	84.66	93.20	10.00	10.67	11.74	**10.00**
7	Katsina	248.11	256.48	7.00	120.99	125.82	4.00	112.00	116.52	**4.00**
8	Sokoto	600.42	928.85	54.70	160.10	160.10	0.00	58.99	58.99	**0.00**
9	Kebbi	192.17	194.30	1.10	106.48	107.22	0.70	38.95	39.60	**1.67**
10	Zamfara	300.81	306.82	2.00	435.45	436.50	0.24	139.85	140.86	**0.70**
11	Kano	302.00	317.10	5.00	93.96	97.72	4.00	67.00	71.02	**6.00**
12	Kaduna	138.50	139.19	0.50	47.00	47.46	0.98	209.86	220.35	**5.00**
	Total	**2102.33**	**2495.09**	**19.11**	**1048.64**	**1068.02**	**1.56**	**637.32**	**659.08**	**3.41**

Table 3.12.4: Production Estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
6	Jigawa	310.80	341.88	10.00	36.13	36.13	0.00	6.00	6.60	**10.00**
7	Katsina	210.00	231.00	10.00	60.84	63.25	4.00	76.33	80.14	**5.00**
8	Sokoto	582.00	396.69	-31.84	95.50	91.52	-4.17	94.71	87.04	**-3.80**
9	Kebbi	241.54	213.30	-11.50	57.97	60.04	3.40	45.03	47.53	**5.60**
10	Zamfara	401.00	414.00	3.25	149.55	159.90	6.92	112.13	112.93	**0.71**
11	Kano	301.59	322.70	7.00	70.69	74.22	5.00	77.24	81.87	**6.00**
12	Kaduna	170.10	170.95	0.49	34.11	34.45	1.00	345.50	347.73	**0.50**
	Total	**2217.03**	**2090.52**	**-5.70**	**504.79**	**519.51**	**2.92**	**756.94**	**763.84**	**0.89**

Table 3.12.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000Ha)

9.5	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
13	Taraba	101.40	Na	0.00	32.30	34.24	6.00	128.20	Na	**Na**
14	Plateau	335.18	340.21	1.50	20.42	20.73	1.50	14.69	14.71	**0.14**
15	Nasarawa	21.61	20.96	-3.00	82.24	85.53	4.00	66.84	69.51	**4.00**
16	FCT	14.76	15.00	1.60	13.63	13.90	1.98	5.27	5.34	**1.32**
17	Niger	127.05	128.96	1.50	59.95	Na	Na	356.57	363.70	**2.00**
18	Kwara	25.05	25.05	0.00	1.92	1.90	-0.90	21.04	20.83	**0.00**
19	Kogi	8.95	8.95	1.00	58.21	58.79	1.00	37.49	37.86	**1.00**
20	Benue	42.44	NA	NA	30.42	30.90	0.20	203.42	204.32	**0.44**
Total		676.44	539.13		299.09	245.99		833.52	716.27	**1.55**
	ENP		**638.01**			**307.70**			**846.46**	

Table 3.12.4: Production Estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
13	Taraba	128.14	Na	Na	18.16	19.98	10.00	195.22	0.00	**Na**
14	Plateau	238.05	245.19	3.00	13.53	13.73	10.00	16.72	17.22	**3.00**
15	Nasarawa	28.53	27.96	-2.00	47.70	49.13	3.00	80.21	86.62	**3.00**
16	FCT	20.41	20.82	2.00	9.51	9.70	2.00	6.84	6.96	**1.75**
17	Niger	102.42	103.96	1.50	32.19	Na	0.00	415.50	423.81	**2.00**
18	Kwara	28.44	28.44	0.00	1.08	1.11	3.00	32.82	32.16	**-1.90**
19	Kogi	14.94	15.11	1.10	47.31	47.78	1.00	65.90	66.69	**1.20**
20	Benue	63.66	0.00	0.00	25.10	25.15	0.20	366.16	373.67	**2.05**
Total		624.59	441.48		194.58	166.58		1179.37	1007.13	
	ENP		**638.20**	**2.15**		**199.60**	**2.58**		**1206.90**	**2.33**

Table 3.12.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season '(000Ha)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	Na	Na	0.00	1.53	1.61	5.30	0.00	0.00	**0.00**
22	Oyo	1.70	1.71	0.60	13.82	13.93	0.80	6.65	6.70	**0.80**
23	Ekiti	Na	Na	0.00	19.14	20.30	6.00	Na	Na	**0.00**
24	Ondo	Na	Na	0.00	Na	Na	0.00	0.57	0.59	**3.50**
25	Ogun	Na	Na	0.00	2.01	2.13	6.00	Na	Na	**0.00**
26	Lagos	Na	Na	0.00	1.42	1.43	0.70	1.42	1.42	**0.00**
27	Edo	Na	Na	0.00	Na	Na	0.00	14.50	13.79	**-4.90**
28	Delta	Na	Na	0.00	Na	Na	0.00	1.87	1.94	**4.00**
	Total	**1.70**	**1.71**	**0.59**	**37.92**	**39.40**	**3.90**	**25.01**	**24.44**	**-2.30**

Table 3.12.4: Production estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	Na	Na	0.00	0.98	1.01	3.10	Na	Na	**0.00**
22	Oyo	1.33	1.34	0.80	6.92	6.96	0.60	7.48	7.53	**0.53**
23	Ekiti	Na	Na	0.00	24.88	31.48	26.50	0.00	0.00	**0.00**
24	Ondo	Na	Na	0.00	Na	Na	0.00	0.80	0.83	**3.80**
25	Ogun	Na	Na	0.00	1.27	1.35	6.30	Na	Na	**0.00**
26	Lagos	Na	Na	0.00	1.48	1.49	0.68	2.27	2.27	**0.00**
27	Edo	Na	Na	0.00	Na	Na	0.00	8.11	8.77	**3.10**
28	Delta	Na	Na	0.00	Na	Na	0.00	2.25	2.55	**13.00**
	Total	**1.33**	**1.34**	**0.80**	**35.53**	**42.29**	**19.00**	**20.91**	**21.95**	**4.97**

Table 3.12.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
29	Anambra	NA	NA	0.00	NA	NA	0.00	NA	NA	**0.00**
30	Enugu	NA	NA	0.00	1.31	1.38	5.30	1.46	1.55	**6.20**
31	Ebonyi	NA	NA	0.00	0.00	0.00	0.00	4.95	5.23	**5.60**
32	C/River	NA	NA	0.00	10.50	10.50	0.00	8.45	8.45	**0.00**
33	Abia	NA	NA	0.00	Na	Na	0.00	Na	Na	**0.00**
34	Akwa Ibom	NA	NA	0.00	1.53	1.53	0.00	Na	Na	**0.00**
35	Imo	NA	NA	0.00	NA	NA	0.00	0.13	0.17	**30.80**
36	Bayelsa	NA	NA	0.00	1.59	1.63	2.50	NA	NA	**0.00**
37	Rivers	NA	NA	0.00	NA	NA	0.00	NA	NA	**0.00**
	Total	**0.00**	**0.00**	**0.00**	**14.93**	**15.04**	**0.74**	**14.99**	**15.40**	**2.74**

Table 3.12.4: Production Estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Millet			Cowpea			Groundnut		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
29	Anambra	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
30	Enugu	Na	Na	0.00	1.31	1.38	5.00	1.00	1.06	**6.00**
31	Ebonyi	Na	Na	0.00	Na	Na	0.00	3.85	3.96	**2.90**
32	C/River	Na	Na	0.00	10.19	10.19	0.00	8.85	8.85	**0.00**
33	Abia	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
34	Akwa Ibom	Na	Na	0.00	2.28	2.28	0.00	Na	Na	**0.00**
35	Imo	Na	Na	0.00	Na	Na	0.00	0.07	0.09	**28.60**
36	Bayelsa	Na	Na	0.00	2.43	2.58	6.60	0.00	Na	**0.00**
37	Rivers	Na	Na	0.00	Na	Na	0.00	0.00	Na	**0.00**
	Total	**0.00**	**0.00**	**0.00**	**16.21**	**16.43**	**1.36**	**13.77**	**13.96**	**1.38**

Table 3.12.5: Land Area Cultivated for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Cassava			Cocoyam			Yam		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	0.80	0.80	0.00	0.01	0.01	0.00	Na	Na	**0.00**
2	Yobe	4.10	Na	-5.00	Na	Na	0.00	Na	Na	**0.00**
3	Bauchi	Na	3.90	0.00	Na	Na	0.00	Na	Na	**0.00**
4	Gombe	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
5	Adamawa	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
	Total	**4.90**	**4.70**	**-4.10**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**

Table 3.12.6: Production Estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000MT)

S/No	State	Cassava			Cocoyam			Yam		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
1	Borno	5.00	5.00	0.00	0.05	0.05	0.00	Na	Na	**0.00**
2	Yobe	4.83	4.47	-7.50	Na	Na	0.00	Na	Na	**0.00**
3	Bauchi	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
4	Gombe	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
5	Adamawa	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
	Total	**9.83**	**9.47**	**-3.70**	**0.05**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**

Table 3.12.5: Land Area for Cultivated for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000Ha)

S/No	State	Cassava			Cocoyam			Yam		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
6	Jigawa	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
7	Katsina	12.09	12.21	1.00	7.37	7.37	0.00	0.49	0.50	**2.00**
8	Sokoto	3.94	4.02	2.00	0.00	Na	0.00	Na	Na	**0.00**
9	Kebbi	61.32	59.10	-3.60	Na	Na	0.00	Na	Na	**0.00**
10	Zamfara	Na	Na	0.00	Na	Na	0.00	0.75	0.75	**0.00**
11	Kano	4.21	4.31	1.00	Na	Na	0.00	Na	Na	**0.00**
12	Kaduna	189.63	192.47	1.50	Na	Na	0.00	94.28	97.10	**3.00**
	Total	**271.19**	**272.11**	**0.30**	**7.37**	**7.37**	**0.00**	**95.52**	**98.35**	**3.00**

Table 3.12.6: Production estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000mt)

S/No	State	Cassava			Cocoyam			Yam		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
6	Jigawa	Na	Na	0.00	Na	Na	0.00	Na	Na	**0.00**
7	Katsina	134.42	137.11	2.00	45.44	45.89	1.00	2.76	2.89	**5.00**
8	Sokoto	11.83	12.46	5.40	Na	Na	0.00	Na	Na	**0.00**
9	Kebbi	453.44	437.02	-3.60	Na	Na	0.00	Na	Na	**0.00**
10	Zamfara	Na	Na	0.00	Na	Na	0.00	5.48	5.52	**0.80**
11	Kano	67.99	69.35	2.00	Na	Na	0.00	Na	Na	**0.00**
12	Kaduna	1879.40	1907.59	1.50	Na	Na	0.00	970.53	999.64	**3.00**
	Total	**2547.08**	**2563.53**	**0.60**	**45.44**	**45.89**	**1.00**	**978.77**	**1008.05**	**3.00**

Table 3.1025: Land Area for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000Ha)

		Cassava			Cocoyam			Yam		
S/No	State	2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
13	Taraba	251.20	267.00	3.00	7.90	7.74	-2.00	202.50	216.00	**7.00**
14	Plateau	30.20	30.65	1.50	2.90	Na	Na	10.70	10.86	**1.49**
15	Nasarawa	67.57	69.60	3.00	4.82	Na	Na	79.77	83.76	**5.00**
16	FCT	4.00	4.01	0.32	Na	Na	Na	20.30	20.82	**2.50**
17	Niger	75.29	76.80	2.00	25.00	Na	Na	333.29	343.29	**3.00**
18	Kwara	69.73	74.62	6.90	Na	Na	Na	76.18	79.94	**5.00**
19	Kogi	252.84	268.01	6.00	5.70	5.76	1.00	104.56	105.87	**1.25**
20	Benue	270.33	297.36	10.00	1.41	Na	Na	228.46	230.00	**0.68**
	Total	**1021.16**	**1088.05**	**6.57**	**47.73**	**13.50**	**-0.70**	**1055.76**	**1090.54**	**3.30**

Table 3.12.6: Production Estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season('000MT)

		Cassava			Cocoyam			Yam		
NO	State	2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
13	Taraba	2366.21	2462.00	4.00	62.00	63.80	2.90	2680.19	2814.20	**10.00**
14	Plateau	340.02	350.22	3.00	15.40	Na	Na	168.52	173.58	**3.00**
15	Nasarawa	995.86	1015.78	2.00	24.24	Na	Na	1612.15	1676.64	**4.00**
16	FCT	44.81	45.25	0.98	Na	Na	Na	325.40	335.20	**3.00**
17	Niger	690.55	711.27	3.00	102.00	Na	Na	5399.30	5561.28	**3.00**
18	Kwara	1195.24	1219.15	2.00	Na	Na	Na	948.58	996.01	**5.00**
19	Kogi	3741.85	4022.49	7.50	49.24	49.73	1.00	1286.96	1306.26	**1.50**
20	Benue	3567.95	3683.91	3.25	14.61	Na	Na	2903.73	2955.50	**1.80**
	Total	12942.28	13510.07	4.39				15324.83	15818.67	**3.20**
	ENP				**267.49**	**273.00**	**2.06**			

Table 3.12.5 Land Area Cultivated for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	**State**	**Cassava**			**Cocoyam**			**Yam**		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
21	Osun	71.40	72.97	2.20	12.00	12.84	7.00	38.51	40.82	**6.00**
22	Oyo	144.52	148.13	2.50	6.22	6.25	0.50	74.75	75.65	**1.20**
23	Ekiti	84.52	100.00	1.40	24.84	27.19	9.46	80.08	85.00	**6.14**
24	Ondo	118.00	119.69	1.43	32.32	36.49	12.90	129.08	130.63	**1.20**
25	Ogun	190.69	200.22	5.00	20.00	23.20	16.00	22.72	25.44	**12.00**
26	Lagos	54.00	55.20	2.20	12.43	12.70	2.20	7.03	7.06	**0.43**
27	Edo	66.10	68.20	3.18	11.00	12.30	12.20	51.20	55.10	**7.40**
28	Delta	123.79	130.15	5.00	5.25	5.41	3.00	89.40	94.10	**5.00**
	Total	**853.02**	**894.56**	**4.90**	**124.06**	**136.38**	**9.90**	**492.77**	**513.80**	**4.30**

Table 3.12.6 Production Estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000MT)

nO	State	Cassava			Cocoyam			Yam		
		2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
21	Osun	1136.69	1193.52	5.00	229.17	245.21	7.00	568.87	600.88	**5.60**
22	Oyo	1496.94	1530.00	2.20	47.17	48.21	2.20	695.47	710.35	**2.10**
23	Ekiti	1515.43	1781.45	17.57	262.66	270.54	3.00	1403.49	1522.25	**8.50**
24	Ondo	2413.83	2413.83	0.00	268.66	269.40	0.30	2194.36	2194.56	**0.00**
25	Ogun	2823.21	3077.30	9.00	120.76	142.65	18.10	203.28	228.98	**12.60**
26	Lagos	859.68	872.20	1.46	50.71	50.82	0.20	44.87	44.94	**0.15**
27	Edo	696.01	759.35	9.10	110.31	127.96	16.00	355.31	380.18	**7.00**
28	Delta	1734.30	1884.67	9.00	51.35	57.81	13.00	1137.17	1247.65	**10.00**
	Total	**12676.09**	**13512.32**	**6.60**	**1140.79**	**1212.60**	**6.30**	**6602.82**	**6929.79**	**5.00**

