JIGAWA STATE AGRICULTURE MEDIUM TERM SECTOR STRATEGIES (MTSS) 2025-2027



Small Scale Women Farmers Organization in Nigeria (SWOFON)

And



Centre for Social Justice (CSJ)

(Mainstreaming Social Justice in Public Life)

A Memorandum for Improvements in Agriculture Sector Budgeting

First Published in June 2024

Ву

Centre for Social Justice (CSJ)

Plot 836 Emmanuel Aguna Crescent, Off Idris Ibrahim Crescent, Jabi P.O. Box 11418, Garki, Abuja Tel: 08055070909, 08127235995

Website: www.csj-ng.org; Email: censoj@gmail.com; Blog: csj-blog.org

Facebook: Centre for Social Justice Nigeria; X: @censoj

ACKNOWLEDGEMENT

CSJ acknowledges the funding support of the International Budget Partnership (IBP) and the research contributions of Eze Onyekpere, Martins Eke, Victor Emejuiwe and Grace Ezeobi towards the production of this Publication.

TABLE OF CONTENTS

Acknowledgement	iii
Table of Contents	iv
Acronyms	٧
List of Tables	vi
Executive Summary	vii
1. Introduction	1
1.1 Background	1
1.2 Rationale for the Exercise	1
1.3 Outlining linkages between MTSS and Annual Budget	3
1.4 Identifying High Level National and International Policies and Standards	3
1.5 Structure of the Sector	5
Key Challenges of the Agriculture Sector and Laying out Goals, Objectives and targets	5
· · · · · · · · · · · · · · · · · · ·	5
	7
·	8
, , ,	8
o ,	9
3.3 Performance of the Agriculture Budget of Jigawa State	10
4. Key Agriculture Sector Achievements	10
5. MDAs Agriculture Projects/Activities that should be Sustained	11
6. Recommendations	15
7. Conclusion	20

ACRONYMS

CAADP Comprehensive Africa Agricultural Development Programme

CSA Climate Smart Agriculture
CSJ Centre for Social Justice
CSO Civil Society Organization

FMAFS Federal Ministry of Agriculture and Food Security

FRL Fiscal Responsibility Law GDP Gross Domestic Product

GHG Green House Gas

ICESCR International Covenant on Economic, Social and Cultural Rights

MDA Ministry, Department and Agency of Government

MTEF Medium Term Expenditure Framework

MTSS Medium Term Sector Strategy
NDC Nationally Determined Contribution

NDP National Development Plan
 NIMET Nigeria Meteorological Agency
 NPK Nitrogen-Phosphorous-Potassium
 SDGs Sustainable Development Goals
 SWF Smallholder Women Farmers

SWOFON Smallholder Women Farmers Organization in Nigeria

USD United States Dollars

LIST OF TABLES

Table 1:	Jigawa State Agriculture Budget and Variance from 10% Maputo Declaration
Table 2:	State Agriculture Votes Converted to USD 2020 - 2024
Table 3:	Recurrent and Capital Votes Expressed in Percentages: 2020 – 2024
Table 4:	Jigawa State Agricultural Sector Capital Budget Performance
Table 5:	Budget Line Items that Should be Sustained

EXECUTIVE SUMMARY

This memorandum is divided into 2 parts of 6 sections. The first section is the introduction which deals with the background, the rationale for the exercise and outlining linkages between the Medium-Term Sector Strategies (MTSS), Medium Term Expenditure Framework and the annual budget. It identified high level national and international policies and standards on Agriculture and concluded with the delineation of the structure of the sector in Nigeria.

Section 2 is on the key challenges of the sector and laying out goals, objectives and targets based on the high level national and international policies and standards. Section 3 reviews existing budget commitments 2020-2024 and identifies low budgetary allocation to the sector, late and partial release of appropriated funds and defines the capital recurrent expenditure mix. Section 4 is on key Agriculture sector achievements in the past decade whilst section 5 is on MDA projects and activities that should be sustained.

Section 6 which is under Part 2 is about activities and interventions proposed for the medium term. The Memorandum Makes the Following Policy Recommendations:

GOVERNANCE

- Ensure the full implementation of the Agriculture component of the Jigawa State
 Roadmap for Sustainable Development 2023 2027
- Develop gender indicators in Agriculture through a collaboration between the Ministry of Agriculture and the Ministry of Budget and Economic Planning.
- Establish Business Advisory Services to give meaning to the Agriculture value chain concept.
- Improve security service in the state through local efforts and establishment and proper funding of the State Police when the 1999 Constitution is eventually amended is imperative for enhancing Agricultural productivity

FUNDING

• Allocate 10% of the total annual national budget to the Agriculture sector in compliance with the Maputo Declaration. Where not possible, start with a minimum of 5% (being 50% of the Maputo Declaration) allocation in 2025 and progressively increase by 1% until the 10% is attained by 2030.

- Establish a Revolving Agriculture Credit Facility in the state.
- Set up a department/desk to attract resources from Development Banks, Special Agriculture Funds and Climate Finance in Agriculture as well as sensitise and empower SWF in the state on the procedures for accessing them.
- Consider the feasibility of floating Green Bonds for Agriculture

OPERATIONAL ISSUES

- Embark on soil and nutrient management, especially through the dissemination of information on the concluded soil map by the FMARD including the proper use and application of fertilisers.
- Increase fertilizer use per hectare through the promotion of organic fertilizers. Also, promote organic agriculture. The need for sustainability in our farming practices dictates that we invest more in producing organic fertitlisers and farm inputs. Beyond making the soils less acidic over the medium to long term, the process of making these fertilizers will create jobs, reduce the waste that has become a challenge to city managers as well as convert same to wealth in a win-win scenario for all.
- Dedicated extension services should be used to disseminate research knowledge, meteorological information, agro forestry practices, etc. to farmers and other value chain operators. This will involve collaboration between federal, state and local governments and inter agency collaboration.
- There is the need for the Jigawa State Ministry of Agriculture to establish links with research institutes to facilitate demand driven research or research driven by the needs of real farmers and processors.
- Tackle desertification and loss of forest cover through tree planting, access to water for irrigation, etc.
- Invest in Appropriate Locally Available Mechanization for the reduction of drudgery in farming. Incentivize the local fabrication and production of processing plants and storage facilities.
- Use resistant and genetically improved animals and crops to increase yield and production of crops, meat, milk and other related products.
- Reduction of post-harvest losses through public funding and local technology, public-private partnerships and public-public partnerships; develop cold hubs for fruits, vegetables and tubers and provide small scale processing plants.

- Organize new SWF cooperatives and strengthen existing ones. Encourage the formation of cooperatives to group and organize small holders and operators as this will improve their chances of accessing credit, farm inputs and become part of the functional formal economy.
- Begin a phased transition over the medium term (defined as three to seven years) to renewable energy and energy efficient lighting and other equipment for Agriculture, especially for small scale Agriculture in the rural areas.
- Popularize the use of resistant and genetically improved animals and crops.
- Institutionalize monitoring, reporting and verification of inclusivity, mitigation and adaptation measures and data and statistics gathering and management.

