



**BRITISH AMERICAN
TOBACCO NIGERIA
FOUNDATION**

AGRICULTURAL POLICES AND THE NIGERIAN SMALLHOLDER FARMERS

**A draft report by the
British American Tobacco Nigeria Foundation's
Executive Working Group on Key Issues
Affecting Smallholder Farmers in Nigeria**

Compiled by New Nigeria Foundation

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ACRONYMS

ADP	Agricultural Development Programme
AGRA	Alliance for Green Revolution in Africa
ARCN	Agricultural Research Council
ATA	Agricultural Transformation Agenda
BATNF	British American Tobacco Nigeria Foundation
CBN	Central Bank of Nigeria
CBO	Community Based Organisation
EWG	Executive Working Group
FGD	Focus Group Discussion
FGN	Federal Government of Nigeria
FMARD	Federal Ministry of Agriculture and Rural Development
FUTO	Federal University of Technology, Owerri
GESS	Growth Enhancement Support Scheme
GMP	Guaranteed Minimum Price
HQCF	High Quality Cassava Flour
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
KII	Key Informant Interview
LGA	Local Government Area
NGO	Non-Government Organization
NHRI	National Horticultural Research Institute
NIRSAL	Nigeria Incentive-Based Risk-Sharing System for Agricultural Lending
NNF	New Nigeria Foundation
SAP	Structural Adjustment Programme
SCPZ	Staple Crops Processing Zones
SHFs	Small Holder Farmers

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1. INTRODUCTION

The British American Tobacco Nigeria Foundation (BATNF) is an independent charitable organization incorporated in Nigeria in November 2002 as a Company Limited by Guarantee. Its vision is to see “a Nigeria in which poverty has been significantly reduced in rural communities”. BATNF’s mission focuses its corporate programmes on projects that reduce poverty and make sustainable positive impacts on lives within rural communities. In pursuit of this mission, the BATNF has well over hundred community projects spread all over the country focusing on empowerment through sustainable poverty alleviation, sustainable agricultural development, sustainable potable water, sustainable environmental protection and vocational skills acquisition. It targets several farming communities (including BATNF-associated farming communities) as the core of an expanding circle of beneficiary communities.

BATNF’s program strategy is to contribute to the lifting of the most affected sub-population out of extreme poverty in Nigeria by supporting rural smallholder farmers and their communities to adopt more productive ways of managing and earning livelihoods from natural resources in a sustainable manner. This support would be optimized through strengthening the capacity of community-based farmers’ and agro-enterprise associations, cooperatives and networks to develop and manage livelihoods by undertaking innovative economic activities and adopting soil health-protective, climate-adaptive and renewable/efficient energy technologies and practices. In pursuit of this strategy, BATNF is guided by principles emphasizing - small farmer-centeredness, outcome and learning-driven, sustainability, enterprise-based, participation, equity, multi-sectorality and comprehensiveness and value-for-money. As a first step, BATNF desires to assess existing policies in agriculture especially the Agriculture Transformation Agenda (ATA) with a view to suggesting ways of improving its impacts on small holder farmers and entrepreneurs.

1.1 Agriculture Transformation Agenda (ATA) framework

The Agricultural Transformation Agenda (ATA), launched in 2011, was a bold step to repositioning agriculture to drive Nigeria’s economy. The vision is to achieve a food secure Nigeria through a private sector-led agricultural sector that drives income growth, accelerates achievement in food and nutritional security, generates employment, and transforms Nigeria into a leading player in global food markets. The goal is not only to increase crop production, but also to create value-added food processing industries as a means to reduce food imports and create jobs. Critical targets for the agenda are: create 3.5 million jobs in the agricultural sector by 2015, provide over \$2 billion of additional income for Nigerian farmers, increase domestic food production by 20 million MT, make Nigeria self-sufficient in rice production by 2015 and shift from net importer to net exporter of foodstuffs. The major ATA components are Nigeria Incentive-Based Risk-Sharing System for Agricultural Lending (NIRSAL), Marketing Corporations, Growth Enhancement Support Scheme (GESS) and Staple Crops Processing Zones (SCPZ).

The Nigeria Incentive-Based Risk-Sharing System for Agricultural Lending (NIRSAL): An innovative mechanism targeted at de-risking lending to the agricultural sector, is designed to provide the singular transformational and one bullet solution to break the seeming jinx in Nigeria’s agricultural lending and development. The Central Bank of Nigeria (CBN) in August 2010, engaged the Alliance for Green

Revolution in Africa (AGRA) to develop the NIRSAL. NIRSAL is an approach that tackles both the agricultural value chains and the agricultural financing value chain. The goal of NIRSAL is to trigger an agricultural industrialization process through increased production and processing of the greater part of what is produced to boost economic earnings across the value chain.

Marketing Corporations: Under the Agricultural Transformation Agenda, the markets for agricultural commodities would be strengthened through the establishment of commodity marketing corporations around each of the commodities. The Federal Government was to support the development of private sector-driven marketing organizations to grow the agricultural sector. The scrapping of marketing boards during the implementation of Structural Adjustment Programme (SAP) without any institutions to replace them or play their roles left millions of farmers in a precarious situation making access to market a very serious challenge. One of the effects of this has been price uncertainties and volatilities which left farmers at the mercy of middle-men.

These marketing institutions were designed to be privately owned and run by agricultural value-chains players, but enabled by government institutions to empower farmers and the value chain actors to generate value. The marketing corporations were meant to coordinate production and export of target commodities. They were also to attract investment into the sector from Research and Development to infrastructure and processing; and also stimulate the development of tailored financial services to grow the sector.

Growth Enhancement Support Scheme (GESS): This represents a policy and pragmatic shift within the existing Fertilizer Market Stabilization Programme. It puts the resource constrained farmer at its centre through the provision of series of incentives to encourage the critical actors in the fertilizer value chain to work together to improve productivity, household food security and income of the farmer. The goals of GESS are to:

- Target 5 million farmers in each year for 4 years that will receive GESS in their mobile phone directly totaling 20 million at the end of 4 years.
- Provide support directly to farmers to enable them procure agricultural inputs at affordable prices, at the right time and place.
- Increase productivity of farmers across the length and breadth of the country through increased use of fertilizer i.e. 50kg/ha from 13kg/ha.
- Change the role of Government from direct procurement and distribution of fertilizer to a facilitator of procurement, regulator of fertilizer quality and catalyst of active private sector participation in the fertilizer value chain

Staple Crops Processing Zones: This was focused on attracting private sector agribusinesses to set up processing plants in zones of high food production, to process commodities into finished products. This was to be enabled by government through appropriate fiscal, investment and infrastructure policies for the establishment of the Staple Crops Processing Zones. The location of Staple Crop Processing Zones depended mainly on State government support and an analysis of the comparative advantage of the region to produce the identified commodity.¹

The Federal Ministry of Agriculture and Rural Development (FMARD), in November 2012 outlined the new policies, institutions and financing structures to drive the growth of the sector including: deregulation of seed and fertilizer sectors, marketing reforms to structure markets, innovative financing for agriculture and new agricultural investment framework. Other government incentives to support investors in agriculture are new fiscal incentives to encourage domestic import substitution; removal of restrictions on areas of investment and maximum equity ownership in investment by foreign investors; no currency exchange controls – free transfer of capital, profits and dividends; constitutional guarantees against nationalization/expropriation of investments; zero percent (0%) duty on agricultural machinery and equipment imports; pioneer tax holiday for agricultural investments; duty waivers and other industry related incentives such as those based on use of local raw materials, export orientation etc.

1.2 Objectives of the Executive Working Group

As part of its strategy to alleviate poverty by supporting small holder farmers (SHFs) BATNF constituted an Executive Working Group (EWG) comprising experts in agriculture, socio-economic policy and climate change (names of members in Appendix 1) to assess the effectiveness of these agricultural policies, especially the ones embedded in the Agricultural Transformation Agenda, in order to establish their impact on small-holder farmers in Nigeria and provide suitable recommendations for their improvements. The strategic objectives of the EWG for the review of the ATA and other policies are:

- a. *To contribute to national discourse on Agriculture Policies with specific review of the Agricultural Transformation Agenda and other agricultural policies; and*
- b. *To fulfill part of the Foundation's voluntary commitment to smallholder farmers by ensuring viability of public policies that they can benefit from, in the short and long term.*

¹ <http://www.fmard.gov.ng/ata-fmard-transformation-agenda> assessed on 04/08/15

2. ASSESSMENT METHODOLOGY

The Executive Working Group's approach to achieving the deliverables of this assessment was participatory, involving stakeholders in the agricultural sector. The stakeholders included farmers, farmer associations, processors, research institutions, financial institutions, climate experts, government officials (ADPs), Non-governmental organizations (NGOs), aggregators, fabricators and traders. The main methods adopted to generate and analyse data collected for the assessment are Desk research, Focused Group Discussions (FGDs), Key Informant Interviews (KIIs), Data analysis workshop and Dialogue Session.

Desk research: *An extensive desk research was carried out by members of the EWG by consulting relevant literatures and publications from various sources including State Ministries of Agriculture, Federal Ministry of Agriculture and Rural Development website, publications on other assessments of government agricultural policies etc.*

Focused Group Discussions (FGDs): *Information was obtained from a number of farmers and farmers' associations through focus group discussions. The discussion centered on the awareness and benefits derived from the implementation of the various policies.*

Key Informant Interviews (KIIs): *Structured discussion guides were used to elicit information from identified critical stakeholders who were in a position to provide relevant and accurate data on the various components of the ATA and other policies as it affects the small holder farmers. These included bank officials, Agricultural Development Programme staff, staff of the Federal Ministry of Agriculture and Rural Development, research institutions, processors, traders etc.*

Data Analysis Workshop: *A one-day data analysis workshop was held by the members of the EWG. Data from the various stakeholders were collated and analyzed to identify achievements, gaps, challenges and a draft report was produced. The draft report was presented to participants at the dialogue session for validation.*

Dialogue Session: *A one day dialogue session was organized to validate the findings of the executive working group. Over 90 participants attended the workshop including Staff of ADPs, Bank officials, NIRSAL officials, Federal and state government officials, Agricultural experts, academia, research institutions, farmers, traders etc. Some details of the dialogue session are presented in Appendix II.*

After initial desk research, and based on the focus of this assessment, the EWG restricted the assessment of the impact of agricultural policies on SHFs to the active components of ATA namely NIRSAL and GESS; as well as interventions in some value chains (maize, cassava, rice, oil palm, vegetable and Aquaculture/Livestock) and issues related to climate change.

3. NIGERIA INCENTIVE-BASED RISK SHARING SYSTEM FOR AGRICULTURAL LENDING (NIRSAL)

3.1 Policy direction

The Nigeria Incentive-Based Risk-Sharing System for Agricultural Lending (NIRSAL) is a Risk Sharing initiative Fund designed to identify, redefine, measure, re-price and evolve strategies for the risks of lending to the Nigerian agriculture value chain. The intention of the Fund is to create incentives and catalyse processes to encourage the growth of formal credit (direct and indirect) for the agriculture value chain, as a mechanism for driving wealth creation among value chain participants. NIRSAL is also expected to be a catalyst for innovative risk management strategies, long term financing for agribusiness, and significant job creation by new entrepreneurs and established market participants in the agribusiness sector and broader Nigerian economy. The goal of NIRSAL is to trigger an agricultural industrialization process through increased production and processing of the greater part of what is produced to boost economic earnings across the value chain.