Table 3.12.5 Land Area Cultivated for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	State	Cassava			Cocoyam			Yam		
		2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
29	Anambra	105.14	105.35	0.20	20.40	20.50	0.50	64.73	65.18	**0.70**
30	Enugu	257.64	273.10	6.00	29.42	30.89	5.00	245.72	258.00	**5.00**
31	Ebonyi	63.86	64.20	0.50	11.97	12.99	8.50	98.14	99.65	**1.50**
32	C/River	276.12	276.12	0.00	36.94	36.94	0.00	199.82	199.82	**0.00**
33	Abia	35.56	35.57	0.00	16.42	16.42	0.00	36.88	36.87	**0.00**
34	Akwa-Ibom	24.68	27.15	10.00	21.68	23.13	6.70	20.27	22.22	**9.60**
35	Imo	233.00	238.50	2.40	15.18	16.53	8.90	51.37	54.20	**5.50**
36	Bayelsa	157.44	160.00	1.60	35.26	37.20	5.50	45.49	48.00	**5.50**
37	Rivers	180.30	189.63	5.00	19.98	20.38	2.00	104.45	106.58	**2.00**
	Total	**1333.74**	**1369.62**	**2.67**	**207.25**	**214.98**	**3.70**	**866.87**	**890.52**	**2.70**

Table 3.12.6 Production Estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season ('000MT)

S/No.	**State**	**Cassava**			**Cocoyam**			**Yam**		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
29	Anambra	1673.06	1703.17	1.80	156.33	159.45	2.00	918.86	941.83	**2.50**
30	Enugu	3183.61	3374.64	6.00	252.06	264.66	5.00	2816.13	2956.94	**5.00**
31	Ebonyi	957.90	963.65	0.60	94.00	95.03	1.10	957.90	965.23	**0.80**
32	C/River	3370.51	3370.51	0.00	252.39	252.39	0.00	2137.45	2137.45	**0.00**
33	Abia	648.70	649.35	0.10	151.17	151.19	0.00	564.44	564.44	**0.00**
34	Akwa-Ibom	124.49	136.29	9.50	157.49	173.24	20.50	167.11	200.53	**20.00**
35	Imo	3086.50	3563.69	15.50	158.01	190.41	5.70	725.96	765.95	**5.50**
36	Bayelsa	1772.07	1806.88	2.00	262.48	277.47	5.70	363.94	389.61	**7.00**
37	Rivers	1835.45	2110.77	15.00	102.00	108.12	10.60	849.00	899.40	**5.90**
	Total	**16652.29**	**17678.95**	**6.20**	**1585.93**	**1671.96**	**5.40**	**9500.79**	**9821.38**	**1.80**

Table 3.12.7 Land Area Cultivated for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	**% Change**
1	Borno	NA	NA	NA	NA	NA	NA	773.16	773.16	**0.00**
2	Yobe	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
3	Bauchi	56.67	60.07	6.00	2.69	2.93	8.90	NA	NA	**NA**
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
5	Adamawa	0.36	0.36	6.00	0.22	0.23	0.00	NA	NA	**NA**
	Total	**57.03**	**60.43**	**6.00**	**2.91**	**3.16**	**8.60**	**773.16**	**773.16**	**0.00**

Table 3.12.8 Production Estimates for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000MT)

S/No.	State	Melon			Soybean			Cotton		
		2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
1	Borno	NA	NA	NA	NA	NA	NA	16.90	16.90	**0.00**
2	Yobe	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
3	Bauchi	36.60	39.53	8.00	1.82	1.97	8.20	NA	NA	**NA**
4	Gombe	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
5	Adamawa	0.25	0.25	1.00	40.69	42.72	0.50	NA	NA	**NA**
	Total	**36.85**	**39.78**	**8.00**	**42.51**	**44.69**	**5.10**	**16.90**	**16.90**	**0.00**

Table 3.12.7 Land Area Cultivated for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	State	Melon			Soybean			Cotton		
		2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
6	Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
7	Katsina	NA	NA	NA	25.63	26.14	2.00	90.44	93.15	**2.00**
8	Sokoto	NA	NA	NA	9.00	9.00	0.00	NA	NA	**NA**
9	Kebbi	NA	NA	NA	3.49	3.51	0.60	11.20	11.20	**0.00**
10	Zamfara	NA	NA	NA	3.76	3.78	0.67	95.30	95.38	**0.08**
11	Kano	NA	NA	NA	25.60	26.37	3.00	39.73	39.73	**0.00**
12	Kaduna	NA	NA	NA	73.73	76.67	4.00	NA	NA	**NA**
	Total	**NA**	**NA**	**NA**	**141.21**	**145.47**	**3.00**	**236.67**	**239.46**	**1.20**

Table 3.12.8 Production Estimates for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000MT)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
6	Jigawa	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
7	Katsina	NA	NA	NA	30.52	32.35	6.00	93.77	99.40	**4.00**
8	Sokoto	NA	NA	NA	7.47	6.86	-8.11	NA	NA	**NA**
9	Kebbi	NA	NA	NA	2.78	3.22	15.75	6.30	6.30	**0.00**
10	Zamfara	NA	NA	NA	3.94	3.97	0.67	107.40	104.18	**-3.00**
11	Kano	NA	NA	NA	37.22	38.34	3.00	66.03	66.69	**1.00**
12	Kaduna	NA	NA	NA	106.94	111.22	4.00	NA	NA	**NA**
	Total	**NA**	**NA**	**NA**	**188.87**	**195.96**	**3.80**	**273.50**	**276.57**	**1.10**

Table 3.12.7: Land Area Melon, Soybean And Cotton In 2009 Rain-Fed Cropping Season ('000Ha)

		Melon			Soybean			Cotton		
S/No	State	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
13	Taraba	NA	NA	NA	49.10	NA	NA	0.34	NA	**NA**
14	Plateau	NA	NA	NA	9.05	NA	NA	30.00	30.45	**1.49**
15	Nasarawa	NA	NA	NA	2.12	2.10	-1.0	NA	NA	**NA**
16	FCT	4.45	4.40	-1.20	2.74	2.48	-9.5	NA	NA	**NA**
17	Niger	NA	NA	NA	10.66	NA	NA	NA	NA	**NA**
18	Kwara	17.12	16.78	-1.90	19.40	19.79	2.0	NA	NA	**NA**
19	Kogi	NA	NA	NA	0.25	NA	NA	NA	NA	**NA**
20	Benue	29.88	NA	NA	119.00	119.0	0.16	NA	NA	**NA**
	Total	51.45	21.18	NA	212.07					
	ENP		**50.52**	**-1.80**		**212.78**	**0.22**	**30.34**	**30.45**	**1.50**

Table 3.12.8: Production Estimates For Melon, Soybean And Cotton In 2009 Rain-Fed Cropping Season ('000MT)

		Melon			Soybean			Cotton		
S/No	State	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
13	Taraba	NA	NA	NA	40.34	NA	NA	0.41	NA	**NA**
14	Plateau	NA	NA	NA	1.05	NA	NA	12.00	12.36	**3.00**
15	Nasarawa	NA	NA	NA	2.71	2.66	-2.00	NA	NA	**NA**
16	FCT	1.90	1.87	-1.50	4.34	4.42	1.80	NA	NA	**NA**
17	Niger	NA	NA	NA	12.87	NA	NA	NA	NA	**NA**
18	Kwara	6.85	6.71	-2.00	28.13	28.97	3.00	NA	NA	**NA**
19	Kogi	NA	NA	NA	0.18	NA	NA	NA	NA	**NA**
20	Benue	NA	NA	NA	179.76	180.98	0.68		NA	**NA**
	Total	8.75			269.38			12.41		
	ENP		**8.58**	**-1.90**		**272.00**	**0.97**		**12.78**	**3.00**

Table 3.12.7 Land Area Cultivated for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
22	Oyo	6.20	6.23	0.50	0.39	0.40	2.60	NA	NA	**NA**
23	Ekiti	1.71	2.01	17.54	4.27	5.00	17.10	NA	NA	**NA**
24	Ondo	2.23	2.32	4.00	NA	NA	NA	NA	NA	**NA**
25	Ogun	23.45	23.56	1.00	NA	NA	NA	NA	NA	**NA**
26	Lagos	8.97	9.10	2.00	NA	NA	NA	NA	NA	**NA**
27	Edo	19.11	22.21	16.22	NA	NA	NA	NA	NA	**NA**
28	Delta	30.02	33.24	11.10	NA	NA	NA	NA	NA	**NA**
	Total	**91.69**	**98.67**	**7.60**	**4.66**	**5.40**	**15.90**	**NA**	**NA**	**NA**

Table 3.12.8 Production Estimates for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000MT)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
21	Osun	NA	NA	NA	NA	NA	NA	NA	NA	**NA**
22	Oyo	2.11	2.15	1.90	0.27	0.28	3.70	NA	NA	**NA**
23	Ekiti	2.81	3.10	10.30	5.55	5.70	2.70	NA	NA	**NA**
24	Ondo	0.48	0.50	4.20	NA	NA	NA	NA	NA	**NA**
25	Ogun	14.07	16.49	18.00	NA	NA	NA	NA	NA	**NA**
26	Lagos	7.14	7.16	0.28	NA	NA	NA	NA	NA	**NA**
27	Edo	6.67	8.44	26.54	NA	NA	NA	NA	NA	**NA**
28	Delta	9.91	11.33	14.00	NA	NA	NA	NA	NA	**NA**
	Total	**43.19**	**49.17**	**13.80**	**5.82**	**5.98**	**2.70**	**NA**	**NA**	**NA**

Table 3.12.7 Land Area Cultivated for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000Ha)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
29	Anambra	14.06	14.17	0.80	NA	NA	NA	NA	NA	**NA**
30	Enugu	3.98	4.22	6.00	1.46	1.53	4.80	NA	NA	**NA**
31	Ebonyi	5.78	6.98	20.80	NA	NA	NA	NA	NA	**NA**
32	C/River	10.20	10.20	0.00	NA	NA	NA	NA	NA	**NA**
33	Abia	37.94	37.95	0.00	NA	NA	NA	NA	NA	**NA**
34	Akwa Ibom	13.29	13.29	0.00	NA	NA	NA	NA	NA	**NA**
35	Imo	6.10	6.42	5.20	NA	NA	NA	NA	NA	**NA**
36	Bayelsa	1.34	1.39	3.70	NA	NA	NA	NA	NA	**NA**
37	Rivers	11.20	11.42	2.70	NA	NA	NA	NA	NA	**NA**
	Total	**103.89**	**106.04**	**2.10**	**1.46**	**1.53**	**4.80**	**NA**	**NA**	**NA**

Table 3.12.8 Production Estimates for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season ('000MT)

S/No.	State	Melon			Soybean			Cotton		
		2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
29	Anambra	4.60	4.72	2.60	NA	NA	NA	NA	NA	**NA**
30	Enugu	1.45	1.36	-6.10	0.87	0.91	4.60	NA	NA	**NA**
31	Ebonyi	3.46	3.86	11.60	NA	NA	NA	NA	NA	**NA**
32	C/River	5.72	5.72	0.00	NA	NA	NA	NA	NA	**NA**
33	Abia	14.01	14.02	0.00	NA	NA	NA	NA	NA	**NA**
34	Akwa Ibom	4.24	4.24	0.00	NA	NA	NA	NA	NA	**NA**
35	Imo	9.26	10.50	13.40	NA	NA	NA	NA	NA	**NA**
36	Bayelsa	6.16	7.22	3.70	NA	NA	NA	NA	NA	**NA**
37	Rivers	5.26	5.52	5.00	NA	NA	NA	NA	NA	**NA**
	Total	**54.16**	**57.16**	**4.00**	**0.87**	**0.91**	**4.60**	**NA**	**NA**	**NA**

Table 3.12.9: Estimated Crop Area Cultivated, Crop Production and Yield for Major Crops in Nigeria in 2008 and 2009

S/No/Crops	2008			2009		
	Area cultivated (000ha)	**Crop Production (000MT)**	**Yield MT/ha)**	**Area cultivated (000ha)**	**Crop Production (000MT)**	Yield MT/ha)
1. Cassava	3484.08	44,827.08	12.866	3629.04	47,274.32	**13.027**
2. Cocoyam	386.42	3039.70	7.866	406.15	3203.50	**7.887**
3. Cotton	1040.17	302.81	0.291	1043.42	306.25	**0.293**
4. Cowpea	2510.48	1436.42	0.572	2560.03	1480.96	**0.578**
5. Groundnut	2130.94	2622.15	1.230	2186.41	2690.52	**1.230**
6. Maize	4668.78	7375.45	1.580	4862.62	7771.77	**1.598**
7. Mellon	304.06	143.75	0.473	315.66	154.69	**0.490**
8. Millet	3640.020	4,004.130	1.100	4,110.480	3,922.470	**0.95**
9. Sorghum	4734.18	5568.98	1.176	4793.84	5638.19	**1.176**
10. Soybean	362.56	507.45	1.400	368.34	519.54	**1.410**
11. Yam	3370.54	32,556.64	9.659	3478.37	33,577.88	**9.653**
12. Rice	**2009.04**	**3543.51**	**1.764**	**2140.82**	**3759.95**	**1.756**

Table 3.13.1: Land Area Cultivated for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season (000ha) by Agro-zones

Zone	Sorghum			Maize			Rice		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
South West Zone	28.00	28.21	0.75	1076.51	1151.17	6.9	125.89	185.64	**47.5**
South East Zone	0.0	0.0	0.0	564.46	575.37	1.9	200.90	214.81	**6.9**
North Central Zone	1246.52	1268.42	1.73	1314.69	1337.91	1.77	782.26	802.55	**2.6**
North West Zone	1976.07	1987.27	0.6	941.19	996.28	5.8	443.49	464.18	**4.7**
North East Zone	1483.59	1509.94	2.28	771.93	801.89	3.9	456.50	473.64	**3.75**
Total	4734.18	4793.84	1.42	4668.78	4862.62	4.16	2009.04	2140.82	6.56

Table 3.13.2: Production Estimates for Sorghum, Maize and Rice in 2009 Rain-Fed Cropping Season (000MT) by Agro-zones

Zone	Sorghum			Maize			Rice		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
South West Zone	26.00	26.20	0.8	1690.71	1864.54	10.3	229.61	273.25	19.0
South East Zone	0.0	0.0	0.0	640.60	640.0	0.0	421`.63	429.59	1.9
North Central Zone	1533.66	1562.75	1.90	2095.90	2148.58	2.51	1755.21	1866.96	6.4
North West Zone	2601.30	2617.16	0.6	1906.19	2028.73	6.4	845.06	890.81	5.3
North East Zone	1408.02	1432.08	1.7	1,042.05	1089.92	4.6	292.00	299.34	2.5
Total	5568.98	5638.19	1.24	7375.45	7771.77	5.35	3543.51	3759.95	6.11

Table 3.13.3: Land Area Cultivated for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season (000ha) by Agro-zones

Zone	Millet			Cowpea			Groundnut		
	2008	2009	% Change	2008	2009	% Change	2008	2009	% Change
South West Zone	1.70	1.71	0.6	37.92	39.40	3.9	25.01	24.44	– 2.3
South East Zone	0.0	0.0	0.0	14.93	15.04	0.7	14.99	15.40	2.7
North Central Zone	624.59	638.01	2.15	298.91	307.7	2.94	833.52	846.41	1.55
North West Zone	2102.33	2504.09	19.11	1048.64	1068.02	1.85	637.32	659.08	3.41
North East Zone	911.40	966.67	6.06	110.08	1129.87	1.78	620.10	641.03	3.38
Total	3640.02	4110.48	12.92	2510.48	2560.03	1.97	2130.94	2186.41	2.60