TRANSPARENCY AND ACCOUNTABILITY

- Jigawa State Ministry of Agriculture should ensure that the budget is part of the plan, policy, law and budget continuum.
- Increase the efficiency of Agriculture sector spending through greater value for money strategies. Ensure strict and efficient utilisation of the resources allocated to the sector by implementing open contracting standards as part of an open government strategy.
- The Jigawa State Ministry of Agriculture should embrace the civil society, especially SWOFON as a critical partner in achieving greater value for money in a bid to improve national Agriculture outcomes. Future preparation of the MTSS should rely on a full Sector Team including the civil society and other relevant stakeholders. The Jigawa State Ministry of Agriculture should engage CSOs for budget monitoring and tracking expenditure of borrowed sums in the sector.

PART ONE: FOR 2025 AND THE MTSS/MTEF

1. INTRODUCTION

1.1 Background

The Medium-Term Expenditure Framework (MTEF) for the period 2025 - 2027 and or the 2025 state budget is in the process of preparation by the Jigawa State Ministry of Budget and Economic Planning. When finalized, considered and endorsed by the State Executive Council, it will be transmitted to the State House of Assembly for approval.

The Agriculture Medium Term Sector Strategy (MTSS) which should be drawn from the Agriculture component of the MTEF including a focus on smallholder women farmers (SHWF) and climate smart agriculture (CSA) is expected to:

- Articulate medium-term (three years) Agriculture goals and objectives against the background of the overall goals of high level national and state Agriculture policies, international Agriculture standards and the attainment of the Sustainable Development Goals (SDGs);
- Identify and document the key programmes and projects the government plans to embark upon to achieve the State Agriculture goals and objectives;
- Cost the identified key initiatives in a clear and transparent manner;
- Phase implementation of the identified initiatives over the medium-term;
- Define the expected outcomes of the identified initiatives in clear measurable terms; and
- Link expected outcomes to the objectives and goals.

1.2 Rationale for the Exercise

Agriculture contributed 21.07% to Nigeria's real GDP in the first quarter of 2024.¹ Headline inflation stood at 33.69% with food inflation at 40.53%.² Food and non-alcoholic beverages at the divisional level contributed 17.45% to the headline inflation index.³ Agriculture productivity also plays a key role in the determination of the level of the Consumer Price Index as food inflation is the biggest contributor to overall headline inflation. It is therefore a very important sector to food security, employment generation and economic growth and diversification of the economy. Again, importation of major food items contributes to the determination of the value of the Naira as it imports currency volatilities. In 2023, Nigeria imported agricultural goods worth N2.281 trillion and exported produce worth N1.244 trillion thereby incurring a

-

¹ National Bureau of Statistics, First quarter 2024, GDP Report.

² National Bureau of Statistics, Consumer Price Index, April 2024.

³ NBS, April 2024, supra.

sectoral trade deficit of N1.037 trillion.⁴ Agriculture is therefore an important sector that deserves the attention of all stakeholders.

The population of Jigawa State is estimated at about 9million in 2024, disaggregated into 51% male and 49% female.⁵ The state has a land mass of 22,410 square kilometres. There are challenges of desertification, deforestation and soil degradation in some parts of the state. However, despite the numerous challenges that have negatively affected agricultural production over the years, the sector has continued to be the major contributor to total economic output in the State. It is also the main source of livelihood for the people with close to 85% of the population relying on it as their main source of income. While production has largely remained subsistence relying on seasonal rains, the mode of production is generally labour intensive with limited mechanization. Population growth and traditional land tenure system have been major contributors to the fragmentation of agricultural lands, which now averages 2.5Ha per farming family. This limits the extent and potentials for mechanization.⁶ There is therefore need for SWOFON to engage properly so that SHWF in Jigawa can benefit from the resources and potentials of the agriculture sector.

Official preparation of the Agriculture Sector MTSS by the Jigawa State Ministry of Agriculture provides Smallholder Women Farmers Organization in Nigeria (SWOFON) and other Civil Society Organizations (CSOs) working in the Agriculture Sector an opportunity to present memorandum articulating key inputs into the MTSS and 2025 Agriculture budget. The memorandum is focused on mainstreaming inclusivity especially the needs of small-scale women farmers, a low carbon framework for budgeting, fit and good practices, value for money, accountability for results and evidence led budgeting in the Agriculture sector whilst responding to the food and agriculture challenges and indicators affecting the majority of the population.

The effects of global warming and climate change are all around us; increasing temperature, devastating erosion, floods, soil degradation, sea level rise, etc. are all manifestations of climate change. They have impacted negatively on Agriculture and the right to food. All these are traceable to the increasing emission of carbon dioxide and other greenhouse gases (GHG) into the atmosphere. It is therefore imperative that SWOFON and partners deliberate and consolidate their inputs into a policy paper framework that will be submitted to the Jigawa State Ministry of Agriculture and other stakeholders.

By this memorandum, CSO stakeholders seek to articulate medium-term (three years) Agriculture goals and objectives for mainstreaming gender and inclusion against the background of the Jigawa State Comprehensive Development Framework (Second Edition), overall goals of high level national Agriculture and Right to Food policies, international standards on the subject and the attainment of the SDGs; identify and document the key initiatives that will be embarked upon to achieve these goals and

2

⁴ NBS Foreign Trade Reports, Foreign Trade in Goods Statistics, 2023

⁵ See Jigawa State Government website https://www.jigawastate.gov.ng/thestate5.html
https://www.jigawastate.gov.ng/thestate5.html

⁶ Jigawa State Comprehensive Development Framework (Second Edition)

objectives; phase implementation of the identified initiatives over the medium-term; define the expected outcomes of the identified initiatives in clear measurable terms; and link expected outcomes to the overall sectoral goals and objectives.

1.3 Outlining Linkages Between MTSS and Annual Budget

Fit and good practices in public finance management stipulate that annual budgets are to be derived from the MTEF. The MTEF shall be the basis for the preparation of the estimates of revenue and expenditure required to be prepared and laid before the House of Assembly. The sectoral and compositional distribution of the estimates of expenditure shall be consistent with the medium-term developmental priorities set out in the MTEF.

SWOFON and CSJ therefore seek to make inputs into the Medium-Term Developmental Priorities of the Jigawa State Government in the Agriculture Sector considering that this will form the basis for the preparation of the 2025 Agriculture budget.

1.4 Identifying High Level National and International Policies and Standards

There are so many national and international standards, laws and policies guiding Agriculture including climate-smart agriculture and the Right to Food in Nigeria. These include but are not limited to the National Development Plan 2021-2025 (NDP), Gender Policy in Agriculture, National Gender Policy, etc. These policies stated the goals of the sector within the context of overall national goals.

The NDP states its agriculture objectives to include reduction of post-harvest losses, building a sustainable food production system, increasing female participation, increasing food self-reliance through increased productivity. Some of its strategic recommendations include improving security, improving value addition across the agriculture value chain, reactivation of grain aggregation centres, off grid energy solutions, improved extension services linking research institutions with actual farmers, capacity building for women and youth in agriculture, increased livestock and aquaculture productivity, etc.