NIRSAL is composed of two parts: (i) a ₦45 billion risk Credit Risk Guarantee (CRG) covering losses on loans per contractual specification, and (ii) a N5 billion Interest Draw Back program (IDP) providing interest payment support on loans issued under NIRSAL guidelines. With respect to small holder farmers, each small holder is required to belong to a registered farmer group that is autonomous from political groups such as a state, local or federal government; such groups need not show a long history of existence in order to qualify. While new farmer groups can be formed for purposes of borrowing but each group must submit to due diligence terms as prescribed by the guidelines and their lender.

NIRSAL was designed to share the risk of non-repayments of loans with the banks if it does occur. This is meant to give some comfort to the banks and encourage them to go into lending to farmers. The banks and the other operators of the scheme who manage loans however still subject the SHFs to all the requirements and processes required for normal loans. This is where the SHFs have issues and are unable to qualify for NIRSAL interventions.

3.2 Current Scenario

The achievements of the programme included the following:

- i. Participation in GESS N39.5bn worth of loans leveraged for 207 projects.
- ii. Value chain mapping (Tomatoes, Rice, Cassava, Oil palm etc.).
- iii. Training of actors in each value chain.

However with respect to SHFs the following are true:

- i. Traditionally the banks are not willing to lend to the Small Hold Farmers (SHFs) because the SHFs are high risk group for lending. SHFs hardly pay back loans and their business is not structured in such a way that they can be accountable for it. SHFs are thus not involved in the scheme. This becomes a dilemma to an economy with at least 60% of its working populations being SHFs.
- ii. SHFs are shut out and are not benefitting significantly from loans attributed to NIRSAL.
- iii. Increase in lending is not going to SHFs – the lending goes through the normal banking and SHFs cannot meet the requirements.
- iv. NIRSAL is a high end/complex package. Banks are generally not friendly to SHFs and as such there is no way they can grow. The SHF does not fall under the category of the farmers that can

benefit from the NIRSAL programme because it is mostly not possible for the SHF to meet the requirements or demands of the Banks.

- v. The NIRSAL office has a training arm that offers technical assistance i.e. trainings. Bankers are currently being trained to understand and appreciate the risk involved in Agriculture. This will help in providing better understanding on how they can invest on the SHFs.
- vi. The NIRSAL office likewise is partnering with local investors to enhance agro-financing and encouraging collaboration among actors such that rice millers for example could partner with the paddy out growers and funds are made available for the out growers immediately they supply the millers through the scheme.
- vii. It is noteworthy to appreciate the reluctance of SHFs to join farmer groups, as from their experience, the process of getting facilities to them after due registrations has never succeeded in our system so they have lost interest and therefore make no efforts to register.

3.3 Issues, Challenges and Strategic Recommendations NIRSAL

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
<p>a. Most SHFs are not aware of the scheme. Low awareness of available incentives and support structures.</p>	<ul style="list-style-type: none"> i. Limited platform to get information. Only some big/registered farmers/associations members are aware. ii. Poor efforts made to create awareness. iii. Most SHFs are uneducated, this creates difficulty for them to get relevant information. iv. Not inclusive of States & LGAs (not participating) v. Inefficiency of government agencies in playing their roles under the ATA in relation to NIRSAL. 	<ul style="list-style-type: none"> i. Effective involvement of relevant NGOs/CBOs/FBOs particularly in awareness creation. ii. Increased media involvement through relevant informative radio programming iii. Involvement of community leadership structure in awareness creation iv. Scale up State & LG involvement in program implementation, e.g. develop Rural based information dissemination system that will provide SHFs reliable information on climate, agronomy, inputs etc. v. Community Leaders should be involved in awareness creation and Coordinate group formation and serve as channels for communication with SHFs. vi. Capacity building, information and awareness creation in local languages vii. Effective monitoring of implementation through NIRSAL monitoring committee that will include CSOs, farmer organizations, CBN, academia, media, corporate organizations etc. viii. NIRSAL committee to provide regular quarterly reports that are widely circulated to sector stakeholders ix. There are other funding portfolios that exist that SHFs can take advantage of but they are not aware of. Such avenues should be made known to the extension workers who will in turn be able to educate farmers on the opportunities.
<p>b. There is significant qualification barrier that excludes SHFs</p>	<ul style="list-style-type: none"> i. The structure seemed to be designed for established/big farmers ii. Banks still apply same requirements (registration with CAC, title to land, collateral, 3-5 	<ul style="list-style-type: none"> i. Government needs to encourage & support investors into the scheme ii. NIRSAL should promote nuclear estate farmstead model iii. Target/Identify Agric- business champions and invest in them

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	<p>years farm record, business plan, counterpart fund, short moratorium etc.) of commercial activities</p> <p>iii. Low capacity of SHFs in terms of best agronomic skills, book keeping, management etc.</p> <p>iv. No special considerations for SHFs to access loans</p> <p>v. Politicization of the entire focus of NIRSAL.</p> <p>vi. Lack of access to market</p>	<p>iv. Government should provide funds to the SHFs at subsidized rates & increase the moratorium for SHFs</p> <p>v. Government should review Land ownership system to make land more accessible to SHFs –land mapping, land titling (C of O). This will improve access to land at lower cost of acquisition and perfection.</p> <p>vi. SHFs should be assisted in terms of aggregation into organized groups which will be registered as legal entities. This can be facilitated by LGA, state government as well as NGOs, CBOs, Champions, etc.</p> <p>vii. LGA and state government should facilitate provision of Extension services, Technical Assistance, and Inputs supply to SHFs</p> <p>viii. Provide guaranteed minimum pricing regime for key farm commodities.</p> <p>ix. Review of (Minimize or abolish) multiple local levies, road blocks, taxation etc.</p> <p>x. Use non-state actors (NGOs, CBOs, etc) to act as sources of finance for SHF that can benefit from NIRSAL scheme</p> <p>xi. Improvement of infrastructure, Implementation strategies:- identify the champions based on specific high value chains and empowering anchors and champions.</p> <p>xii. Use Champions to facilitate access to good and cheap inputs and markets</p> <p>xiii. Restructuring NIRSAL policies to incorporate champions at local/community levels for better targeting of SHFs</p> <p>xiv. Capacity building for farmers should be improved with special focus on loan repayment culture and record keeping.</p> <p>xv. NIRSAL needs to understudy the ‘Esusu’ model and to use it to meet the needs and develop an appropriate design that is realistic for SHFs.</p>

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
c. SHFs have poor access to facilities as points of access are NOT close to SHFs in the rural communities	<ul style="list-style-type: none"> i. Banks do not have branches in rural areas ii. Dispersed producers/SHFs in hard to reach areas. 	<ul style="list-style-type: none"> i. Champions (individuals or associations) in rural areas, can facilitate access of SHFs to inputs and support ii. Conduct an assessment of impact of NIRSAL on small holder farming (number of farmers, impact of facility on SHFs, total amount SHFs have accessed, to what extent has it helped SHFs?) iii. Discourage importation of foreign products that can be produced locally and encourage large retailers e.g. ShopRite to purchase their goods locally.

4. GROWTH ENHANCEMENT SUPPORT SCHEME

4.1 Policy directions

Growth Enhancement Support Scheme (GESS) represents a policy and pragmatic shift within the existing Fertilizer Market Stabilization Programme and it puts the resource constrained farmer at its center through the provision of series of incentives to encourage the critical actors in the fertilizer value chain to work together to improve productivity, household food security and income of the farmer.² The GES is an innovative scheme, which seeks to remove the difficulties usually associated with the distribution of fertilizers and hybrid seeds in the Country. In the past there were complains of diversion, exorbitant cost and adulteration of various inputs to farmers, which ultimately led to low productivity, increased poverty, unemployment and lack of interest in farming. The scheme's approach is to target beneficiaries through the use of electronic system and by encouraging the engagement of the private sector in the distribution and delivery of fertilizers and other critical inputs directly to farmers.

The Growth Enhancement Support Scheme investment (that commenced in 2012) is targeted at 20 million farmers by 2020 where a group of farmers would be supported for four years. The investment is expected to generate five times to ten times returns in increased production. The twenty million farmers are to be in four groups and the program is designed for implementation in four phases. The estimated cost of the programme per farmer per year is 5,000 naira (US\$30) and the total cost of the program is approximately 400 billion naira (US\$2.5billion). The expected benefit of the program is up to 80,000 naira per farmer (US\$500) while the total benefit of the program is 6,800 billion naira (US\$40billion), with a benefit-cost ratio of 16:1. As such, the program is novel, result-oriented and worthwhile.

The objectives of the GES scheme are:

- i. To provide affordable agricultural inputs like fertilizer, hybrid seeds and agro-chemicals to farmers
- ii. To remove the usual complexities associated with fertilizer distribution
- iii. To encourage critical actors in the fertilizer value chain to work together to improve productivity
- iv. To enhance farmers' income and promote food security
- v. To shift provision of subsidized fertilizer away from a general subsidy to genuine small holder farmers.³

The GESS is gulping about N60-75 billion per annum and targeting a cumulative total of 20 million farmers (beneficiaries) from 2012-2015 through a network of more than 1700 agro-dealers/redemption points scattered across the country. It works with an applicable benchmark price of fertilizer being negotiated between the government and fertilizer supply companies at the start of the farming year. Based on this benchmark, a subsidy rate of 50% of the price of fertilizer, shared equally (that is, 25% each) between the federal and respective state governments. The farmer is required to pay the balance of 50% of the price of fertilizer at the redemption point. As regards the 2014 farming year (wet season),

² <http://www.fward.gov.ng/Growth-Enhancement-Scheme>

³ <http://crossriveragriculture.org/index.php/sourcing-agric-funds/fisheries/2-uncategorised/26-growth-enhancement-support-scheme-ges>

the level of subsidy for the generic rollout is pegged at 2 bags of 50kg fertilizer for each farmer, 12.5kg of rice and 10kg of maize. ⁴

4.2 Current Scenario

The achievements of the programme include the following:

- i. Creating a database of farmers for the first time in the country
- ii. All fertilizer and seed companies now sell directly to farmers, not to the government.
- iii. Increased unfettered access to inputs by farmer
- iv. Almost all the value chain are taking advantage of the GES and it has improved distribution of fertilizer to farmers
- v. Increased participation of private sector in input delivery system
- vi. Increased exposure of farmers to ICT
- vii. Change of attitude of farmers to the use of improved seeds and fertilizer
- viii. Elimination of sharp practices in the procurement and distribution of inputs in the country
- ix. Focus on value chain development of the agricultural sector
- x. To a great extent, the intended beneficiaries are being reached by the scheme
- xi. Monitoring committee has been set up comprising critical stakeholders to carry out monitoring to address the issue of poor monitoring.
- xii. A service charter to guide operators has also been developed and approved.
- xiii. Introduction of biometry registration to address the issue of registration fraud/manipulations
- xiv. Total improved seed production in the country has risen from 14,788MT in 2011 to 170,692MT in 2014, a 1,054% increase. There has also been monumental increase in seed companies from 11 to 34 between 2011 and 2014. Bank loans to the seed sector has increased from N1.8billion in 2011 to N6.3billion in 2014
- xv. Fertilizer distribution to farmers increased from 178,942MT, a cost of N19.68billion in 2012, to 664,025MT, valued at N73.043billion, in 2014, a 271% increase. Average fertilizer usage has also risen from 13kg/Ha in 2011 to 80kg/Ha in 2014. New investment in the fertilizer sector totals \$5billion from major companies such as Indorama, Dangote, and Notore.
- xvi. Number of Farmers redeeming inputs per year have risen from 1.61million farmers in 2012 to 6.85million farmers in 2014; an increase of 326%. A total of 14.3million farmers have redeemed inputs in the period 2012-2014. NW region of the country accounted for the highest redemption, 30% of the total, followed by NE (22%), NC (17%), SS (12%), SW (11%), and SE (9%).
- xvii. No of redemption/collection centres in 2014 = 1663

