



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

FEED THE FUTURE NIGERIA AGRICULTURAL EXTENSION AND ADVISORY SERVICES ACTIVITY

Gender and Social Inclusion Analysis

November 2020

Submission Date: November 19, 2020

Contract Number: 72062020C00001

Activity Start Date and End Date: October 1, 2020 to September 30, 2021

COR Name: Charles Iyangbe

Submitted by: Ben Odoemena, Chief of Party

Winrock International

Tel: +011 234 808 890 0300

Email: ben.odoemena@agextensionactivity.org

This document was produced for review by the United States Agency for International Development Nigeria (USAID/Nigeria).

Submitted to USAID: November 19, 2020

Disclaimer: This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Winrock International and do not necessarily reflect the views of USAID or the United States Government

TABLE OF CONTENTS

Acronyms	4
Program Overview/Summary	5
Program Description/Introduction.....	5
Executive Summary	7
Summary of Key Findings and Recommendations	8
Methodology	9
Limitations.....	11
Country Overview.....	12
Literature Review: Findings from the ADS 205 Domains for Gender Analysis	15
Laws, Policies, Regulations, and Institutional Practices	16
Cultural Norms and Beliefs	18
Gender Roles, Responsibilities, and Time Use	19
Access and Control Over Assets and Resources	20
Patterns of Power and Decision-Making	23
Field Analysis: Key Findings and Recommendations.....	24
Cross-Cutting Best Practices	41
Conclusion.....	43
References	45

ACRONYMS

ADP	Agricultural Development Program
ADS	Automated Directives Systems
AFEX	Africa Exchange Holdings
CoP	Community of Practice
EUCORD	European Cooperative for Rural Development
FGD	Focus Group Discussion
FMARD	Federal Ministry of Agriculture and Rural Development
FMWASD	Federal Ministry of Women Affairs and Social Development
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GII	Gender Inequality Index
GON	Government of Nigeria
HDI	Human Development Index
ICT	Information and Communications Technology
IFDC	International Fertilizer Development Centre
IFAD	International Fund for Agricultural Development
KII	Key Informant Interview
LGA	Local Government Areas
M2M	Mapping to Markets
MSME	Micro, Small, Medium Enterprises
NAERLS	National Agricultural Extension and Research Liaison Services
NBS	National Bureau of Statistics
NGO	Non-Governmental Organization
NGP	National Gender Policy
PIND	Partnership Initiatives in the Niger Delta
PYD	Positive Youth Development
SME	Small or Medium Enterprise
SMS	Short Message Service
USAID	United States Agency for International Development
WIA	Women in Agriculture

PROGRAM OVERVIEW/SUMMARY

Program Name:	Feed the Future Nigeria Agricultural Extension and Advisory Services Activity
Activity Start Date and End Date:	May 25, 2020 – May 24, 2025
Name of Prime Implementing Partner:	Winrock International
Contract Number:	72062020C00001
Name of Subcontractors:	Connexus, Digital Green Foundation, European Cooperative for Rural Development (EUCORD)
Major Counterpart Organizations:	Public and Private Sector extension and service providers; Partnership Initiatives in the Niger Delta (PIND) ¹ ; Federal Ministry of Agriculture and Rural Development (FMARD); State Ministry of Agriculture and Rural Development
Geographic Coverage:	Benue, Cross River, Delta, Ebonyi, Kaduna, Kebbi, and Niger states

Program Description/Introduction

Winrock International was awarded the **Feed the Future Nigeria Agricultural Extension and Advisory Services Activity**, hereafter referred to as the Extension Activity, on May 18, 2020. The five-year activity (May 25, 2020 – May 24, 2025) will partner with micro, small and medium enterprises (MSMEs) and key market actors within the aquaculture, cowpea, maize, rice, and soybean value chains to pilot proven technologies, scale up successful ones, and promote the adoption of improved production practices as well as improved service delivery that will rapidly, effectively, and sustainably provide access to agro-inputs and service delivery and disseminate extension messaging to at least two million smallholder farmers in Benue, Cross River, Delta, Ebonyi, Kaduna, Kebbi, and Niger states. The Extension Activity consortium is described in Box 1.

The three cornerstones of the approach are:

- achieving impact at scale,
- taking a ‘farmer first’ perspective to ensure on-farm results, and
- using a facilitative market systems approach for sustainability.

¹ The Extension Activity will also explore collaboration with other development organizations and/or development projects such as International Fertilizer Development Centre (IFDC), HarvestPlus, AFEX, CropIT, etc.

The Feed the Future Nigeria Agricultural Extension and Advisory Services Activity works at the intersection of these pillars to achieve sustainable, scaled, farmer-level impact. The Extension Activity uses Lean² production principles and tools to develop a deep understanding of the existing production systems to identify the most promising opportunities and critical constraints to improve efficiency and increase return on investment for farmers. The Extension Activity leverages MSMEs as change agents around the identified on-farm opportunities. These MSMEs are strategically placed intermediaries for upstream and downstream movement of inputs and commodities through the market system; and their businesses depend on and can grow with the enhanced competitiveness and profitability of smallholder producers: their core customers.

The Extension Activity will focus on improving producer supply to proven market channels and increase efficiencies in the flow of goods and services within the selected value chains (maize, rice, cowpea, soybean, and aquaculture) thereby increasing the productivity of the smallholder farmers, increasing their household income, and ensuring the sustainability of interventions beyond the life of the project.

These efforts will inform both research and public sector extension services. In particular, the Activity will facilitate a demand-driven Community of Practice (CoP) that will bring private sector, research institutions, the Federal Ministry of Agriculture and Rural Development (FMARD), State Ministries of Agriculture, State Agricultural Development Programs (ADPs), associated government institutions, and donors together and serve as a platform for those system actors to share and disseminate learning, develop partnerships, and promote investments that address common barriers to growth in the agricultural sector.

State ADPs, the National Agriculture Extension Research Liaison Services (NAERLS), FMARD officers, and FMARD-supported extension centers will be invited to participate in training and learning activities with MSME cohorts. Through their expansive networks and national reach, Nigeria's universities and research institutes will support system scale-up; along with adoption of new technologies and ways of doing business. By the end of 2025, the Extension Activity will enable 280 SMEs to provide new or improved extension and advisory services to support smallholder farmers – leading to \$300 million in increased sales.

Box 1. The Extension Activity Consortium
Winrock International – Prime Implementer; responsible for overall program implementation and compliance; Leads Objective 1.1, 1.2, Component 2, and Cross-Cutting Activities

Connexus – Leads Objective 1.4 and financial/business analyses of private sector service models (Objective 1.2); contributes to leveraging private sector investments

Digital Green – Leads Objective 1.3; introduces and adapts Most Impactful Practices methodology; contributes lessons and best practices from global ICT-enabled extension

European Cooperative for Rural Development (EUCORD) – Supervises State Coordinators; contributes value chain technical knowledge and farmer context (Objectives 1.1 and 1.2)

² **Lean** is a process-driven analytical and management set of principles and tools the Activity will use to develop a deep understanding of the existing production systems to identify the most promising opportunities and the most important constraints to improve efficiency and increase return on investment for farmers. Lean principles emerged from the Toyota Production System, known for efficiency and high net margins within its industry, and have been applied in agriculture as well as other sectors and industries in the recent decades.

EXECUTIVE SUMMARY

Gender equality and women’s empowerment are key goals for both USAID and the Government of Nigeria (GON). Not only has the government sought to identify and address key gaps in all sectors of society, but USAID has also implemented policies that require addressing gender and social inclusion gaps and constraints in all activities and projects. Notwithstanding these commitments, the country faces challenges in reaching gender equality, particularly with respect to agriculture and food security. Women continue to occupy the lowest levels of all value chains and remain the majority amongst subsistence farmers. They still lack access to land, extension services, training, and opportunities that could significantly help them benefit from activities across the higher levels of value chains. Furthermore, women in Nigeria are given fewer opportunities to make decisions about how household income will be used than are men, and rural women’s workloads are disproportionately higher.

With a fast-growing population that requires an ever-growing supply of food, a national poverty rate of 40.1 percent (NBS, 2019), and a labor force that is dominated by agricultural work, Nigeria’s efforts to boost agricultural productivity could not be better timed and positioned to employ a gender and inclusion lens. Agricultural productivity remains low for women farmers due to several factors, including cultural and gender norms; lack of access to extension and agricultural services; finance; and illiteracy – to name a few. These gender gaps present opportunities for the Extension Activity to design activities that respond to gender inequities in access, increase youth engagement, and bolster women’s empowerment. By thoroughly assessing their agricultural activities and examining key constraints and opportunities, this study did not only help to determine what women and youth are doing in the sector, but how best to reduce their constraints and increase productivity.

This analysis offers a comprehensive overview of the needs, priorities, and opportunities to support youth engagement and integrate gender equality considerations into the target commodities (i.e. rice, maize, soybean, cowpea and pond fish). The purpose of this document is to provide a summary of primary challenges and opportunities present in the intervention areas that can help both Extension Activity staff and stakeholders design more gender-transformative approaches that guide implementation, monitoring, and evaluation. This report includes:

- The gender and social inclusion context in each region where the Extension Activity is being implemented
- Key findings summarized from interviews and focus group discussions
- Key recommendations for the Extension Activity

The key lines of inquiry for the analysis include the following (which cover the relevant domains listed in Automated Directive System (ADS 205.3.2)).

- What are the key advances in gender equality and social inclusion in the agricultural sector?
- What are the issues and constraints to equitable access and participation in agriculture from women and youth, and how does this vary across regions?
- What are the key constraints and opportunities for integration of gender and social inclusion across the various value chains of the Extension Activity?
- What are the entry points for increasing women and youth voices and access in the Extension Activity?

- How do traditional and cultural norms or gender roles impact participation of women and youth in the agricultural sector and productivity?

SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

The analysis of the primary data collected supports findings from secondary resources analyzed for the literature review, which suggests that deep-rooted historical and perpetuated inequalities between men and women tend to contradict national legal frameworks established to address women’s inequality and unequal opportunities for youth. Given the context of inequality in Nigerian society, it can prove challenging to implement interventions that increase productivity and build resilience in households and communities without addressing systemic, culturally rooted gender inequalities. Some of the key findings of the analysis are listed below; and recommendations are highlighted subsequently.

- **Actions of the Government of Nigeria indicate its support for prioritizing women’s economic empowerment and advancing greater participation of women and youth in agriculture.** The current administration has increased their attention to gender equality broadly at the national level; and compliments Nigeria’s standing legacy of prioritizing women’s contributions in agriculture such as with equal access to agricultural inputs, credit, loans, and extension services.
- **Tradition and cultural beliefs continue to act as a barrier for women,** which exacerbate their inability to participate fully in all aspects of household, employment, and community life. Men are seen as decision-makers in the family and cultural norms suggest it is a woman’s job to follow what men say.
- **Women continue to face a “double burden”** where their time is taken up with domestic responsibilities such as collection of fuel wood and water for household use and consumption, cooking, child care and care of the elderly, and care of small animals, alongside paid employment and help on family farms. There is tremendous opportunity for the Extension Activity to sensitize beneficiaries on the impact that strict gender norms and women’s high workloads have on agricultural productivity. During identification of most impactful practices (MIPs), the Extension Activity will identify new technologies and improved practices that will likely impact time burdens placed on women.
- **Women and youth are constrained by lack of access to finance/loans to establish or expand their agricultural businesses.** Women and youth lack access to finance (as well as information about financing options) that could help them minimize risk and expand access to critical inputs – like new technologies, including cell phones and improved agricultural practices (such as new seed varieties that are drought tolerant, or conservation farming techniques). The analysis recommends collaborating with government and financial institutions to facilitate women farmers’ access to credit through cooperative groups before the outset of the planting season, to enable them to purchase production inputs such as fertilizer and agrochemicals and pay for hired labor.
- **Gender inequalities exist in land ownership, which impacts the purchase and transfer of assets and critical production resources.** Land ownership and control are still dominated by men

in terms of average land size apportioned to farming activities, with widespread disparity across communities and states. Shifting land tenure rights is well beyond the scope of this project; however, the analysis recommends the use of innovative approaches to ensure that women and youth benefit from access to communal land. This could be achieved by encouraging a tripart partnership arrangement between the public sector (government), interested SMEs, and women groups or between community land owners, interested SMEs, and women groups to make bulk land available to women on long-term lease to farm and enhance their production.