Table 3.13.4: Production Estimates for Millet, Cowpea and Groundnut in 2009 Rain-Fed Cropping Season (000MT) by Agro-zones

Zone	Millet			Cowpea			Groundnut		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
South West Zone	1.33	1.34	0.8	35.53	42.29	19.0	20.91	21.95	**4.97**
South East Zone	0.0	0.0	0.0	16.21	16.43	1.3	13.77	13.96	**1.4**
North Central Zone	624.59	638.02	2.15	194.58	199.60	2.58	1179.37	1206.90	**2.33**
North West Zone	2,217.03	2090.96	– 5.7	504.79	519.51	2.92	756.94	763.84	**0.91**
North East Zone	1161.18	1192.15	2.67	685.31	703.13	2.60	651.16	683.87	**5.02**
Total	4004.13	3922.47	– 2.0	1436.42	1480.96	3.1	2622.15	2690.52	2.61

Table 3.13.5: Land Area Cultivated for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season (000ha) by Agro-zones

Zone	Cassava			Cocoyam			Yam		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
South West Zone	852.99	894.56	5.0	124.06	136.38	9.9	492.77	513.80	**4.3**
South East Zone	1334.04	1369.62	2.67	207.25	215.00	3.7	866.90	890.52	**2.7**
North Central Zone	1020.96	1088.05	6.57	47.73	47.39	– 0.7	1055.72	1090.54	**3.3**
North West Zone	271.19	272.11	0.3	7.37	7.37	0.0	955.15	983.51	**3.0**
North East Zone	4.90	4.70	– 4.1	0.01	0.01	0.0	-	-	**-**
Total	3484.08	3629.04	4.16	386.42	406.15	5.11	3370.54	3478.37	3.2

Table 3.13.6: Production Estimates for Cassava, Cocoyam and Yam in 2009 Rain-Fed Cropping Season (000MT) by Agro-zones

ZONE	Cassava			Cocoyam			Yam		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
South West Zone	12676.09	13512.32	6.6	1140.79	1212.60	6.3	6602.82	6929.79	**5.0**
South East Zone	16,652.29	17,678.94	6.2	1585.93	1671.96	5,4	9650.23	9821.38	**1.8**
North Central Zone	12942.28	13510.06	4.39	267.49	273.00	2.06	15,324.83	15,818.66	**3.2**
North West Zone	2547.08	2563.53	0.6	45.44	45.89	1.0	978.76	1008.05	**3.0**
North East Zone	9.83	9.47	– 3.7	0.05	0.05	0.00	-	-	**-**
Total	44,827.57	47,274.32	5.46	3039.70	3203.5	5.39	32,556.64	33,577.88	3.14

Table 3.13.7: Land Area Cultivated for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season (000ha) by Agro-zones

Zone	Melon			Soybean			Cotton		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	**% Change**
South West Zone	91.69	98.67	7.6	4.66	5.40	15.9	Na	Na	Na
South East Zone	103.89	106.04	2.1	1.46	1.53	4.8	-	-	-
North Central Zone	51.45	50.53	– 1.8	212.32	212.78	0.22	30.34	30.80	1.5
North West Zone	Na	Na	Na	141.21	145.47	3.0	236.67	239.46	1.2
North East Zone	57.03	60.43	6.0	2.91	3.16	8.6	773.16	773.16	0.0
Total	**304.06**	**315.66**	**3.82**	**362.56**	**368.34**	**1.60**	**1040.17**	**1043.42**	**0.31**

Table 3.13.8: Production Estimates for Melon, Soybean and Cotton in 2009 Rain-Fed Cropping Season (000MT) by Agro-zone

Zone	Melon			Soybeans			Cotton		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**	**2008**	**2009**	% Change
South West Zone	43.19	49.17	13.8	5.82	5.98	2.7	Na	Na	**Na**
South East Zone	54.96	57.16	4.0	0.87	0.91	4.6	Na	Na	**Na**
North Central Zone	8.57	8.58	– 1.9	269.38	272.00	0.97	12.41	12.78	**3.0**
North West Zone	Na	Na	Na	188.87	195.96	3.8	273.50	276.57	**1.1**
North East Zone	36.85	39.78	8.0	42.51	44.69	5.1	16.90	16.90	**0.0**
Total	143.75	154.69	7.61	507.45	519.54	2.38	302.81	306.25	1.14

3.14 LIVESTOCK AND FISHERIES

Livestock

Data on livestock population and production were not available in many of the states during the APS 2009 survey. The last national census or survey for livestock took place in 1992 and data were not available on the number of commercial farmers in most of the States.

Livestock Inputs

There was no record of government intervention in livestock input supply in 2008 and 2009 for one third of the all the States (Table 3.14.1). Livestock inputs procured and distributed include livestock feeds and drugs; day-old chicks, poultry feeds, vaccines and drugs. Salt licks were supplied at subsidized rates of ₦100/blocks. Livestock inputs in Kaduna, Kano and Kogi States were procured by the Ministry of Agriculture and ADPs; under the small-holder pilot programme on diary production and by the Federal Government of Nigeria respectively. It was reported in Kwara State that vaccines procured and distributed were inadequate. Across the country, farmers expressed concerns about the havoc being wrecked by polyethylene bags and 'attachments' in ruminant livestock.

Livestock Diseases

Presented in Table 3.14.2 are the prominent diseases reported affecting livestock and poultry locally and state-wide in 26 states (70.27%). Those affecting cattle include external parasites, Foot and Mouth Disease (FMD), and Contagious Bovine Pleuroneumonia (CBPP), Tryanosomiasis and Helminthities. Major diseases of sheep and goats are PPR, Helminthities and diahorea. Others include external and internal parasites, FMD, foot rot and mange. Localized incidence outbreak of light severity of African Swine Flu (ASF) was reported in Kaduna State; but in Lagos and Ogun States it was state-wide of heavy severity.

New Castle Disease was reported as the prominent in 19 (51.35%) of the states and half of them as being state-wide in occurance. Other diseases affecting poultry are Gumboro, Coccidiosis and Fowl pox. Fear of avian influenza exist in and Oyo and Ogun; the campaigns/publicity have greatly reduced the effects in the latter. Moderate severity of avian influenza and salmonella infestation were reported in all the ADP zones in Ogun State.

Table 3.14.1: Livestock production inputs in 2008 and 2009

State	Type of Input/State	Quantity Procured		Quantity Distributed		Remarks
		2008	**2009**	**2008**	**2009**	
Adamawa	NA	NA	NA	NA	NA	NA
Bauchi	Sheep	150	NA	150	NA	Healthy
	Day old chick	1, 000	NA	1, 000	NA	Healthy
	Poultry feeds	600	NA	600	NA	Good condition and satisfactory
	Assorted equipment	9, 116	NA	9, 116	NA	
	Poultry vaccines/drugs	210	NA	210	NA	Used
Borno	NA	NA	NA	NA	NA	NA
Gombe	NA	NA	NA	NA	NA	NA
Yobe	NA	NA	NA	NA	NA	NA
Jigawa	Wheat offal	60 bags	30 bags	60 bags	30 bags	Supplied to LIBC farms
Kaduna	Work bulls	NA	63 pairs	NA	63 pairs	MOA & ADP
	Ox-Ridger	NA	17 No.	NA	17 No.	MOA
	L.A. Antidote	NA	100 bottles	NA	100 bottles	MOA
	A.L bendezole	NA	100 bottles	NA	100 bottles	MOA
Kano	Improved in-calf heifers	NA	NA	6 heads	NA	Under small holder pilot programme on diary production
	C. S. C	NA	NA	42 bags	NA	
	Wheat Offal	NA	NA	21 bags	NA	
	Mineral lick	NA	NA	6 blocks	NA	
	Dewormer	NA	NA	3 litres	NA	
Katsina	Livestock feeds	37 Tons	215Tons	37 Tons	215Tons	
	Molasses	6 drums	NA	6 drums	NA	
	Mineral block	83 blocks	300 blocks	83 blocks	300 blocks	
	Management tools	Assorted	NA	All	NA	
	Drugs/antibiotics	Assorted	NA	All	NA	
Kebbi	NA	NA	NA	NA	NA	NA
Sokoto	Salt licks	10, 000 blocks	NA	10, 000 blocks	NA	Subsidized at ₦ 100/block
Zamfara	NA	NA	NA	NA	NA	NA
Benue	NA	NA	NA	NA	NA	NA

FCT	NA	NA	NA	NA	NA	NA
Kogi	Vaccine (PPR)	-	65, 000 doses	-	6500 doses	Procured by FG
	GBPP	NA	200, 000	NA	200, 000	
	Automatic syringe	-	15	-	15	
	Disposable	-	3 cartons	-	3 cartons	
	Diluents	-	100 litres	-	100 litres	
	Cotton wool	-	4 rolls	-	4 rolls	
Kwara	PPR vaccines	1, 500	3, 750	1, 500	3, 750	Inadequate Vaccines
Nasarawa	Assorted vaccines	205,000 vials	205,000 vials	205,000 vials	205,000 vials	
Niger	NA	NA	NA	NA	NA	NA
Plateau	NA	NA	NA	NA	NA	NA
Taraba	NA	NA	NA	NA	NA	NA
Abia	Poultry feed	9.9 MT	11MT	8.8 MT	11MT	
	Day old chicks	2.2 million	2 millions	1.7 million	1.7 millions	
Ak/Ibom	NA	NA	NA	NA	NA	NA
Anambra	NA	NA	NA	NA	NA	NA
Bayelsa	NA	NA	NA	NA	NA	NA
Cross River	NA	NA	NA	NA	NA	NA
Ebonyi	NA	NA	NA	NA	NA	NA
Enugu	NA	NA	NA	NA	NA	NA
Imo	NA	NA	NA	NA	NA	NA
Rivers	NA	NA	NA	NA	NA	NA
Delta	NA	NA	NA	NA	NA	NA
Edo	NA	NA	NA	NA	NA	NA
Ekiti	NA	NA	NA	NA	NA	NA
Lagos	NA	NA	NA	NA	NA	NA
Ogun	PPR vaccine	125	160	125	140*	
Ondo	NA	NA	NA	NA	NA	NA
Osun	NA	NA	NA	NA	NA	NA
Oyo	NA	NA	NA	NA	NA	NA

Table 3.14.2: Occurrence and severity of frequently reported diseases of livestock and poultry

State	Cattle					Sheep and Goats			Pigs	Poultry			
	FMD	External Parasite	CBPP	Tryps	Helminths	PPR	Helminths	Diarrhoea	ASF	NCD	Gamboro	Coccidiosis	Fowl Pox
Adamawa	LL	LL				LL	LL						
Bauchi	LL		LL		LL	LL				LM	LH		
Borno		SL			SL		SL			LL		LL	
Gombe	LH		LM			LL				LH	LH		
Yobe	SL	SM			SH	SL	SL			SH			SM
Jigawa			LH			LH				SH	SH	SH	
Kaduna		SL		SL	SL	SL	SL		LH	SL			LM
Kano					SL	SL	SL			SL		SL	
Katsina	LH		LM			LL							
Kebbi	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sokoto	SL		SL			SL				SL	SL		SL
Zamfara	LL		LL			LL	LL			LL			LM
Benue	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FCT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kogi						SH				LL			
Kwara	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nasarawa		SL	SL	SL	SL		SL			SL		SL	
Niger	SL		SL		SM	SL	SM			SL			
Plateau		LL				LM				LH		LH	
Taraba			LL			LH				LH			
Abia		LL			LL	LL		LL		LL	LL	LL	
Akwa Ibom	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anambra						LL				LM		LL	LL
Bayelsa						SM						SM	
Cross River						LH		LH				LL	
Ebonyi	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Enugu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Imo										SL		SL	SL
Rivers						SL	SL						SL
Delta	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Edo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ekiti	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lagos						LL			SH				
Ogun	LL	LM				SL	SM		SH	SM			
Ondo						LL					LL		
Osun	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oyo						LM				LL	LH		LL

(LL = Localized and light; LM = Localized and Moderate; LH = Localized and heavy; SL = Statewide and light; SM = Statewide and moderate; SH = Statewide and heavy

Livestock Production

Eleven of the states did not provide any data on livestock production, while two-thirds had no information on number of commercial poultry farms (Table 3.14.3).

Cattle:

Feeding problem in Intensive dairy farm

The land tenure system in Nasarawa, Abia and Ondo States makes it difficult for the cattle rearers to move freely in search of fodder/grazing materials. In Adamawa State, no land has been designated for livestock until recently, hence the conflict with crop farmers. Other States experiencing conflict between cattle Fulanis and crop based farmers include Kaduna, Nasarawa, Anambra, Kogi, Kwara, Oyo, Ogun and Ekiti. But in Gombe State, crop farmers have encroached into routes of cattle. Scarcity of fodder during dry season and conventional feeds were experienced in Yobe, Plateau, Bayelsa, Imo and Lagos States. Appropriate housing is not available for cattle in Plateau and Lagos States. In Taraba State, lack of supply of supplementary feeds e. g. cotton seed and poor development of grazing reserves in the state have discouraged sedentary cattle rearing with associated benefits. Dams, functional and permanent grazing reserves for cattle in Niger and Ondo States were not also available. In Sokoto, Kogi and Kwara States supplementary feeds are scarce and expensive. Generally there were temporal and spatial variations in the quantity and quality of forages for cattle rearing.

On-farm crop-residue storage system for livestock feeding

Sheep and goats

Theft and adverse weather conditions have been reported to affect sheep and goats in Adamawa and Ogun States. They are not always controlled by owners, thus allowed to go unrestrained to feed on growing crops in Gombe and Kaduna States. Grasses and other feed materials are not available especially in the dry season for sheep and goats in Yobe, Kogi, Plateau, Taraba, and Lagos States. Drugs are not available for small ruminants in Ogun State

and those available are very expensive. Extensive management system, poor housing, low genetic potential and nonprofit orientation system of livestock keeping in Bauch, Sokoto, Plateau and Ondo States, have affected the productivity of sheep and goats.

Pigs

High cost of pig feed, scarcity of pure breeds and limited access to veterinary care are among the various challenges affecting piggery production. Farmers in Nasarawa and Imo States reported the problem of high cost of building materials for livestock pens. Heavy mortality was recorded for African swine flu in Ogun State and the outbreak has reduced the population of pigs in Lagos State. In Plateau and Ondo States, there is a lack of breeding stocks for pigs. It was reported that there are no markets for pork in Kwara.

Poultry

Poultry birds in semi- intensive system

Most of the farmers keep free range native fowls, though exotic birds are reared mainly by large scale commercial farms in the states. High cost of poultry drugs, feed and vet services were among problems facing farmers in Sokoto, Nassarawa, Kwara, Taraba, Abia, Cross Rivers, Imo, Ondo and Oyo States. In Jigawa State, capital and feed mills are not available for poultry production; but the feed mills are inadequate in Ekiti. High cost of involvement and risk were associated with poultry production in Kastina State. Other challenges include non availability of day-old chicks, lack of reputable hatchery for the production of disease free day-old chicks and unhealthy chicks in Sokoto, Kogi and Adamawa States respectively. Occasional egg glut exits in Kwara State. Most of the poultry farmers are not specialist and there are minimal or no veterinary services resulting to high death rates of poultry in all the states. Outbreak of avian influenza has reduced the population of poultry in Lagos State and there is a lack of knowledge on how to use poultry droppings.