⁴ <http://www.fmard.gov.ng/Growth-Enhancement-Scheme>

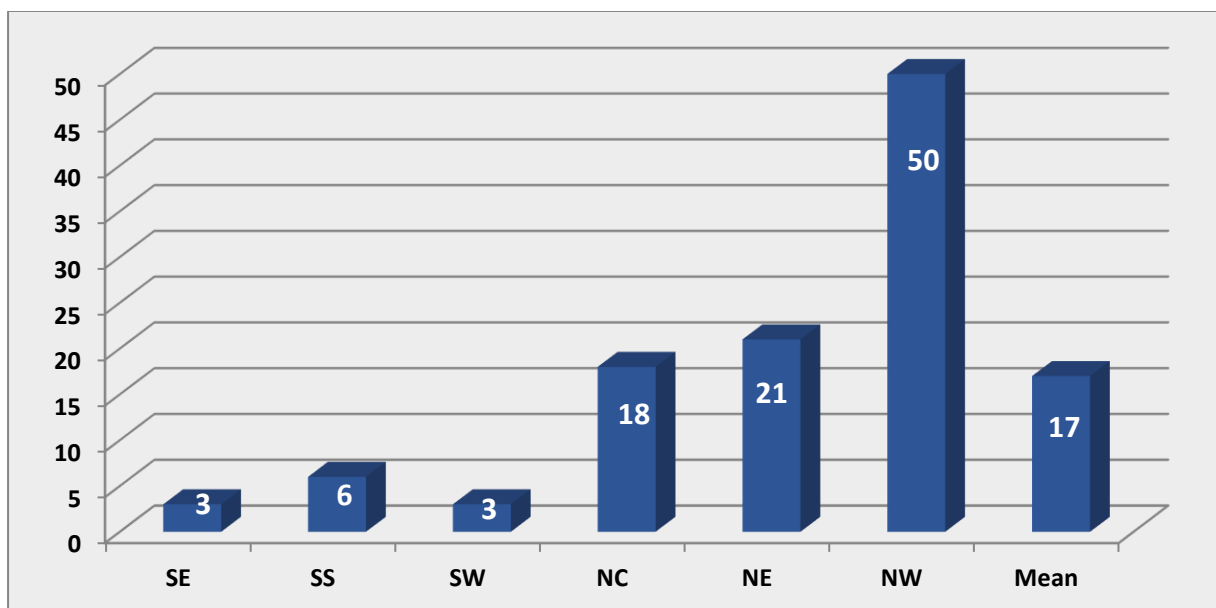


Fig 1: Percentage of farmers that redeemed their GESS inputs by zone, 2014 (ATA Mid-Term Score Card)

Nevertheless, the following observations were made with respect to GESS:

- i. Skewed nature of the GESS implementation
- ii. Limited access to inputs by farmers
- iii. Inadequate amount of inputs
- iv. Inability of farmers to get inputs on time
- v. Fraud and round tripping which can significantly reduce the impact of the scheme and may eventually kill the scheme
- vi. Adulteration of fertilizers by dealers
- vii. Reduction in the momentum of the programme
- viii. Creation of uncertainty among farmers and fear of policy reversal
- ix. Evidence of diversion, as some farmers received alert but were unable to claim inputs at designated centres.
- x. Evidence of fraud/manipulation of registration process leading to registered farmers not getting alerts for the redemption of the inputs.
- xi. Technological failures as some un-registered farmers got alerts.
- xii. Failure of some states to pay counterpart funds.
- xiii. Restriction of the scheme to certain commodities is encouraging sharp practices on the part of farmers and input dealers.
- xiv. Non registration of farmers in 2015.
- xv. Lack of effective tracking mechanism to identify who the real farmers are – many civil servants and traders got registered and received fertilizers which they resold to real farmers at high/market prices.

4.3 Issues, Challenges and Strategic Recommendations GESS

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Accuracy of targeting	<ul style="list-style-type: none"> i. Ineffective M and E system ii. Evidence of diversion, as farmers received alert but were unable to claim inputs at designated centres iii. Evidence of fraud/manipulation of registration process leading to farmers not getting alerts iv. Technological failures as some un-registered farmers got alerts 	<ul style="list-style-type: none"> i. Efficient supervision/monitoring by all critical stakeholders that is open and transparent ii. The database on farmers' registration should be made available to guide policy formulation and programmes iii. Farmers' registration should be a continuous process iv. Formation into cooperatives/groups v. Better information dissemination/community based information sharing systems and delivery vi. Vanguard for information dissemination on the GES should be identified vii. Continuous improvement of the scheme e.g. adoption of digital capture (GESS TAP) viii. Advocacy and awareness creation ix. Intervention will be based on well-defined targets and appropriate budgeting
b. Timeliness of delivery	<ul style="list-style-type: none"> i. Delay in payment to input dealers leading to farmers not getting inputs on time ii. Poor spread of redemption centers iii. Delayed payment of agro-dealer /suppliers weakened the morale iv. Lack of support of the agro-dealer by the commercial banks v. Process of delivery of input supply not in sync with farming season vi. Diversion of inputs by input dealers vii. Many States did not live up to expectations in terms of paying the counterpart funding 	<ul style="list-style-type: none"> i. There should be early supply of seeds and fertilizers to farmers. ii. There should be a dedicated fund to service payment to input dealers once verification is done iii. Put in place sanctions/penalties/surcharge for defaulting input dealers iv. There should be wider and far-reaching redemption centres for easy collection of inputs by SHFs. v. The number of beneficiaries per collection center should be regulated and streamlined to curtail rowdiness and hardship the farmers currently go through. vi. Redemption centers should be created

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<p>within the community, and through the community head. It will be less cumbersome if two to three people in the community will be allowed to collect the bulk for the community for easy collection by farmers.</p> <p>vii. Efforts should be made to recreate the awareness and make collection/redemption points more accessible to the people.</p> <p>viii. Regular evaluation of input dealers</p> <p>ix. Timely supply of inputs to farmers when needed</p>
c. Significance of inputs	Restriction of the scheme to certain commodities is encouraging sharp practices on the part of farmers and input dealers	<p>i. To the extent possible, expand the target commodities in order to impact more farmers.</p> <p>ii. The GESS intervention should be extended to other sectors of the agro industry, especially tractors, land development, and agro chemicals.</p>
d. Correctness of package	Adulteration of fertilizer packaging by dealers	<p>i. Effective supervision/monitoring by GESS monitoring committee</p> <p>ii. Periodic review of package to reflect policy objectives</p> <p>iii. Greater support for extension activities</p> <p>iv. The LGA and States should help to complement the effort of community based private input service providers</p>
e. Registration of farmers	<p>i. Technology failure (observed lapses in the OMR method for farmers data capture)</p> <p>ii. Duplication of names (multiple registration by ADP, farmers associations and ministry and lack of network)</p> <p>iii. Bureaucratic bottleneck</p> <p>iv. Registration of non-real farmers</p>	<p>i. Registration should be carried out by the month of January and well publicized.</p> <p>ii. Registration centers should be created within the community, and through the community head.</p> <p>iii. Registration should be continuous process using the ward structure of the LGAs</p> <p>iv. Decentralize registration to increase access to farmers and make it stress free</p>

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<ul style="list-style-type: none"> v. Assisting the organization of farmers into groups vi. GESS committee to mobilize farmers vii. LGA and State should work together to carry out re-sensitization and follow-up farmers registration viii. Mainstreaming of the federal programs into the state Ministry of Agriculture programs and LGAs. ix. Putting effective mechanism for identification of real farmers for registration
f. Sustainability	<ul style="list-style-type: none"> i. Failure of some states to pay counterpart funds ii. Fraud and round tripping which can significantly reduce the impact of the scheme and may eventually kill the scheme iii. Reduction in the momentum of the programme iv. Creation of uncertainty among farmers and fear of policy reversal 	<ul style="list-style-type: none"> i. The authority should consider implementation of GESS through community/village committees. ii. The programme should be removed from politics. The use of political membership as basis for registration and service receipts is not good as those that do not belong to the party were denied participation. iii. There should be a bottom up approach to the development of agriculture and the involvement of the private sector. iv. The scheme should be continuous; farmers should be allowed to benefit from the scheme as far as they remain in farming. v. Curb the problem of round tripping, some farmers sell the subsidized fertilizers given to them by the Government to the private sectors. vi. Government to partner with relevant NGOs, CBOs and FBOs to facilitate the registration and strengthening of groups and associations in the LGAs. vii. Formation of stakeholders' forum to facilitate regular dialogues at the state and national level to improve on the implementation of the scheme.

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<ul style="list-style-type: none"> viii. Promote effective formation of farmer/commodity association with common economic interest at the community level ix. Fast track the process of institutionalizing the scheme with appropriate legislation x. The roles of relevant NGOs should be clearly defined especially in awareness creation, registration of farmers, sensitization, group formation and supervision and monitoring. xi. Independent assessment by the non-state actors on the level of implementation and status xii. Monitoring and evaluation system should be improved in the ministries of agriculture and ADP. xiii. Mainstreaming of the federal programs into the state ministry of agriculture programs and LGAs. xiv. Implementation of the exit strategy in the design of the GESS. xv. The cost of running the scheme is too high and government would have to consider whether to continue with it or find alternatives. xvi. GESS has not given the fertilizer value chain an opportunity to develop because it is still a government driven initiative. GESS should give opportunity to the production of fertilizers locally since the country is rich in petroleum. Subsidy should be made available to local fertilizer producing companies. xvii. Agriculture development should be anchored by the LGA level followed by the state while the Federal Government provides the enabling environment.