- **Disparity exists regarding the percentage of women and youth belonging to mixed farmers' groups.** For example, in Benue, more than 50 percent of women participate in mixed farmers' groups, compared to other states where women and men operate in separate groups due to sociocultural and religious factors. The percentage of women in leadership positions within groups also varies across states, with fewer than 25 percent holding leadership positions in most states. Due attention should be given to the formation and strengthening of women and youth farmers' groups, to increase the number of women in leadership positions. This will include encouraging the formation of women's only groups, as well as recognizing the 35% government affirmation for women inclusion by deliberating increasing the proportion of women in groups' leadership positions.
- **Access to information, lack of credit, and negative perceptions around farming are some of the leading reasons why youth are leaving small-scale farming at alarmingly high rates.** Negative perceptions that were voiced throughout the data collection process highlighted opinions of farming being antiquated, unprofitable, and highly labor-intensive. Many cited that when they cannot find viable jobs in their communities, they begin to migrate from rural areas in search of opportunities in urban centers. The Extension Activity will identify opportunities to sustain youth interest in small-scale farming, including identification and dissemination of innovations, mechanized and labor-saving applications to agriculture.
- **Barriers to inclusive growth in agricultural development are impacted by regional nuances.** Findings from the study show regional differences when it comes to agricultural productivity, and more specifically with access to critical inputs. It is recommended that productive resources need to be tailored to regional differences. For example, activities in the south should consider a greater need to address access by women to the same quantities of inputs, including herbicides and labor-saving devices, as men. In the north, provision to women farmers should also consider the institutional structural disadvantages (community norms, traditions, etc.) that prevent women and their households from fully benefiting from agricultural production and modernization.

The Extension Activity will liaise with key stakeholders including PIND and the government at state level in providing thematic workshops to respond to specific women and youth needs, targeted at increasing women and youth participation in agriculture. It will also take advantage of the CoP meetings to discuss some of the issues amongst key players with the aim of improving women and youth involvement in agriculture.

Methodology

The team conducted the gender equality and social inclusion (GESI) analysis from September to November 2020. The team adopted a mixed method approach in gathering data on the existing situation related to gender equity and social inclusion, observed gaps, and opportunities in a sample of the target Extension Activity states. Prior to the primary data collection phase, the team carried out a literature review of key

gender and social inclusion considerations in Nigeria. This offered background context and insights that helped the team prepare for key informant interviews and focus group discussions. The team also included a review of all program documents (including the workplan and baseline assessment report) to review GESI issues that served as a foundation to identify gaps in programming that could be GESI transformative. Beginning with a review of the literature provided the team the opportunity to understand existing secondary data and gaps to be filled from the primary sources.

The research team consisted of the Activity Gender and Social Inclusion Specialist and the Senior Gender and Social Inclusion Adviser in the Winrock Home Office. The team also worked with 12 enumerators who assisted in primary data collection process using key informant interviews and focus group discussions. The Extension Activity organized a training for the enumerators on the data collection tools, data collection approaches, and their roles and responsibilities ahead of the field data collection process. This ensured that enumerators selected for the primary data collection were capable of collecting the data from the targeted respondents using the tools and applying appropriate gender sensitive practices.

A cluster sampling approach was used to select the surveyed states and primary respondents (Table1). The primary data for the assessment was collected from three states as presented in Table 1. The three states selected represented geographic agro-ecological and cultural diversity (including similarity of norms) of the different geo-political zones that the Extension Activity is targeting.

Table 1: Sampling framework

Cluster	Focal states	States selected
Northwest	Kaduna and Kebbi	Kaduna
Northcentral	Benue and Nigeria	Benue
South-south and Southeast	Cross River, Delta and Ebonyi	Cross River

Balancing constraints posed by movement restrictions around the country, the team could only complete data collection in three of the seven states. These states were chosen as a representative sample for the entire seven states based upon the assumption that the geographic and cultural attributes in each cluster represent the cross-section of views shared by the population of the states in that cluster. As the literature review that preceded primary data collection provided the ‘big picture’ covering the entire ZOI, the states selected were to help deepen understanding of the issues selected for the assessment.

During the data collection, the research team employed semi-structured interviews and focus group discussions (FGDs) with GON officials, private extension service providers, non-governmental organizations (NGOs), and farmer groups across three selected states. Ninety-eight participants (43 females and 55 males) were selected for key informant interviews (KIIs) and focus group discussions as seen in Table 2. Twelve focus groups discussions (6 male and, 6 female) were conducted across the three states, where 42 persons were involved.

Table 2: Number of participants in the KIIs and FGDs

Technique	Stakeholders	Sex of Respondents		Purpose
		Women	Men	
Semi-structured interviews	Government counterparts, farmers groups, financial services providers, development partners	8	22	To gather data on gender equity advances, gaps, challenges, constraints in line with the project areas of intervention To assess the extent of gender equity and social inclusion impacts on opportunities for equitable access and participation in the agricultural sector
Focus group discussions	Male and female farmers	35	33	To capture project participants’ opinions and perceptions regarding gender and social inclusion constraints, benefits, and opportunities associated with proposed interventions

Limitations

Primary data collected for the analysis was collected from five communities (namely Uyi, Igabi, Shika, Edemita Ita, and Ikot Offiong) within three states where interventions are planned. The states selected were identified to reflect both geographic, agro-ecological and cultural diversity in data collected from KIIs and FDGs. While the report offers an excellent starting point for understanding critical gender and social inclusion considerations within the value chains, there is significant cultural diversity even within the very states the team visited. Findings generated by this study highlight important trends; however, the project should be careful to not over-generalize outcomes of this analysis. The Extension Activity team will build on the findings from the three states and continue to investigate gender and socio-cultural considerations in all states with a view to integrating them in the implementation process.

The presence of COVID-19 and movement restrictions due to the EndSARS campaign created delays in collecting data at the field level. However, prior to the primary data collection process, the team maximized the time to conduct secondary research and literature review of existing information. Additionally, the team experienced challenges in getting a representative sample of youth into focus group discussions. The team was able to integrate youth into several focus group discussions, but was unable to convene enough youth to hold separate focus group discussions with them as planned. To overcome any short fall in information gathering, the team created a good atmosphere that gave opportunity to those present to freely air their view. However, the Extension Activity will further explore youth considerations in a more targeted manner during implementation.

The process of selecting respondents proved somewhat challenging in certain locations. While the criteria for respondent selection was clear, data collectors in the field encountered difficulties meeting these criteria to reach gender balance in the KIIs conducted. The teams were often guided towards men because of the management positions they occupy within the organizations. This limitation confirmed the secondary data gathered, which signaled gender disparities both in leadership positions within farmers groups and cooperatives, as well as within extension service providers.

Country Overview

According to UNDP (2016), Nigeria's Human Development Index (HDI) value for 2015 was 0.527, which places the country in the low human development category, positioning it at 152nd out of 188 countries and territories. Nigeria is Africa's most populous country with approximately 206 million people and an average annual rate of population change of 2.6 percent. The country is home to one of the largest youth populations in the world with 43.5 percent of the population being between the ages of 0-14 and 31.9 percent of the population aged between 10-24 (UNFPA, 2020). Child marriage is most common in the Northern part of Nigeria, where 68% and 57% of women aged 20-49 were married before their 18th birthday. Child marriage is particularly common among Nigeria's poorest, rural households and some ethnic groups. A 2017 World Bank/ICRW study³ estimated that ending child marriage could generate Nigeria an additional USD7.6 billion in earnings and productivity.

Data from the National Bureau of Statistics (NBS) reveals Nigeria's unemployment rate as at the second quarter of 2020 is 27.1 percent indicating that approximately 21.7 million Nigerians remain unemployed. Nigeria's unemployment and underemployment rate (28.6 percent) is a combined 55.7 percent (World Bank 2019). The data also reveals the worst-hit are Nigerian youth, with over 13.9 million currently unemployed. Youth between the ages of 15-24 constitute approximately 6.8 million Nigerians out of jobs and another 7.1 million also unemployed. Nigeria's poverty rate is predicted to increase from 44.2 percent in 2020 to 45.5 percent in 2030, as its gross domestic product (GDP) growth fails to keep up with population growth. With these projections, it is critical to ensure that the country can meet its growing food security needs. Improving the agriculture sector, which employs more than 60 percent of the labor force according to official government reports, could play a significant role both in ensuring food security and reducing poverty.

Gender inequality remains a major barrier to human development in Nigeria. The Gender Inequality Index (GII) is an index that measures gender inequalities in three important aspects of human development: reproductive health measured by maternal mortality ratio and adolescent birth rates; empowerment measured by the proportion of parliamentary seats occupied by females; and education. According to the subcategory of access to reproductive health, Nigeria had a mean score of 49.8 for maternal mortality, of 43.1 for births attended by skilled health staff, and of 55.1 for pregnant women receiving prenatal care (AfADB, 2015). Nigeria ranks 118 out of 134 in the Gender Equality Index. Additionally, female unemployment is higher even though there are more males than females in the labor force (male: 42 million; female: 39 million) (Nigeria Economic Alert, 2020).

The economic growth forecast for Nigeria disproportionately affects Nigeria's women and girls. Girls are less likely than boys to attend school and, by implication, more likely to be illiterate. In the poorest parts of the country, 75 percent of girls are out of school and in some regions, the share of unenrolled girls is close to twice that of boys. Some 54 million Nigerian women live and work in rural areas, where they constitute 60 to 70 percent of the rural workforce. According to the NBS (2013), 49.1 percent of the female working age population was part of the labor force, compared with 64 percent of males of the same age. Women

³ <http://documents.worldbank.org/curated/en/530891498511398503/pdf/116829-WP-P151842-PUBLIC-EICM-Global-Conference-Edition-June-27.pdf>

represented 42 percent of the total labor force.⁴ The main employment sectors are wage labor, household enterprise activities, and farming. Agriculture, trade, and personal services are important employment sectors for both men and women. While agriculture is the largest employment sector for men, trading dominates in the case of women (37 percent), with agriculture in second place (33 percent). In comparison, men are much less likely to work in trading (10 percent) than in other sectors.⁵

As the youth population has grown, so has the unemployment rate. Analysis of youth unemployment by geographical/settlement location (rural and urban areas) indicates that youth unemployment occurs mostly in rural areas and is rapidly growing. Each year, 15-20 million of the country's youth seek entry into the workforce, all too many without success. In 2020, the estimated youth unemployment rate in Nigeria was almost 14.2 percent. The transition from school to employment is particularly difficult for youth, and they face challenges in finding opportunities in productive employment in agriculture and rural off-farm enterprises. Many of the constraints rural youth face are faced by other groups, including lack of finance, farm inputs and modern equipment for production and processing. Yet youth face higher and more specific hurdles related to lack of capital, experience, and strong social capital and networks that would facilitate coping with climatic and other shocks and improving their livelihoods. Young women in particular have less access to information and irrigation and are less likely to benefit from cooperative memberships. Nevertheless, young men and women have higher resilience compared to older groups in terms of health, mobility and ability to migrate, as well as easier access to the internet as a source of information⁶. There are also issues of climate risks, alongside a low opinion of agriculture's image as being unattractive for income generation and perceived as being incredibly labor-intensive. While these issues underscore a pervasive problem in rising unemployment amongst youth, this could also represent a huge opportunity to become the engine propelling new agriculture and agribusiness enterprises as well as rural transformation.