The Gender Policy in Agriculture envisions a Nigerian Agriculture driven by gender equity, equality and inclusiveness for women, people with special needs across the value chain with a goal of ensuring equal access to services, resources and programmes irrespective of gender to ensure food security and economic growth. It targets inter alia improvements in increasing resource allocation and targeting of women farmers, labour saving devices, extension services, access to markets, capacity building, strengthening women's agricultural cooperatives, access to farming inputs and supplies, access to credit, agribusiness opportunities and business advisory services. Others are collection and use of gender disaggregated information and mainstreaming gender into climate change.

Furthermore, Nigeria is a member of the United Nations and signatory to the Paris Climate Change Agreement and a plethora of international standards that mandate States Parties to be more responsive to the reduction of GHG in all fields of human

endeavor. According to Nigeria's Nationally Determined Contribution (NDC),⁷ Agriculture, Forestry and other land Use is the second largest contributor to total GHG emission, approximately 255% of national GHG emissions. The NDC states as follows:

For agriculture, Climate Smart Agriculture (CSA) is a key mitigation measure. Its aims are to sustainably increase agricultural productivity and support equitable increases in farm incomes enhancing food security and development. The sector exhibits high growth and is deemed essential for the creation of youth employment. Farmers take agro-ecological measures that increase the resilience of the farming systems, as opposed to measures that promote high external input farming, industrial meat production and large-scale industrial agriculture, which contribute to climate change. The benefits of improved practices go beyond improved yields. With improved yields come improved diets, growing productivity and reinvestment in rural communities. One example is agroforestry, where trees are mixed with crops and animals on the same land, can be another option for carbon fixing and for providing mulch material. Estimates of the benefits from agroforestry range from total (lifetime) emissions reductions of 158 million tonnes to 712 million tonnes. Another example is a reduction of methane emissions from livestock, through improved feeding and breeding.

At the regional level, Nigeria endorsed the Comprehensive African Agricultural Development Programme (CAADP), the African Union Maputo Declaration on Agriculture and Food Security 2003 and the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods⁸. Also, the SDGs No.2 supports CSA and targets inter alia: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that helps maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improves land and soil quality.⁹

Agriculture is the foundation of the right to food and freedom from hunger. Nigeria is a State Party to the International Covenant on Economic, Social and Cultural Rights (ICESCR). The ICESCR in article 11 states inter alia:

⁷ Nigeria's First Nationally Determined Contribution, 2021 Update.

4

⁸ At the Second Ordinary Assembly of the African Union in July 2003 in Maputo, African Heads of State and Government endorsed the "Maputo Declaration on Agriculture and Food Security in Africa" (Assembly/AU/Decl. 7(II)).

⁹ Other targets include: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round; By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment. Others are: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries, etc.

- (2) The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take individually and through international cooperation, the measures including specific programmes, which are needed to:
 - (a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge...and by developing and reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources.

Satisfying the right to food will not be possible without climate smart agriculture which is a reform of agrarian policies to achieve efficiency and sustainable use of natural resources. The state's duties are specifically to respect, protect and fulfill the right to food and this can only be possible if the impediments for the provision of food through farming are removed; and fit and good practices which satisfy the needs of generations adopted. As part of the minimum core obligation of the state, there is a duty to provide information, disseminate knowledge of standards and practices that will guarantee viable production, processing, storage and distribution systems of food and agricultural products.

1.5 Structure of the Sector

In terms of practical Agriculture, the sector is mainly a private sector driven initiative. The sector is divided into four sub-activities: Crop Production, Livestock, Forestry, and Fishing. Federal and State Governments provide policies, regulation, extension services, facilities and knowledge to support the sector. The local governments are the domain of the actual farming activities. At the federal level, FMARD is the lead agency with support from Ministries like the Federal Ministry of Environment and the Federal Ministry of Water Resources. The State Ministry of Agriculture leads state level interventions. The National Council on Agriculture coordinates policy activities and the Council includes membership from State Commissioners of Agriculture and the aforelisted ministries. Other relevant ministries that attend the National Council on Agriculture include the Federal Ministries of Finance, Trade and Industry. For SHWF, the Ministry of Women Affairs is also involved in facilitating their full participation in public funded interventions.

In Jigawa State, there are small scale subsistence farmers working along-side a few large-scale commercial farmers. Most of the small-scale agriculture is rain-fed. The land is mainly owned by men but to a great extent cultivated by women. The Land Use Act is the major legislation which centralizes the ownership of the land in the State Governor as a trustee for all residents of the state - who are now given or be deemed to have been given a right of occupancy for a plethora of uses.

2. KEY CHALLENGES OF THE AGRICULTURE SECTOR AND LAYING OUT GOALS, OBJECTIVES AND TARGETS BASED ON HIGH LEVEL NATIONAL AND INTERNATIONAL POLICIES AND STANDARDS

2.1 Challenges of the Jigawa Agriculture within the Context of SWF

The Jigawa State chapter of SWOFON has identified the following requests for the improvement of Agriculture. They are installation of water pumps for irrigation farming

in their local governments; allocation of grants to access labor saving equipment; training on how to make local feeds for their animals (small ruminants); labour saving smoking kiln for fish processing to be allocated in the agriculture budget; value addition training on crops produced; establish central storage and processing facilities (e.g. groundnut oil extracting machine, rice mills, etc.); construction of drainages and river channels around cluster farms in their different LGAs; establishment of demonstration farms for animal husbandry across the value chain and setting up a committee to improve soil texture and quality.

From the foregoing policy analysis and review of the SWOFON Charter of Demands, the following challenges crystallise:

- Low levels of funding not meeting the 10% Maputo/Malabo commitment.
- Inadequate mainstreaming of gender and inclusivity- from budget formulation, preparation, approval, implementation, monitoring and evaluation up to audit.
- Inadequate gender indicators in Agriculture
- Budgeting and governance framework for mainstreaming CSA has not been activated.
- Inefficient and unsustainable management of agricultural and natural resources including land, water, soil nutrients and genetic resources.
- Desertification and deforestation.
- Drudgery in farming and lack of appropriate and affordable level mechanization.
- Poor access to farm inputs and supplies such as fertilisers, seeds, seedlings, stems, etc.
- Link between research and practice is weak, occasioned by poor extension services.
- Limited activation of the agriculture value chain inadequate links between agricultural produce with value addition in manufacturing and packaging of finished goods and services.
- Absence of supportive rural (where the bulk of farming takes place) infrastructure including energy, roads, etc., to support agriculture's value chain.
- Post-harvest losses; dearth of storage and processing facilities.
- Near absence of business advisory services.
- Poor access to credit.
- Poor risk management systems and interventions
- Security challenges crop farmers and herder clashes, etc.

Other challenges undergirding the poor performance of the sector include weak supply chain management for inputs, limited human resource capacities and insufficient coordination, cohesion and accountability.