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		xviii. Securing the redemption centers xix. PEER reviews
g. General		i. The institutionalization of GESS by the government (NASS) should be fast tracked and periodically reviewed ii. Alternative information supply mode to the farmers should be devised. This is because greater proportions of the farmers do not have sufficient knowledge of how to operate SMS and/or the mobile phones. The use of local information dissemination organs such as town criers, the church/mosque, primary schools should be considered. iii. The states and LGAs should be fully involved in the awareness creation and sensitization of the farmers. The extension system should be made very functional and active. LGAs should take a leading role. iv. The GES management should be adequately supervised. Many of the input dealers divert the supplies to private dealers and traders and deny farmers access to them. v. The redemption process should be reviewed for an extended timeframe

5. CLIMATE CHANGE

5.1 Policy directions

The National Agricultural Resilience Framework (NARF) was launched to support the national ATA programme and strengthen national capacity. The framework includes a robust implementation plan that incorporates innovative agricultural production strategies and risk management mechanisms to promote resilience in the agriculture sector. The goal of the programme is to strengthen the capacity of small- and large-scale agricultural producers to increase productivity, grow wealth and thrive in the face of growing challenges from multiple social and environmental stressors, including changing climate. The initiative is the first attempt at developing a sector-specific climate adaptation and risk mitigation programme in Nigeria. The strategic objectives of the initiative include:

- i. Strengthening the overall policy and institutional framework for improved resilience and adaptation to climate variability and change in the agriculture sector, including planning and implementation, systems for resource mobilization and effective project monitoring and evaluation.
- ii. 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 agriculture sector and widespread deployment of the same through information and communication technologies, including mobile phones.
- iii. Improving productivity through training communities and farmers on land and water management strategies (e.g., irrigation, water harvesting, soil fertility enhancement and erosion control), improved farming practices and using policy instruments such as economic incentives, regulations and communication.
- iv. Reinforcing existing social safety nets through support systems that reduce vulnerability and improve livelihood conditions for the vulnerable, especially women and children.
- v. Improving farming systems research capacity within the National Agricultural Research System to enable and support the implementation of climate-friendly agriculture in Nigeria.
- vi. Revamping extension services, including building new capacity for evidence-based assessment and management of climate risk for resilience in the agriculture sector.

5.2 Current Scenario

Achievements under ATA

- i. Creation of Environment and Climate Change Unit (ECCU) in the Federal Ministry of Agriculture and Rural Development (FMARD).
- ii. Formulation of the National Agricultural Resilience Framework and the Climate Change Policy

The following observations were made as regards the issue of climate change:

- i. There is general lack of farmer education about climate change issues.
- ii. There is no little or no access to technical information for farm operations by smallholder actors.
- iii. Limited farmer access to climate smart varieties and breed (depends on level of awareness and access to agencies developing the smart varieties/breeds).
- iv. There is lack of technical knowhow about climate issues and climate-smart practices at the level of states agricultural officers.
- v. Farmers are unduly exposed to climate change risks which could affect harvest such as extreme temperatures, windstorm, flood, wild fires, etc.
- vi. There is high cost of energy at the level of smallholder farmer.
- vii. Farmers mostly use organic manures and inorganic fertilizer. Farmer application of inorganic fertilizer does not take into consideration soil fertility conditions.
- viii. The Growth Enhancement Support Scheme (GESS) does not take into consideration soil mapping to determine fertilizer use. Currently, the USAID MARKETS (II) soil testing manual is a useful instrument, which is not available to farmers.
- ix. There is still a preponderance of inadequate staffing of ADPs to provide appropriate climate information to farmers.
- x. There is inadequate funding for ADPs, NGOs, and CBOs to support extension services.
- xi. There is a lack of adequate production recommendations on climate change realities.
- xii. There is inadequate private sector participation in extension services in Nigeria.
- xiii. Data used for agricultural planning does not capture climate change realities and impact on farming practices and productivity.
- xiv. ATA did not achieve much on use of renewable energy because it did not make concrete provision on its promotion for agricultural use.
- xv. Farmers generally use any of wood, fossil fuel (kerosene, petrol, and diesel), public electricity, solar (sunlight), coal and wind as their sources of energy.
- xvi. Many States are still not embarking on sustainable projects on use of renewable energy or energy efficient systems in their production systems.
- xvii. There is indeed inadequate awareness on use of renewable energy sources at the level of farmers
- xviii. Inadequate funding of low-carbon agricultural economy
- xix. There is still a lack of adequate funding for climate change issues.
- xx. There also exists an absence of relevant and substantive climate and environment data bank on local climatic condition.
- xxi. The rural economy is not viable and there is still low returns on agricultural investments.
- xxii. The persistent decrease in crop production and resultant decreased in farm income also result in poor living conditions for rural farmers.

- xxiii. NANTS–Farmers Diary programme on AIT
- xxiv. Kogi, Sokoto, Taraba states making efforts to provide climate change information, however IFAD is assisting 7 states on climate change.

5.3 Issues, Challenges and Strategic Recommendations CLIMATE CHANGE

Issues/ Scheme	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
<p>a. Access to information (Knowledge/education) on climate change for farming operations</p>	<ul style="list-style-type: none"> i. Preponderant illiteracy ii. Drought, changes in rainfall pattern, flooding, iii. Lack of knowledge about climate change iv. Inability to prepare/ plan for farming operations that can be affected by climate change v. Indigenous knowledge not adequately captured/ mainstreamed. 	<ul style="list-style-type: none"> i. Need to have proper education package targeted at farmers level ii. Intensive Stakeholder sensitization on climate change issues and implementation of adaptation and mitigation strategies iii. Use of workshops, dialogues and training sessions at various levels iv. Use of Social Media to educate farmers and extension officials. v. Use of participatory approach to integrate smallholder farmers into policy making process vi. Engagement of local traditional and unusual media (electronic- Radio and Television, town criers, artists (actors/actress in Nollywood and Musicians) to propagate the message) vii. NIMETS Act should be reviewed to create a unit on Agricultural meteorology. viii. The Agricultural Transformation Agenda (ATA) should be expanded to cover the issues of climate change and information. ix. States media houses (TV and radio) should create content and airtime for disseminating climate change information. x. State and LGAs should be actively involved in climate change information dissemination to farmers using CSOs, farmer associations, communal leadership and media. xi. States Agricultural Development Programmes (ADP) should integrate Climate and Market information system into their services xii. States ADPs should host a one stop information center for Agriculture and

Issues/ Scheme	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<p>climate information</p> <p>xiii. The states agriculture departments should build the capacity of extension officers on climate change issues.</p> <p>xiv. States should invest in the acquisition of climate predicting technologies and update same regularly</p> <p>xv. There is need to create synergy in information sharing between Department of Climate Change in the Federal Ministry of Agriculture and Environment and Climate Change Unit in the Federal Ministry of the Environment.</p> <p>xvi. The Federal Government should encourage States to create Climate Change Units in appropriate and relevant state ministries.</p> <p>xvii. Need for the development of a national data base on Agro meteorological information for agricultural and non-agricultural uses which should be made readily available, easily and widely disseminated</p>
b. Access to Climate smart varieties and breeds	<p>i. Inadequate funds for research institutes, ADPs, NGOs, CBOs.</p> <p>ii. Lack of adequate funding</p> <p>iii. Limited capacity of input producers to mainstream climate knowledge</p>	<p>i. ATA should deepen its climate adaptation /mitigation provisions</p> <p>ii. ATA should be localized, owned and driven by the state</p> <p>iii. Federal intervention in Agriculture should be a support tied to the level of commitment of each state to climate change issues</p> <p>iv. Research institutes should add mandates on climate change issues in their researches</p> <p>v. Implement policies on climate smart practices & varieties in government agricultural agencies and programmes</p>
c. Climate Change Financing	<p>i. Poor knowledge of finance windows like Green Climate Fund and Carbon Fund to Nigerian actors generally.</p> <p>ii. Poor government involvement in providing platform to access funding of</p>	<p>i. The Government and other facilitator groups should disseminate information and platform for access to global funds for green projects.</p> <p>ii. States should have a budget line and track implementation properly</p>

Issues/ Scheme	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	green projects, including climate smart agriculture.	

6. COMMODITY VALUE CHAINS

6.1 General Recommendations

1. ATA should be institutionalized from the Federal to Local Government levels
2. ATA should promote improved collaboration among government, non-government actors and donor agencies -
 - i. The non-state actors are able to leverage funds from other sources
 - ii. They bring to the table certain skills set not available in government
 - iii. They can also help to build capacity of states officials
 - iv. FG to assist State governments to quickly commence the promotion of farmsteads (5 to 10ha/farmer) within the agro-based LGAs. This will trigger the emergence of new generation of farmers.
3. Government should provide support to champions (individuals or associations) at community level
4. Improve rural infrastructure especially road, water, markets, etc.
5. Urgently revive the agriculture extension system: Making agricultural extension service delivery attractive to young graduates.
6. Efforts should be made to change the farmers' orientation with respect to agribusiness—knowledge based and profit driven approach to agriculture.
7. Avoid policy inconsistency or policy somersault occasioned by changes in government.
8. Undertake consistent monitoring and evaluation by independent evaluators.
9. Undertake comprehensive census and GPS mapping - link farmers to farmers and prevent false claims and clash of claims.
10. Government should put in place mechanism for purchase of produce at guaranteed minimum prices (GMP). Farmers have noted that with ready market and good price, there will be no need for subsidy. Thus, the government should introduce and enforce GMP as a matter of urgency for the key commodities.
11. Promote establishment of farm equipment centers in high producing communities.
12. Federal government to consider the revitalization of the National Agricultural Land Development Agency (NALDA) and Tractor Hiring Services.

6.2 Cassava Value Chain

6.2.1 Policy direction: Turn the cassava sector in Nigeria into a major player in local /international processing industries, with produce such as Starch, Sweeteners, Ethanol, HQCF, and dried Chips, amongst others. This can be achieved by organizing producers and processors into efficient value-added chains.

6.2.2 Current Scenario

Achievements under the ATA policy

- i. Establishment of farmers Data base
- ii. Access of farmers to improved planting materials to boost farm productivity and incomes.
- iii. Mobilization of Farmers into cooperative groups
- iv. Better linkage between farmers & agro-input dealers facilitated
- v. Improvement in adoption of best practices
- vi. Employment generation through up-scaling of farm holdings
- vii. Awareness of coop & capacity building for relevant stakeholders
- viii. Interventions in the cassava value chain delivered 2.6 million bundles of stem and 160,264 bags of fertilizer to 80,000 farmers between 2012 -2014. A total of 55,934 jobs were created. Efforts to partially replace wheat with High Quality Cassava Flour (HQCF) is also yielding results with launch of 10% HQCF composite flour for bread making by the two largest wheat millers. Efforts to reduce wheat imports are already showing progress. Wheat imports declined by 8.7% from an all-time high of 4,051,000 MT in 2010 to 3,700,000 MT in 2013.