As Nigeria's economy contracted in 2016 due to a nationwide recession, the country's agriculture sector took on even more importance. Long touted as a remedy to the West African nation's dependence on oil, agriculture is now seen as a potential for economic redemption. Given trends over the last several years, it is clear why policymakers are placing greater emphasis on the sector. In the fourth quarter of 2016, the sector contributed 26 percent to real GDP, making it the largest single contributor to Nigeria's economic output. While real GDP contracted by 1.3 percent year-upon-year in the last quarter of 2016, agriculture grew at a rate of 4 percent. Without agriculture, the country's economy would be in an even more precarious state; however, the ability of the agriculture sector to insulate Nigeria's economy against food insecurity and play the expected role in backward and forward linkages has been consistently under threat.

Nigerian women play important roles in food and agriculture. It is reported that female smallholder farmers constitute 70-80 percent of the agricultural labor force. While they produce the majority of food for domestic

⁴ Campbell, John (2019) "Nigeria's Laws Hold Women Back and the Economy Suffers", Council for Foreign Relations, <https://www.cfr.org/blog/nigerias-laws-hold-women-back-and-economy-suffers>

⁵ National Gender Profile of Agriculture and Rural Livelihoods, Food and Agriculture Organization (FAO), (2018), <http://www.fao.org/3/CA0818EN/ca0818en.pdf>

⁶ IFPRI 2020: Agriculture and youth in Nigeria: Aspirations, challenges, constraints, and resilience, Discussion Paper: <https://www.ifpri.org/publication/agriculture-and-youth-nigeria-aspirations-challenges-constraints-and-resilience>

consumption and play a significant role in food processing, marketing, and preservation; they have limited access to land, credit facilities, farm input training, advice, technology, and crop insurance, among other things. Female smallholder farmers maintain only 14 percent of land holding rights on the very land they farm.⁷ Among the most important crops that women participate in the commodities value chains are rice, cowpea, and aquaculture. The pattern of land ownership by women is also reflected in their business ownership. According to Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2013)⁸, only 16.8% of small enterprises and 12.2% of medium enterprises are owned by women in Nigeria.

Agricultural technology is a major driver of agricultural productivity. As agriculture becomes increasingly technology-intensive, farmer capability and readiness to use and adopt new technologies is crucial to productivity, growth, and transformation. Adoption of new technology alongside improved practices could in turn influence poverty reduction in rural contexts where a significant proportion of the poor live. The majority of farmers (men and women) in Nigeria still produce crops using manual or traditional methods planting local varieties. Some of the methods and technologies used by farmers include mixed farming, intercropping, and crop rotation practices, which were handed down by their forefathers. Very few have access to improved and mechanized farming methods or improved varieties such as cowpea, soybean, maize, and rice. Research suggests that female farmers in Nigeria tend to apply less fertilizer per hectare than men in the north and according to the World Bank (2014), this disparity accounts for a substantial proportion of the overall gap in productivity. Also, women in the south use less herbicides per hectare compared with men, and this imbalance has further contributed to widening the gender productivity gap in the south. Most women with access to improved technologies were introduced to these through special projects, adopting them because the technologies improved their yield and income and reduced the drudgery associated with farm labor. Many women preferred to continue using traditional farming methods and local varieties due to inheritance from parents, lack of better alternatives, and low cost of these technologies.⁹

Despite the performance of the industry, agriculture still falls short of its potential in Nigeria. Although agriculture accounts for over a quarter of GDP, the country still spends N6.6 trillion (\$23.3 billion) each year on food imports. Annual losses in export opportunities from key crops are largely a consequence of declining production, which is a result of poor irrigation, limited adoption of new technology and research, inadequate storage techniques, and a lack of access to credit for farmers. Productivity is also a factor; in the last two decades, agriculture value added per capita has grown at less than 1% per year.¹⁰

⁷ <http://cirddoc.org/women-lead-agriculture-in-nigeria>

⁸ Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). SMEDAN and National Bureau of Statistics Collaborative Survey: Selected Findings (2013) <http://www.smedan.gov.ng/images/2013%20MSME%20Survey%20Summary%20Report.pdf>

⁹ National Gender Profile of Agriculture and Rural Livelihoods, Food and Agriculture Organization (FAO), (2018), <http://www.fao.org/3/CA0818EN/ca0818en.pdf>

¹⁰ “Nigeria’s agriculture sector drives economic growth and boosts employment”, Oxford Business Group, <https://oxfordbusinessgroup.com/overview/fertile-ground-face-lower-global-oil-prices-agriculture-increasingly-seen-vehicle-economic-growth>

Literature Review: Findings from the ADS 205 Domains for Gender Analysis

Through USAID’s operational policy on integrating gender equality and female empowerment into the program cycle, the agency encourages use of the five domains for gathering and analyzing data for gender analysis (which may be applied to other aspects of social inclusion as well). The domains include: (a) law, policies, regulations and institutional practices; (b) cultural norms and beliefs; (c) gender roles, responsibilities and time use; (d) access and control over assets and resources; and (e) patterns of decision making. This study analyzed gender-based constraints and opportunities related to the project’s activities using the five domains. This section presents gender analysis findings and recommendations by each of the domains contributing to the Agency’s gender equality objectives.

With respect to the Agency’s youth engagement commitments, the Positive Youth Development (PYD) Framework is a model supported by USAID. While this analysis does not organize findings across the domains of the PYD Framework, we have evaluated primary and secondary data to determine key findings within the context of these domains, which include:

- **Assets:** Youth have the necessary resources, skills and competencies to achieve desired outcomes.
- **Agency:** Youth perceive and have the ability to employ their assets and aspirations to make or influence their own decisions about their lives and set their own goals, as well as to act upon those decisions in order to achieve desired outcomes.
- **Contribution:** Youth are engaged as a source of change for their own and for their communities’ positive development.
- **Enabling environment:** Youth are surrounded by an environment that develops and supports their assets, agency, access to services, and opportunities, and strengthens their ability to avoid risks and to stay safe, secure, and be protected and live without fear of violence or retribution. An enabling environment encourages and recognizes youth, while promoting their social and emotional competence to thrive. The term “environment” should be interpreted broadly and includes: social (e.g., relationships with peers and adults), normative (e.g., attitudes, norms and beliefs), structural (e.g., laws, policies, programs services, and systems), and physical (e.g., safe, supportive spaces).

Laws, Policies, Regulations, and Institutional Practices

Nigeria has a national gender policy that focuses on women's empowerment, while also making a commitment to eliminate practices that are harmful to women. In 1995, the Federal Ministry of Women's Affairs and Social Development (FMWASD) was created to provide an institutional base for addressing women's issues in Nigeria (FMWASD 2019; Suleiman 2010). According to FMWASD, 2008, the process for developing a strategic framework for the implementation of National Gender Policy (NGP) began in August 2007. Additionally, Nigeria became a signatory to the United Nations Convention on the Elimination of all Forms of Discrimination against Women in 1985 and the Women's Rights Protocol of the African Charter in 2004.

Despite their significant contribution to national food security, women received no formal recognition by way of an enshrined policy to encourage, protect, and facilitate their access to inputs and services until 1986, when a government policy directive was developed to establish the Women in Agriculture (WIA) component of the ADPs that were responsible for grassroots extension and advisory services in all states of Nigeria. The overall goal of the WIA policy was the integration of women into the nation's total agricultural development through the mainstreaming of issues affecting women in the ADP system and to enable them to have equal access to agricultural inputs, credit, loans, and extension services. The specific objectives were to:

- i. develop innovative gender specific programs for women farmers in close collaboration with national agricultural research institutions;
- ii. promote the development and use of appropriate agricultural technologies which reduce drudgery and meet the needs of women for poverty alleviation; assist in linking women farmers to sources of credit;
- iii. increase agricultural productivity and income of women farmers;
- iv. improve skills of women in food processing, utilization, and marketing for enhanced income;
- v. organize women into cooperative groups for effective group action; and
- vi. encourage women farmers to keep livestock to improve their nutritional status.

Gender Mainstreaming in Nigeria's 2016 Agricultural Policy

A key goal of the Nigerian 2016 agricultural policy was to encourage a shift in behaviors that have contributed to negative outcomes for women and youth and strengthen efforts to expand wealth creation opportunities for them (FMARD, 2016).

The major policy objectives and targets are to:

- a. Develop and launch entrepreneurship platforms that create a pathway for youth and women to enter the agribusiness economy, expanding cooperation with CBN's intervention funds targeting women and youth and facilitating investment advisory support for potential entrepreneurs;
- b. Review the subsisting gender policy document with a view to improving implementation activities;
- c. Expand training of key leaders and influencers across FMARD to ensure that gender/ youth considerations are integrated into decision-making;
- d. Expand capacity-building in entrepreneurship for women and youth, including technical training and access to financial services;
- e. Facilitate dialogue with farmers' groups and service providers (for women and youth), to expand the pool of ideas that FMARD can pursue to institutionalize change.

The premise of this policy was that the successful integration of women into the ADP system would significantly increase their productivity, raise their incomes, improve their quality of life, and make a significant contribution to the nation's overall agricultural development.

Furthermore, Nigeria initiated several other strategies to advance women and youth empowerment. Such initiatives included the launch of the National Gender Policy in 2006 which replaced and reinforced the previous National Policy on Women and targets gender inequality specifically. The National Gender Policy was followed by the development of the National Gender Policy Strategic Framework which had a five-year planned period (2008-2013) with a comprehensive plan of action for the delivery of the National Gender Policy. The Vision 2020, Nigeria's National Development Plan recognizes that women's contribution to the economy remains largely undocumented and makes a national commitment to redressing long-term systemic discrimination against women, identifying and overcoming the limitations to gender equality as integral to guaranteeing well-being and productivity of all Nigerians, and ultimately creating a society that values gender balance and equity.

The Buhari administration increased the budgetary allocation of ministries that have direct impacts on the lives of women, particularly health and education, with greater emphasis on girl-child education. Critical government strategies, such as the Buhari Plan for the reconstruction of Northeast Nigeria, have paid unique attention to the specific needs of women. There are several legislative and policy frameworks addressing gender equality at the state level as well. Nigeria also has coherent policies for youth inclusion, improved nutrition, and promotion of rural financial inclusion, to which the design of Extension Activity extension objectives aligns. Under the Agricultural Promotion Policy (2016), GON placed a premium on the inclusion of youth and women in the current agricultural promotion and transformation as they have a prominent role to play. Increasing youth participation in agriculture can lead to the creation of jobs, thereby positively impacting the higher numbers of unemployed youth.

Unfortunately, in Nigeria, inheritance laws and laws governing land ownership are biased against women and youth. For most rural women and youth, land tenure is extremely complex and is complicated by issues related to access and ownership coupled with barriers present in their daily lives, including discriminatory social dynamics and strata, unresponsive legal systems, lack of economic opportunities, and lack of voice in decision making. Yet most policy reforms, land management, and development programs disregard these realities in their interventions, which ultimately increases land tenure insecurity for rural women in particular. Persistent inequalities in land rights reinforce this exclusion because women still hold less land than men in Nigeria and have less security of tenure, so that when husbands die their land may go back to their family. Inequalities in land ownership translate to a reduction in women's access to land and land improvement practices from extension services, because land ownership is an incentive to invest in land improvement for productivity and income increase.