2.2 Sectoral Goals, Objectives, Targets and Strategies

The over goal is to facilitate a 2025-2027 Agriculture MTSS and 2025 Jigawa State Agriculture Budget that promotes inclusivity and climate smart agriculture. Against the background of the challenges of the sector, the following objectives and targets have emerged:

- Improve levels of funding to meet the 10% Maputo/Malabo commitment.
- Design of Agriculture budgeting and indicators framework that mainstreams gender and inclusivity.
- Activation of budgeting and governance framework for mainstreaming climate smart agriculture.
- Efficient and sustainable management of agricultural and natural resources including land, water, soil nutrients and genetic resources.
- Tackling desertification and deforestation.
- Reduction of drudgery in farming and through locally made appropriate and affordable level mechanization.
- Improvement in access to farm inputs and supplies such as fertilisers, seeds, seedlings, stems, etc.
- Enhanced linkage between research and practice through improved extension services including irrigation and dry season farming, water harvesting, soil fertility management and erosion control; improved seeds, seedlings, stems and plant varieties, planting, harvesting and storage systems, etc.
- Considering the threat of desertification and loss of forest cover, the state should consider capacity building in soilless farming growing of crops without soil should be prioritised including hydroponics, aeroponics, aquaponics.
- Knowledge creation and management for the activation of the agriculture value chain – links between agricultural produce with value addition in manufacturing and packaging of finished goods and services.
- Budgeting for improvement of business advisory services.
- Provision of supportive rural infrastructure including especially renewable energy, roads, etc., to support agriculture's value chain.
- Minimize post-harvest losses through provision of storage facilities and enabling environment for farmers to store their products.

- Creating a revolving agriculture credit facility; knowledge management, organization for access to credit from Development Banks and other national funds and resources.
- Knowledge access, evaluation and introduction of risk transfer and risk management strategies (e.g., improved seasonal and real time weather forecasts, insurance-based risk mitigation options etc.) into the agricultural sector and widespread deployment of same through communication technologies, including mobile phones.
- Improving security through the police, local security and vigilante services and community mobilization, etc.

In view of the foregoing, the overall purpose of this exercise is to mainstream gender and inclusivity, a low carbon framework for budgeting; fit and good practices, value for money, accountability for results and evidence led budgeting framework in the agriculture sector whilst responding to the food and agriculture challenges/indicators affecting the majority of the population. Furthermore, to support Nigeria's food sovereignty, the introduction of genetically modified crops must be handled with utmost care, based on empirical evidence and in line with our national aspirations.

3. REVIEW OF EXISTING BUDGET COMMITMENTS (2020 - 2024): KEY ISSUES

3.1 Low Budgetary Allocation

Table 1 shows the state of budgetary allocations in the State Ministry of Agriculture between 2020 and 2024.

Table 1: The Jigawa State Agriculture Budget and Variance from 10% Maputo Declaration

Year	Total State Budget	Total Allocation	% of	Malabo	Variance Against
	(NGN)	to Agric (NGN)	Agric	Declaration (10%)	Malabo (10%)
			Allocatio	Benchmark	Benchmark
			n	(NGN)	(NGN)
2020	124,357,000,000.00	7,120,054,000.00	5.73	12,435,700,000.00	5,315,646,000.00
2021	156,588,000,000.00	12,552,980,000.00	8.02	15,658,800,000.00	3,105,820,000.00
2022	177,795,588,000.00	9,525,000,000.00	5.36	17,779,558,800.00	8,254,558,800.00
2023	242,775,000,000.00	10,041,470,000.00	4.14	24,277,500,000.00	14,236,030,000.00
2024	298,140,000,000.00	16,618,764,000.00	5.57	29,814,000,000.00	13,195,236,000.00
Total	999,655,588,00.00	55,585,268,000.00	5.76	99,965,558,800.00	44,107,290,800.00

Source: Directorate of Budget and Economic Planning; Jigawa State Government and Authors Calculation¹⁰

From Table 1 below, Agriculture enjoyed a total five-year allocation of N55.858 billion from an overall budget vote of N999.655 billion. The annual average allocation was N11.171billion constituting an average annual percentage of 5.76%. The highest allocation to Agriculture was recorded in 2024 - \text{\text{\text{\text{N}}}16.618billion representing 5.57% of the total budget. In terms of percentages, 2021 was the highest at 8.02%. The lowest allocation was recorded in 2020 when \text{\text{\text{\text{\text{\text{\text{\text{otal}}}}} of the total budget. The Maputo Declaration figure of 10% of overall budget would have come up to N99.965 billion over the five years. The total variance from the 10% benchmark over

-

¹⁰ 2020 and 2023 budgets are the revised versions.

the 5-year period amounted to \(\frac{\text{\te\

Table 2 shows the allocation to the Agriculture sector in Jigawa State budgets between 2020 -2024 and its real value in Naira and United States Dollars. The conversion is done against the background of the fluctuating value of the Naira, inflation rate, cost of living and other macroeconomic variables.

Table 2: State Agriculture Vote Converted to USD 2020 - 2024

Year	Total Jigawa State	Agriculture Budget	Percentage	Exchange	USD Value of
	Budget		to	Rate	Agriculture
			Agriculture		Vote
2020	124,357,000,000.00	7,120,054,000.00	5.73	N 305/\$	23,344,439.34
2021	156,588,000,000.00	12,552,980,000.00	8.02	N 379/\$	33,121,319.26
2022	177,795,588,000.00	9,525,000,000.00	5.36	N 410/\$	23,231,707.32
2023	242,775,000,000.00	10,041,470,000.00	4.14	N 435/\$	23,083,839.08
2024	298,140,000,000.00	16,618,764,000.00	5.57	N 800/\$	20,773,455.00

Source: Directorate of Budget and Economic Planning; Jigawa State Government and Authors Calculation

Table 2 shows the allocation to the agriculture sector in Jigawa State for 2020 - 2024 and its real value in Naira and United States Dollars. 2021 recorded the highest percentage allocation to agriculture and the figure stood at \(\frac{1}{2}\)12,552,980,000.00. In terms of its real value in USD terms, the 2021 allocation to Agriculture which stood at \(\frac{1}{2}\)319.26 is the highest. This is followed by the 2020, 2022 and 2024 figures.

3.2 Recurrent Vs Capital Funding of the Agriculture Sector

The recurrent vs capital expenditure ratio for agriculture sector has been relatively stable over the years. Table 3 tells the story.

Table 3: Recurrent and Capital Votes Expressed in Percentages: 2020 - 2024

Year	Agriculture	Recurrent	% of	Capital	% of
	Budget	Expenditure	Recurr	Expenditure	Capit
	(NGN)	(NGN)	ent	(NGN)	al
2020	7,120,054,000.00	806,854,000.00	11.33	6,313,200,000.00	88.67
(Revised)					
2021	12,552,980,000.00	918,800,000.00	7.32	11,634,180,000.00	92.68
2022	9,525,000,000.00	971,500,000.00	10.20	8,553,500,000.00	89.80
2023	7,479,366,000.00	890,466,000.00	11.91	6,588,900,000.00	88.09
2024	16,618,764,000.00	1,220,864,000.00	7.35	15,397,900,000.00	92.65

Source: Directorate of Budget and Economic Planning; Jigawa State Government

Recurrent expenditure moved from 11:33 in 2020 to 7:35 in 2024. The 2021 and 2024 values wherein the capital expenditures were as high as 93% is preferred, and should be sustained. While a high capital expenditure is desirable, there is the need for sufficient personnel and overhead costs to run projects like extension services, demand driven research and dissemination, policy oversight and implementation, etc. This will make more resources available for projects and interventions that will address the challenges of SHWF.