Table 3.14.3: Livestock Population and Commercial Stock

State	Cattle		Sheep & Goats		Poultry	
	Total population	Population of commercial stock	Total population	Population of commercial stock	No. of Commercial Farms	**Average herd or Flock Size**
Adamawa	4, 709, 085	NA	4, 709, 839	NA	NA	**NA**
Borno	500, 000	50, 000	1, 100, 000	NA	NA	**NA**
Bauchi	1, 300, 000	NA	4, 900, 000	NA	47	**23, 000**
Gombe	960, 000	3, 000	1, 700, 000	6, 000	10	**34, 0000**
Yobe	NA	NA	3, 240, 127	NA	16	**NA**
Jigawa	2, 189, 645	NA	7, 161, 010	NA	6	**12, 400**
Kaduna	1,940,000	NA	3,420,000	NA	42	**12, 467**
Kano	3,575,000	NA	12,707,000	NA	NA	**NA**
Katsina	1,200,000	200, 000	4,000,000	1, 500, 000	NA	**NA**
Kebbi	NA	NA	NA	NA	NA	**NA**
Sokoto	NA	NA	NA	NA	NA	**NA**
Zamfara	NA	NA	NA	NA	NA	**NA**
Benue	NA	NA	NA	NA	NA	**NA**
FCT	NA	NA				
Kogi	365,582	NA	2, 068, 447	NA	NA	**NA**
Kwara	3, 760, 000	3,760,000	8, 525, 000	8, 525, 000	48	**223, 000**
Nasarawa	3,844,816	1,644	10, 261, 828	NA	12	**3, 791.67**
Niger	3, 500, 000	100, 000	10, 200, 000	300, 000	35	**510, 500**
Plateau	8, 214, 992	NA	11, 836, 295	NA	NA	**NA**
Taraba	4, 518, 468	1, 807, 387	2, 778, 847	2, 186, 706	NA	**NA**
Abia			6, 194, 217	4, 072, 719	5, 262	**11, 250**
Ak/Ibom	NA	NA	NA	NA	NA	**NA**
Anambra	178, 600	142, 880	1, 273, 095		1, 070	**65, 000**
Bayelsa	1, 692	1, 410	17, 759	2, 173	NA	**NA**
C/River	NA	NA	NA	NA	NA	**NA**
Ebonyi	NA	NA	NA	NA	NA	**NA**
Enugu	NA	NA	NA	NA	NA	**NA**
Imo	5, 850	5, 700	385, 986	55, 986	83	**81, 870**
Rivers	NA	NA	119, 800	5, 505	368	**NA**
Delta	NA	NA	NA	NA	NA	**NA**
Edo	NA	NA	NA	NA	NA	**NA**
Ekiti	5, 000	5, 000	215, 000	NA	15	**767**
Lagos	44, 835	NA	1, 121, 066	NA	NA	**NA**
Ondo	40, 000	26, 000	1, 154, 600	77, 000	112	**17, 800**
Ogun	1, 250, 174	1, 014, 726	5, 251, 432	5, 198, 210	13, 480	**2925**
Osun	2, 013, 152	362, 367	4, 162, 418	749, 235	NA	**NA**
Oyo	**2, 000, 000**	**2, 000, 000**	**8, 000, 000**	**2, 000, 000**	**500**	**170, 000**

FISHERIES

Data on fisheries were not available in most of the states. A likely reason could be inadequate fisheries personnel to collect the required data on the field and many of the fishing communities are not accessible due to poor access routes.

Fisheries Inputs

Only 29.73% (11) states procured and distributed fishing inputs for 2008 and 2009 (Table 3.14.4). No input was purchased by some states because fund was not released and due to lack of government interventions. Fishing gears were procured as lump sum and distributed as revolving fund in 2008 in Yobe State; no figures were given. The fishing inputs distributed in Bayelsa State were sourced by staff of Aqua-Ibom ADP (AKADP) and procured under ADP facilitation. Fishing inputs (gears) were supplied by Bauchi, Zamfara and Anambra States under the NPFS Programme.

Table 3.14.4: Fish Input Supply in 2008 and 2009

State	Type of Input	Quantity Procured by Government	Quantity Distributed by Government	Quantity Procured by Government	Quantity Distributed by Government
		2008	2009	2008	**2009**
Adamawa	NA	NA	NA	NA	**NA**
Bauchi	Fish fingerlings	20, 000	10, 000	20, 000	**10, 000**
	Fish feed	12, 000 bags	NA	7, 000 bags	**500 bags**
	Non-motorized canoe	4 canoes	NA	4 canoes	**NA**
	Fishing nets	180 bundles	NA	180 bundles	**NA**
	Fishing hooks	40 packets	NA	40 packets	**NA**
	Rope and twine	60 bundles	NA	60 bundles	**NA**
	Lead and floats	48 pieces	NA	48 pieces	**NA**
Borno	NA	NA	NA	NA	**NA**
Gombe	NA	NA	NA	NA	**NA**
Yobe	NA	NA	NA	NA	**NA**
Jigawa	NA	NA	NA	NA	**NA**
Kaduna	Reconstruction of cold room and smoking klin	NA	NA	NA	**2**
	Hatchery for one million fingerlings	NA	NA	NA	**1**
Kano	NA	NA	NA	NA	**NA**
Katsina	Trawl net	50 Meters	NA	NA	**NA**
	Floats	1, 000 pieces	NA	NA	**NA**
	Sinkers	1, 000 pieces	NA	NA	**NA**
	Pond chemicals	Assorted	NA	NA	**NA**
	Fish feeds	1, 750 Kg	NA	NA	**NA**
	Laboratory equipment	Assorted	NA	NA	**NA**
	Scoop nets	4 pieces	NA	NA	**NA**
Kebbi	NA	NA	NA	NA	**NA**
Sokoto	NA	NA	NA	NA	**NA**
Zamfara	Fishing gears	6	NA	6	**NA**
	Smoking kiln	8	NA	8	**NA**
Benue	NA	NA	NA	NA	**NA**
FCT	NA	NA	NA	NA	**NA**
Kogi	NA	NA	NA	NA	**NA**
Kwara	Hooks	120 packets	NA	120 packets	**NA**
	Outboard Engines 8HP	4	NA	4	**NA**
	Net Bales	280	NA	280	**NA**

	Twines	300	NA	300	**NA**
	Floaters	3000	NA	3000	**NA**
	Leads sheets	30 yards	NA	30 yards	**NA**
	Pelleting machines	NA	30	NA	**30**
	Fibre glass	NA	NA	NA	**NA**
	Overhead storage tanks	50	NA	50	**60**
	Bags of feeds	334	NA	334	**NA**
	Pumping machines	55	NA	55	**NA**
	Local smoking kilns	NA	20	NA	**20**
Nasarawa	NA	NA	NA	NA	**NA**
Niger	NA	NA	NA	NA	**NA**
Plateau	NA	NA	NA	NA	**NA**
Taraba	NA	NA	NA	NA	**NA**
Abia	NA	NA	NA	NA	**NA**
A/Ibom	NA	NA	NA	NA	**NA**
Anambra	Cat fish fingerling	10, 000	70, 000	10, 000	**7, 500**
	Fish feed	12, 100	9, 075	12, 100	**9, 075**
Bayelsa	Fish seed	NA	NA	50, 000	**19, 208**
	Smoking kilns	NA	NA	11	**8**
	Feed mill equipment	NA	NA	2	**2**
	Drag nets	NA	NA	15 yards	**10 yards**
	Local fish feed	NA	NA	1750 Kg	**2750 Kg**
Cross River	NA	NA	NA	NA	**NA**
Ebonyi	NA	NA	NA	NA	**NA**
Enugu	NA	NA	NA	NA	**NA**
Imo	Fingerlings	65, 000	56, 000	65, 000	**65, 000**
	Feed	12 MT	10MT	12MT	**10MT**
Rivers	NA	NA	NA	NA	**NA**
Delta	NA	NA	NA	NA	**NA**
Edo	NA	NA	NA	NA	**NA**
Ekiti	NA	NA	NA	NA	**NA**
Lagos	Yamaha 40Hp (OBE)	50	150	50	**150**
	Yamaha 30 Hp (OBE)	20	115	20	**115**
	9x2" net (200x400)	5 bundles	15 bundles	5 bundles	**15 bundles**
	4x2" net (1000x400)	5 bundles	10 bundles	5 bundles	**10 bundles**
	Suzuki 15 Hp (OBE)	5	7	5	**7**
	3x3" net	10 bundles	15 bundles	10 bundles	**15 bundles**
Ogun	Lime	76 bags (3, 800kg)	124 bags (6, 200Kg)	76 bags	**119 bags**
	Fingerling	NA	NA	63, 176, 700	**80, 046, 076**
Osun	NA	NA	NA	NA	**NA**
Oyo	**NA**	**NA**	**NA**	**NA**	**NA**

Fish Disease

Diseases reported affecting fish especially under culture systems were mainly of light severity (Table 3.14.5). Fungal infection on Clarias lazera fingerlings (Nasarawa) and broken skull were the only diseases of heavy severity. Pests and diseases control on fisheries was a major challenge for fish farmers because of inadequate fish disease experts. Inadequate diagnostic procedures, lack of drug and laboratory facilities for post-mortem; lack of knowledge on drug administration, high cost of medication due to imported products were reported in Sokoto, Jigawa, Kebbi, Zamfara, Kwara, Nasarawa, Abia, Imo, Ekiti, Lagos, and Ondo.

Other problems are low technical/ management skills of farmers and inadequate training of field (extension) staff on management of diseases in the States. There is a need for fisheries technical staff to undergo specialized trainings on disease detection, treatment and controlled procedures.

Table 3.14.5: Fisheries Pests and Diseases Situation

Fish Species	Pest/Diseases	States Where Reported	Severity	Control Measures Undertaken
Oreochromis niloticus (Tilapia)	Ecto parasites	Kastina, Kwara, Plateau, Abia, Imo, Rivers	Light	Infection from the wild waters (Plateau), disinfection and treatment (Kastina), at manageable level (Kwara)
	Endo parasites	Plateau, Edo, Abia, Rivers	Light	This is very common in earthen ponds, lakes and reservoirs.
Oreochromis niloticus and Heterotis niloticus	Gill rot/bacteria	Kwara	Light	
Heterotis niloticus	Gill rot/bacteria	Kwara	Low	At manageable level
Clarias lazera Fingerling	Fingerling infection	Plateau, Rivers	Light	More prominent in concrete tanks
	Fungal/virus	Nasarawa	Heavy	95% mortality after 5 weeks of hatching
Clarias lazera	Ecto parasites	Bauchi, Azare (Bauchi), Kastina, Imo, Ogun (state-wide)	Light	Disinfection and treatment (Kastina), controlled (Ogun)
	Endo parasites	Kogi, Imo, Rivers, Niger, Kwara, Ekiti	Light	The problem was put under control, (Kogi), controlled (Ekiti), at manageable level (Kwara)
	Bacteria	Bauchi, FCT, Kaduna, Kwara, Lagos (State wide)	Moderate	Treated with drugs in FCT, at manageable level (Kwara)
	Fungal	FCT, Rivers, Kebbi, Kaduna, Ondo	Moderate, heavy (Kaduna)	Delay in reporting of disease Treatment was not effective in Akure, poor water quality suspected
	Broken head	Anambra (state wide), Bauchi, Lagos (state wide)	Light	Malnutrition
	Broken skull	Delta	Heavy	Growth inhibited
	Mucus and bruises	Zamfara	Light	Stagnant water and dry water surfaces

HeteroClarias species	Endo parasites	Rivers	Light	Not so common in present day fish culture.
Heterobranchus species	Bacteria	Kwara	Light	
	Endo parasites	Kwara	Light	At manageable level
Gymnarchus niloticaus	Ecto parasites	Kwara	Light	At manageable level

Fisheries Production

Acquaculture rearing tanks

The fish catch data are presented in Table 3.12.6. Complete fish data were reported by 16 states (35.14%), 18 supplied none and 3 provided only for 2008. It could be because the last survey for fisheries was in 1995 as reported by Kastina State. In captured fisheries, there was a drop in fish catch for 2009 in Jigawa (-32.42%), Kogi (-60%), Plateau (-25%, due to over fishing), Ekiti (-16.67%) and Ogun (-72.85%) States compared to 2008. A likely reason could be because fish catch data provided were collected in June, July or August. But Abia (23.53%), Anambra (3.01%) and Osun (20.69%) reported an increase in fish catch. In Kwara, Plateau, Abia and Ekiti States cultured fish production increased by 33. 33%, 50.00%, 43.86% and 60.00% respectively due to increased participation.

There was a 7.54% increase in artisanal fish catch for 2009 (289, 672MT) compared to 269, 351MT in 2008 from 11 States that provided required data. Aquaculture production forecast is increase of 23.66% in 2009 from 112, 243MT in 2008 to 138, 799.MT in 2009 for the 10 states. In South-East Zone, aquaculture grew rapidly leading to a glut in Imo state and justifying a need to improve market information services that connect the various zones.

Main fish type captured from the wild are Tilapia, Clarias lazera, Labeo species, Gymnarchus niloticus, Synodontis niloticus, Mormyrus species, Bagrus baayd and Channa obscura. Clarias lazera, Oreochromis niloticus (Tilapia) and Cyprinus carpio are the major fish species cultured by fish farmers.

Challenges of aquaculture are lack of proper fish medication equipment, high cost of fish feed and fish feed ingredient/synthetic. Generally fish feed was reported by fish farmers as being expensive since they use imported feed. In Benue State water is a limiting factor to production of cultured fish in Zone C because they purchase water from tankers.

Processed fish on display at a local market

Table 3.14.6: Production Estimates for Fisheries (MT)

State	Artisanal (MT)			Aquaculture (MT)		
	2008	**2009**	**% Change**	**2008**	**2009**	**% Change**
Adamawa	NA	NA	NA	NA	NA	NA
Bauchi	6, 969.2	NA	NA	408	NA	NA
Borno	NA	NA	NA	NA	NA	NA
Gombe	NA	NA	NA	NA	NA	NA
Yobe	20, 000	20, 000	0.0	40, 000	40, 000	0.0
Jigawa	4, 108	2,776 (August 2009)	NA	NA	1, 087 (June. 2009)	NA
Kaduna	NA	NA	NA	NA	21, 031	NA
Kano	NA	NA	NA	NA	NA	NA
Kastina	NA	NA	NA	NA	NA	NA
Kebbi	NA	NA	NA	NA	NA	NA
Sokoto	23,080	NA	NA	263	NA	NA
Zamfara	NA	NA	NA	NA	NA	NA
Benue	1, 646, 448	NA	NA	11, 455, 812	NA	NA
FCT	30, 000	40, 000	33.33	33, 000	45, 000	36.36
Kogi	743.7	299.0 (3months)	NA	NA	NA	NA
Kwara	21, 000	30, 000	42.86	9, 000	12, 000	33.33
Nasarawa	7, 800	8, 000	2.56	55	68	23.64
Niger	180	180	0.0	40	45	12.50
Plateau	40, 000	30, 000	-25.0	20, 000	30, 000	50.0
Taraba	16, 000	NA	NA	600	NA	NA
Abia	17	21	23.52	57	82	43.86
Ak/Ibom	NA	NA	NA	NA	NA	NA
Anambra	79, 514.89	81, 911.64	3.01	NA	NA	NA
Bayelsa	NA	NA	NA	NA	NA	NA
Cross River	NA	NA	NA	NA	NA	NA
Ebonyi	NA	NA	NA	NA	NA	NA
Enugu	NA	NA	NA	NA	NA	NA
Imo	NA	NA	NA	NA	NA	NA
Rivers	NA	NA	NA	10	15	50.0
Delta	4, 636.316	NA	NA	26, 339.018	NA	NA
Edo	NA	NA	NA	NA	NA	NA
Ekiti	1.2	1.0	-16.67	20	32	60.0
Lagos	70, 548	79, 208	12.28	10, 060	11, 556	14.87
Ogun	48, 509, 900	13, 170, 790 (July 2009)	NA	6, 983, 504	4, 274, 246 (July 2009)	NA
Ondo	114, 064.5	NA	NA	NA	NA	NA
Osun	290	350	20. 69	0.851	0.950	11.63
Oyo	NA	NA	NA	NA	NA	NA

3.15 AGRICULTURAL DEVELOPMENT PROGRAMME EXTENSION ACTIVITIES

ADP Funding and Staffing

The capability and stable management, funding and adequate staffing are the determinant factors of any organizational success. However majority of the states' ADPs were deficient in terms of the factors mentioned above. As presented in the Table 3.15.1 below only 30% and 35% have very good/good funding and, or enough qualified Extension Agents (EAs) throughout the country. Majority of the ADPs 62% and 43% were identified to have poor funding and staffing inadequacy respectively. These factors have affected the performance of ADPs.
Serious funding and staffing problems were identified in Adamawa, Sokoto, Benue, Taraba, Ekiti, Ondo, Bayelsa, Ebonyi, Enugu and Rivers state. Nevertheless across the nation, Bauchi, Gombe, Kano, Kogi, Lagos and Osun states were reported to have excellent /good funding and staffing of fair ADPs. Due to the relevance of ADPs' extension agents for overcoming the problems of new technologies usage, youth unemployment, poverty eradication, combating HIV/AIDs, women participation in agriculture among other development issues; the challenges of ADP funding and staff must be adequately addressed.