As part of the National Agricultural Policy launched in 2001, FMARD released a landmark initiative in the National Gender Policy on Agriculture. In October 2019, a new National Gender Policy on Agriculture was launched. This policy is intended to serve as a tool to deepen women's involvement in the country's agriculture. The policy aims to promote the adoption of gender-sensitive and -responsive approaches in the agricultural sector and ensure that men and women have equal access to, and control of, productive resources. Specifically, the policy has been designed to focus on drastically reducing women's vulnerability to systemic biases in farming, aim to bridge the gender gap, and address the unequal gender and power relations

in the sector. The Ministry has long recognized that women farmers have faced unique challenges in comparison to men with respect to access to technology, extension services, land, credit facilities, infrastructures education, and farm inputs like fertilizers and seeds. The policy looks to achieve gender-based reforms, increased productivity by men and women along all segments of the value chain in the sector, improved food security, reduced hunger, reduced poverty, and sustain the livelihoods of men and women who rely on agricultural value chains for common good.

Cultural Norms and Beliefs

In Nigeria, women's lives are influenced by cultural and religious norms, which are linked with indigenous customs that legitimate male dominance and female subordination (Para-Mallam, 2006). These cultural norms and beliefs continue to limit women's ability to participate fully in agriculture. Society expects women to perform domestic work, while men are the main breadwinners, devoting much of their time to earning cash by participating in productive activities outside the household (SOFA Team and Cheryl Doss, 2011). Cultural expectations of women's domestic responsibilities lessen the amount of time (labor) they freely give to engage in productive activity. In more traditional settings, particularly in the northern Nigeria states, women are predominantly valued for their role as caregivers and belonging to the domestic sphere. As such, their economic activities tend to be regarded as secondary to their primary role of managing the household and raising children. These social norms and beliefs about the expected roles and responsibilities influence decision-making processes in the household, which in turn affects the ability of women to access and control productive resources (e.g. inputs, finance, land, etc.) and information to better farming practices (MEDA, 2019).

Cultural norms and beliefs place restrictions on Nigerian women's social interactions with men outside the family. Specifically, these norms limit communication between male extension agents and female farmers, preventing male extension officers from meeting with women farmers. In other places where women and men may be allowed to interact, women's participation is often marginalized or women do not feel comfortable speaking in public. Restricting women's movements and their involvement in trainings, including agricultural extension services, can hinder their access to information and better farming practices. Traditional views of farmers as male persist, and they affect the quality of extension information and training that women farmers receive, coupled with the fact that male staff most often lack the knowledge and understanding of women's constraints. This inability to learn about new agricultural techniques, seeds, technologies, etc. leads to lower productivity for women farmers (World Food Programme 2011; Karl 1997). Similarly, seclusion and exclusion limit women's access to sources of information about financial services. Evidence shows that some women have to consult with their husbands or male relatives rather than make financial decisions on their own. This cultural norm sometimes bar women from holding bank accounts or entering financial contracts as farmers. Similarly, most formal financial institutions are reluctant to extend credit to women because they feel obliged to ensure their husbands agree to line of credit (Fletschner, 2009; World Bank, FAO and IFAD 2009; EFINA 2019; USAID/Nigeria 2020).

While physical access and time constrain, among others, are seen as one of the hinderance for women in accessing information and extension, innovative agricultural technology, including mobile applications, have the potential of freeing up time for women farmers by eliminating the need to travel long distances to pay for agricultural inputs or services. This has significant positive impact on women farmers who face an increased risk because of restricted mobility in some contexts. However, there are challenges in the uptake of innovative information and communications technologies (ICTs), particularly among rural women, as cultural

norms and beliefs also affect women's willingness and their capacity to make use of agricultural technologies and new agricultural innovations. For instance, UNIFEM (1993 cited in FAO 2014) shows that a pedal-operated, bicycle-mounted rice thresher was rejected by female processors because using the thresher exposed women's thighs, and wearing trousers was not a culturally appropriate alternative in the location. Women also tend to be more risk-averse in terms of trying out new technologies. They believe that modern technology is too complicated for them to understand. Also, women's use and adoption of labor-saving and energy-saving technologies is constrained by norms and values about culturally appropriate gender roles and technology. In general, it is rare for women to use tractors and other mechanized farm equipment (FAO 2014; Anouka van Eerdewijk, et.al 201 Rola-Rubzen 2020). Hence, women's low use of technology increases the time and energy associated with production, and exacerbates existing gender inequalities and poverty, as activities involving the use of farm machinery are commonly seen as being men's domain.

Cultural and religious beliefs also prevent women from inheriting and owning land (USAID/Nigeria 2020). Land acquisition for men and women in most rural communities in Nigeria is largely through inheritance, where men have a higher likelihood of inheriting land over women. While there are legal and regulatory systems in some places that provides for other options of land acquisition, such as renting/leasing, share cropping, and buying system, customary law and social norms undercut these formal guarantees, especially for women. There is a significant gender gap in land ownership in Nigeria, where less than 2 percent of women compared with 17 percent of men, own land by themselves. The 1978 Land Use Act of Nigeria established a state-owned land system that allowed similar opportunities for men and women to acquire or inherit land. However, only legally married women could benefit from this act, so it did not necessarily improve the ownership or inheritance rights for women in Nigeria. Besides, transfer of land ownership is still largely guided by customary practices that discriminate against women, especially because the average citizen has poor knowledge of the statutory laws with respect to land. Although this may differ by location based on ethnicity, age, cultural practices, and religious beliefs. An important distinction is the differences between adult women and men and youth. Young people's access to land is influenced by both land shortages and biases towards youth. Cultural barriers resulting from perceptions that young people have not reached "maturity" or that they are in transition between childhood and adulthood are hurdles to the realization of land rights for youth (Mitullah et al. 2002; Izehi Oriaghan, 2018; ALINe 2010).

Negative perceptions of agriculture by youth is a primary challenge in seeing farming as an attractive employment option. Furthermore, agriculture is not perceived as sufficiently rewarding financially, which is compounded by a context where young people lack access to assets and resources, decision making, and ownership. Coupled with factors such as the slow uptake of new technology in agricultural practices, youth are discouraged from establishing start-ups in the agricultural sector.

Gender Roles, Responsibilities, and Time Use

Gender roles and responsibilities in Nigerian society are aligned with patriarchal norms, ideologies, and perceptions, which has implications for women's roles in the public and private spheres. The NGP notes that "Nigerians ...hold rigidly to ethnic based cultures, especially those which cushion traditional gender roles and women's subordination" (FMWASD, 2006a: 82-83). In rural areas, most Nigerian women bear a double burden as they continuously engage in both productive and reproductive activities (World Bank 2006; Carr and Hartl 2010). Women provide about 70% labor to agricultural sector (Dore 2015). For example, in Mangu Local Government Area of Plateau State of Nigeria, research conducted by Dikwal and Jirgi (2001) showed that a majority (75%) of women farmers spent 6 - 8 hours on the farm each day. About 71 per cent of the

women farmers spent 4 - 6 hours in the domestic front. On average, according to the report, the women used to spend 12 hours daily on both farm and domestic activities. Also, time use surveys from a study conducted by MEDA (2019) in Bauchi State, women's working days tend to be considerably longer than men. The study reported that men spend almost all their working time on paid forms of labor, while women divide their time between unpaid domestic work and their own business activities. This means that women are not only burdened but may lack adequate time to fully participate in extension activities, which in turn affects timely access to quality agricultural inputs and information. Similarly, time constraints due to domestic and care work mean that women have little capacity to attend training and amass the knowledge critical to improving their productivity. This is even more so for young women who are in their reproductive cycle because of inadequate day-care facilities in training venues to keep their babies during trainings.

Given the gender division of labor, women and men specialized in different activities in agricultural production. Women have a disproportionate responsibility for tedious and time-consuming farm activities, such as planting, weeding, sorting or packaging, fertilizer application, threshing, harvesting, and post-harvest processing whereas men carry out tasks that need strength or involve machinery. These gender assigned roles and responsibilities influence men and women's access to productive assets and services. Additionally, these assigned roles constrain the time available for women to contribute to or participate in extension activities. These gendered patterns of labor use also mean that the capacity of individuals to reallocate their labor in response to economic incentives and to maximize productivity and efficiency may be very limited (World Bank 2006; Njobe, 2015). Variations in the gender division of labor between and within communities and states are reported in numerous other studies and evidenced by ALINe's fieldwork.

Access and Control Over Assets and Resources

When it comes to improving agricultural productivity, access to and control over agricultural resources such as land and other critical inputs are necessary. Land ownership and control in Nigeria is still dominated by men in terms of average land size apportioned to farming activities. Despite the roles played by women in agriculture and society, and the critical nature of land for production, women are often discriminated against in land ownership, especially in the case of inheritance. In rural communities, inheritance is seen as the prerogative of men and constitutes a determinant in land ownership. This is the result of culturally embedded discriminatory beliefs and practices, both in customary and formal land tenure systems (Emeasoba, 2012). There is a need for the Federal Government to articulate legislation on property and land rights protecting personal safety and gender equality.

Fewer than 10 percent of Nigerian women own land, and key gender differences exist in land size, fertilizer use, labor and other household characteristics. According to the British Council (2012), women own four percent of land in the North East, and just over 10 percent in the South East and South West. The World Bank (2014) reported gender disparity in plots managed by men and women in northern and southern zones. In the northern zone, plots managed by women produce 27 percent less (in terms of gross value of output) per hectare than plots managed by men. Similarly, in the south, plots managed by women appear to produce substantially less per hectare than plots managed by men.

Women face high transaction costs for credit, a situation that is exacerbated by their limited property rights and their poverty. Although men also face this barrier, women are more vulnerable in rural areas. In cases where women have access to credit, the amounts are usually very small and repayment conditions are unsuitable (Anaglo et al., 2014). As such, poor access to credit facilities prevents women from purchasing

needed inputs for their agricultural production. In addition, most rural financial programs are designed and implemented with the male head of household as the intended clients despite women's participation in economic activities and their financial needs and constraints. Less than one-third of loans in Nigeria are awarded to women, and some financial institutions require the consent of a woman's husband before granting a loan. The most used sources of credit are informal sources such as mutual credit and savings groups (24.9% of women and 19.9% of men) and friends or relatives (25.3% of women and 13.6% of men). In this context, young women are less likely to access loans from the banks as compared to their male counterparts because of lack of access and control over productive assets. (MEDA 2019; RUFIN 2012). Study undertaken by EFINA showed that men are more likely than women to access credit from formal lenders (EFINA 2019). A lower availability of financial services to both youth and women not only implies less access to agricultural inputs but lower quality inputs (e.g. poor-quality seeds or fertilizer, restricted access to knowledge of their appropriate use, etc.), which translates into unequal returns from those inputs. With limited access to formal financial institutions, Savings and Loan Associations/farmers organizations are facilitated by some development partners to fill a gap in access to formal financial services. Through group savings and, loans farmers have been able to gain access to fertilizer, high-quality seeds, technologies, etc. increasing productivity and income. Another innovative approach included linking farmers organizations with agricultural input dealers to promote the purchase of improved seed, fertilizers, and other production-enhancing inputs. Even with this alternative approach, weak participation and representation of women in group leadership positions mean skewed access to privileges to access credit from informal sources for men.