3.3 Performance of the Agriculture Capital Budget of Jigawa State

Allocation of funds in the budget is usually different from the release and utilization of the funds. The revenue projection may be overly optimistic or due to some reasons, the revenues may not be realized and the managers of the economy decide on priorities different from appropriation. Table 4 shows the picture

Table 4: Jigawa State Agricultural Sector Capital Budget Performance

Year	Capital	Full year	Capital	Balance Against
	Expenditure	performance	Budget	Allocation (NGN)
	Allocation	(Q1 – Q4)	Performance	
	(NGN)		(%)	
2024	15,397,900,000.00	2,496,687,725.00*	16.2%	12,901,212,275.00
2023				
(Revised)	9,128,900,000.00	401,144,477.08	4.4%	8,727,755,522.92
2022	8,566,500,000.00	1,000,954,999.25	11.7%	7,565,545,000.75
(Revised)				

Source: Directorate of Budget and Economic Planning, Jigawa State Government¹¹

Table 4 shows that the performance of the agriculture capital budget in Jigawa State has been very poor. The figure stood at 11.7% in 2022 and 4.4% in 2023. These low percentages of budget performance cannot guarantee significant and meaningful improvements in the lot of SHWF in Jigawa State. The 2024 figure as at the end of the first quarter stood at 16.2% and is an improvement when compared to the previous years. All stakeholders in the agriculture sector of Jigawa State must ensure that this performance is improved upon in the other quarters of 2024 as well as in forthcoming years.

4. KEY AGRICULTURE SECTOR ACHIEVEMENTS

- **1. Agribusiness:** Agriculture is the mainstay of Jigawa State's economy as it contributes more than 60% of GDP and provides livelihood for close to 90% of the state's population. The sector is robust and fast growing. Recent interventions of government are helping the state to move from subsistence to commercial farming.
- **2. Crop Production:** Jigawa State is one of the largest crops producing states in Nigeria. It is Nigeria's largest producer of dates and hibiscus. The state is also the second largest producer of gum Arabic and sesame, as well as being among the top 3 rice producing States.
- 3. Livestock Production: Jigawa State, a major livestock producing region, has weather that is conducive for the rearing of animals, birds and fish thereby creating opportunities for the establishment of slaughterhouses, cold storage and transport facilities. Investors are also encouraged to venture into diary production, tannery development, animal feed mills, etc. The state has an appreciable livestock population currently estimated at 3.06 million cattle, 5.6 million sheep and 6.6 million goats. The estimated population of poultry is 15.9 million. Jigawa State also has the largest

-

¹¹ 2024 figure is for the first quarter.

livestock market in West Africa, located at Maigatari in Maigatari local government area.

5. MDAs AGRICULTURE PROJECTS/ACTIVITIES THAT SHOULD BE SUSTAINED

The below listed provisions are Agriculture projects that facilitate inclusivity and CSA and should be sustained. The listing is not an opinion on whether the projects were implemented or not.

Table 5: Budget Line Items that Should be Sustained

Jigawa State 2023 Capital Expenditure Projects				
Project Name	Administrative Code and Description			
Food and Nutrition Agric. Support &	021500100100 - Ministry of Agriculture			
Interventions	oz roco roc roc will ilotily or right culture			
Review of Agriculture policy	021500100100 - Ministry of Agriculture			
Field Crop Protection and Termite Control -	021500100100 - Ministry of Agriculture			
Control of field crop pests i.e quela birds	021300100100 - Williamy of Agriculture			
Horticultural Crops Development - horticultural	021500100100 - Ministry of Agriculture			
development covering bee-keeping prog0r2a1	021000100100 Williamstry of Agriculture			
Procurement of fertilizer for specific	021500100100 - Ministry of Agriculture			
government interventions program, extension	021000100100 Williamstry of Agriculture			
support				
Purchase of foundation and certified seeds	021500100100 - Ministry of Agriculture			
Implementation of the Value-Chain	021500100100 - Ministry of Agriculture			
Development of 3 selected crops and support	Virtually of Agriculture			
Procurement of threshers, and mini combine	021500100100 - Ministry of Agriculture			
harvester	oz roco roc roc will motify or righteditate			
Upgrading of Agric Mechanization center,	021500100100 - Ministry of Agriculture			
Hadejia	oz roco roc roc will motify or righteditate			
Installation of solar back up at 8No. Veterinary	021500100100 - Ministry of Agriculture			
Clinic				
Renovation of 3No. Veterinary Clinic at Jahun,	021500100100 - Ministry of Agriculture			
Ringim and Kafin Hausa	, ,			
Procurement of 1,800,000 doses of CBPP	021500100100 - Ministry of Agriculture			
vaccine (cattle) 1,200,000 doses of PPRV (sh	, ,			
Procurement of vaccination inputs,	021500100100 - Ministry of Agriculture			
consumables and accessories for Disease	, ,			
Control				
Conduct of vaccination exercise across the 27	021500100100 - Ministry of Agriculture			
LGA in the state				
Control and containment of sporadic livestock	021500100100 - Ministry of Agriculture			
disease outbreak for Disease Control an	-			
Livestock Investigation and Breeding Centres	021500100100 - Ministry of Agriculture			
- Direct Treasury Funded Goat breeding				
NCARES Grants Funded Goat Breeding	021500100100 - Ministry of Agriculture			
Program				
Rehabilitation of 3no. Fish farm at Kazaure,	021500100100 - Ministry of Agriculture			
Hadejia and B/kudu				
Restocking of 3no. Fish farm	021500100100 - Ministry of Agriculture			