Table 3.15.1: Status of ADP Funding, Adequacy and Quality of Staff

State	Funding	Adequacy and Quality of Staff	Remarks
Kwara	Good	inadequate	Government should sustain and improve the funding. They need to recruit more extension workers.
Niger	Weak	Adequate staffing	The state government needs to pay attention to ADP funding and sustain the extension workers farmers' ratio.
Nasarawa	Weak	Adequate staffing	Government should sustain the extension workers, farmer's ratio but pay special extension in ADP funding.
Kogi	Good	Adequate	Government should sustain and improve on funding and early release. They should also sustain and improve the quality of extension workers.
FCT	Weak	Adequate	Funding needs to be improved to enable the extension workers to perform their work effectively.
Benue	Weak	inadequate	ADP should have more sustainable arrangement for timely funding and recruit more extension agents to carry out extension activities in the state.
Plateau	Weak	Fair	Government should restore the funding of ADP and increase the number of extension workers.
Taraba	Weak	Inadequate	Government need to pay more attention to ADP funding and staffing.
Rivers	Weak	inadequate	Government needs to pay attention to ADP funding and need to recruit more extension agent to carry out extension activities
Bayelsa	NA	Inadequate	Government has to pay serious attentions to funding of ADP and employment of extension workers which are grossly in adequate in the state.
Ebonyi	Weak	Inadequate	Government has to pay serious attention to funding of ADP and employment of extension workers which is grossly in adequate in the state.
Enugu	Weak	Inadequate	Government has to pay serious attention to funding of ADP and employment of extension workers which is grossly in adequate in the state.
Cross River	NA	Fair	Government need to improve the funding of ADP.
Kaduna	Weak	Fair	They need to recruit more extension agent to meet the EA farmers' ratio.

Katsina	Fair	Inadequate	There is need to improve funding of ADP extension activities and additional extension staff to be recruited for effective extension outreach in the state.
Kano	Very good	Very adequate	The ADP is getting adequately funded, but need to be released more promptly. Adequate EAs.
Jigawa	Fair	Fair	They need to recruit more extension workers and government should provide more funding to ADP.
Ogun	Weak	Adequate	Government need to improve the funding of ADP and provide adequate logistic for staff to embark on extension activities.
Lagos	Very good	Adequate	Government should sustain and improve on funding and staff quality. ADP should have full responsibility to facilitate farmers' access to farm input.
Ekiti	Weak	Inadequate	Inadequate funding and inadequate frontline field staff demands urgent attention.
Sokoto	Weak	Inadequate	Government should adequately fund its ADP and recruits more Extension Agents
Zamfara	Weak	Fair	Government need to pay more attention to ADP funding and employ more Extension Agents
Kebbi	Weak	Fair	Inadequate funding and extension agent areas of major challenges and government should pay urgent attention
Edo	Fair	Inadequate	Government should provide enough fund to the ADP and recruit extension agents
Delta	Good	Fair	Government should employ more extension agent and improve funding
Oyo	Weak	Adequate	Government need to put more attention to ADP funding
Abia	Weak	Adequate	Government should increase the extension workers and put more attention on ADP funding
Anambra	Good	Fair	Government should sustain ADP funding and employ more extension agents
Akwa Ibom	NIL	Inadequate	There is a need for sufficient funding and staffing of ADP with quality extension agents
Imo	Good	Inadequate	Government should sustain ADP funding and employ more extension agents
Ondo	Weak	Inadequate	Government needs to pay attention to ADP funding and need to recruit more extension agent
Osun	Good	Adequate	Government should sustain ADP funding and encourage staff motivation
Adamawa	Weak	Inadequate	Funding and staffing of ADP is seriously needed
Bauchi	Good	Adequate	Government should improve on ADP funding and encourage staff motivation
Borno	Weak	Adequate	The state government needs to pay serious attention on ADP funding and employ more extension workers
Gombe	Very good	Adequate	State ADP is getting adequate funding however government should encourage staff motivation
Yobe	Good	Inadequate	Government should improve the funding of ADP and employ more extension workers.

Performance Indicators

The variables used to assess the extension performance of the ADPs include number of farm families, Subject Matter Specialists (SMS), number of extension workers (BES, BEAs, VEAs), visits to farmers' farms, number of farmer groups and extension agent (EA)-farmer ratio; extension methodologies used to disseminate crops, livestock and fisheries technologies.

Available data revealed that the ADPs coverage of more than 500,000 farm families was achieved in Kano (840895), Bayelsa (685,095), Kaduna (606,007) and Kebbi (532,362) states (Table 3.13.2). Similarly, the lowest achieved figure of below 500 families was recorded in Plateau (325, 052) and Jigawa (376) states. Other states across Nigeria achieved targets that fall between these two extremes.

The village extension agent (VEAs), form an important group among the categories of extension workers surveyed because they have regular direct contact with the farmers. Across the states in Nigeria, Kano state had the highest number of VEAs (800), while the lowest number (10) was recorded in Akwa Ibom state. However, it is important to note that while some state ADPs recorded an increase in number of VEAs in 2009 based on their 2008 data (Bauchi, Ebonyi, Lagos, Zamfara, Ondo, Nassarawa and Kwara); others recorded a drop in the number of VEAs (Edo, Niger, Taraba, Jigawa, Ekiti, Gombe, Kebbi and Plateau). This may be due to dwindling funding by the respective state governments.

Regular visits to farmers by extension agent, help in evaluating progress made by the farmers and identify problems encountered for feed back to SMSs. Yobe, Taraba, Ekiti, Cross Rivers, Akwa Ibom, Edo and Enugu States recorded low or very low visits to farmers. This can be attributed to low morale of EAs or funding constraints.

Only 3 states (Gombe, Nassarawa and Benue) achieved their targeted number of MTRMs/QTRMs within the 2009 survey period. These meetings (MTRMs/QTRMs) are important at deliberating on identified problems of farmers in the course of implementing crop and livestock technologies. Eleven states (29.7%) conducted less than 5 MTRMs/QTRMs; while 12 states (32.4%) conducted 5 and above. The remaining states had no available data.

The strategy of encouraging farmers to form groups/associations/cooperatives has become more pronounced within the ADP system from the onset of the Fadama development effort being promoted by the World Bank (Fadama Users Associations). Farmers' groups often have access to production inputs and extension service within the Fadama framework. Data on the number of farmers' group across state ADPs revealed that only 46% of states had farmers' groups. Zamfara state reported the highest number of groups (23,000); while Nasarawa reported the lowest (14 groups).

The success of any extension strategy depends to a large extent on the extension agent (EA)-farmer ratio. The recommended ratio in Nigeria stands at 1:1500 while that recommended by the World Bank is 1:500. Sixty two percent (62%) of states (23) had EA-farmer ratios above 1:1500; whereas 10.8% (4) reported ratios below 1:1500. FNTs, MTPs, SPATs and OFARs were conducted by 81% of the states in 2009 as compared to 86% in 2008.

Table 3.15.2 ADP Extension Activities

States	Year		No. of Farm Families	Zones	SMS's	No. of Ext. Workers			VEA visits	SPATs	FNTs/ MTs	MTRMs/ QTRMs	MTPs	OFARs	No. of Groups/ Coops	EA/Farmer Ratio
						BES	BEA's/ WIA	VEA's								
North Eastern States																
Borno	08	Tar	365322	3	15	62	NA	450	NA	NA	NA	NA	NA	NA	NA	1:1971
		Ach	365322	3	15	47	NA	272	NA	NA	NA	NA	NA	NA	NA	1:1971
	09	Tar	365322	3	15	62	NA	450	NA	NA	NA	NA	NA	NA	NA	1:1971
		Ach	365322	3	15	45	NA	272	NA	NA	NA	NA	NA	NA	NA	1:1971
Yobe	08	Tar	407,834	2	16	32	172	NA	4	NA	12	12	200	30	NA	1:1250
		Ach	407,830	2	16	32	16	323	1	NA	6	2	200	30	NA	1:1800
	09	Tar	707,837	2	16	32	172	NA	4	NA	12	12	200	30	NA	1:1250
		Ach	407,854	2	16	32	16	323	1	NA	2	1	200	30	NA	1:1800
Bauci	08	Tar	34,860	3	27	44	40	225	64,524	2,500	12	12	10,000	NA	74	1:1300
		Ach	34,860	3	27	44	16	225	48,260	3000	12	12	10,800	NA	73	1:1300
	09	Tar	34,860	3	27	44	40	335	84,627	3000	12	12	12,000	NA	72	1:1300
		Ach	34,860	3	27	44	16	335	42,320	3,800	7	7	12,900	NA	20	1:1300
Gombe	08	Tar	240,360	NA	7	45	45	240	NA	NA	40	4	10,000	NA	NA	1:1000
		Ach	240,360	NA	7	37	36	142	NA	NA	40	4	6,110	NA	NA	1:1350
	09	Tar	240,360	NA	7	45	45	240	NA	NA	40	4	NA	NA	NA	1:1000
		Ach	240,360	NA	7	37	36	138	NA	NA	40	4	NA	NA	NA	1:1741
Adamawa	08	Tar	344,166	4	40	46	NA	688	NA	NA	104	NA	300	NA	NA	1:500
		Ach	344,166	4	25	42	NA	135	NA	NA	NA	NA	NA	NA	NA	1:2549
	09	Tar		4	40	46	NA	688	NA	NA	104	NA	400	NA	NA	1:500
		Ach		4	25	42	NA	135	NA	NA	NA	NA	NA	NA	NA	1:25549
North Western States																
Jigawa	08	Tar	NA		NA	47	8	376	NA	NA	NA	12	NA	20	NA	1:1000
		Ach	376		NA	47	4	219	NA	NA	NA	6	NA	18	NA	1:1500
	09	Tar	NA		NA	47	8	376	NA	NA	NA	12	NA	48	NA	1:1000
		Ach	376		NA	47	4	193	NA	NA	NA	7	NA	40	NA	1:1500
Katsina	80	Tar	NA	3	NA	NA	500	NA	NA	NA	12	4	1750	NA	NA	NA
		Ach	NA	3	NA	NA	NA	NA	NA	NA	7	2	1750	NA	NA	NA
	09	Tar	NA	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	15	NA	NA
		Ach	NA	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	14	NA	NA
Sokoto	08	Tar	322133	2	8	32	27	236	NA	NA	NA	NA	NA	NA	NA	NA
		Ach	322133	2	8	30	27	72	NA	NA	NA	NA	NA	NA	NA	NA
	09	Tar	322133	2	8	32	27	236	NA	NA	NA	NA	75	NA	NA	1:1300

		Ach	322133	2	8	30	27	72	NA	NA	NA	NA	75	NA	NA	1:4013
Kebbi	08	Tar	532,362	4	20	32	32	256	870,000	NA	16	4	109	Na	NA	1:1000
		Ach	432,100	4	20	32	20	196	206,000	NA	8	2	119	Na	NA	1:1600
	09	Tar	532,362	4	20	32	32	256	870,000	NA	16	4	302	9	NA	1:1000
		Ach	532,362	4	20	32	20	191	185,000	NA	NA	1	290	3	NA	1:3,749
Zamfara	08	Tar	256,411	2	10	8	34	256	NA	NA	12	12	NA	NA	30,000	1:1000
		Ach	123,430	2	10	7	21	172	NA	NA	12	4	NA	NA	21,000	1:1490
	09	Tar	256,411	2	10	8	34	256	NA	NA	12	12	NA	NA	30,000	1:1000
		Ach	114,748	2	8	7	34	181	NA	NA	12	5	NA	NA	23,000	1:400
Kano	08	Tar	840,895	5	18	44	150	800	160,000	NA	NA	NA	22,900	105	12,500	NA
		Ach	840,895	3	18	44	150	800	160,000	NA	NA	NA	22,900	105	12,500	NA
	09	Tar	1,000,000	5	18	44	150	800	200,000	NA	NA	NA	22,900	NA	30,000	NA
		Ach	840,895	3	18	44	150	800	160,000	NA	NA	NA	22,900	NA	12,500	NA
Kaduna	08	Tar	NA	4	NA	60	132	552	31,488	4,250	12	4	4500	1500	40	1:1000
		Ach	606,007	4	24	32	49	220	16,282	3,005	12	0	3175	120	36	1:3000
	09	Tar	NA	4	NA	60	132	552	31,488	NA	12	4	NA	NA	44	1:1000
		Ach	606,007	4	24	32	49	220	13,407	NA	7	2	NA	NA	42	1:3000

North Central States																
Taraba	08	Tar	288,000	4	NA	30	30	288	8	6,650	NA	NA	2000	NA	NA	1:1000
		Ach	NA	4	NA	19	2	90	4	2,050	NA	NA	70	NA	NA	1:3,200
	09	Tar	288,000	4	8	30	30	288	10	50	NA	NA	30	NA	NA	1:1000
		Ach	NA	4	7	18	2	85	7	40	NA	NA	25	NA	NA	1:3,200
Plateau	08	Tar	NA	3	18	32	32	228	28,204	300	192	11	592	80	NA	1:1000
		Ach	325,052	3	14	30	19	146	9684	78	82	16	346	23	115	1:1000
	09	Tar	NA	3	18	32	32	228	28,204	150	24	11	580	NA	NA	1:1000
		Ach	325	3	16	32	16	141	10,516	70	16	2	54	NA	115	1:1,800
Nasarawa	08	Tar	180,433	3	18	20	26	156	17,536	NA	17	8	147	7	20	1:1,156
		Ach	180,433	3	18	20	18	121	17,536	NA	17	8	147	9	28	1:2,313
	09	Tar	180,433	3	18	26	26	156	17,536	NA	17	8	147	9	20	1:1,156
		Ach	180,433	3	18	26	22	136	17,536	NA	17	8	147	9	14	1:1,317
FCT	08	Tar	100,000	4	48	12	12	93	17,856	3,000	12	12	80	NA	NA	1:1000
		Ach	86,000	4	48	12	12	81	5,810	1,620	8	11	64	NA	NA	1:1148
	09	Tar	100,000	4	NA	12	24	93	17,856	3,000	24	12	80	NA	NA	1:1000
		Ach	96,000	4	NA	12	24	82	NA	NA	NA	NA	NA	NA	NA	1:170
Niger	08	Tar	NA	3	15	37	37	296	60,500	2,205	12	12	25	5	270	1:23,680
		Ach	508,285	3	14	37	19	296	16,401	1,676	4	7	17	2	270	1:21,280
	09	Tar	NA	3	15	37	37	296	67,551	2,989	4	12	30	5	350	1:23,680
		Ach	NA	3	8	37	23	252	17,507	295	2	2	NA	2	300	1:20,160