In many rural communities in Nigeria, men (husbands/or senior male relatives) have control over women's (wives/or young females) labor, thus males' farm work takes precedence over their own. Similarly, women face difficulties in access to family labor as well as pay for hire labor especially during peak activities. When women do hire labor, their workers generate lower returns for them compared with male farmers; potentially due to the fact that women's cash constraints can lead them to hire cheaper, less productive labor. In addition, these constraints may vary for female heads of household depending on whether they are unmarried, divorced, or widowed (Njobe 2015).

Access to ICT plays a critical part in improving productivity for women farmers, specifically as it relates to gaining information required for producing, buying, and selling agricultural products, and acquiring modern farming technologies (Peterman et al., 2010). However, there is a gender gap favoring male farmers with respect to access to ICT due to social norms that affect women's use and ownership of technology and their presence in public facilities further restricts their access to ICT. An analysis of ownership of agro-input businesses by Goni (2018) shows that ownership of agro-inputs business by sex showed that 81.3 percent belong to men as compared to 18.7 percent belonging to women. Low educational levels and lack of income to purchase mechanical tools has also been highlighted as factors limiting women's access and use of ICT (Hafkin and Odame, 2002; Hafkin and Taggart, 2001). As technologies become more sophisticated and expensive, rural women need greater financial means to access them – but their incomes and savings have been shown to be often insufficient or controlled by men (Gillwald et al., 2010).

Similarly, affordability and access to financing due to inequalities in the distribution explain less access to and use of more advanced agro-processing equipment than men; and women must rely on less mechanized and more labor-intensive processing technologies. With respect to irrigation farming, women and youth face barriers. Relative to men, women have limited access to land, water, labor, capital, water pumps, and other assets. Therefore, they are less likely to access or benefit from irrigation interventions. Men, in contrast, generally have better access to irrigation technologies and own most irrigation assets. As a result, the income generated from irrigated agriculture is often controlled by men and spent according to their preferences.

Women in Agriculture (WIA) Extension Program

The **Women in Agriculture Extension Program** in Nigeria is well known for its farmer groups approach. As female farmers' contribution was largely underestimated in different agricultural development strategies (ADPs), the WIA program was developed to improve access to extension and advisory services for women farmers in rural settings. In an effort to integrate a gender focus into ADPs, a WIA unit was created with trained female extension agents working directly with increasing access to agricultural extension and advisory services for rural women farmers throughout the country to identify their technical and information needs, and support them through training and technology dissemination to increase their productivity (Onyibe 2001; Odurukwe et al. 2006).

WIA extension workers assisted women in establishing group farms to provide advice on marketing agricultural products, and train them on recommended agricultural technologies (e.g. processing, storage etc.). Formation of women farmers' groups facilitated the dissemination of agricultural innovations and provided them with better access to farm inputs and credit facilities. Over the years, the program has proved to be effective in incorporating female farmers' needs into national agricultural development strategies and uplifting the socio-economic wellbeing of women beneficiaries in rural areas. The inaccessibility of the program to many female farmers in remote areas, however, limited the adoption of WIA packages, and the involvement of women in the selection and design of technologies, resulting in lower adoption rates. (Odurukwe et al. 200).

Source: JAKF CARI NG PB 0002, Sept 2015 Policy Briefing, Increasing Access To Agricultural Extension Services Among Rice Value Chain Actors - New Approaches https://www.cari-project.org/wp-content/uploads/2016/12/Nigeria_Extension-Services.pdf

Patterns of Power and Decision-Making

Traditional practices that influence access to and control of resources in rural communities not only include women often being denied the right to inherit land, but also limits their contributions to decision-making in the home. Discriminatory social norms tend to limit women's role in exercising power and decision-making, with men generally dominating agricultural decision-making both in the household and even in the community.¹¹ Generally, men are regarded as the custodians of culture as well as the heads and providers of their families with decision making powers relying on them with absolute control over household and economic resources as against their female counterparts.

Cultural norms around land ownership also play into women's economic empowerment and decision-making. For many women farmers, access to and use of resources does not guarantee control over resources, produce, or incomes. Studies in Nigeria showed that even if women carried out nearly all the tasks involved in the production of cash crops, men made most of the decisions, marketed the produce, and controlled the income. Also, cultural norms designate men as household heads, making them in charge of major farm investment decisions such as what to cultivate, where and how to cultivate, investments in inputs, and in the allocation of productive assets.

Similarly, decision making plays a central role in access to and control over resources and benefits among women and men in agricultural production. Traditionally, women are expected to give priority to working in fields which in turn affects the ability of women to access training opportunities. For instance, some men regard themselves as representatives of their households during training and, to some extent, extension officers reinforce these views by using biased training recruitment methods. Also, there are considerable gender inequalities in household decision-making and management of income from agriculture. Men tend to spend more time on financial management of agriculture than women do. Limited decision-making power over household resources, including financial decisions, hinder women from accessing information about technology improvements and their correct application. Similarly, limited control over household resources and financial decisions prevent women from investing in technology for a typical 'women's task' thus creating constraints in access to productive resources (Ajani 2009). This has consequences for women's ability to increase agricultural productivity.

Damisa and Yohanna (2017), using Zaria in Kaduna State of Nigeria as their study area, examined the level of participation of rural women in the decision-making in different areas of agriculture and studied factors influencing their participation in the decision-making process in farm management. They found that women's participation in decision-making was quite minimal. In each of the farm operations, less than 20% of the women were consulted, except in the sourcing of farm credit, where about 28% were consulted; about 13% or less of the women had their opinion considered in each of the farm operations. However, only between 1.0 and 2.5% took the final decision in all of the farm operations.

Existing value chain actors' groups (e.g. farmers organizations) provide information sharing and supporting platforms for access to productive assets and resources (e.g., credit, access to inputs, farm equipment, marketing channels, training and capacity building in technologies, and good farming practices). However,

¹¹ Decision-making in agriculture generally refers to decision-making power over i) the use of productive resources and inputs; ii) the use of credit; iii) participation in agricultural associations; and iv) farming activities in general.

men represent the majority within farmer organizations, which helps them receive support targeted to their needs. One of the largest challenges women face is access to land for farming, especially for those growing maize and millet, which is a precursor to benefiting from many of the services provided by farmer organizations. Kammonke (2015) reported that, such platforms have little to no youth representation who are furthermore restricted from making decisions regarding the use of productive resources. This is also expressed in terms of women being marginalized from participation in farmers' organizational structures as well as cooperatives. In addition, active women members face challenges such as inconvenient meeting times. Women's decision-making power is limited, as their number in leadership positions is limited. As a result, most women become disengaged and less involved in production activities. Farmers' organization are male dominated and women's presence is seen as secondary. Potentially this undermines the interest of the women and youth and indirectly subjects them to additional disadvantages.

Field Analysis: Key Findings and Recommendations

Objective 1: Build the Capacity of Private Extension Service Providers to Deliver Extension and Advisory Services to Value Chain Stakeholders

Finding 1.1. Social and gender norms create barriers for women to own land, assume leadership positions, limits their access to extension services and their capacity to own businesses:

Interactions with women in the field indicated that in principle, land rights and access to lands cut across gender but in practical terms, women, unlike men, are handicapped in land ownership, thus affecting their business decisions on the land. Participants in Benue State revealed that female farmers are exposed to greater risk of losing access to the land they hold due to sudden changes in marital status, high rental prices, multiple sales of land by landowners, limited tenancy arrangements, and the refusal to release/or renew land leasing agreement by landowners.

Research also observed limitation for women in leadership positions and participation in the activities of farmers groups. Women's participation in farmers' groups is low across all the three states. Women do not express themselves effectively in gender-mixed meetings because they do not want to be going against the community norms. This occasionally discouraged them from showing active participation in discussions that affect their lives. Where they are present, they lack the confidence to assert themselves in public settings in the presence of men. Women cited that cultural and religious norms and beliefs, low educational levels, and difficulties in balancing the demands of farmer organizations with their multiple household tasks were contributing factors to their low confidence. In addition, women and men generally agreed that since men are the community gatekeepers, have information, and have a great social network, they typically have a final say on major decisions in the group activities. Gender disparities in leadership place female farmers and SMEs in a disadvantaged position, and they do not benefit equally from extension services and inputs that come through their farmers' organizations. In Kaduna State, two women interviewed shared that their husband's permission was required for a married woman to be accepted in a farmer's group. This criteria precludes some women from joining farmer's organizations or participating fully in meetings, which has placed those that are not permitted in a disadvantaged position in extension activities.

The result showed that differences in extent of women farmers' involvement in making decisions in farming activities have to be considered while planning and delivering for agriculture extension. The findings suggest

that women have the capacity to make business decisions, however, this is influenced by their ownership of productive resources such as land, information, and access to finance. In other words, women’s ownership of land and leadership positions increases their participation in decisions both on allocation of farm resources (e.g. fertilizers, improved seeds, technologies, etc.) and other benefits (e.g. trainings) that they may gain through group membership.

In discussions with key informants, representatives from farmers groups (both men and women) cited that membership fees were not considered to be primary constraints to their participation in farmers’ associations. Across the three states surveyed, membership fees range from N100 – N500 depending the agreed amount by the members. In mixed groups, both women and men pay the same membership fees. To manage their limitation on poor access to land, women and youth seek alternative solutions to meet land requirements, such as through sharecropping, rent, or accessing land through relations or friends, which is often not secure. The insecurity of land tenure has implications for women’s membership and their participation in farmers’ organizations; along with greater challenges to their access to productive inputs and assets such as credit, seeds, improved agricultural technologies when land tenure is not secure.

Recommendation

- **Support innovative solutions that could allow women and youth to acquire land on long lease for their businesses and business decisions. This could be by encouraging tripart arrangement between large landowners such as community/government; SMEs and women farmer groups. In this case, support for women’s only groups and youth only groups structure is also encouraged.** Where mixed groups are present, support institutional change, such as the introduction of quotas to enable women and youth to access leadership positions. Also provide SMES training on gender awareness to enable them identify opportunities to expand participation and influence women and youth within groups where mixed-sex groups are present.
- **Engage critical stakeholders to strengthen women and their voices:** Facilitate linkage of women/women-led organizations to existing women’s networks and associations along the value chains as well as support capacity-building initiatives to build women’s technical and leadership skills.
- **Stakeholders/actors to collaborate with:** *Thrive Agric, CropIT, Alluvial Trade, SMEs, FMARD, CSOs, NGOs, SMEs, State ADPs, IFAD, Commodities Associations, (e.g. rice, maize, soybeans, etc.), etc.*

Recommendations from Focus Group Discussions

“Training workshop schedules should be made more sensitive to women’s workloads and time constraints and training should be organize closer to women.” – Women’s FGDs in Cross River

“I will like to say that if there is provision for credits and loans for farmers, it will increase and encourage women and youth participation in agriculture.” -Men’s FGDs in Kaduna State

“Number one, is to give grant assisting them by giving them loans to go into the fish stuff they want to go into and again the interest rate should be reduced.” Men’s FGDs in Cross River

“The offices for some of the resources like fertilizer should be made available in our community so they are be easily bought.”- Women’s FGDs, Kaduna State

Finding 1.2. Men play a dominant role within SMEs as cultural norms preclude women from gaining ownership and obtaining employment in the sector.