Procurement of Fishing Gears	021500100100 - Ministry of Agriculture
Procurement of meat inspection kits,	021500100100 - Ministry of Agriculture
Reagents, Chemicals, Cleansing Materials,	
etc	
Avian Influenza Control Project - Sample	021500100100 - Ministry of Agriculture
collections, transportation, and storage & lab	, ,
Conduct of 2023 State Agric Shows -	021500100100 - Ministry of Agriculture
agricultural equipment and product exhibition	
Procurement of research equipment and	021502100100 - Jigawa State
materials	Agricultural
Problem identification in farming system	021502100100 - Jigawa State
consisting of seed production of Millet,	Agricultural Development Agency
Sesame	
Research dissemination & knowledge transfer	021502100100 - Jigawa State
on techniques of artificial insemination	Agricultural Development Agency
Research on protocol development for date	021502100100 - Jigawa State
palm and Micro & vegetative propagation	Agricultural Development Agency
Collaboration with other research centres on	021502100100 - Jigawa State
research projects, generation, dissemination	Agricultural Development Agency
Cluster farming program commercial support	021502100100 - Jigawa State
activities and other activities across a	Agricultural Development Agency
Rehabilitation of irrigation schemes;	021502100100 - Jigawa State
productivity Improvement and Value Chain	Agricultural Development Agency
develop	Agricultural Development Agency
Construction of irrigation structures in	021502100100 - Jigawa State
Community - Agricultural Transformation	Agricultural Development Agency
Support Agricultural Transformation	Agricultural Development Agency
Food & Nutrition (Agric-related) Programme	021502100100 - Jigawa State
, , ,	Agricultural Development Agency
Implementation of Sasakawa Agricultural	021502100100 - Jigawa State
Support Programme - Sasakawa Agricultural	Agricultural Development Agency
Development of pasture paddock in each	021511500100 - Farmers And
Senatorial Zone and Development of 5no.	Herdsman Board
Monitoring & Evaluation -Task Force for the	021511500100 - Farmers and
conflict resolutions	Herdsman Board
Maintenance and Provision of wind mills	021511500100 - Farmers and
across the state and additional watering	Herdsman Board
scheme	
Jigawa State 2024 Capital	Expenditure Projects
Project Name	Economic Code and Description
Continued training/research on protocol	23050108 - Capacity Building /
development for date palm, micro & macro	Human Resource Development
vegetative propagation of economic crops	·
Field plot research on crops problem	23050101 - Research & Development
identification in farming system consisting of	and
seed production of millet, sesame, rice, I	Census/Surveys
seed production of millet, sesame, rice, wheat etc. equipment and materials	Census/Surveys
wheat etc. equipment and materials	•
-	Census/Surveys 23050101 - Research & Development and Census/Surveys

Research on Animal production, genetic	23050101 - Research & Development
improvement of cattle, introduction, selection	and Census/Surveys
propagation and utilization of natural sown	·
pastures	
Provision of Solar Power Boreholes and	23020105 - Construction/Provision Of
Overhead Tanks at Birniwa Livestock	Water Facilities
Investigation Bureau, Centre Gumel	
Piloting of electronic livestock identification	23050101 - Research & Development
	and Census/Surveys
Renovation of Livestock Pen	23030112 - Rehabilitation/ Repairs -
	Agricultural Facilities
Fodder Production to research institutes	23050101 - Research & Development
	and Census/Surveys
Development and upgrading of Cattle Ranch,	23020113 - Construction/ Provision Of
Gumel	Agricultural Facilities
Purchase of Grains for Buffer Stock	23010156 - Purchase of Grains
Purchase of IT Equipment for Agricultural	23010146 - Purchase of other ICT
Planning and Information System	equipment
Development	
Capacity building at the National Council on	23050108 - Capacity Building/Human
Agriculture (NCA)	Resource Development
Provision for conducting the review of the	23050101 - Research & Development
State Agric policy	and Census/Surveys
Procurement of ICT Equipment for the	23010146 - Purchase of other ICT
Development of Digital Platform and	equipment
Licenses of Jigawa Agricultural Commodity	
Exchange	
Field crop protection earmark for the control	23040103 - Wildlife & Nature
of crop per of red birds quiler, stem borer etc.	Conservation
Procurement of Agricultural fertilizer for	23050118 - Purchase of Agricultural
government interventions program	Inputs - Seeds, Fertilizer, etc.
Renovation of Agricultural Mechanisation	23030138 - Rehabilitation/Repairs of
Workshop, Hadejia	Workshops/Laboratories
Purchase of goats under the Goat breeding	23010150 - Purchase of Livestock
and rearing programme for widows and	
others	
Avian Influenza Control Project - Sample	23050101 - Research & Development
collections, transportation, and storage &	and Census/Surveys
laboratory analysis	
Crop Rehabilitation Programme - provision is	23020144 - Development of Agriculture
for the Development of Crop Rehabilitation	
for the Purchase of Breeders and Certified	
Seeds and Dry season Wheat and Rice	
Production Programme	
Conduct training at Hadejia Mechanization	23020144 - Development of Agriculture
center with training of 100no. of youth on	
_	3
Tractor Operation and Mechanics at -N25.0	3
	23020144 - Development of Agriculture

	T
Services	
Rehabilitation of Yamidi fish farm example	23030112 - Rehabilitation/ Repairs -
stocking with fingerlings, fatilization, fencing,	Agricultural Facilities
security watchman room, sign board and	
water pumping machine	
Empowerment program of youth and women	23020144 - Development of Agriculture
through aquaculture, 4 persons each local	
government across the state	
Fertilization with animal dung-manure and	23020144 - Development of Agriculture
fencing with sign board	
Rehabilitation of surface irrigation scheme for	23030129 - Rehabilitation of Irrigation
6no. irrigation project at Abir, Damsu, Kafin-	Facilities
Gana, Jekarade and Kuda	
Provision for the conduct of 2024 State Agric	23050104 -Anniversaries/Celebrations
Shows - agricultural equipment and product	
exhibition.	
Purchase of agricultural equipment for	23010101 - Purchase/Acquisition of Land
Cluster farming program and commercial	200 TO TO THE GOOD TO TO LAND
support activities across all Local	
Governments	
Rehabilitation of irrigation schemes;	23030129 - Rehabilitation of Irrigation
productivity Improvement and Value Chain	Facilities
1.	raciiiles
development	22050400 Consoity Building/ Human
Capacity building on Food fortification, home economics and food demonstration	23050108 - Capacity Building/ Human
	Resource Development
Horticultural crop developing promotion of	23020144 - Development of Agriculture
economic trees of date palm, mango and	
cashews	00000444 D
Provision for implementation of Youth	23020144 - Development of Agriculture
Empowerment Support on agiculture	2222444 B
Implementation of APPEAL Project for the	23020144 - Development of Agriculture
Development of Crop Value Chain,	
Production & Processing of Rice, Wheat and	
Roselle	
The provision is for the development livestock	23020144 - Development of Agriculture
productivity, resilience and commercialization	
of selected value chains and to strengthen	
the State capacity to respond to an eligible	
crisis or emergency	
Provision is for the conversion of 3No.	23020105 - Construction/Provision of
Windmill in to solar pumps	Water Facilities
Task force for conflict resolutions in	23050108 - Capacity Building/Human
collaboration with NGOs, private sectors and	Resource Development
FGN	
Conflict resolution among farmers/pastoralist	23050108 - Capacity Building/Human
· ·	. ,
	Resource Development

Investments in livestock procurement, breeding centres, vaccination and purchase of goats for widows under the goat breeding and rearing programme are steps that would benefit SHWF. Production of the soil map and its dissemination will facilitate the proper management of soil and nutrients. Control of pests improves farm yield; procurement of mechanisation equipment increases productivity and reduces drudgery while investments in renewable energy (solar) reduces GHG emission and makes farming more sustainable. Irrigation structures (windmills, solar powered pumps and boreholes) provides access to water for all season farming while investments in fishing improves aquaculture productivity. Conflict resolution between farmers and herders reduces insecurity that threatens farming while electronic livestock identification will facilitate the reduction of animal rustling and theft. Review of the State Agriculture Policy provides opportunity for inputs from SWOFON and other stakeholders for mainstreaming of gender, inclusivity and CSA into the state policy framework.