Observations on the cassava value chain

- i. Inadequate supply of cassava roots at competitive price to industrial users (cassava flour and starch millers)
- ii. Weak extension services
- iii. Production still largely subsistence as compared to semi commercial (95% of farmers planting 0.2-1 ha usually intercropped & yield of 8-10 mt/ha)
- iv. Major cost components is labour cost, (70% of total production cost) This is attributable to poor agricultural mechanization.
- v. Traditional foods (90% of cassava produce is consumed directly in various local forms)
- vi. Industrial product (starch and high quality cassava flour – HQCF) accounting for merely 10%.
- vii. Poor Supply of cassava roots to urban based SMEs & large processing plants for industrial use due to challenges of cost and logistic timing of transport from the rural areas.
- viii. Underutilization of cassava roots in the improved food and industrial products channel

6.2.3 Issues, Challenges and Strategic Recommendations CASSAVA

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Inputs	<ol style="list-style-type: none"> i. High cost of inputs and mechanization ii. Lack of credit facilities for input dealers 	<ol style="list-style-type: none"> i. Strategic linkage /engagement between farmers, input distributors & Research institutes
b. Production	<ol style="list-style-type: none"> i. Land development/clearing and 	<ol style="list-style-type: none"> i. Government should prioritize farm

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	<ul style="list-style-type: none"> lack of mechanization ii. Farmland tractorization iii. Poor agronomic practices by farmers iv. Uncompetitive roots due to very poor productivity v. Farmers vs pastoralist conflict vi. Lack of info on Climatic change vii. Inadequacy of improved technology along the Value chain viii. Poor knowledge and use of improved varieties 	<ul style="list-style-type: none"> Mechanization especially Land clearing/tractorization as social infrastructure ii. Reorientation of farmers to adopt best agronomic practices including consistent use of improved high yielding, disease resistant varieties, crop nutrition & protection iii. Support activities to small cassava farmers around group formation, production techniques, & access to services iv. Promote good agronomic practices through public and private extension to farmers as a way of improving productivity v. Promote commercial supply of labour saving devices (harvester, lifter) that could reduce the drudgery - labour cost of farmers; vi. Strengthen innovative extension services vii. There should be a formulation of a concrete policy on the establishment of Grazing Reserve at LGA level viii. Governments/NGO's, etc. to ensure education and promotion of vitamin A enriched cassava production ix. Research on the introduction of varieties that increase productivity of farmers by reducing production lifecycles
c. Processing	<ul style="list-style-type: none"> i. Lack of small technologies for farm gate value addition ii. low efficiency of processing enterprise iii. non-commercial orientation of many farmers and processors iv. Inadequate cottage level processing facilities 	<ul style="list-style-type: none"> i. Promotion of on-farm processing machines ii. Strengthen the capacity of processors to facilitate the intermediate processing to optimize product quality and reduce transport and operational costs; iii. Facilitate linkages between medium/large scale processors with microprocessors that can process cassava in rural areas for onward delivery to the former iv. Value addition by actors v. Consider on-farm technology for semi processing
d. Storage & Aggregation	<ul style="list-style-type: none"> i. Time and place value provision 	<ul style="list-style-type: none"> i. Address the challenges of improved bulking and logistic operations

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<ul style="list-style-type: none"> ii. Enhance relations between farmers, aggregators and processors
e. Market	<ul style="list-style-type: none"> i. Weak linkages between actors in the chain to deliver cassava to industrial processors within 24 hours ii. Poor access to markets/information gap iii. Deplorable state of rural feeder roads vs high transportation costs 	<ul style="list-style-type: none"> i. Open infrastructure to increase farmer contact with bulk buyers and retail chain store suppliers; ii. CSOs with focus on Agric should help raise farmer capacity to access viable markets and develop packaging skills iii. Improved access to market information iv. Local/State governments to develop initiatives to encourage the support of local supplies in the production process
f. Finance	<ul style="list-style-type: none"> i. Lack of access to credit for operating and expanding enterprises. ii. Lack of credit facilities for input dealers, producers, processors & marketers. 	<ul style="list-style-type: none"> i. State governments to ensure the introduction of small scale Agric loans/access to finance customized to address the needs of small/medium input dealers, producers, processors, marketers, etc. ii. Encouragement of backward integration in industries with schemes that strengthen and build the capacity of local supplies/stakeholders along the value chain by providing loans iii. NGO's, CBO's, etc. to facilitate linkage between financial institutions and small scale farmers by reducing some of the barriers and identifying investors/champions to share the risks.
g. General	<ul style="list-style-type: none"> i. Inadequacy of improved technology along the Value chain 	<ul style="list-style-type: none"> i. Advocacy and Promotion of development of adaptive and replicable technologies tailored to enhance small holder's productivity in research institutions, college of technologies, etc. ii. Ensure the availability of community-based storage facilities. iii. Environmentally friendly land preparation techniques should be encouraged and adopted to ensure long-term land fertility. iv. Reorientation of farmers to see farming as a business by ensuring markets are identified with quality and yield expectations

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		considered before the commencement of production activities.

6.3 Maize Value Chain

6.3.1 Policy directions

Maize plays a predominant role in the farming systems and diets of millions of Nigerians. It is a very versatile crop since it is used for domestic consumption in addition to its industrial use by flour mills, breweries, confectioneries and animal feed manufacturers. Consequently, increasing maize yields and its cultivation particularly in high production potential areas of the country can jumpstart a second maize green revolution in the country. Some of the factors that make maize an ideal target crop for intensification in high production potential areas of the county include the following, its high yield potential, diversified uses, ease of transportation, processing and marketing and the availability of dependable research products.

The Maize Value Chain aims at increasing maize production from 6 million metric tons to 12 million metric tons by 2015. The Maize Value Chain focuses on 15 states of Kaduna, Kano, Niger, Adamawa, Taraba, Plateau, Bauchi, Gombe, FCT, Nasarawa, Kwara, Oyo, Ondo, Katsina and Enugu. It is believed that the Katsina axis will extend to Gusau in Zamfara state to capture the high-yield potential of that zone while Gombe will also extend to Gombe and Biu in Southern Borno. The approach to doubling maize production is through production system intensification that can double yields through access to improved seeds and agro-inputs. The value chain also seeks to enhance system competitiveness through a market driven approach. Strategic linkages with input-output markets will be strengthened and the commodity association -Maize Association of Nigeria, will be central to this.⁵ Focus is on the:

1. Commercialization and deployment of high yielding, stress tolerant and nutrient efficient maize hybrids and varieties.
2. Promotion of optimal fertilizer usage along with appropriate crop and resource management practices targeted to maintain the soil base and enhance agricultural productivity
3. Modification of policies which impede the growth of private sector input companies including, seeds, fertilizer and other inputs, as well as the marketing of maize grain both in-country and for export.
4. Identification and development of new uses for maize in order to drive demand for the crop and create additional market.⁶

6.3.2 Current Scenario: Current Scenario: Roughly 1 million MT of maize is consumed on farm as saved seed, as food, as gifts or post-harvest loss ~9 MMT is sold commercially.

Under the ATA, the achievements made for the maize value chain include:

- i. Increase in the number of farmers involved in maize production, (e.g. it increased by 30-40% in Oyo State and by more than 15% in Kaduna state).
- ii. Increased access to improved inputs- fertilizers, seeds and agrochemicals to maize farmers.
- iii. Organisation of farmers into production groups and clusters in participating states.
- iv. Production of Breeder seeds by the 3 Research Institutes (IAR/ABU, IAR&T and IITA).
- v. Procurement of 100 metric tons of Foundation seeds by Seed Companies through the National Seed Council (NASC).

⁵ FMARD%20ATA%20Scorcard%20Report%202013.pdf

⁶ <http://www.unaab.edu.ng/attachments/Agricultural%20Transformation%20Blue%20Print.pdf>

- vi. Trained six staff on the use of GPS to survey and record actual crop area, an essential tool to determine actual area planted for seed increase.
- vii. Six FMARD staff were trained on the use of GPS to survey and record actual crop area, an essential tool to determine actual area planted for seed increase. This is particularly important to determine area planted to 'maize seed increase' for inclusion in GESS in 2013.
- viii. A pre-season meeting of all stake holders in the value chain was held in Ilorin between 27 -28 May, 2013 to review the value chain's activities in 2012 and discuss the plans for 2013.
- ix. The Value Chain undertook on-field capacity building training and field visits in 14 states and FCT in collaboration with NASC to ensure production of quality certified seeds of maize.
- x. Zonal workshops in the NE, NW, NC and SW zones on pre- and post-harvest handling of maize grains against mycotoxin and other contaminations.
- xi. Training of young maize farmers on the use of the 5, 000(No) knapsack sprayers procured and distributed to them. This activity was handled by the Extension Department of the Ministry.⁷

Investments in the Maize Value Chain

- i. Pioneer Seeds, one of the largest seed companies in the world plans to establish a presence in Nigeria using maize hybrids including Imazapyl Resistant (IR) hybrids developed by IITA as a platform.
- ii. SeedCo. from Zimbabwe with substantial investment in South Africa has also established maize seed production for sale in Nigeria.
- iii. A starch mill owned by Obasanjo Holdings is interested in 150 metric tons of maize per day and will be interested to partner with the Maize Value Chain.
- iv. Cargill is also interested in the use of maize for starch and is looking to establish a maize starch mill in Nigeria as soon as possible.
- v. Rainbow Chicken, the largest chicken producers in Southern Africa intend to do business in Nigeria but for the negative mycotoxin alarm publications which the value chain is seriously addressing through a national mycotoxin survey and workshops on pre and post-harvest handling of maize grains on zonal basis.⁸

6.3.3 Issues, Challenges and Strategic Recommendations MAIZE

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Inputs and Production	<ul style="list-style-type: none"> i. Input access, reliability & affordability is limited - Production is constrained by access to input /credit & limited on-farm value-add ii. Primary constraint to fertilizer use is poor availability at needed time iii. Despite high use of improved seed, yields are not reaching potential - Improved seed works best when 	<ul style="list-style-type: none"> i. Improving fertilizer access, timeliness & credibility of purchased seeds could bump up yields from 2 MT to ~4 MT/ha ii. Grow quality maize – by working with seed companies, agro dealers and other Agricultural organisations to drive quality production iii. Strengthen farmer groups - improve

⁷ FMARD%20ATA%20Scorcard%20Report%202013.pdf

⁸⁸ FMARD%20ATA%20Scorcard%20Report%202013.pdf

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	<p>combined with fertilizer and other best practices that farmers are reluctant to purchase or adopt</p> <ul style="list-style-type: none"> iv. GESS only provides 2 bags of fertilizer which is insufficient for most farmers so they also need to purchase from the open market v. Distribution system is underdeveloped and untrustworthy; corruption is common vi. Lack of extension means SHFs often apply incorrect amounts or types of inputs vii. Lack of infrastructure and facilities for the take-off of maize SCPZs viii. Lack of access to ICT by the smallholder farmers ix. Low literacy levels of smallholder farmers 	<p>extension services; promote better supply of inputs through farmer groups.</p> <ul style="list-style-type: none"> iv. Promote adoption of best agronomic practices among SHFs through farmer groups, NGOs and extension agents. v. Provide improved varieties with higher yields vi. Provide adequate technical support like extension services, capacity building, etc. vii. Use of Community Driven Development (CDD) approach
b. Land preparation	<ul style="list-style-type: none"> i. High cost of land preparation ii. Mechanization is hampered by land fragmentation 	<ul style="list-style-type: none"> i. Revitalization of National Agricultural Land Development Authority (NALDA) and Tractor Hiring Services. ii. States should design creative & innovative ways of promoting farmland development iii. Establish land development schemes with strong support from states and LGAs through a phased method that will allow for land aggregation and mechanization. iv. Consolidation of land holding for SHFs.
c. Storage and Aggregation	<ul style="list-style-type: none"> i. Few functional farmer groups exist to bulk market maize ii. Little aggregation and conditioning at the farm level iii. Post-harvest losses are high iv. Effective farmer groups are limited v. Cash flow problems force SHFs to sell maize soon after harvest to obtain 	<ul style="list-style-type: none"> i. Promote local aggregation, storage and conditioning – (strengthening farmer groups to undertake these activities) ii. Assist SHFs to meet quality standards and reduce labour costs through conditioning and mechanization. iii. Reduce waste, improve quality and