The findings indicated that a significant proportion of private extension service providers – particularly agro-dealership owners – are men. Besides, business operations owned by women are much smaller than those owned by men. This gender disparity was also reflected in the number of staff recruited and in the leadership structure. Respondents highlighted they experience difficulties in recruiting women even when they deliberately target women for employment. Some of the KIIs revealed that very limited numbers of women are available for employment when calls are placed due to cultural norms around women’s roles and responsibilities. The restriction of agribusiness jobs based on the perceived roles appropriate for men and women also limits women’s participation as both men and women view the activities as tedious and energy sapping for women. Findings revealed that men were involved in all activities associated with operating the business: purchases/orders; looking for customers; off-loading; storing; sales; and providing an advisory service to customers. While men and women shop owners were heavily involved in purchasing and ordering, most of the female employees are more involved in accounting and administrative activities.

“You know that men are the head of the family so he can ask his family to work for him including his wife, so where will his wife have the time to finish his own and then focus on her own farm. Even when the husband wants to help he must finish working on his own first before turning to his wife. Not only that, women have smaller plot and less money to hire agricultural labor all these constraints together reduce their agricultural production and productivity - Men FGDs, Benue State

Female agro-dealers have lower levels of business capital compare to men agro-dealers. Findings highlighted from three states shows that the required capital for start-up for an agro-business is considered to be high - for both women and men. However, women experience higher difficulties in accessing funds because of the financial constraints

faceted. Both substantial capital requirements along with operational costs creates barriers for most women and youth with interest in agro-business. Female agro-dealers explained that the lack of capital affects their capacity to invest in their business as well as to access large loans for business expansion. One of the female respondents had started and expanded her business with personal savings and support from a development partner.

Recommendation

- **Strengthen capacity of SMEs.** Provide training on business management, customer management, and leadership to women to enable them access to disseminate agri-inputs. Leveraging on the CoP platform and stakeholders’ coordination forms, the Extension Activity will support and promote a peer-to-peer learning culture amongst women-led SMEs as to enhance their capacity to engage in learning and knowledge sharing. Strengthening existing women organizations to participate and contribute in coordination meetings of CoPs to create visibility of women’s participation in agri-business.
- **Support N-Power Program to grow women agri-entrepreneurs.** Support youth’s engagement in the agricultural sector by providing technical skills training and linking youth to private sector for mentoring through N-Power program. The youth will be turned into private extension service providers.

Stakeholders/actors to collaborate with: *Cropit and Alluvial Trade, FMARD, N-Power Program, PIND, Notore Chemical Industries PLC., etc.*

Finding 1.3. Women’s abilities as agro-dealers are devalued, particularly in some communities where religion and/or social norms play a role in the attitudes towards women in these roles.

Women’s participation in agriculture as agro- dealers is constrained by social pressure that comes from husbands as well as husbands’ relations (e.g. in laws/husbands’ friends). In traditional Muslim communities in Kaduna State, women’s participation in activities beyond the household is considered inappropriate. It was revealed that male farmers have more confidence in services received from male agro-dealers than from female agro-dealers due to assumptions about women’s lack of competence as well as the assumptions held about agro-dealer business as being exclusively reserved for men. A female agro-dealer narrated that a male farmer would prefer to travel a long distance to buy inputs than to buy from her shop.

Men attend to their farms; females do most of domestic work and this constrained them from accessing especially in the area of managing their children. It takes them a lot of time away from participating in these activities. And if the women are provided with services like caregivers during it will less their burden.” Benue State

The gender related barriers identified by KII were alike across the three states although the level of intensity is different from one context to another. Cultural and gender norms were mentioned to be one of the main constraints for women (and youth) in accessing extension services and adopting new practices and technologies. It also determines what sources of information women can access and which meetings they could attend. These norms limit women’s mobility and restrict their interaction with male service providers.

Data collected highlighted a preference for the gender of the extension agent to have an impact on women’s access to and participation in training and extension services. Primary data revealed a preference for men and women to receive extension services from a person of the same sex. In Kaduna State, women expressed their preference of working with female extension workers because their husbands would not react negatively (i.e. with jealousy), and they felt able to discuss personal matters with women. However, in Benue and Cross River, both male and female key informants did not express a gender preference.

Recommendation:

- **Collaboration and strengthening of existing women SMEs/organizations to participate and contribute in coordination meetings of the CoPs with SMEs.** The provision of such capacity strengthening should take account of women’s multiple roles, their limited time and mobility constraints. In this line, the Extension Activity will support and build diversified platforms and networks of cooperation in areas of capacity building, information exchange, and best-practice sharing to enhance gender inclusivity and expand the network of women agri-entrepreneurs.
- **Support capacity building of SMEs.** The Extension Activity to support SME cohorts and other stakeholders to incorporate women and youth considerations in their service delivery to smallholder farmers. Such considerations will help to address constraints to women’s led-agribusiness access to productive assets including their participation in the market channels to enhance their production, productivity, income, and nutritional value.
- **Stakeholders/actors to collaborate with:** SMEs, CSOs, NGOs, SMEs, State ADPs, IFAD Commodities Associates (e.g. rice, maize, soybeans, etc.).

Finding 1.4. Collateral requirements from microfinance and lending institutions present significant constraints to women and youth farmers to access finance. Microfinance banks have loan requirements,

such as collateral and a bank account, before a client can be approved to access financing which creates barriers for women and youth. In Benue and Cross River States, KIIs indicated that access to credit is linked to showing some level of collateral or support from a guarantor - a trusted person in the community.

“Having an account with us and a functioning business and a surety who must give us a postdated cheque including a signed authorization letter to debit from his account in case of default by the customer. Besides, one must have banked with us for three months at least. Then one’s level of turnover in the bank, which will determine if you are credible to access or not. (Benue State)

Generally, youth and women farmers lack these forms of collateral, which precludes them access to formal financial service that can expand their agricultural productivity.

Restrictions on credit are further exacerbated by high interest rates which disproportionately discourage women and youth from applying for loans. In cases where they do have access, women typically face more rigorous loan requirements in comparison to men. For example, married women with collateral still need their husband’s approval or consent to apply for loans. Loan agreements require a woman to have their spouse or male guardian as co-signatories for them to be valid and complete. When women farmers lack access to financial services, their ability to invest in farm inputs and modern technologies to raise their productivity is limited.

There are limited options and minimal innovation of financial products which limits accessibility for women and youth. There are similarities in the products and services offered by the various financial institutions with very little innovation among microfinance banks. In Benue and Cross River States, the analysis highlighted that institutions avoid financing agricultural loans due to the perceived risk around agricultural products. As a result, they are unlikely to address the full range of agricultural needs of women and youth farmers. Without access to financial products and services that meet their agricultural needs, most youth and women will be restricted to farming practices that result in low levels of productivity even when they have access to extensions services.

Some organizations have been successful in using innovative approaches to address key lending constraints. For example, Babban Gona and Thrive Agric were both interviewed and shared that they provide interest-free loans to farmers in the form of input supplies (e.g. seeds, fertilizers, etc.), technical advice, and trainings related to agricultural production, fertilization, and disease control. These institutions engage at the village level to raise awareness and mobilize interest amongst farmers and inform communities about requirements for participation. Interested individuals must have minimum land size, undertake an oral interview, and are expected provide a guarantor (e.g. a pastor, Iman, community leader, etc.) as a mechanism to lower default risk to participate.

Individuals that successfully meet these criteria are invited to form groups based on self-selection in order to access services provided by these institutions. Upon harvest, clients repay input loans in kind with bags of grains produced. A set repayment volume is defined at the onset of the season based on the value of the inputs package received and the expected selling price of the repayment volume. The justification for providing this level of training was to address farmers’ low productivity that could impact their repayment ability.

Although this approach was found to increase the availability and accessibility of extension services and farm inputs to women, youth were excluded to a certain degree as the programs targeted adults. The range of financial products provided by the suppliers is quite narrow as it primarily consists of seasonal credit and short-term advances.

Recommendation

- **Develop creative approaches to link MSMEs and smallholder farmers to appropriate financial products, financial institutions, and direct value chain financiers.** The Extension Activity will collaborate with and link women and youth with cohorts that are finance ready MSMEs. Capacity of such partners/or financial institution will be developed and strengthened to meet women and youth’s needs. The Extension Activity will also promote savings and digital finance solutions to expand financial services to women and youth, particularly in more remote areas of the ZOI
- **Extension Activity to deliver gender-responsive training.** The Extension Activity will build the capacity of MSMEs and financial institutions in gender-sensitive training programs so that partner staff have the necessary skills and expertise for dealing with female clients. This will uncover and address unconscious bias and support advocacy for gender sensitive product/service design.
- **Stakeholders/actors to collaborate with:** *Lift Above Poverty Organization, First Bank Nigeria, FCMB, Stanbic IBTC Bank, WEMA Bank Plc, Nigeria Incentive Based Risk Sharing System for Agriculture (NIRSAL) Development Bank of Nigeria, Alluvial Inputs & Expertise, Thrive Agric*

Finding 1.5. Low levels of literacy complicate access to finance and comprehensive understanding of techniques to improve agricultural productivity amongst women.

Low levels of literacy also prove to be one of the primary constraints facing women to access financial products. One interview highlighted several ways that low awareness of financial products and services among women limits women’s access to financial services. For instance, it impedes their ability to understand and complete documents that are required to apply for a loan as well as understand the terms and conditions attached to the loans. Another key informant in Cross River state added that female customers generally are less experienced with procedures around borrowing from formal financial institutions, and without any assistance in terms of financial literacy they will find it difficult to gain access to credit facilities.

“The level of literacy is a barrier for the women because they cannot read. so, getting information on finance is not easy” – Benue

“Most women are ignorant of the fact that they can easily walk into a bank and get a loan, and some have this fear of obtaining loans from the bank. They are some people you can go to meet now, and they will say “no I don’t need a loan, let me manage with the little that I have. I have seen people who the bank has taken their properties and all that.” – Cross River

Women’s low literacy rate was also identified by respondents as a challenge for women to clearly understand prescription notes on farm inputs as well as apply the application of agro-chemicals. In Kaduna state, KIIs pointed out that it limits female clients’ confidence in understanding proper application of the agro-chemicals and inputs. Limitation in literacy skills also prevent women from verifying that the inputs supplied by agro-dealers are in line with recommendations. Respondents also noted that women are often not as informed as men about improved seeds varieties and appropriate use of technologies and are less likely to try new technologies due to limited information received.

Recommendation

- **Design youth and gender-responsive financial products.** As part of M2M, an in-depth gender analysis of the needs and constraints of women and youths farmers/SMEs when designing and delivering financial services will be undertaken to foster inclusion. Analysis will include overarching attention to cultural reasons that preclude women as potential customers. This will be accompanied by comprehensive capacity development of financial institution partners.
- **Support women’s entrepreneurship** through private sector investments, training and knowledge sharing for skills development as to assist women, especially women-owned or led agri-businesses, to facilitate access to finance.
- **Stakeholders/actors to collaborate with:** *Lift Above Poverty Organization, First Bank Nigeria, FCMB, Stanbic IBTC Bank, WEMA Bank Plc, Nigeria Incentive Based Risk Sharing System for Agriculture (NIRSAL) Development Bank of Nigeria, Alluvial Inputs & Expertise, Thrive Agric*

Finding 1.6. Limited access to ICTs and lack of trust hamper women’s confidence in the use of digital financial services. Generally, respondents all mentioned that most rural women farmers do not own phones, laptops, Wi Fi and when they do, they experience difficulties in operating such technologies due to their inability to read or understand the content of short message services (SMS) received on their devices. They also worry about connectivity and being tricked into paying for or accessing products they do not understand. In Benue State, a KII informant stated that *“women are afraid of losing their funds to fraud when using technology for financial transaction”*. From the assessment it was highlighted that by a KII in Kaduna State that *“although ICTs deliver large volume of extension information but that this does not suggest the effective use of the information and that adaptation of content to local needs, languages and contexts is still a very big challenge especially in the northern states like Kaduna State”*.