Kwara	08	Tar	300,000	4	24	32	23	190	20,800	NA	24	12	12	2	8,000	1:2000
		Ach	273,717	4	5	5	13	88	17,408	NA	4	1	8	2	7,500	1:4025
	09	Tar	300,000	4	20	23	23	264	28,032	NA	27	12	20	2	10,000	1:2000
		Ach	280,000	4	11	5	14	93	16,352	NA	6	3	47	2	8,000	1:3843
Kogi	08	Tar	228,964	4	20	24	24	172	19,672	2454	160	12	572	NA	NA	NA
		Ach	228,964	4	17	24	15	150	2,332	2012	112	6	422	NA	NA	1:1526
	09	Tar	228,964	4	20	24	24	172	19,670	2454	160	12	572	3	NA	NA
		Ach	228,964	4	17	24	15	150	2,320	1800	55	5	410	3	NA	1:1526
Benue	08	Tar	NA	3	15	46	46	368	19,296	2,020	26	12	1,005	50	NA	1:700
		Ach	413,159	3	15	43	13	112	16,242	1,742	26	12	774	NA	NA	1:2,630
	09	Tar	NA	3	15	46	46	368	9,648	2,020	13	6	2,500	50	NA	1:700
		Ach	413,159	3	15	43	13	112	3,690	1,051	13	6	1,051	NA	NA	1:3,640

South Western States																
Oshun	08	Tar	415,030	3	24	28	28	224	23,690	-	26	5	15	-	11,396	-
		Ach	415,030	3	19	28	22	114	23,690	-	17	3	-	-	11,396	1:3217
	09	Tar	415,030	3	24	28	22	114	15,664	-	26	5	15	-	13,404	-
		Ach	415,030	3	19	28	22	114	15,664	-	17	3	-	-	13,404	1:3097
Oyo	08	Tar	256,000	2	15	31	-	284	39,680	34	26	12	34	9	-	-
		Ach	254,984	2	8	31	-	187	16,105	17	26	8	17	6	-	1:500
	09	Tar	256,000	2	15	3	-	284	39,680	-	26	12	39	4	-	-
		Ach	254,984	2	8	3	-	177	14,616	-	16	6	27	2	-	1:500
Ekiti	08	Tar	123,000	2	15	16	16	128	806	1,689	48	12	216	11	100	1:128
		Ach	123,000	2	15	16	13	48	414	1,422	48	10	95	11	120	1:42
	09	Tar	123,000	2	15	16	16	128	7480	240	48	12	36	10	108	1:128
		Ach	123,000	2	8	16	12	46	3519	68	32	6	3	1	116	1:42
Ogun	08	Tar	320,000	4	20	20	20	158	20,370	520	12	6	671	9	349	1:200
		Ach	260,000	4	15	20	16	97	22,460	531	12	6	670	9	253	1:3711
	09	Tar	320,000	4	20	20	20	158	NA	520	8	6	820	6	349	1:200
		Ach	260,000	4	15	20	16	97	NA	388	8	3	411	4	350	1:3711
Lagos	08	Tar	342,000	3	30	16	16	128	NA	480	72	12	141	20	1950	1:1000
		Ach	146,321	3	20	14	14	63	NA	260	33	8	120	20	2033	1:1100
	09	Tar	332401	3	30	16	16	128	NA	127	72	12	107	30	2140	1:1200
		Ach	25200	3	15	16	16	79	NA	102	43	9	79	27	3250	1:1350
Edo	08	Tar	180,000	3	3	18	18	180	1700	592	26	10	12	8	1800	1:1000
		Ach	NA	3	3	18	10	44	600	445	26	4	4	3	1149	1:2100
	09	Tar	200,000	3	3	18	18	180	1700	NA	26	10	NA	7	2000	1:1000
		Ach	NA	3	3	18	10	22	NA	NA	18	NA	NA	NA	NA	1:2100

Delta	08	Tar	179,256	3	12	25	25	200	16,511	790	26	12	133	NA	NA	1:800
		Ach	179,256	3	5	24	13	115	11,570	515	24	12	125	NA	NA	1:1559
	09	Tar	179,256	3	12	25	25	200	16,511	580	26	12	160	NA	NA	1:800
		Ach	179,256	3	5	24	13	115	8,255	2,142	14	7	78	NA	NA	1:1559
Ondo	08	Tar	2500	2	3	18	36	18	33660	520	48	12	274	NA	1152	1:1000
		Ach	2500	2	3	18	21	18	33660	520	48	8	274	NA	1152	1:1500
	09	Tar	2500	2	3	18	36	54	18360	347	32	NA	180	NA	1152	1:1000
		Ach	2500	2	3	18	21	54	18360	347	32	NA	NA	NA	1152	1:1500

South Eastern States																
Anambra	08	Tar	338,721	4	25	21	21	155	7,912	1,440	26	12	17	NA	NA	1:1000
		Ach	338,721	4	25	21	10	62	6,223	1,291	24	4	14	NA	NA	1:6048
	09	Tar	212,798	4	25	21	21	155	6,260	1,337	26	12	14	NA	NA	1:1000
		Ach	212,798	4	25	21	9	62	3,062	631	17	5	8	NA	NA	1:3799
Enugu	08	Tar	246542	3	15	24	24	192	1092	118	24	12	98	4	104	1:1092
		Ach	246542	3	11	18	14	40	746	641	24	4	42	2	88	1:746
	09	Tar	246542	3	15	24	24	192	1092	118	24	12	98	4	104	1:1092
		Ach	246542	3	11	18	14	40	850	380	14	4	45	3	92	1:850
Ebonyi	08	Tar	NA	3	15	13	13	104	NA	360	26	12	10	5	NA	1:1000
		Ach	435,329	3	15	13	13	72	4224	288	26	5	16	4	50	1:6046
	09	Tar	NA	3	15	26	26	260	NA	1110	26	12	4	5	NA	1:1000
		Ach	435,329	3	15	26	26	222	650	888	16	1	20	NA	50	1:1960
C/Rivers	08	Tar	291131	3	18	22	308	NA	24	1055	12	4	480	NA	NA	NA
		Ach	291112	3	8	22	110	NA	16	NA	8	1	335	NA	NA	NA
	09	Tar	NA	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Ach	NA	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Abia	08	Tar	315,910	3	25	38	38	274	53,332	1,337	78	12	120	300	30	1:1000
		Ach	107,000	3	25	37	22	123	27,293	208	60	4	6	50	25	1:2632
	09	Tar	315,910	3	25	38	38	274	53,488	1,855	78	12	600	300	22	1:1000
		Ach	107,000	3	25	37	22	123	8,995	773	36	2	168	25	15	1:2952
Ak/Ibom	08	Tar	320	3	7	10	174	10	195	96	24	12	10	6	150	NA
		Ach	165	3	5	NA	10	10	97	64	8	4	NA	2	79	NA
	09	Tar	NA	3	7	16	174	10	NA	NA	NA	12	NA	4	NA	NA
		Ach	NA	3	5	NA	10	10	NA	NA	NA	NA	NA	NA	NA	NA
Imo	08	Tar	303,333	3	20	38	38	286	27,034	1729	26	12	1180	5	182	1:1000
		Ach	30,333	3	20	37	21	70	18,224	1416	26	12	849	2	104	1:3333
	09	Tar	303,333	3	20	38	38	286	27,034	1729	26	12	1180	5	182	1:1000
		Ach	30,333	3	20	37	37	70	10,983	1077	17	7	680	3	96	1:3333

Bayelsa	08	Tar	685,095	6	30	40	40	274	45,120	8690	26	12	400	104	1882	1:1500
		Ach	685,095	6	30	40	39	243	40,679	5888	26	6	33	28	1610	1:2820
	09	Tar	685095	6	30	40	40	274	46,272	9441	26	12	738	NA	1928	1:1500
		Ach	685095	6	30	40	39	242	24,277	4487	7	4	8	NA	1094	1:2820
Rivers	08	Tar	479,170	NA	13	48	48	282	11,856	2070	26	12	9	2	NA	1:1000
		Ach	479,170	NA	12	27	8	78	4,591	979	26	6	9	2	326	1:6389
	09	Tar	479,170	3	13	48	48	282	10,800	1528	26	12	14	2	NA	1:1000
		Ach	479,170	3	12	27	8	78	4,533	294	26	6	26	0	356	1:6655

Technologies Evaluated under OFAR, SPAT and MTPs

Most of the technologies for OFAR, SPAT and MTP were based on crop, but none on livestock and fisheries. Only Zamfara, Jigawa, Benue, Anambra, Ebonyi, Edo, Lagos, Osun, Ondo and Oyo States reported technologies in livestock and fisheries.

OFAR

The following states Borno, Sokoto, Zamfara, Taraba, Osun, Oyo, Edo, Delta, Ebonyi, Cross Rivers, Abia and Akwa-Ibom did not conduct any OFAR in 2009. Technologies disseminated under OFAR varied widely from zone to zone. However, varietal trial on maize was common to almost all the States. In the North-Eastern Zone cereal such as maize, rice, sorghum and millet were prominent in the OFAR trials. Varietal trial, spacing and fertilizer trials were the most evaluated technologies. The use of organic fertilizer and improved varieties were also evaluated in Gombe, Adamawa, Kano and Kaduna States. In the North-Western and North Central Zones, most of the states conducted trials on cereals and legumes especially cowpea and groundnut. Tuber crops such as cassava and sweet potato were also evaluated across the states. Niger State conducted trial on soil reclamation. Intercropping trials of cowpea with yam, cocoyam or sweet potato were conducted in Plateau and Nasarawa States.

Farmers groups inspect mother baby trials

Community Coalition meeting

In the South West and South East States, tubers and cereals featured prominently in the various trials conducted across the zones. Control of avian pests using netting was conducted in Ogun State. Enugu State had feeding trials for fish on cocoyam leaf meal in poly culture of

Heterobranchus niloticus and Oreochromis niloticus. Intercropping of maize with cassava, cowpea, yam or vegetables were also conducted in some States. Rodent control, weed control using agrochemicals were also common in the South West and South East zones.
Generally, there was a remarkable improvement in the number of OFAR trials conducted across the country in 2009.

SPAT

Borno, Bauchi, Gombe, Adamawa, Jigawa, Katsina, Sokoto, Kebbi, Kano, Nasarawa, Niger, Kwara, Osun, Oyo, Cross-River, Abia and Akwa-Ibom States did not establish any SPAT in 2009. Zamfara promoted small ruminants and upgrading of indigenous poultry. Taraba promoted varietal trials, fertilizer and storage trials on rice. Lagos State conducted trials on water melon, pigs and plantain, while Edo State promoted feed formulation for fish. In Anambra state artificial brooding of rabbit was of major interest. Grass-cutter domestication was promoted by Benue State. Generally, all agricultural enterprises including agro processing and WIA activities were given attention in the SPATs conducted in many States where this extension methodology was still in use.

MTP

Management Training Plots (MTPs) were not conducted in the following states Yobe, Katsina, Zamfara, Niger, Osun, Oyo, Ekiti, Anambra, Ebonyi, Cross Rivers, Abia and Akwa-Ibom States in 2009.
Throughout the country, MTP was conducted only in a few states on different varieties of crops (cereals, tubers and legumes) livestock, fisheries and land management practices. The technologies centered on varietal trials, fertilizer trial, livestock production and management, intercropping, deworming, use of herbicides as well as popularization of different agricultural products.

GENERAL

Borno, Yobe, Gombe, Nasarawa, Sokoto, Ogun, Lagos, Imo and River States recorded an improvement on their previous year records despite all odds. It is expected that adoption of technologies are being enhanced throughout the country. It is hoped that this will translate into more food for both local consumption and for exports.

Table 3.15.3: Technologies evaluated under SPAT, OFAR and MTP's

No		OFAR		SPAT		MTP	
	State	Crop/ Livestock	Technology	Crop/ Livestock	Technology	Crop/ Livestock	**Technology**
1	Borno	NA	NA	NA	NA	• Cereal/legumes	• Crop rotation • Production
2	Yobe	NA	NA	NA	NA	NA	NA
3	Bauchi	• Cereal/Legume	• Organic/ inorganic fertilizer trials	NA	NA	• Crop	• Double row Spacing • Conservation tillage • Improved seeds
		• Maize	• Striga control/ resistant trial • Varietal trials			• Citrus	• Upgrading
						• Fishery	• Fingerlings promotion
						• Agro-forestry	• Seedlings promotion
		• Cowpea/melon/ Sesame	• Varietal trials			• livestock	• Parasite control
4	Gombe	• Crop	• Effect of Auxensiona and metalen	NA	NA	• Cereals/legumes	• Improved production
		• Cereals • legumes	• Varietal improvement				
		• Maize	• Striga resistant • Organic fertilizer trial				
		• Millet	• Varietal improvement				
5	Adamawa	• Cereals	• Varietals trials • Striga resistant trial • Organic/inorganic fertilizer trial	NA	NA	• Cereals	• Spacing • Fertilizer application trial
		• Sesame	• Varietal improvement				
		• Onion	• Organic/inorganic fertilizer trial				
6	Jigawa	• Water melon	• Diff. Planting Date	NA	NA	• Crop	• Varietal trial • Raising of seedlings.
		• Rice	• Seedlings				

			transplanting			• Rice	• Milling
						• G/Nut	• Oil processing.
		• Fodder crop • Cereal/Legume	• Demonstration • Varietals trial			• Livestock/fisheries	• Poultry production/upgrading • Bee-keeping • Aquaculture
		• Crop	• Crystallizer fertilizer trials				
7	Katsina	• Maize	• Varietal trials • Striga resistant trial	NA	NA	NA	NA
		• Sorghum	• Midge resistant trial				
8	Sokoto	NA	NA	NA	NA	• Crop	• Plant population • Fertilizer application trial
9	Kebbi	• Cereal/legumes	• Farming system	NA	NA	• Crop	• Fertilizer Application • Use of improved seeds • Spacing
		• Rice	• Varietal trial				
10	Zamafara	NA	NA	NA	NA	• Cereal/legumes	• Varietal trials
						• Crop	• Use of herbicides • Use of Neem extract for pest & disease control • Soil erosion control
						• Soyabean	• Milk production
						• Livestock	• Poultry upgrading • Fodder production
11	Kano	• Cereal/legumes	• Variety trial	NA	NA	• Cereal/legumes	• Variety trial
12	Kaduna	• Soyabean	• Improved varieties	• All Crops	• Management practices	• All Crops	• **Management Practices**
		• Sweet corn	• Irrigation trial				
		• Maize/soybean	• Farming system trial				