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	<p>much-needed income</p> <p>vi. Traders buy direct at farm-gate, but do not get needed quantities</p> <p>vii. Middlemen block direct access of farmers to traders or end buyers</p>	<p>provide access to higher prices and larger buyers/ premium markets through storage and conditioning.</p>
d. Processing	<p>i. Large processors do not operate close to supply due to absence of infrastructure - roads and electricity</p> <p>ii. Reliable electricity remains a major constraint for processors</p> <p>iii. Poor linkage between SHFs and large processors exist – however as large processors are well organized and buy large amounts of maize; opportunity exists to connect these large processors to the farmers directly</p>	<p>i. Encourage entrepreneurs (champions, farmer associations, etc.) to identify the niche and provide small scale milling services for grains</p>
e. Market	<p>i. Low power of SHFs as traders and middlemen dictate price and block SHFs access to market</p>	<p>i. Aggregating at farm level & connecting farmers to buyers (this can get additional 5-20% back to SHFs).</p> <p>ii. Support SHFs to access premium markets by encouraging competitive agro dealers or merchants to link aggregation efforts to premium markets.</p> <p>iii. Link conditioning centres to buyers.</p> <p>iv. Out-grower schemes can be used to link SHFs to buyers with quality maize.</p>
f. General	<p>Policy summersault or lack of continuity when government changes</p>	<p>Government have to provide enabling environment for private investors to do business in the area of Agriculture.</p>

6.4 Rice Value Chain

6.4.1 Policy directions:

Rice is among the commodities (together with cassava, sorghum, cocoa, and cotton) for which a country-wide commodity-specific transformation plan was designed. The final goal of the rice transformation agenda is to reduce the import bill, and make Nigeria self-sufficient within a 5 years' timeframe. To achieve the goal, the strategy aims at improving rice quality thereby offering a viable

alternative to the current imports, while ensuring that a significant portion of demand in the domestic rice market will shift from parboiled rice to milled rice. Consequently, policies will not only focus on milled rice but also on parboiled rice as a supply side target. Activities will focus on enhanced irrigation and mechanization systems, through private sector involvement. For example, incentivize the private sector to invest in large parboiling and de-husking facilities in regions of high current production, such as Niger State and Cross River State.⁹

6.4.2 Current Scenario

The value chain has witnessed the following achievements under the ATA:

- i. The chain is active in about 10 states (Ebonyi, Nasarawa, Anambra, Niger, Kano, Enugu, Kebbi, Kaduna, Kogi and Zamfara)
- ii. Procurement and installation of rice processing mills in states: Abuja, Enugu, Kebbi, Nassarawa, Niger and Ebonyi States
- iii. Significant increase in production in participating states; e.g. from 2-3 tons/ha to 4-5tons/ha for rice in Zamfara, kebbi and Niger state and from 2.5/ha to 4-5tons/ha in Anambra, Ebonyi, Enugu and Taraba states.
- iv. Increase in the use of private extension services leading to a boost production
- v. Number of farmers producing rice increased by about 50% in many of the states
- vi. Access to improved inputs- fertilizers, seeds and agrochemicals increased for rice farmers
- vii. Farmers organized into production groups and clusters in participating states
- viii. Branding of rice produced such as the Ofada rice, Mama Pride and Chef Choice from Olam, Ebony Rice and Ebony Gold Rice from Ebonyi state by Ebony Agro. In the rice value chain, six million rice farmers were reached with 10-25kg of improved rice seeds and 2-3 bags of fertilizer in the period 2012-2014. Yields increased from 1.5MT/Ha to over 4MT/Ha on average and national paddy rice production rose by an additional 7 million MT. The nation reached 85% sufficiency in rice production and 1.7million jobs were created. Integrated rice mills rose from one in 2011 to 24 in 2014. A new rice policy put in place to encourage local production and milling has attracted \$1.6 billion of private sector investments.
- ix. Promotion of integrated rice mills in strategic locations across the country – Targeted to achieve 2.0 mmt milling capacity by IRMs by 2015.
- x. High quality polished local rice now effectively competing with imported grades – Ebony Gold, Micap, IRS, etc.
- xi. Conducted feasibility for the establishment of paddy aggregation centers across the key rice states.
- xii. Reduction on volume of rice imports.

The following are observations on the rice value chain:

- i. Improper implementation of GESS.
- ii. Lack of infrastructure and facilities for the take- off of the rice SCPZs.
- iii. Unnecessary preferences of Nigerians for imported rice.
- iv. Installation of some substandard mills in some states.

6.4.3 Issues, Challenges and Strategic Recommendations RICE

⁹<http://watchpub.org/jaast/issues/2014/december/pdf/Osuoha.pdf>

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
<p>a. Production & productivity Land development Inputs & irrigation</p>	<p>i. Low on-farm efficiency and high costs of production (₦181,072 per ha) depending on the state</p> <p>ii. Rain-fed lowland (52% of national area & 43% of national output), rain-fed upland (30% of national area & 27% of national output), and lowland irrigation schemes (16% of national area and 29% of national production)</p> <p>iii. High cost of land preparation</p> <p>iv. Improved rice seeds and fertilizer are expensive.</p>	<p>i. Improved & productive technologies to enhance and scale up farm operations and improve productivity</p> <p>ii. Rehabilitation and up-grading of the irrigation facilities.</p> <p>iii. Promotion of rice-based farmsteads of not less than 10ha per person.</p> <p>iv. High cost of land preparation is one of the critical constraints. Mechanization is hampered by land fragmentation. States should come up with innovative ways to promote land development at the farm level.</p> <p>v. Incentivizing Investors to adopt the Nucleus Farms model</p> <p>vi. Revitalization of NALDA, Tractor Hiring Services</p> <p>vii. Rehabilitation and up-grading of the irrigation facilities</p> <p>viii. Promotion of rice farmsteads of 5 to 10ha contiguous land per farmer</p>

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
b. Paddy Aggregation, Trade & Logistics	<ul style="list-style-type: none"> i. Weak or absence of aggregation capacity as paddy is directly purchased from producers' fields (farm gate), households and at local markets ii. Transport costs are high (32 check- points from Kano to Lagos); poor road maintenance increases operating costs of hauling companies. iii. Low gross margin (₦2.50 per kg). Paddy dealers have a very low share of final consumer price for rice at 1.6% 	<ul style="list-style-type: none"> i. Finalizing the setting of up a well-equipped collection centres (Paddy Aggregation Centers,PACs) in the producing states ii. Tax incentives & repayment holidays to aggregators under first 5-6 years iii. There is need to align the Agricultural policies with trade policies. This is because rice consumed by Nigerians are smuggled rice which is cheaper than the Local rice. This is a big challenge to the SHFs farmers because they are discouraged to produce locally. The restriction of rice importation should be strictly enforced. iv. Setting up of a well-equipped collection centre in each of the producing states i.e. Paddy Aggregation Centers (PACs). The Federal government should consider granting tax incentives and repayment holidays to the aggregators within the first three to five years; as well regulate the activities of LGA revenue collectors that lead to multiple taxes and levies paid by transporters and distributors engaged in the movement of farm produce from one location to another.
c. Processing and other infrastructure	<ul style="list-style-type: none"> i. Low quantities for economic processing activities and poor processing facilities in the rural communities ii. Traditional practices of hand threshing and cleaning dominates, iii. Post-harvest losses estimated to range from 30 - 40% iv. Poor internal road networks in farming areas v. Uncompetitive downstream sector – processing and 	<ul style="list-style-type: none"> i. Incentivize farm equipment services centers in producing communities ii. Promote farm-gate processing facilities, especially threshing iii. Consolidate the integrated Rice mill intervention and protect the investors from policy reversals iv. Commence the gradual ban on the consumption of imported rice at government functions

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	marketing vi. Traditional practices of hand threshing and cleaning dominates.	
d. Access to Farm finance and farmer income	i. Credit for farming is still unavailable and/or at high interest cost ii. Banks do not have branches in rural areas iii. Finance facilities still designed for more established farmers iv. Low farmer income (farmers receive an estimated US\$123/ha per year) compared to US\$207/ha in Bangladesh	i. SHFs should benefit significantly from loans attributed to NIRSAL ii. Financial institutions should increase lending to SHFs
e. General		i. Faithful implementation of all the strategies for the realisation of the Rice Transformation Plan targets, which include: <ul style="list-style-type: none"> ○ Rehabilitation of Target Irrigation Programs. This will be in form of utilizing labor intensive methods to rehabilitate target irrigation schemes that have existing reservoir systems and require only irrigation canals and drainage canals to be developed ○ Incentivizing Investors to Invest in Nucleus Farms. This will include leveraging investment in rehabilitating irrigation schemes and incentivizing investors to develop nucleus farm estates. ○ Replication of Nucleus Farm Model on Medium Scale. There will also be replication of farm nucleus model to rapidly target community level production and processing.

6.5 Oil Palm Value Chain

6.5.1 Policy directions: Replacement of unproductive wild palms with improved plantings, distribution of improved seedlings through NIFOR and other public and private nursery operators, improved access to agricultural inputs – fertilizer and agrochemicals, promotion of improved harvesting equipment, promotion of improved processing equipment and support for promotion of RSPO in Nigeria.

6.5.2 Current Scenario

- i. Production is currently mainly used by Household (cooking red oil) & industrial (oil, soap, cosmetics, etc.)
- ii. Annual estimated local consumption of over 1 million tons (deficit of 400,000 metric tons of industrial grade palm currently bridged by imports)
- iii. 80% of production undertaken by smallholder farmers
- iv. Production not organized and coordinated – mostly scattered, self-originated wild species
- v. Few existing plantations not properly maintained

Major achievements under the ATA include:

- i. Expanded production of improved oil palm seedlings by NIFOR for distribution to SHF through ADP, states Min. of Agric. and private nursery operators – about 9 million seedlings
 - o N2,000 for 50 seedlings, wire gauze and 2 bags of fertilizer
- ii. Government exited fertilizer supply scheme and created avenue for Input companies to provide fertilizer directly to SHF which elicited the true demand for fertilizer and also opportunity to produce specialty fertilizer
- iii. A total of 4.5 million sprouted oil palm value nuts were distributed to 45,353 small and large oil palm estate owners and 1,080,000 jobs were created. Additional Crude Palm Oil (CPO) production due to these interventions is projected to be 2.76million MT.