The respondents further mentioned that women turn down loans or refuse seeking loans because of other peoples’ past negative experiences (e.g. asset confiscations) by formal financial providers during loan default. Also, respondents collectively shared the view that women avoid formal banks due to the fear of taking on high-interest loans. For instance, in Cross River a KII noted that rural women especially worried over their own ability to repay loans so do not uptake credit facilitates to increase farm productivity. In addition, they stated that women do not apply for loans because of their own perception that their applications would be denied.

Recommendation

- **Conduct ICTs assessment to increase efficiency of Extension Activity initiatives with respect to use of ICTs in agriculture as to better serve women.** Identify technologies that are suited to local needs and contexts through assessment. The assessment will include priorities, needs, and gaps in service -- and effectiveness, accessibility, and affordability of different channels, including interactive voice response (IVR), SMS, WhatsApp, video, and radio and adopt blended approaches. This may include a mix of technologies that are locally relevant.
- **Support gender-responsive ICTs to reduce impact of illiteracy and increase access to information.** A critical factor for adoption of ICT extension services is the ease of use of information. This assessment shows that low literacy hinders women’s access to ICT channels. The Extension Activity, working through the SME cohorts, will capacitate them to incorporate literacy training in their efforts to deliver business solutions to smallholders’ farmers. Such efforts might include packaging information in local language reaching illiterate farmers. Low cost information and

communication technologies can be particularly useful in addressing the challenges faced by women in the areas of poor access to information.

- **Support the development and integration of a specific SME business and technology development module** to address challenges in using more productive and appropriate technologies, to address production capacity constraints and quality/standard issues of products and services of SMEs.
- **Stakeholders/actors to collaborate with:** *Relevant stakeholders include FMARD and ADPs, private sector/SMEs (e.g Thrive Agric, CropIT, Alluvial Trade, SMEs, etc.).*

Finding 1.6. Gender roles and time use pose certain challenges to expand women’s participation in and across the agricultural value chains. Across the three states, respondents widely accepted that expectations around an “ideal woman” as a limiting factor for women’s participation in agriculture thus in extension activities. There is also a perception among men and women that women farmers are more likely to get cheated in the open market on price and quality when purchasing farm inputs. In Kaduna State, respondents also stated that women farmers have to travel for a long distance to access high quality inputs. Therefore, it is perhaps not surprising that women relied more on men such as family and neighbors to purchase or access inputs reducing their accessibility to accurate information on the application of such inputs. The general notion of an ideal woman as defined within the different cultures among the various groups also have implications for women’s participation in farmers’ organization as rightly observed by respondents.

There are clear gender roles in households and across the value chains. For example, in the rice value chain in Benue State, land preparation and clearing, tiling, bird scaring, chemical and fertilizer application, and transportation of paddy bags are mainly carried out by men and male youth; on the other hand, major players of sowing, transplanting, weeding, threshing, and winnowing are women and female youth. These gendered roles and responsibilities pose challenges for women interested in agriculture as well as their participation in farmers’ groups. In Kaduna state, social norms preclude the full participation of women in agriculture, especially on-farm activities, because of gender norms around women’s participation in the public sphere. However, some participants expressed that this long held opinion is starting to change.

With respect to Benue and Cross River States, both women and men in the focus groups expressed different opinions from those interviewed in Kaduna State. They stated that there are virtually no cultural restrictions known to them that visibly hinder women from participating in farming or agricultural extension activities. However, as noted by some women in the focus groups in Benue State, they feel overburdened in carrying out productive roles alongside household responsibilities. Mixed findings were highlighted in Kaduna State with regards to time constraints. For instance, the majority of the men in the focus group discussions indicated that the responsibility of taking care of the household and the children created little time for women traveling outside the household for extension and work to engage in farm-related work out the home. However, some FGD women interviewed indicated that though time is a constraint for them, they will “make it work” to benefit from group meetings and extension trainings. This indicated significant interest and willingness to improve on their productivity and income.

Recommendation:

- **Ease the time burden of household responsibilities.** Women are usually not able to participate fully in extension programs activities, particularly training, because of workloads making them

difficult to attend. Therefore, it is recommended that SME cohorts and other partner stakeholders recognize the time constraint of women and adjust their training schedule to fit into women's workload.

- **Expand access to information and agri-inputs.** One of the greatest constraints that women farmers face in improving their farming practices and productivity is lack of physical availability of inputs and information. Therefore, the Extension Activity incorporates gender transformative approaches, including women focus targeting to expand outreach.
- **Stakeholders/actors to collaborate with:** *Relevant stakeholders include FMARD and ADPs, private sector/SMEs (e.g Thrive Agric, CropIT, Alluvial Trade, SMEs, etc.).*

“The major cultural practice that discourages women from participating in agriculture and things like agro-dealer business is the influence and interference of family members and in-laws in marriages. Most relatives of the husband will suggest that another man will snatch his wife from him if he allows her to go out, or the wife will run away when she leaves the house. This kind of talk also limits women from participating in farming and accessing farm inputs. Husbands, his relatives and other family members have always posed as threats to involvement of women in farming activities. My husband seeing the benefit of my involvement in this business is now more understanding and supporting me but initially it almost affected my marriage because of the pressure from my husband people and his friends who are not happy with my business.” (Female, KII, Kaduna State)

Finding 1.7 Socio-cultural norms limit access to trainings, workshops, resources and extensions services, which limit their capacity to use new knowledge to be able to adopt and to increase productivity and own productive assets.

A major theme that emerged during FGDs was that women farmers often have limited time to attend extension activities. Social norms dictate that women are expected to spend most of their time at home doing domestic tasks. Findings from Kaduna State revealed that women spend much time engaging in unpaid labor, hence are often unable to travel or leave their homes for long periods of time to attend extension meetings and trainings. This restriction on their movement as mentioned by KIIs in Benue and Kaduna States

affect women's access to various types of inputs, technology, and services. Interestingly, women from Cross River State enjoy a higher degree of autonomy to pursue training opportunities with the consent of their husbands - compared to Benue and Kaduna States. In all the states respondents also highlighted how women's lack of extension training and information limits their access quality inputs as well as usage. This limits women's opportunity to develop skills in new areas in agriculture production and limits the adaptation of technology. For instance, in Benue State, an informant made observations about the challenges and constraints faced below.

Restrictions on movement and mobility has precluded women from accessing the range of inputs, technology and services provided by extension providers. These challenges coupled with the limited access to information on how to access quality inputs presents critical roadblocks to increasing productivity amongst female farmers. For example, for pesticide application, since this is not traditionally done by women, they have to hire labor or depend on male family members. Respondents indicated that the gendered norms of labor pose a major challenge to women farmers to access labor during the peak period for weeding, planting and harvesting but create opportunities for youth to gain income.

“As a woman, I cannot remove my veil and put a hoe on my shoulder that I am going to the farm or ride a motorcycle to say that I am going to the farm. It’s not like it is bad physically but it’s against our culture as a woman. Except we put someone else to do it or our children or husbands like we said earlier. (FGD, Women, Kaduna State)

“In our culture, women are not allowed to go to the farm. Even unmarried young ladies are not allowed in our Hausa culture here. I will not be nice to say a man’s wife is going to the farm. He would be asked what the benefit or usefulness of his farming. We see it as derogatory or lack of dignity for a woman to go to the farm. We see it as the man has failed in his responsibility to take care of his family.” (FGD, Men, Kaduna State)

Recommendation:

- Identify and formulate partnership with local e-extension providers, NGOs, and government to develop an ICT media platform (e.g. mobile phone, IVR, video, web, radio, etc.) for MSMEs to disseminate and scale extension information.
- Support SMEs with innovative gender awareness approach to sensitize men. Use of Gender Action Learning System methodology to sensitize men in farmers’ organizations on gender issues as well as empower women to renegotiate underlying patriarchal norms. This engagement and dialogue with men will create spaces for women’s participation.
- **Stakeholders/actors to collaborate with:** *Relevant stakeholders include FMARD and ADPs, private sector/SMEs (e.g Thrive Agric, CropIT, Alluvial Trade, SMEs, etc.).*

Finding 1.8. Conventional banks, as well as microfinance banks, consider agricultural investment as a risk. Findings from the GESI analysis suggest that cultural and social norms and lack of financial education make access to credit more challenging, particularly among women, who have been marginalized and are hardly represented in the financial mainstream and decision making. Another associated finding in is that agricultural loan terms are unfavorable to women and youth. FGD participants, especially in Benue State, stated that agricultural credits from banks are mainly short term with fixed repayment periods. The mismatch between the repayment schedule and the cash inflow of smallholders’ farmers together with limited access to finance reduces agricultural production and productivity.

In Kaduna State, findings showed that most Muslim women are more interested in non-interest financial services in line with Sharia-compliant institutions. However, there are agriculture financing institutions (e.g Baban Gona and Thrive Agric) that provide farmers with in-kind inputs as well as technical skills for increased productivity without interest rates.

Furthermore, in Benue and Cross River, FGD participants indicated that societal expectations around gender identity, roles, and responsibilities, and community perception about women working on-farm or outside the home, create barriers for women in accessing credit facilities in Benue and Kaduna States. Overall, the findings show that women's ability to participate in agricultural activities, including social networks such as farmers' organizations, is limited because of the restrictions placed on their mobility.

“I think the first big issue is the issue of ownership so most women don't have access to land most of the land belong to the male who are the head of the house, women are culturally seen as not owners of land in this part of the world so women lack access to land and secondly women lack access to finance so that it basically prevents them from making the right kinds of decisions and getting the right kind of services for agriculture. – Male, KII, Benue State

From the views expressed during discussion and interview sessions, there was a clear indication that women's representation in institutions is low compared to men because of the difficulties experience in attracting and retaining female staff. This is not without its own challenges as it is often difficult for male field officers to interact freely with women due to gender and cultural norms. The assessment revealed that women farmers feel more at ease with women staff, particularly in strongly gender-segregated and conservative societies in Kaduna State. In Benue, a key informant mentioned that sometimes female staff leave the organization due to the tedious nature of the job once they are married or begin to bear children. Another implication is that an organization that is predominantly constituted by men, gender issues tend to be relegated to the background and treated on an ad hoc basis rather than mainstreamed into the organizational plan. Findings revealed that although finance institutions train all farmers and provide farm inputs irrespective of gender or age, they did not have specific agricultural programs for youth and women.

Recommendation:

- **Support for capacity building of financial institutions.** Strengthen the capacity of financial institutions to understand financial needs of SMEs and design products that could enhance their value chain financing relationship with the women farmers. The Extension Activity will engage with financial institutions in empowering the SMEs with business solutions (or MIPs) that have potential for high return on investment as an incentive to provide finance for women farmers.
- **Support financial institutions to design gender-responsive products.** Work with financial institutions to advocate for gender and youth friendly products that can enhance youth and women's financial inclusion and accessibility to improved farm inputs. Such should include supporting financial institutions with financing or price discounts aligned with their cash flow to encourage the purchase of farm inputs.
- **Stakeholders/actors to collaborate with:** *MFBS, MFIs, banks with microfinance, digital financial institutions, value chain financiers, MSMEs, PIND, Development partners (e.g. Agriculture Investment Activity, FMARD, GIZ, Agro-Mall, Chuby Agro, Higher Agric, Nalmaco, Lift Above Poverty Organization, First Bank Nigeria, FCMB, Stanbic IBTC Bank).*

Finding 1.9. Youth have misconceptions about agriculture, and interest in the sector is diminishing.