		• Maize	• Use of pesticide (Aflotoxin)				
		• Rice	• Crystallizer fertilizer trial				
		• Cassava	• Varietal trial				
13	Taraba			• Crops	• Varietal trial • Fertilizer application trial • Chemical/ storage demonstration	• Crops	• Varietal trial • Fertilizer application trial • Chemical/storage demonstration
14	Plateau	• Cocoyam/cowpea	• Intercropped	• Cassava	• Varietal trial	• Cereals/legumes/tuber	• Varietal improvement trials
		• Cassava	• Crystallizer • Micro-nutrient (Agrolyzer)				
		• Irish potato	• Boost extra				
		• Maize • Cowpea	• Use of organic pesticides				
		• Cowpea/sweet potato	• Intercropped				
15	Nasarawa	• Rice	• Seed priming • Varietals selection	NA	NA	• Maize	• Varietal trial
						• Tuber crops	• Varietal trial
		• Sweet potatoes	• Varietal trial				
		• Cowpea/yam	• Intercropped				
		• Maize	• Mgt practice				
		• Cassava	• Varietal trial				
		• Banana	• Organic manure trial				
16	FCT	• Fluted Pumpkin • Cowpea • Groundnut	• Varietal trial	• Rice	• Varietal trial	• Rice • Cowpea • Cassava	• Varietal trials
				• Maize	• Striga tolerant		
				• Cowpea	• Varietal trials		
	Niger	• All crops	• Soil reclamation (acidity) • Liquid fertilizer	NA	NA	•	

			trial				
17	Kwara	• Vegetables	• use of organic manure • fertilizer trial	NA	NA	NA	**NA**
		• Cassava	• population density (kissing method)				
18	Kogi	• Cassava/Maize/Yam	• Organic/inorganic fertilizer trial	• Livestock/Poultry	• Vaccination NCD/PPR • Mange control • Artificial brooding (local chicks)	• Maize /rice	• **Mgt practice**
						• Sweet potato	• **Use as source of vit.**
				• Fish	• Production		
19	Benue	• Ginger	• Varietal trial	• Yam	• Minisett	• Yam	• **Minisette** • **Variety trial**
		• Cocoyam	• Varietals trial	• Sweet potato	• Variety trial	• Rice	• **Production** • **Variety trial**
				• Cocoyam	• Popularization		
		• Cowpea/cassava	• Intercrop	• Rice/Cowpea	• varietal trial	• Soyabean	• **Application of lime to soil**
		• Rice	• Varietals trial	• Grass cutter/snail	• popularization		
						• Maize	• **Production**
		• Sugar cane	• Varietal trial	• Livestock	• vaccination of small ruminant	• Cowpea IT93K-452-1	• **Application of boost extra**
		• Bambara nut	• Varietal trial				
						• Crops	• **Variety trial**
						• Cassava	• **Production** • **Varietal trial**
20	Osun	• Poultry	• Feed evaluation	• NA	• NA	• Yam	• Minisett
		• Plantain/citrus	• Varietal trial			• Cocoyam • Sweet potatoes	• Staking
		• Rice	• Improved variety	•	•	• Maize/cassava	• Chemical weed control
						• Soyabean/maize	• Varietal trial •

						• Rice	• Varietal trial • Farming system • Chemical weed control
						• Livestock	• De-worming
						• Cassava/sweet potato/okra •	• Improved variety •
						• Cocoyam	• Farming system
						• Yam	• Multiplication using Minisett
						• Cocoa	• Rehabilitation
						• Maize	• Popularization
						• Fruit	• Homestead production
						• Poultry	• Introduction of exotic breed
21	Oyo	• Rice	• Varietals trials •	NA	NA	• Yam	• Minisett
		• Yam/Cassava	• Intercrop •			• Vegetable	• Use of dry poultry manure • Use of ash as insecticides & pesticides
		• Poultry	• Comparison of growth performance with cassava meal based diet			• Cassava stem	• On-farm preservation
		• Fish	• Evaluation of growth & survival of cat fish. • Feed evaluation			• Maize	• **Close spacing**
		• Spices	• Processed from locust bean, Soybean and pigeon pea.				

22	Ekiti	• Cassava	• Use of cassava waste base organic fertilizer	• Cocoa	• Rehabilitation through fertilizer application	NA	NA
		• Rabbits	• Use of macuna seed meal based diet.	•			
		• Fish	• Partial replacement of soybean meal with castor oil-seed meal	• Livestock	• Feeding of small ruminant with treated farm waste		
				• Rice	• Varietal trial		
23	Ondo	• Plantain/pepper/maize/ cassava	• Inter-crop	• Crop	• Improved variety • Mgt practices	• Rice/maize	• Plant populatio
						• Sweet potato	• Mgt practices
		• Cassava	• Varietal trial	• Sweet potato	• Use for weed control	• Plantai	• Varietal trial
		• Yam	• Organic/inorganic fertilizer trial			• Cocoa	• Rehabilitation
				• Orchard	• Pest control		
				• Livestock	• Control of in-breeding problem	• Cassava	• Processing
						• Livestock	• Worms control
				• Fish	• Use of fibre tanks		
24	Ogun	• Crop	• Varietal trial	• Crop	• Improved variety/spacing • Mgt practice	• Cocoyam/cassava/yam	• Varietal trial • Mgt practices
		• Rice	• Pest control	• Yam	• Minisett		
				• Rice	• Varietal trial		
25	Lagos	• Yam	• Sprouting methods evaluation	• Water melon	• Fertilizer regimes	• Rice/fluted pumpkin • Cassava	• Improved mgt practice • Varietal trial
		• Cassava	• Processing	• Plantain	• Effect of pairing & hot water treatment on yield		
		• Maize	• Evaluation of maize wining diet • Use of Roxazyn-G				
		• Poultry	• Processing	• Livestock	• Feed performance evaluation		

26	Edo	• Yam	• Organic fertilizer • Varietals trial	• Crop	• Spacing • Fertilizer Application • Varietals	• Cassava/Sweet potatoes/Cocoyam/cowpea	• Production •
		• Sweet potato	• E local TIS 2532 OP1 and local varieties			• Yam	• Minisett
				• Livestock	• Feeding/ Housing		
				• Fisheries	• Feed formulation		
27	Delta	NA	NA	• Yam	• Beetle control/minisett	• Maize •	• Hybrid Production
				• Plantain/banana •	• Improved variety	• Fish	• Pond construction
				• Vegetable	• production		
				• Cassava	• improved variety	• Cowpea	• Production
				• Livestock •	• housing	• Cassava	• Planting Improved varieties
				• Fisheries	• Homestead production	• Sweet potato/Cocoyam	• Production
						• Rice	• Planting Improved varieties
						• Weed	• Chemical control
28	Anambra	• Yam/Cassava	• On-farm evaluation	NA	NA	• Yam	• Minisett
						• Cassava	• Improved variety
						• Vegetables	• Production
						• Fruit/ vegetables	• Preservation/storage
		• Achatina	• On-farm evaluation of feed.			• Snail/bee/fish	• Production
						• Rabbitary	• Introduction
						• Poultry	• Artificial breeding of local chicks.

						• Erosion control	• Using contour bunds & vertivers
29	Enugu	• Cocoyam • Sweet potatoes	• storage method evaluation. • On Farm evaluation	• Maize • Cassava/Maize/Sweet potato • Cassava/Maize/melon • Rice • Sheep/Goat/pig • Poultry • Fish • Bee keeping • Snail	• sole cropping • Intercropping • Intercropping • Upland/swamp Production • Production • Production • Production • Production • Production	NA	NA
30	Ebonyi	NA	NA	* Crop	• Improved varieties • Line planting • Fertilizer usage and application • Use of agro-chemical • Minimum/zero tillage	NA	**NA**
31	C Rivers						
32	Abia	• Sweet potato/cassava/maize • Poultry • Fish	• On Farm Eva. • On Farm Eva. • On Farm Eva.	• Cassava/Maize/Eguisi • Cassava/Maize/Telfaria • Yam/Maize/Cassava/Telfaria • Cassava/Maize/Sweet potato • Bee keeping • Sheep and goat • Rabbitary	• Intercropping • Intercropping • Intercropping • Intercropping • Hive/baiting/smoke application system • Improved housing • Use of hutches	• Cassava • Yam / • Cocoyam • Seed yam	• Cuttings multiplication • Based mixture • Multiplication

33	Ak Ibom	• Cassava/Maize/sweet potato • Poultry • Parachaua africana	• On farm evaluation • Feed evaluation • Culturing	• Cassava/maize/melon • Cassava/maize/cowpea • Cassava/yam/melon • Casava/cocoyam/maize • Yam/maize/cowpea • Snail/bee • poultry (local chicks) • Fishery	• intercropping • Intercropping • Intercropping • Intercropping • Intercropping • Production • Artificial brooding • Production • Pond production	NA	**NA**
34	Imo	NA	NA	NA	NA	NA	**NA**
35	Bayelsa	• FIsh • Yam • Sweet potato • Poultry • Snake	• On Farm Eva. • On Farm Eva. • On Farm Eva. • On Farm Eva. • Culturing	• Swamp rice • Casava/cocoyam/maize • Cassava/yam/maize • Cassava/yam/melon • Cassava/maize/cowpea • Cassava/maize/melon • Vegetable • Bee keeping/snail • Fishery • Poultry (local chicks)	• *Introduction (FARO 52) • Intercrop • Intercrop • Intercrop • Intercrop • Intercrop • Production • production • *Pond production • *Artificial brooding	• Cassava/maize/ melon • Cassava/maize/ sweet potato • Cassava/cocoyam /maize • Yam	• intercropping • intercropping • intercropping • minisett
36	Rivers	• Hybrid yam/sweet potato	• Varietal evaluation	• yam/maize/cowpea • yam/maize/melon • cassava/maize/melon • cassava/maize • plantain/cocoyam • sheep/goat • Rabbit • Livestock • fisheries • Snail	• Minisett • intercropping • intercropping • intercropping • intercropping • confirmation • Rearing • Artificial rooding • production • Farming	• yam • cassava/maize • Cassava/maize/co wpea • Cassava/maize/sw eet potato • Yam/maize	• Minisett • intercropping • intercropping • intercropping • intercropping

TRAINING NEEDS OF ADPs

ADPs indicated areas in which they need training with pre-season training ranking highest with 70%, followed by management training for administrative staff with 49%. A major need is the specialized training for subject matter specialist SMS, in areas of extension communication skills, fish farming technology, animal traction skills improvement seed production and certification. Group formation and development, short term courses and long term courses are also listed (Table 3.15.4) as training needs presented in order of priority.

Table 3:15:5 TRAINING NEEDS OF ADPs

S/No	Training Topics/Subject	No. of ADPs	%
1.	Pre-season training	26	70
2.	Management Training for administrative staff	18	50
3.	Specialized for subject matter specialist (SMS)	17	49
a.	Extension Communication skills		
b.	Fish farming technologies		
c.	Forest Management technology		
d.	Animal Traction skills improvement		
e.	Seed production and certification		
f.	Oil palm and free production training		
g.	Popularization of artificial insemination		
h.	Training on handling and administration of Livestock drugs		
	Training on research methodology		
i.	Proper maintenance of irrigation infrastructure		
j.			
4.	Group formation, development and management	15	41
5.	Short term course	12	32
6.	Long term course	7	19
7.	Data collection processing and management	7	19
8.	Post season training	7	19
9.	Livestock production and fattening techniques	5	14
10.	Orientation and refreshed course	3	8

PROBLEMS OF EXTENSION SERVICES

The most common problems of extension services reported by 64% of the ADPs is poor funding from their respective State Governments (Table 3.15.5). Fund allocation from the State Governments was grossly in adequate and often disbursed late. Low funding in addition to other factors has led to the ADPs' inability to meet their required logistic and manpower development needs. It has also resulted in the widespread problems of low EA: farmer ratio. Other problems of extension services reported by 61% of the ADPs include lack of adequate serviceable vehicles, inadequate qualified extension staff (58%), lack of incentives/motivations for extension staff (42%) and lack of inputs/working materials (36%) in the ADPs. High cost of farm inputs and lack of access road to the communities for evacuating farm produce was reported by 15% of the ADPs, while poor

supervision and lack of in-service training for extension staff was reported by 12%. Unavailability of production packages, non-commercialization of Shika brown breed of poultry, problems of feeds and adulterated livestock drugs in the market, lack of popularization of artificial insemination in livestock, lack of cottage industries at community levels for processing and storage of fruits and vegetables at commercial level and lack of affordable labour saving devices for women were also reported as problems of extension services.

Table:3:15:5: Problems of Extension Services

S/NO	PROBLEMS	% of ADPs
1.	Poor funding	**64**
2.	Lack/inadequate serviceable vehicles	**61**
3.	Inadequate qualified Extension staff	**58**
4.	Lack of incentives/motivation for Ext. Staff	**42**
5.	Lack of Inputs/Working Materials	**36**
6.	Lack of Cottage industries at Community level for processing and storage of fruits and vegetable at commercial level.	**16**
7.	Lack of ACHA dehusking machines at commercial level.	**16**
8.	High Cost of Farm Inputs	**15**
9.	Lack of access road to the communities for evacuating farm products	**15**
10.	Problem of fake and adulterated livestock drugs in the market	**14**
11.	Lack of In-service Training for ext. Staff	**12**
12.	Poor Supervision	**12**
13.	Unavailability of Production Packages	**12**
14.	Commercialization of the Shika boom breed of poultry	**12**
15.	**Popularization of artificial insemination in Livestock**	**12**

PROBLEMS NEEDING RESEARCH

A number of problems needing research were identified and presented in Table 3:16:6

Table 3.15.6 Problems Needing Research

S/No	Commodity	Problem
1.	Crops	- Development of striga resistant varieties - Pest/disease infestation on melon - Low fertilizer demanding/high yielding varieties - Fruit abortion in fruit trees - Development of herbicides application in mix-cropping and cost effective post emergence herbicides - Development of heat tolerant tomato varieties - Development of cowpea and groundnut varieties that are resistant to Aphids - Development of disease resistant cassava varieties (against tuber rot). - Standardization of combined rates of organic and inorganic fertilizer in different crops.
2.	Livestock	- Development of effective drugs and vaccines for common diseases - Development of foot and month disease resistant breeds - Genetic improvement technologies in small ruminants/poultry. - Development of low cost feeds technologies for monogastric animals. - Genetic improvement for improved milk quality and quantity - Adoptability of Friesian breeds of cattle to Local environment - Conduct of livestock census.
3.	Fisheries	- Development of low cost fish farming technologies. - Formulate affordable fish feed for fish farmers - Development of improved method of controlling hyacinth weeds - Conduct of census on fish farming/enterprises - Diseases that affect Clarias lazera in cultural environment control diseases.
4.	Agro-forestry	- Research on wild fruits for economic development - Improvement on indigenous varieties of fruit species - Development of OFAR packages on agro-forestry - Control of insect/pest on mango trees. - Domestication and improvement of some exortic tree species - Domestication of fast growing tree species to check desertification.
5.	Engineering	- Development of indigenous combined harvesters/ labour saving devices affordable to farmers.
6	Extension	- Development of an alternative agricultural extension approach (participatory) - Extension service appraisal survey - Conduct of census on extension worker, farming families and categories of farmers - Conduct of adoption rate studies for all commodities - Inadequate market information
7.	Others	Research into indigenous knowledge of production.