The observations made under the value chain include:

- i. Poor distribution mechanism of seedlings to SHFs
- ii. Increased cost of seedlings (by 50%) and no supply of additional inputs
- iii. Non clarity on level of implementation of other oil palm ATA policies- improved harvesting and processing technologies, etc.
- iv. Non targeted promotion of Guaranteed Minimum Price (GMP) for oil palm
- v. High level of subsistence oriented and unorganized farmers
- vi. High cost of inputs- (fertilizer, CPP) and technologies
- vii. High cost of Finance and no targeted finance scheme under ATA for oil palm
- viii. Lack of access to new markets for SHFs
- ix. Most processors prefer to only sell to food market
- x. Fabricators manufacturing more appropriate and affordable processing technologies
- xi. Limited availability of reliable new planting material
- xii. Limited knowledge on; and, non- utilization of mechanical harvesters
- xiii. Limited linkages between farmers and vertically integrated mills
- xiv. Limited linkages between small/medium scale improved mills to the secondary processors
- xv. Limited linkages between NIFOR, researchers and equipment fabricators

- xvi. Weak flow of information on market and prices
- xvii. Weak flow of information on availability of technologies and their value propositions
- xviii. Weak flow of information on agricultural current practices
- xix. Weak application of good agricultural practices - weeding, pruning, applying fertilizer, herbicides, etc.
- xx. Improper harvesting of fruit (how to identify when the bunch is ripe)
- xxi. Lack of access to credit for smallholder farmers and processors limiting the purchase of improved equipment and upgrading of the plantations

6.5.3 Issues, Challenges and Strategic Recommendations OIL PALM

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Production	<ul style="list-style-type: none"> i. Unproductive or low-yield wild grove palms ii. Low productivity of palms/ Current production practices result in low yields 	<ul style="list-style-type: none"> i. State ADPs lack facility/structure to raise the nuts into seedlings for onward distribution to farmers ii. Strengthen capacities of private sector nursery operators within oil palm clusters to provide improved seedlings to farmers iii. Need to adopt the tissue culture in Oil Palm cultivation. iv. Establishment of NIFOR Nurseries in each state of the Oil Palm Belt (OPB) of Nigeria for decentralized and effective access to improved nurseries by farmers. v. Commence rapid replacement of old grooves with fast growing and high yielding variety. vi. Replacement of wild groves with improved varieties vii. Promotion of oil palm farmsteads of minimum of 5ha to 10ha per farmer
b. Inputs	<ul style="list-style-type: none"> i. GESS offered some farmers access to these inputs, but inadequacy from poor input availability still experienced ii. Poor access to inputs: fertilizer, seedlings & agrochemicals 	<ul style="list-style-type: none"> i. Review the GESS scheme for improved efficiency and effectiveness for delivery of inputs & services to farmers ii. Formation of strong viable cooperatives and commodity clusters in readiness to key into interventions
c. Mechanization	<ul style="list-style-type: none"> i. Manual harvest of crops ii. Unavailability of appropriate 	<ul style="list-style-type: none"> i. Promotion of improved harvesting equipment for smallholder farmers by private sector actors-manufacturers/marketers

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
	technologies/Dearth of Harvesting equipment	<ul style="list-style-type: none"> ii. Lack of access to credit for smallholder farmers and processors limiting the purchase of improved equipment and upgrading of the plantations iii. Creation of a technical oil palm package kit (seedlings, fertilizer, CPP) and education by relevant stakeholders – NIFOR, Fertilizer and CPP companies and agric. extension agents and coordinated and managed by social enterprise in order to make it sustainable iv. Facilitate R&D for new technologies(harvesting, etc.) that are suitable for and affordable by SHF
d. Processing	Preponderance of Inefficient processing methods at farmer level	<ul style="list-style-type: none"> i. Promotion of improved processing equipment amongst smallholder farmers by private sector actors- fabricators ii. Facilitate R&D for new technologies(harvesting, processing, etc.) that are suitable for and affordable by SHF
e. General	Lack of access to new markets for SHFs	<ul style="list-style-type: none"> i. There is need to develop alternative markets for many crops including oil palm. ii. Access to markets and consumers. iii. Faithful implementation of ATA oil palm transformation plan. iv. Promotion of oil palm farmsteads for the youths across the OPB of Nigeria. This is to be in every rural LGA, and 5 to 10 participants per LGA at the inception. Five to ten hectares per youths (farmer), supported with primary processing facilities and borehole. v. Rapid sensitization of farmers on the imperatives of productive oil palm management practices. vi. Promotion of small, effective farm-level technologies for harvesting and primary value addition. vii. Establishment of grades and standards unit for industrial and export oriented produce.

6.6 Vegetable Value Chain

6.6.1 Issues, Challenges and Strategic Recommendations VEGETABLE

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Inputs	<ul style="list-style-type: none"> i. Input scarcity (quality seed) -good quality seeds are not available to the SHFs. ii. High cost of high quality inputs iii. Limited access to and/or information on high quality inputs iv. High cost/non-availability of irrigation facilities /water 	<ul style="list-style-type: none"> i. Promote access to water (through irrigation) and high quality inputs ii. Introduction of schemes and incentives that ensure access to inputs and irrigation facilities amongst the vulnerable groups iii. Regular information dissemination on inputs, input providers and irrigation technics through the state and local government agencies (general recommendation) iv. Increase in number of input access points v. Reduction of distance to inputs points for farmers
b. Production	<ul style="list-style-type: none"> i. Low productivity/ low yield ii. Non-availability of farmer-friendly, low cost technology for irrigation and land preparation. iii. High waste due to poor farming techniques iv. Limited use of integrated pest and disease management systems v. Poor storage facilities vi. Information gap between farmers and technical knowledge vii. Inadequate knowledge of soil fertility and fertilizer application for optimum production viii. Non-availability of appropriate fertilizer for vegetables. ix. Poor knowledge of pest control and indiscriminate use of pesticide which can lead to contamination of produce. x. There is poor handling and storage facilities xi. The gap in technical knowledge and information exist at farmers level 	<ul style="list-style-type: none"> i. Promote improved agronomic practices such as local greenhouse approach to production. ii. Promote improved, disease resistant, varieties for optimum production of the different vegetables. iii. Promotion of low cost irrigation techniques and technologies amongst farmer cooperatives and associations iv. Gap in production information among farmers should be closed with on-farm adaptive training

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
c. Wholesale Market /Processing	<ul style="list-style-type: none"> i. Farmer is a price taker due to limited market access & product perishability ii. Lack of adequate processing facilities/ Limited local processing iii. Poor quality and inconsistent supply iv. Poor post-harvest infrastructure v. Poor handling/ packaging materials for vegetables during processing and transportation vi. Sale of produce by farmers soon after harvest at give-away prices vii. Heavy losses due to spoilage and deterioration 	<ul style="list-style-type: none"> i. Promote local technologies that are applicable to small holder farmers in preservation, storage and packaging of tomatoes and other leafy vegetables ii. Address the issue of poor handling of vegetable produce before getting to the final consumer.
d. Retail/Trade	<ul style="list-style-type: none"> i. Difficult for small holder to access market directly ii. Poor market access, non-availability of market information and market regulation for vegetables. iii. Farmers receive low price for produce iv. Fragmented retail market for fresh vegetables – primarily sold in wet markets and kiosks v. Poor wet market infrastructure vi. Poor market access vii. Sales of produce by farmers soon after harvest at give-away prices viii. Lack of adequate storage facilities on farms, and at major collection centres 	<ul style="list-style-type: none"> i. Facilitate linkage between SHFs and high-end markets ii. Banks should organize the off-takers prior to production.
e. Logistics	<ul style="list-style-type: none"> i. Lack of cold storage facilities ii. Lack of adequate storage facilities on farms, and at major collection centres iii. High transport cost 	<ul style="list-style-type: none"> i. Infrastructure (road and power) access to farm sites ii. Promotion of cold chain transport
f. Finance	<ul style="list-style-type: none"> iii. Difficult to access finance across value chain 	<ul style="list-style-type: none"> iv. NIRSAL should cover the vegetable value chain. Until SHF have access to funds they will not make any tangible progress. Without support from the Banks, SHFs cannot adopt new technologies and mechanization.
g. General		<ul style="list-style-type: none"> i. Promote internationally marketable

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
		<p>vegetables: tomatoes, peppers, onions and other leafy vegetables.</p> <ul style="list-style-type: none"> ii. Establish quality standards for vegetable marketing and export. iii. Nation-wide awareness on the importance of vegetables consumption to stimulate production and market iv. Formation of national association of vegetable producers, marketers and processors. Harmonize all the existing different vegetable association into one strong umbrella body. v. Formation of vegetable-specific policy along the value chain with focus on all actors along the value chain. vi. In formulating policy on processing, the government should consider the interest of the SHF producers in terms of pricing. vii. Develop a comprehensive value chain analyses on vegetables in Nigeria. viii. Establish National Working Group (NWG) for different value chains in vegetable production. Develop Terms of Reference (ToR) for the NWG to make it bottom-up in approach. ix. Nigeria should adopt nutritional standards that comply with global standards.

6.7 Aquaculture/Livestock Value Chain

6.7.1 Current Scenario

Capture fisheries is still the largest producer of fishery in Nigeria. The achievements of ATA include:

- i. Increased access to funding by commercial farms.
- ii. Increased local and foreign direct investments.
- iii. Increased research support to produce new local stock (National Animal Production Research Institute).
- iv. Increased local production (about 20% growth in the poultry sector).
- v. The poultry value chain gave out 254,000 day old chicks and 200MT of feed to 2,500 poultry farmers leading to the creation of a net value of N106million to poultry farmers. A total of 1,696 new jobs were also created.
- vi. The fishery and aquaculture value chain have reached over 29,000 artisan fishermen and fish farmers with 3.9million juvenile fingerlings, and 270,000 bags (50kg) of fish feed, in addition to nets, floats, and boats. In response to GESS support to artisanal fishermen and fish farmers, fish production has risen from 292, 105MT to 418, 537MT, a 43% increase, for artisanal fishing in inland rivers and lakes; and from 221,128 MT to 278,706MT, a 26% increase, for farmed fish.
- vii. Inclusion of aquaculture in the GESS

6.7.2 Issues, Challenges and Strategic Recommendations AQUACULTURE/LIVESTOCK

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
a. Inputs supply – Fingerlings, Chicks, feeds, vaccines, extension services	<ol style="list-style-type: none"> i. High cost of feeds ii. Non-involvement of livestock /aquaculture farmers organization/ farmers groups in GESS programmes iii. Poor extension service (there are very few extension agents knowledgeable in aquaculture) iv. Poor access to technical support services 	<ol style="list-style-type: none"> i. Creating awareness on best practices in handling fingerlings/chicks ii. Need for introduction of local feeds such as the use of maggots, and environmentally friendly materials like maize, soya, groundnut cake, rice brand, bean seed, etc. for fish feeds to reduce costs of feeds iii. Train more extension officers in aquaculture
b. Processing/ Mechanization	Lack of technologies	<ol style="list-style-type: none"> i. Investment in development of local technologies ii. Awareness creation on new technologies
c. Markets and storage.	<ol style="list-style-type: none"> i. Lack of cold chain ii. Influx of poultry imports (including eggs by some TNCs/major supermarkets) 	<ol style="list-style-type: none"> i. Market linkage ii. More investment in and exhibition of locally fabricated less expensive cold room technologies iii. Application of safeguard mechanisms such as Quota and administrative restrictions (including health standards) allowed by the WTO

Issues	Challenges SHFs have in benefiting from the scheme	Strategic recommendations
d. Finance	Poor access to funding	Encouraging groupages and cooperative actions towards financing options
e. General	<ul style="list-style-type: none"> i. Little or no awareness of the ATA programme ii. Poor feedback mechanism iii. Insecurity in the North East has hampered productivity and marketing 	<ul style="list-style-type: none"> i. Improved access to information ii. Strengthening commodity/ farmers' associations via NGOs, etc. iii. Small holders farmer cooperatives to be encouraged iv. Establishment of innovative platforms v. Facilitation and capacity building vi. Realistic data bank is necessary vii. Linkages to input and output markets viii. Encouraging networking among stakeholders ix. Need to adopt best practices from livestock producing nations x. NGOs should be encouraged to do more in the area of aquaculture and livestock agriculture xi. Need for more information to farmers on government investment in agriculture

7. RECOMMENDED ROLES FOR STAKEHOLDERS

To ensure optimum benefits for smallholder farmers, processors, marketers/traders and entrepreneurs in the agricultural value chains, the following roles are recommended for the different stakeholders considered very important:

7.1 Roles for States & LGAs Agencies

1. Scale up State and LGA involvement in implementation of the programme.
2. Establish and regularly update farmer's database in the state.
3. Provide the enabling environment for the operations of SHFs.
4. Develop and implement sustainable agricultural subsidy schemes.
5. Develop appropriate mechanisms for information dissemination to SHFs.
6. Provide adequate support for agricultural extension schemes, Agricultural extension agents and strengthen their capacities.
7. LGA should recruit extension workers and train them on the routines of commodity production and handling (e.g. vegetable production and handling).
8. Obtain buy-in of traditional and community leadership institutions into renewal schemes for commodities such as palm oil.
9. LGA should encourage Community Driven Development Approach (CDDA) and train community leaders on CDDA.
10. States and LGAs should encourage Young Vegetable Scientist (YVSc) in schools. For example, Lagos State have built Greenhouses in over ten (10) schools. The schools grow cucumber and other vegetables. During the long holiday, students are engaged for about 3 weeks training on how to cultivate different vegetables.
11. States should fulfil their commitments to agricultural policies for example make available counterpart funds, lands, etc.
12. There should be strict compliance to implementation of strategies developed.
13. Encourage better interaction between all tiers Government and farmers/value chain actors.
14. Promote linkages among ADPs, LGA Agriculture officers and communities.
15. Encourage grass root participation in formulation, implementation, monitoring and evaluation of agricultural programmes.