However, all the foregoing provisions were gender neutral and could be appropriated by the strongest in the power equation of the state, hence the need for specificity and possible affirmative action to ensure that SHWF benefits from these provisions.

PART TWO: FOR ACTION IN THE MEDIUM TERM

Part Two is dedicated to action needed to improve budgeting for inclusivity and CSA and the right to food before and after the passage of the 2025 budget vis - in the medium term, before the end of the tenure of the current Executive and State House of Assembly. Action (in terms of bills, motions and oversight activities) is expected from the legislature and a multiplicity of action from the executive and other stakeholders. Other key actions are expected from the Jigawa State Ministry of Agriculture. However, the provisions should start from the 2025 budget of the Jigawa State Ministry of Agriculture.

6. RECOMMENDATIONS

6.1 Development of Gender Indicators in Agriculture

The Jigawa State Ministry of Agriculture and the Ministry of Budget and Economic Planning should collaborate with experts to develop gender and inclusivity specific indicators in Agriculture which should guide budgeting and planning in the sector. The indicators will show the action points for budgeting, monitoring and reporting. The proposed review of the State Agriculture Policy offers an opportunity for the development of these indicators and mainstreaming gender, inclusivity and CSA into the Agriculture policy and implementation framework.

6.2 Link between Research and Practical Agriculture

Nigeria has 15 Commodity-based Agricultural Research Institutes, 11 Federal Colleges of Agriculture, a Specialized National Agricultural Extension Institute, over 50 Faculties of Agriculture in regular Federal Universities and 3 Specialised Universities of Agriculture. There is also the Jigawa State Agricultural Research

Institute. The research findings of these institutions should translate to increased yield on the agricultural farms. There is therefore need for the Ministry of Agriculture to establish links with research institutes to facilitate demand driven research or research driven by the needs of real farmers and processors. Research findings should get across to farmers through extension services.

6.3 Extension Services

As a follow up to the linking research to real life farming, the state should enhance extension services and consider reaching out to farmers through a multiplicity of approaches. These will include physical meetings and deployment of electronic media especially radio and television, as well as through the social media, text messages, etc. The establishment of local government and community level demonstration farms is imperative. Extension services and demonstration farms provide opportunities for imparting knowledge and disseminating fit and good practices. Considering desertification, knowledge of soilless farming can be disseminated - hydroponics vis, growing plants, usually crops or medicinal plants, without soil, by using water-based mineral nutrient solutions in an artificial environment; aeroponics vis, the practice of growing plants in an air or mist environment without the use of any substrate where plant roots are suspended in the air and are misted or sprayed periodically with a nutrient solution or aerosol of nutrient solution; and aquaponics which is a food production system that couples aquaculture with hydroponics whereby the nutrient-rich aquaculture water is fed to hydroponically grown plants.¹²

6.4 Invest in Appropriate Locally Available Mechanization

The link between research and farming will be better enhanced at the level of SWF through investments in mechanization that reduce drudgery and provide new implements for farming. These will include tillers, sprayers, harvester, etc., which can be fabricated locally especially at the Innoson Motor Company in Nnewi and other local assembly plants. Instead of looking for large resources for huge tractors and harvesters, cheaper and hand driven locally fabricated and maintained equipment can fill the void. It will not only improve agriculture productivity but create jobs in their servicing and repair.

6.5 Soil and Nutrient Management

Nitrogen is a very essential nutrient for the growth of crops but too much nitrogen in the soil has side effects. When nitrogen in the soil is too much, some of it will be unabsorbed by plants and will react with air and water to produce nitrous oxide which is a GHG. Fertilizer application is supposed to take note of the amount of nitrogen and other nutrients already present in the soil. The idea of applying the same NPK fertilizer all over the state is unacceptable. Fortunately, the FMAFS has done a soil map for Nigeria while the state is also investing in soil map production research. The information contained in this soil map is very essential to the reduction of GHG emission. However, Nigerians are not aware of the fact that there is a soil map and its

-

¹² See Wikipedia - the open encyclopedia.

contents. The Jigawa State Ministry of Agriculture should liaise with federal agencies and disseminate the information in the soil map to farmers in the state who are supposed to be the ultimate beneficiaries of the information. Also, fertilizer distribution by the state government should begin to take note of the content of the soil map for a particular area. Furthermore, the state should increase fertilizer use per hectare through the promotion of organic fertilizers. The need for sustainability in farming practices indicates that the state should invest more in producing organic fertilisers and farm inputs. Beyond making the soils less acidic over the medium to long term, the process of making these fertilizers will create jobs, reduce the waste that has become a challenge to city managers as well as convert same to wealth in a win-win scenario for all.

6.6 Tackle Desertification and Loss of Forest Cover

With the encroaching desert and loss of forest cover, the Ministry of Agriculture can collaborate with state MDAs on Environment and start a strategic tree planting campaign anchored on women and community participation. Communities, women, youths, etc., can adopt existing trees and plant new ones to ensure their survival and get tokens of appreciation like scholarships for children, access to medicare, seeds and seedlings and other farm inputs as benefits for participating in the tree planting and survival exercise. Collaboration with federal MDAs like the Great Green walls programme is also imperative for achievement of results in combatting desertification.

6.7 Improve Funding and Embrace the Special Windows for Agriculture Financing

At an average of 5.76% over the last five years, budgetary funding for Agriculture is very low. This needs to be increased starting from a minimum of 50% of the Maputo Declaration, vis 5% of the overall budget and graduating in the medium term to 10% of the budget. Furthermore, there is the need for greater budget credibility to ensure that not less than 95% of appropriated funds are released. The special windows for funding agriculture should be reviewed and strategically engaged. The Ministry of Agriculture should consider the establishment of a Revolving Agriculture Credit Facility. It should set up a desk to attract resources from Development Banks and Special Agriculture Funds and sensitise and empower SWF in the state of the procedures for accessing them. The state should support innovative financing options for farmers and other players across the agriculture value chain such as collaborating with financial partners to make available low interest loans to small and medium-scale farmers. The special windows will include the special climate change financing mechanisms.¹³

6.8 The Need for Cooperatives

Considering the need for collaterals and formalization of processes in access to credit, beyond SWOFON, rural SHWF need to be organized into cooperatives and registered with the appropriate legal authorities. This will facilitate their processing of loans, access to inputs and as a fulcrum for getting CSA extension services. Cooperatives of small-scale processors, storage providers and other operatives on the value chain can

¹³ See Financing Options for Climate Change Interventions, Centre for Social Justice, 2016.

also be formed for ease of access to financial and technical support for inclusivity and CSA. Land reform is also imperative for rural lands to become credit worthy as collaterals for accessing loans.

6.9 Reduction of Post-Harvest Losses

Inadequate storage and processing facilities means that huge amounts of the agricultural produce harvested will be lost. Investing in storage facilities means that there will be an increase in productivity and sustainability in supply. Losing harvested crops due to poor storage facilities means that no utility was provided by the crops despite all the GHGs emitted in the process of production. If the lost utility will have to be replaced, more GHGs will have to be emitted through another agricultural production cycle. Consequently, improving agricultural storage facilities will not just make more produce available but will also reduce the GHGs that would have been emitted. However, the major challenge here will be the huge capital cost of storage facilities that will be located in the farm as well as the cost of transportation infrastructure that will be needed. The challenge of financing these facilities and infrastructure is massive. Public Private Partnerships should be used for reduction of post-harvest losses. This will include developing cold hubs for fruits, vegetables and tubers and small-scale processing plants.