GENERAL PROBLEMS

General problems observed on the field include late onset of rains, late arrival of planting, materials from research Institutes/government, inadequate supply of input, high cost labour generally. Others include occurrence of natural hazards such as. flood drought and pests/diseases, inadequate and late release of funds

4.0 CONCLUSION AND RECOMMENDATIONS

In nearly all the states, the cumulative rainfall up to August in 2009 was lower than that of the same period last year (2008). The rains started between April and May in all the states within NE Zone except in Yobe State that recorded its first rains in June. There were no reported cases of flooding except in Yobe state where about four local cases were recorded. Rainfall started in March but most of the areas received their first rain in May/June. In North West and North East Zones, Katsina and Borno states received more rainfall in 2009 compared to the amount received in 2008. Floods occurred in Zamfara, Sokoto Kebbi and Kaduna States in August, 2009. The rains were established late in FCT, Niger, Kwara and Nasarawa states. In the SE and SW Zones, rain commenced between January and February. Dry spells occurred throughout the northern states and a few southern states such as Lagos, Ogun, Ekiti Oyo, Osun and in all states of the SE with varying levels that ranged between 15 and 45 days. Total amounts of rainfall were generally higher between the months of July and September in the north central zone this year than in 2008

The fertilizer supply by government agencies was grossly inadequate and was a constraint to farmers across the nation. Fertilizers came late in 2009 and were poorly distributed. Fertilizer distribution was through special committees in the states. The fertilizers from the LGAs were further subsidized but more difficult to obtain. Farmers had to make up by purchasing fertilizer from open markets where prices ranged from ₦4,500 to ₦7,000 per 50 kg bag. Fertilizer distribution by the Voucher System in Taraba and Kano States gave farmers better accesses to the commodity in 2009 than in 2008, though the consignments arrived late.

Most farmers did not have access to improved seeds hence had to use saved stocks from their previous harvests. The seed supplied by government agencies arrived late and farmers could not use them. Incidences of fake improved seeds assumed wider dimensions in 2009.

Limited procurement and distribution of seeds, cuttings and seedlings were undertaken by the ADPs of some states; while inadequate agrochemicals were reported to have been distributed by Zamfara, Kwara, Niger and Plateau states. Discussion with farmers indicated that they sources for less than actual needed quantity of planting materials and other inputs primarily from the open markets with no assurance of product quality at prices that are about one and a half times higher than the official government prices. Most states did not procure inputs for pest and disease control in crops. The use of agrochemicals is very minimal in Benue State and the South East zone.

Access to tractors was a serious problem in 2009. Lack of adequate functional tractors to meet the demand in the country re-occurred. The few tractors made available were of variable models without spare parts of which operators have limited technical skill to handle in the event of any breakdown. The high cost of diesel during the season, and frequent breakdown of tractors during operation further complicated the problem. Usually farmers preferred to patronize private tractor hiring services that readily meet their demands. The average cost of tractor hiring ranged between ₦3,200. – ₦10,000 for ploughing and ₦1,500 – ₦8,000 for both ridging and harrowing in the South West Zone but lower in the North East Zone. In the North Central Zone and North West Zone, the cost of tractor hiring ranged between ₦2,000 – ₦8,000 and ₦4,000 – ₦15,000 respectively for all

the farm operations. Between 2008 and 2009, the cost of tractor hiring for harrowing increased by about 36% in the South East and South West Zones and 9% in the North West Zone. The cost of ridging increased by 30% in the South West Zone in 2009; but in the North Central Zone and North East Zone however, there were no significant increases in the cost of tractor hiring between 2008 and 2009.

Labour costs of farm operations increased remarkably across the country. While the costs of land clearing increased slightly from ₦2,500 in 2008 to ₦2700/ha in 2009 in the north eastern states, it increased from ₦2,500 to ₦ 3, 528.60/ha in north-western states. This year, land clearing cost was as high as ₦ 7, 287/ha, ₦ 12, 666.70/ha and N 29, 857.10/ha in the north-central states, south western states and south eastern states respectively and underscores the need for improvement in access to farm machineries. On a national level, the percentage changes in mean labour costs (₦ /ha) were 10.8%, 11.5% and 15.4% for land clearing, ploughing and ridging respectively in 2009 compared to 2008.

Prices of food commodities increased substantially in 2009. A comparison of prices between January and July 2008 with January –July 2009 showed a 20% increase in the prices of both maize and millet, and11.92% for rice in the north-eastern states. However, the zonal means indicated that, there is a decrease in the prices of maize and rice by -13.58% and -4.24% respectively which probably relates to the growing investments on importation of rice. In northwestern states rice recorded an increase in price by 170% in Jigawa state, while the zonal means of north western states shows an increase of 32.71%. In north central states a similar price increase for rice was recorded by 73.1%, and 42.5% and 40% for maize and millet respectively. In the south west, the price of maize increased by 66.6%; in Imo by 42.9%; and 23.5% in Ebonyi States. The price of rice decreased by 22.76% in Enugu State, but increased by 60% in FCT and 58.6% in Ondo State. Prices of cassava tuber, gari and flour increased in 2009 throughout the northwest zone. The national average increases for these commodities were 20.29%, 16.59% and 9.2% for cassava tuber, gari and flour, respectively. Prices of yam tuber, yam flour and sweet potato increased significantly in 2009 in north central states by 23.06%, 44.76% and 36.59% respectively, while the average national increase is 16%, 12% and 19% for the same commodities.

The price of melon increased by 51.2% in north central states and Irish potato increased by 27% in the south western states; but with national average increased of 13%, 11% and 4% for melon, soybean and Irish potato respectively. Tomato price increase by over 80% in 2009 while pepperprice increased by over 300%. The national average shows 9%, 12 % and 3% increase in prices for mutton, chicken and fresh fish respectively.

Generally at the national level eggs, smoked and dry fish increased by 16.73%, 4.67% and 3.7% respectively. Other commodities increased marginally between 2% - 6%. The price increases in foodstuff over a period of one year were fair and affordable by consumers. No doubt, the stability (with slight changes in some locations) in commodity prices is as a result of the favourable rainfall experienced within the year, low pest and diseases outbreak, etc which made farmers hopeful that, there would be a bumper harvest this year. Those who hoarded grains have released most of the grains stored to the market, thereby resulting to reduction in cost of most food items. This may invariably ensure food security at the household level by spending less on food and a reduction in level of poverty incidence on the long run.

Estimates for many crops show increases while a few decreases in areas cultivated in 2009 were observed when compared with 2008 figures. Most of the increases in cultivated areas were however marginal and largely reflected on the output forecasts for 2009. Significant differences occurred in terms of changes in cultivated areas for each crop in each zone and state and ranged from 2% for

rice and millet in Katsina and Zamfara states to 54.71% for millet and 47.60% for maize in Sokoto state. Kebbi state predicted a 29.42% of land area cultivated for Sorghum in 2009 compared to that of 2008. Although the prices of cassava and cassava products (cassava-gari and cassava flour) have remained consistently high over the past one year, there is no hope that these prices will come down until the next harvesting season or beyond. Unfortunately, this trend has not yet been very much reflected in the area of cassava cultivated in 2009, especially in the south-west and south east zones of the country where increase in area cultivated was between 3 – 4.9%. It was also noted that the total land area cultivated in 2009 recorded a decrease of about 3% compared with that of last year. The increase in area of cotton cultivated over that of 2008 was just about 0.9%.

Maize production is expected to increase this year by 5.4% from 7.375 million MT in 2008 to over 7.77 million MT. The forecast for rice production is an increase of 6.11% from 3.54 million MT in 2008 to 3.76 million MT in 2009. A slight increase of 1.24% for sorghum from 5.57 million MT in 2008 to 5.64 million MT in 2009 should be anticipated. Similarly, millet output is expected to decrease by 3.6% from 3.45 million MT in 2008 to 3.33 million MT in 2009 while that of cassava may decrease slightly by 5.46% from 44.827 million MT in 2008 to 47.274 million in 2009. Enforcement of policy on incorporation of cassava into flour and promotion of its usage in bio-fuel production has the potential of boosting its production. The decrease in the forecast for millet and the slight increase for Sorghum are related to the problem of late arrival of rains and dry spells that occurred in most parts of North East and North West which affected these crops coupled with a growing interest in the cultivation of maize in the zones where early /extra-early and drought tolerant varieties exist. An increase of 3.14% in yam output from 32.56 million MT in 2008 to 33.58 million MT in 2009 is the forecast. Cocoyam is expected to increase by 5.39% from 3.04 million MT in 2008 to 3.20 million MT in 2009. Soybean and ground nut are expected to have similar margins of increase of 2.3% from 507,450MT to 519,540MT and from 2.48 million MT to 2.54 million MT in 2008 and 2009, respectively. Cowpea is expected to increase by 2.8% from1.28 million MT in 2008 to 1.31 million MT in 2009; The output trends for these crops however show sustained strong growth for maize and a marginal growth for rice over the last seven years; but there has been decline for millet and soybean. There are indications that the forecast for cowpea this year may change positively due to the extension of rainfalls into October. Melon is expected to increase by 7.61% from 143,750MT in 2008 to 154,690MT in 2009; while cotton may increase by only 1.14% from 302,810MT in 2008 to 306,250MT in 2009 suggesting that the campaign on this commodity can use innovative approaches.

Pest problems were moderate across the country although striga attacks in cereals and legumes, rice blast, bird attacks (especially quela birds invasion) in North-West, Northeast and north central. Head smut in sorghum, tuber rot in yam, fruit rot in tomato, die back in citrus, black pod in cocoa and insect attacks in cowpea were some of the key challenges farmers had to contend with that also tend to limit the output expectations for the 2009 wet season.

Several states had no data on input, pests and diseases, production on livestock and fisheries. This could be because data collection on the livestock and fisheries sub-sectors requires special attention that may be beyond what the ADPs can handle. It is technical and expensive. Despite the high potential for livestock and fish in several parts of the country, the required inputs are not available and state supports are abysmal in some states. In Kebbi state, where over 50 unemployed youths were trained in New Bussa on aquaculture and fish feed production, aquaculture was not intensified. Very limited quantities of vaccines were made available to farmers in Nasarawa and Kogi states of North -central zone. Most state governments did not provide livestock and/ fisheries input such as improved breeds, feeds, fishing gears, nets and fingerlings. In the north-central zone, only Kwara State procured and distributed fisheries input while it also established a fishery training centre for unemployed school leavers.

A state-wide incidence of Trypanosomiasis of moderate severity in Nasarawa and Niger States was reported. Major diseases that occurred during the 2009 wet season include diarrhoea and PPR; Helmithiasis that affected sheep and goats, New Castle Disease and coccidiosis in local chickens in north- -central zone states except Kogi and Niger.In terms of available records on livestock population, Kano State led with over 3 million herds of cattle; followed by Jigawa and Kaduna states, respectively in North-West. North West has high potential for livestock production especially small ruminants and poultry which most farmers integrate into their farming system. In general, conditions for rearing extensively managed animals (cattle, sheep, goats and local poultry) were favourable during the year, therefore; marginal increases in population are expected.

There was a 7.54% increase in artisanal fish catch for 2009 (289, 672MT) compared to 269, 351MT in 2008 from 11 States that provided required data. Aquaculture production forecast showed an increase of 23.66% in 2009 from 112, 243MT in 2008 to 138, 799.MT in 2009 for the 10 states. In South-East Zone, aquaculture grew rapidly leading to a glut in Imo state and justifying a need to improve market information services that connect the various zones.

The 2009 wet season agricultural performance assessment captured among several other indicators, the ADP extension activities in Nigeria. The variables used to assess the extension performance of the ADPs includes number of farm families, Subject Matter Specialists (SMS), number of extension workers (BES, BEAs, VEAs), visits to farmers' farms, extension methodologies used to disseminate crops, livestock and fisheries technologies, number of farmer groups and extension agent (EA)-farmer ratio. The number of farm families remained high across the country. Nation-wide average number of farm families per state is 502,000 with the largest being in Kano (849,895), and Kaduna (606,007) States.

Across the states in Nigeria, Kano state had the highest number of VEAs (800), while the lowest number (10) was recorded in Bayelsa state. However, it is important to note that while some state ADPs recorded an increase in number of VEAs in 2009 compared with their 2008 figures (Bauchi, Ebonyi, Lagos, Zamfara, Ondo, Nassarawa and Kwara); others recorded a drop in the number of VEAs (Edo, Niger, Taraba, Jigawa, Ekiti, Gombe, Kebbi and Plateau). This is related to dwindling funding by the respective state governments. Regular visits to farmers by extension agent helps in evaluating progress made by the farmers and equally identify problems encountered for feed back to SMSs. Yobe, Taraba, Ekiti, Cross River, Akwa Ibom, Edo and Enugu States were observed to have records of low or very low visits of EAs to farmers.

Across Nigeria, only 4 states (Gombe, Nassarawa, Benues and Imo) actually achieved stipulated MTRMs/ QTRMs targets in 2009 survey period. Eleven states (29.7%) conducted less than 5 MTRMs/QTRMs; while 12 states (32.4%) conducted 5 or more MTRMs/QTRMs. Most of the technologies under OFAR and SPAT/MTPs were crop-based, except in North Centra,l North-West, South East and South West States where attempts were made to conduct OFARs on livestock and fisheries.

An increasing interest in the formation of groups/associations/cooperatives among farmers was recorded across the country although the operations of the groups showed considerable scope for improvements. Only 46% of states made efforts to organize farmers' groups. Most of the state ADPs patronized the concept of groups and cooperatives as a strategy to improve farmers access to credits/inputs and to reduce prevailing dilemma of wide EA:Farm Family ratios across the country. A proportion of 62% of the states had EA-farmer ratios above 1:1500; whereas only 10.8% reported ratios below 1:1500. About 81% of the states conducted FNTs, MTPs, SPATs and OFARs in 2009 as compared to 86% in 2008.

Recommendations:

Overall, 2009 appears to be a good harvest year for rice, maize and cowpea but not so much for millet and sorghum.

The following recommendations are made based on data collected and observations on the field:

1. It is important as a matter of national policy, for Federal and State governments to improve and sustain funding to enable ADPs achieve reasonable standards in extension delivery in Nigeria in order to realize agricultural growth inherent in the 7-point agenda of Mr. President. To empower agricultural extension in the country in which the ADPs as well as all the other agencies involved in agricultural extension can effectively play their roles, a National Agricultural Extension and Rural Development Policy needs to be put in place.

2. A national strategic plan aimed at enhancing access to subsidized production inputs of target groups as well as improving mechanization of farm operations needs to be urgently put in place to stimulate youths' participation in agriculture. The Voucher System which has been adopted by Taraba and Kano States seemed to have some prospects for improving access to fertilizers but it should be decentralized so that each farmer could register at the LGA.

3. Farmers should have access to credits through cooperative groups before the planting season begins to enable them to purchase relevant farm inputs such as fertilizers, agro-chemicals and pay for tractor hiring services.

4. Owing to the colossal post harvest losses in many crops, renewed attention should be accorded value addition and on understanding commodity value chain in order to advance market driven agriculture. Towards this, incentives for development of agro-cottage enterprises should be designed to open new corridors for trade and employments.

5. Improve funding for research to develop appropriate technologies for mitigating the effects of climate change, multi-purpose tree species for checking erosion and desertification, and nutrient efficient crop varieties, control of pests and diseases of crops, livestock and fisheries and low cost feeds and feeding techniques for fisheries and livestock as well as labour saving devices.

6. Having correct figures on livestock population and fisheries outputs is critical to advance the development of the sub-sector. In this regard, Government needs to create a unit for livestock population census and fisheries data collection and handling.

7. The growing menace of polyethylene bags scattered across the environment remained an issue inhibiting use of refuse dumps in conservation agriculture and a serious hazard to ruminant livestock; urgent attention is required from relevant organs of government to urgently enact and enforce enabling laws for the use of bio-degradable packaging materials in the country.

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