7.2 Roles for Communities

1. Support for Government agricultural policies.
2. Imbibe the culture of sustainability e.g. for facilities provided for the communities.
3. Embrace new technologies/innovations.
4. Facilitation of access to land for research demonstrations.
5. Facilitation of social safety nets.

7.3 Roles for Non-State Actors (NGOs, community based organizations and faith-based organizations)

1. Facilitation, Monitoring and Evaluation, Training and capacity building for SHFs where necessary.

2. Provision of funding support for agricultural projects.
3. Undertake policy reviews to keep Government on track.
4. Be collaborative and participatory in approach to development.
5. Create awareness on policies and activities, assist in aggregation activities, recommendations of champions, etc.
6. Provision of information on available support for SHFs.
7. Work as partners with government and existing farmers' associations.
8. Provision of incentives to support SHFs.

7.4 Champions

Champions are identified strategic stakeholders who are already performing well along the different sub-functions within the value chain- input, production, processing, marketing, support services, markets, etc. They are models that can be showcased to SHFs and they could also be:

- i. At the Ward level - community leaders, extension agents, politicians, lead farmer, etc.
- ii. At the Local government - HOD Agric., Agric Officers, extension agents, etc.
- iii. At the State level – ADP staff, extension agents, etc.
- iv. At the Federal level - State Directors, Director of Agricultural extension, etc.

Champions should be identified by the communities, ADP staff, NGOs, SHFs/farmer associations, etc. Their roles include serving to identify and provide access to SHFs; as channels for SHFs to access technical assistance, markets and inputs; as the nucleus for SHFs' aggregation and to optimize their activities in the different sub-functions.

They will also serve to sensitize SHFs on available technology, i.e. extension/training; provide necessary infrastructure, business environment and effective legal framework. Other functions would include linkages/networking with relevant NGOs, complementing Government policies, undertaking advocacy and sensitization programme on policy options (mobilization, awareness creation, feed-back and early warning signals, etc.)

Champions should be supported with the following enabling conditions:

1. Access to subsidized funding e.g. NIRSAL, CAC, FAFIN, MSMEDF, etc.
2. Access to technical assistance, guarantees, markets, waivers, subsidies, NIRSAL tax holidays, etc.
3. Access to land at subsidized rates or terms.
4. Easier and cheaper cost of land perfection.
5. Budgetary provision for the GESS at the 3 tiers of government.
6. Technical assistance, capacity building, funding, incentives, information, etc.

Champions should be linked with smallholder actors through contracts/off-taker agreements, liaison with government agencies and established rural institutions, aggregation/clustering of SHFs and already existing platforms providing services to SHFs as well as extension agents.

7.5 Roles for BATNF.

1. BATNF can provide Technical Assistance to selected value chains.
2. Fund research in some value chains.
3. Act as a lobbyist for policy change.
4. Support communities in developing redemption centers.
5. Sustain/improve the current threshold of complimentary support to Government policies on poverty reduction.
6. Increase the allocation of BATNF's net profit towards improving livelihoods of resource poor rural farmers and vulnerable groups.
7. Increase the number of beneficiaries of their programmes.
8. Liaise with key stakeholders to address issues/challenges.
9. Continue to play the role of bridge-builder and involve more collaborators for its monitoring and evaluation role.
10. Facilitate market linkages that will benefit SHFs.
11. Assist in locating actors/stakeholders in particular value chains to review activities annually.
12. Continue to locate new implementation partners in the value chains to review the policy of ATA annually.
13. Maintain and sustain the synergy and collaboration that already exist with its partners.

APPENDICES**Appendix I: Executive Working Group Members**

S/N	NAME	ORGANISATION	EMAIL ADDRESS	PHONE NUMBERS
1.	PROF FEMI AJIBOLA	NEW NIGERIA FOUNDATION	femiajibola@nnfng.org	08033237499
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3.	FRANCIS OKPANI	OTUS BROWN RICE	otusbrownrice@yahoo.com	08161683502
4.	INNOCENT AZIH	CARBON EXCHANGE	innoazi@yahoo.com	08023617615
5.	ABIMBOLA OKOYA	BRITISH AMERICAN TOBACCO	Abimbola_Okoya@bat.com	07013490079
6.	PROF LEMCHI JONES	FEDERAL UNIVERSITY OF TECHNOLOGY	lemchijones@gmail.com	08035515014
7.	KEN UKAOHA	NATIONAL ASSOCIATION OF NIGERIAN TRADERS (NANTS)	kenukaoha@gmail.com	08033002001

Appendix II: Some Details of the Dialogue Session

A. Agenda of the Dialogue Session

DIALOGUE ON SMALLHOLDER FARMERS AND SUSTAINABLE AGRICULTURE

OCTOBER 5-7 2015 | SOUTHERN SUN HOTEL, IKOYI, LAGOS



Government Agricultural Policies and the Nigerian Smallholder Farmers

A G E N D A

October 05


- 🕒 12:00pm - 06:00pm - Arrivals and Check-in
- 🕒 06:00pm - 10:00pm - Dinner

October 06

- 🕒 07:30am - 09:00am - Registration
- 🕒 09:00am - 09:15am - British American Tobacco Nigeria Foundation Welcome Address by Chris McAllister, Managing Director, British American Tobacco Nigeria
- 🕒 09:15am - 11:00am - Plenary Session: Presentations
 - **Empowering Rural Nigeria for a Sustainable Future: BATNF's efforts so far:** Oluwaseyi Ashade, Executive Director, British American Tobacco Nigeria Foundation
 - **Analysis of the Agricultural Transformation Agenda (ATA): Current progress, how it has worked before and the impact on the smallholder farmers:** NESG representative
 - **Impacts of the ATA so far on the farming communities in Nigeria:** Professor I. U. Abubakar, Executive Director, Institute of Agricultural Research, Zaria
 - **Presentation of the report of BATNF Executive Working Committee:** Innocent Azih, member BATNF Executive Working Committee
- 🕒 11:00am - 11:30am – Q & A Session
- 🕒 11:30am - 11:45am -Tea Break
- 🕒 11:45am - 1:00pm - Group Session
 - Group A – Cassava Enterprise Value-chain Development: Undertake a careful review of the ATA policies, the BATNF Working Group report and related agricultural policies to identify the challenges of the key players along the value chain and the extent to which the policies and reports will support businesses along the value chain in wealth creation and increased productivity.
 - Group B – Maize/Rice Enterprise Value-chain Development: Undertake a careful review of the ATA policies, the BATNF Working Group report and

related agricultural policies to identify the challenges of the key players along the value chain and the extent to which the policies and reports will support businesses along the value chain in wealth creation and increased productivity.

- Group C – Palm Oil Enterprise Value-chain Development: Undertake a careful review of the ATA policies, the BATNF Working Group report and related agricultural policies to identify the challenges of the key players along the value chain and the extent to which the policies and reports will support businesses along the value chain in wealth creation and increased productivity.
- Group D – Livestock/Aquaculture/Poultry Enterprise Value-chain Development: Undertake a careful review of the ATA policies, the BATNF Working Group report and related agricultural policies to identify the challenges of the key players along the value chain and the extent to which the policies and reports will support businesses along the value chain in wealth creation and increased productivity.
- Group E – Vegetable Enterprise Value-chain Development: Undertake a careful review of the ATA policies, the BATNF Working Group report and related agricultural policies to identify the challenges of the key players along the value chain and the extent to which the policies and reports will support businesses along the value chain in wealth creation and increased productivity.
- Group F – Nigeria Incentive-based Risk Management System for Agricultural Lending(NIRSAL): Undertake careful review on how the policy have been able to assist players along the agricultural value-chain in boosting the banks' confidence so as to give loans to the sector's players to increase their productivity and how the policy have been able encourage to lend to the agricultural value-chain.
- Group G – Growth Enhancement Support (GES): Undertake careful review of the policy, its objectives and the impact on the Nigerian smallholder farmers through provision of series of incentives to improve productivity, food security and income of the farmers.
- Group H – Climate Change: Undertake careful review of the effects/impact of climate change on Nigerian agriculture. Also the Group shall also look into knowledge, education, dissemination of information and experience on climate change by the rural smallholder farmers in Nigeria.

 01:00pm - 02:00pm - Lunch Break

- 🕒 02:00pm - 03:30pm – Groups Presentation 1 (NIRSAL, GES, Climate Change)
- 🕒 03:30pm - 03:45pm – Recess
- 🕒 03:45pm - 05:15pm – Groups Presentation 2 (Value-chains)
- 🕒 05:15pm - 05:45pm – Summary and next steps
- 🕒 05:45pm - 06:00pm - Closing remarks and Vote of Thanks by Freddy Messanvi, Director, British American Tobacco Nigeria Foundation
- 🕒 07:00pm - 09:00pm – **Group Dinner**

October 07

- 🕒 07:00am - 12:00 noon– Breakfast/Check out and departures

B. Discussion Guide for the Dialogue Session

DIALOGUE ON SMALLHOLDER FARMERS AND SUSTAINABLE AGRICULTURE

OCTOBER 5-7 2015 | SOUTHERN SUN HOTEL, IKOYI, LAGOS



Government Agricultural Policies and the Nigerian Smallholder Farmers

Guide for Group Discussion

1. What are major achievements of the ATA with respect to your program/value chain?
2. What are the major challenges in the agenda/program with respect to the small holder actors (farmers/ processors/marketers)?
 - Along subthemes/value chain etc.
3. What do the small holder actors need to overcome these challenges?
4. What recommendations/changes/additions can be made to the current policies/actions to satisfy the needs of the small holder actors?
 - Specify implementation strategies/options.
 - What are the possible issues that the strategies/options may confront?
5. What should be the roles of LGA and state government agencies in ensuring that the small holder actors benefit maximally from the ATA and other government policies?
 - What changes/actions have to take place at LGA/state levels for these roles to be performed?
 - Any role for communities/community structures?
6. Champions
 - How should they be identified and by who?
 - What should be their roles?

- How should they be supported?
 - How should they be linked with the small holder actors?
7. Non State Actors
- Any roles for non-state actors in the effective implementation of the recommended actions, the ATA and other policies?
8. Way forward
- With respect to the program/value chain.
 - With respect to the role of BATNF.

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