6.10 Renewable Energy and Agriculture Establishment Energy Access

The availability of energy in rural farm settlements is usually one of the key challenges militating against storage and preservation of farm products. Renewable energy is also needed for pumping water and irrigation is arid zones like Jigawa. It is imperative for agriculture to begin the transition to renewable energy and energy efficiency. It is admitted that the initial sunk in cost of renewables is high. But a phased transition over the medium term (defined as three to seven years) to renewable energy and energy efficient lighting and other equipment is imperative. In the long term, this will reduce the cost of providing electricity and make same accessible at a sustainable cost. The financing windows can work on this theme for groups of farmers organized in cooperatives. The state may consider issuing Green Bonds for renewable energy mainstreaming in Agriculture. The reporting of the project implementation and use must show energy savings, GHG reductions, renewable energy production, etc.

6.11 Using Resistant and Genetically Improved Animals and Crops

Heat and extreme weather conditions have a very negative impact on crop and animal yield. Pest and diseases also greatly reduce agricultural yield. The effect of this is the reduced crops, meat, milk, etc. which will be provided despite the GHGs that have been emitted during the agricultural production process. Consequently, improved crops and animal varieties should be used for agricultural production. These improved varieties can withstand extreme temperatures and other harsh environmental conditions. Consequently, their yield will be more when compared to the less resistant crops and animal varieties. This means that the associated emission of GHGs needed to produce them will be reduced. This is not a licence for the introduction of genetically modified crops and animals.

6.12 Business Advisory Services

The State should establish Business Advisory Services to give meaning to the Agriculture value chain concept. Business Advisory Services will untie and disseminate the business opportunities along the different animal and crops chains and thereby make it possible for SWF to take advantage of investment opportunities. When Business Advisory Services is combined with innovative financing mechanism, productivity and value addition will be enhanced.

6.13 Risk Management

Collaboration between MDAs will also be imperative. For instance, the Nigerian Meteorological Agency (NIMET) and weather stations will need to give state level farmers sensitive information through the mass media including radio and mobile phones on weather and climate issues that affect agriculture. Furthermore, Jigawa State Ministry of Agriculture should embrace and provide practical information to SWF on the services of the Nigeria Agricultural Insurance Corporation which provides insurance cover for crops, livestock and related agriculture transactions at fairly cheap premiums. These can be part of knowledge and risk management functions of extension department of the Jigawa State Ministry of Agriculture.

6.14 Invest in Agroforestry

Practicing agroforestry means that trees will be included in agricultural and farming systems. Trees provide carbon sinks that go a long way to reduce the carbon in the atmosphere. Tree planting is a very potent strategy to actualize low-carbon development. Tree planting improves productivity as it helps to improve water retention in the soil. Including tree planting in agricultural systems provides an opportunity for crop diversification which will improve the income of the farmer. The trees can also be perennial trees which have economic value. Furthermore, the trees which have been included in agricultural systems will provide shade for farm animals during hot weather. However, the issue of capital-intensive nature of agroforestry must be addressed. Socio-cultural change on farming techniques as well as knowledge transfer issues must also be taken seriously.

6.15 Measurement, Monitoring, Reporting and Verification

The Ministry of Agriculture should provide resources for monitoring, reporting and verification of the challenges, achievements and investments in the sector including mainstreaming of inclusivity, climate change mitigation and adaptation measures. This will close data gaps which frustrates evidence led planning for inclusivity and CSA. Poor measurement, reporting, and verification will deny the state the opportunity of course correction on the path of inclusivity and CSA.

6.16 The Continuum: Policy, Plan, Budget Cycle

Previous and current experience in the implementation of national plans reveals a lot of disarticulations. It is recommended that Agriculture budgets should be backed by a clear MTSS which is linked to high level national and international standards; fully costed and progressively allocates more resources to Agriculture based on increased availability of resources. There should be an inseparable link between policy, planning,

budgeting, performance, monitoring and evaluation continuum. This continuum should be reflected in the Agriculture sector specific budget template to be devised by collaboration between the executive and legislature. The legislature should insist on the establishment of the link between policies and appropriation during the consideration of the budget. Clarity of the budget template will dictate that projects are clearly and properly described in the budget and repetition of budget heads and items should be avoided.

6.17 Formation of Sector Teams for Future Budget Planning

The executive is enjoined to collaborate with the stakeholders in civil society, farmers, cooperatives, professional associations, organized labour, the academia, etc. to ensure that the preparation of Agriculture MTSS is done by a team that represents all stakeholders including the MDA and its parastatals. This will guarantee comprehensiveness of future budgets and the fact the budget votes will target programme results and goals of the sector.

6.18 Adopt Best Practices in Public Procurement

Good and fit procurement practices should be adopted by the Ministry of Agriculture; with a standard price database to remove price differentials for the same projects, programmes and activities and to enhance value for money in Agriculture operations. Adoption of open procurement and contracting should be encouraged through legislative oversight.

6.19 Improve Security

Improving security service in the state through local efforts and establishment and proper funding of the State Police when the 1999 Constitution is eventually amended is imperative for enhancing Agricultural productivity.

7. CONCLUSION

Jigawa State has tremendous opportunities to improve Agricultural productivity by activating and tapping the energy of all citizens available and willing to engage in farming. This can be done through deliberate and targeted steps for inclusivity and investment in CSA, renewable energy, using modern techniques disseminated through extension services whilst the research agenda of research institutes becomes demand driven through engagements between farmers and researchers.



ABOUT SWOFON

Small Scale Women Farmers Organization in Nigeria (SWOFON) is a coalition of Women Farmers Associations and Groups across Nigeria. This coalition exists with the goal of advocating for and supporting women farmers especially those in rural areas to spur rural village economic development, increase food production through capacity building of smallholder women farmers to demand for their rights and privileges from duty bearers while serving as a vocal and visible pressure group on behalf small holder women farmers in Nigeria.

SWOFON organizes and empowers women farmers' association and groups to track and engage duty bearers around agricultural expenditure and investments. We are poised to build a collective voice for all smallholder women farmers associations to express their needs to policymakers and other development stakeholders. SWOFON also engages the government directly to further improve existing agricultural policies to support women smallholder farmers.

ABOUT CENTRE FOR SOCIAL JUSTICE



Centre for Social Justice Limited by Guarantee (CSJ) is a non-governmental, non-profit, non-partisan organization established to introduce professionalism in civil society work and to deepen economic, social and political change.

Vision: A Nigeria where social justice informs public decision making and guarantees respect of human right fundamental freedoms for all.

Mission: To be a principal catalyst in mainstreaming social justice in public life through policy engagement and interventions that bring about economic, political and social reforms, rights enhancement and sustainable livelihoods.