With reference to youth, respondents in KIIs indicated that youth have misconceptions about agriculture and agreed that the drive for ‘quick money’ as a significant barrier to youth participation in agriculture, which in turn has implications on their access to extension services. Low levels of mechanization create negative perceptions among youth for a career in agriculture. The availability and affordability of these technologies significantly affect the utilization of agricultural technologies as observed in Benue and Kaduna States.

One key informant stated: *“Most youths, especially the educated ones, now feel that agriculture is a dirty sector because of the drudgery that is involved and they look at it up to this point that we are talking most youths see agriculture at the subsistence level not in the medium or large scale of commercial agriculture. So, these are some of the factors that limit youth in accessing agricultural service delivery activities because they feel ‘why should I, a degree holder, be involved in agriculture production and people will be seeing me on the farm’- Development Worker in Benue State.*

Youth face similar barriers to productive inputs, such as access to land, finance, and inadequate agricultural inputs. Among KIIs and in all the FGDs across the three states, respondents agreed that youth do not perceive agriculture employment as attractive due to their limited access to land, modernization technology and the low returns to agricultural investment, thus motivating young people to abandon agriculture. Also, most youth lack access to credit to facilitate their buying of inputs such as seeds, fertilizers, and pesticides, as well as to buy farm and other tools and implements. In Benue State for instance, one factor that emerged strongly throughout the discussions was restrictions on land use on youth due to the pattern of land ownership. They further pointed out that young men are sometimes excluded or discriminated in terms of land ownership, especially when the head male household member is alive and active in farming.

“A father feels any land that belongs to him automatically goes to the son because if he dies the son is going to inherit the land but despite that there are challenges because in some places still men do not want to give their land to youths because they feel that maybe they would carry the land and sell it out or maybe they feel we are trying to carry their land and give to these youths and they are the head of the family and they gave birth to this youth so they should be in charge and give any small portion they want to the youths to farm and not giving them the large portion

“Youth don’t want to participate, they want something that will bring quick money, and the still practice agriculture as subsistence farming” “for some of the youth environment don’t encourage youth to practice farming, haven seen what their parents go through with no profit or gain, that is why the rural to Urban migration is high because youth are looking for greener pasture.” (Kaduna State)

“The problem of the youth in the country especially in the south- south youth are migrating from the rural area to urban looking for greener pastures, at times not even greener pastures following the peer groups in a negative way.” (Cross River)

Most young people consider agriculture to be unattractive due to limited access, low returns, and lack of a market-led approach in the agricultural sector. Several youth respondents shared the lack of interest in learning farming techniques. A respondent in Cross River stated that conditions attached to youth accessing funds and credit are too rigid since they lack access to resources combined with pressure from parents wanting their children to be employed in the civil service. Respondents in Kaduna State indicated that female rural youth face additional barriers

linked to persistent gender inequalities perpetuated by societal/traditional gender discriminatory norms which

make their role invisible in the agricultural system. The respondents believe that the provision of adequate financial and technical support may attract young people to take up employment in agriculture.

The formal financial service providers perceive lending to youth as risky because they often do not have a saving culture, minimal financial track records, and their education does not equip them with financial literacy.

Recommendations

- **Identify opportunities to sustain youth interest in small-scale farming, including identification and dissemination of innovations, mechanized and labor-saving applications to agriculture.** It will involve development and dissemination of innovations that bring down high-cost inputs—for example, machinery being developed by John Deere specifically tailored for small-scale farmers.
- **Develop youth capacity in Agriculture:** Develop and implement an outreach, knowledge management, and dissemination strategy using ICT (social media, networking, community radios, TV, etc.) to promote programs and existing opportunities in extension services (or modern agriculture), with a particular focus on youth. This will include documenting and connecting successful youth in agri-business and agriculturalists to shift perceptions of agriculture among the youth.
- **Collaborate with youth entrepreneurship activities, public financial institutions, and development partners to ensure youth benefit from existing risk sharing and financing mechanism** (Grant, Soft loans, and Risk Guarantee Fund) for financing youth led agri-business. Such arrangement will provide back-stopping support to financial institutions that will provide loan to the youth.
- **Promote and support youth led groups/networks to enable youth to access agricultural extension and advisory services and agricultural inputs (mechanization farming implements, seeds, fertilizer, etc.) through partnership and collaborations with MSMEs.** To support this process the Extension Activity will build the capacity of agro- input suppliers to map demand for inputs as to better reach and serve youth in the intervention areas.
- **Stakeholders/actors to collaborate with:** *MFBs, MFIs, banks with microfinance, digital financial institutions, value chain financiers, MSMEs, PIND, Development partners (e.g. Agriculture Investment Activity, FMARD, GIZ, Agro-Mall, Chuby Agro, Higher Agric, Nalmaco, Lift Above Poverty Organization, First Bank Nigeria, FCMB, Stanbic IBTC Bank).*

Finding 1.10 Gendered patterns in decision-making present challenges to embody inclusive participation in farmers’ groups and women’s perspectives are not necessarily integrated in a holistic fashion. With respect to productive resources and activity (e.g. buying farm equipment; paying for help with harvesting; selling products; using the income generated from production, etc.), the assessment shows a general tendency for husbands and wives across several locations to make joint decisions when the farm is cultivated by the women. However, in cases where the farm is jointly owned, the husband’s decision takes

“Important decisions are made by men. This is because the men are culturally the head of the households and also because women are not capable of making good decisions”
Women’s FGD, Kaduna State

precedence over the wife’s even though he might consult with wife. In Kaduna State, for instance, during FGDs, women report that for decisions about the use of income from major cash crops, major agricultural and household expenditures, and major asset sales, their participation is often nominal or consultative, rather than equal. Women

have to seek consent from their husbands before they could sell their products and even participate in farmers' organizations. Also, they are expected to declare or show their husbands any income or benefits realized from participating in programs which also serve as the basis for their continuous participation. This result indicated that male headship significantly reduced the probability of female control over production. In addition, states and cultural differences have an effect on female control over production and access to agricultural production. As for sales, it was found that a woman who has control over production is more likely to control decisions on whether to sell or not.

Recommendation

- **Extension Activity will enable the farmers groups and SMEs to understand and address gender related barrier regarding householder decision making through their involvement in the coordination meetings and CoP forums.** Using these channels, the Extension Activity will expose the smallholder farmers to the concept and practices of Gender Action Learning System (GALS). The methodology (GALS) will strengthen negotiation power of marginalized stakeholders and promoting collaboration, equity and respect between value chain actors.
- **Stakeholders/actors to collaborate with:** *Farmer Groups, Commodity Associations, SMEs members of the CoP and Coordination Meetings.*

Objective 2: Strengthen Linkages Between Agricultural Research Institutions, Agro-Allied Companies, the Public and Private Extension Providers and Agricultural Value Chain Stakeholders

Finding 2.1. Institutions providing extension services are not systematically addressing gender and youth considerations.

In interviews with respondents indicated that extension service providers are not systematically addressing gender issues. Interventions are proposed on an ad hoc basis, such as encouraging women to become lead farmers or ensuring the inclusion of women among beneficiaries of extension services. In the KIIs and FGDs, participants indicated that fewer number of women are employed in agricultural research institutions, agro-allied companies, public and private extension services. A Female KII in Kaduna State stated that *“more men occupy top management positions and decision-making, while women largely occupy middle management and entry levels in most institutions even in agricultural research institutions.”* The gender disparity in extension system drawing from the assessment affects the design and implementation of programs, policies, and the design of agricultural technologies. From the findings gender differences are also reflected in the representation of women and youth in the coordination of extension network. Gender parity in staffing and application of gender-sensitive approaches to respond to the needs and problems of both women and men farmers have implication for addressing women's needs.

In Cross River State, we are doing cooperative extension approach; where we gather farmers at the rural level and form them into groups and facilitate them to become registered as a cooperative group. In that group we ensure that both youth and women are represented; say about 45-50%.” Cross River

The assessment further revealed that cultural norms and complexes hinder women in belonging to groups and or taking leadership/or coordination responsibilities in the group they belong to. KII respondents in Kaduna State further revealed that such gender norms impede women from taking an active role and speaking out in extension meetings and trainings activities in the presence of men. Besides, perceptions about

men and women’s leadership qualities as well as structural constraints on time and mobility tend to limit women’s participation in leadership positions in SMEs/or farmers organizations.

Recommendations:

- **Gender considerations should form an integral part of research as to strengthen the capacity of stakeholders to respond to women’s and youth priorities.** Integrate gender/youths’ issues in innovation challenge fund topics, encourage stakeholders through the stakeholders coordination and linkage forums to use gender-responsive tools/reporting approach, inclusion criteria for research participants and gathering of sex-disaggregated data of women’s and youths’ uptake of technologies. Besides, Extension Activity will support the dissemination of research updates and facilitate dialogue between agriculture innovation stakeholders on gender and youths’ issues.

While a general training on gender in agriculture may not be necessary or appropriate, thematic workshops/research could be designed to respond to specific needs. For example:

- Addressing gender issues in implementation and monitoring.
 - Understanding and designing service and input delivery systems that work for women.
 - Exploring alternative design and delivery mechanisms to meet context-specific gender needs.
- **Engage critical stakeholders to strengthen and women’s voices:** Facilitate linkage of women/women-led organizations to existing women’s networks and associations along the value chains as well as support capacity-building initiatives to build women’s technical and leadership skills
 - **Stakeholders/actors to collaborate with:** *SMEs, CSOs, NGOs, SMEs, State ADPs, IFAD Commodities Associates (e.g. rice, maize, soybeans, etc.)*

Finding 2.2 ICT solutions delivered by extension providers or government entities are not designed with women and youth in mind. Limited access to ICT solutions can significantly reduce women’s access to extension information. Across several interviews with key informants, respondents confirmed that there are huge opportunities to be gained by using innovative ICT solutions to reach women farmers, such as cell phone and radio methods.

Several respondents reported that women have limited access to and control over communication technology such as smart mobile phones with video applications. In Kaduna State, largely in conservative communities, respondents revealed that intra-household gender relations constrain women’s access to information, including

“There is an issue of lack of understanding or trust from the men. The man maybe suspecting that his wife is having extra-marital affairs with other men so this will serve as a hindrance to her owning anything so as to reduce communication with other men. This will make the women not get access to either credit or trainings if there is any.” FGDs, Kaduna State

information about productivity-enhancing agricultural technologies and adoption. They indicated that gender norms impede on women’s access and use of phones as husbands sometimes get suspicious of their wives, creating social tension. Another reason for not owning ICT’s gadgets, including smartphones, is the financial cost associated with buying/or accessing such ICT’s as women occasionally prioritized spending on ICT’s (e.g. airtime to receive SMS) over both personal necessities and discretionary purchases. Added to this, respondents stated women tend to have lower literacy levels than men, which limits their ability to absorb information on available technology and skills to use it. A discussant in the FGDs stated that: “...we the women are not literate and less expose like our men. Sometimes, we to have to depend on our men to help with our phones to help us get information on modern farming. Some of our sons have good phones with internet and they get information.” This has

implications for extension activities as it creates obstacles and limits their access to extension information and services including the uptake and use of ICTs if the technology requires use of more technical and intensive knowledge.

Recommendation

- **Integrate gender and youth dimensions in the design of ICTs.** Support gender analysis to identify opportunities on how ICTs can enhance current practices. This analysis should support and create culturally diversified content as to improve the accessibility and inclusiveness of ICT applications. It should also capture what information and services women youth farmers need and how they are currently meeting those needs. It should also assess what ICTs are already in use and the type of access men and women have to them. Sex-disaggregated data on level of literacy, income, as well as attitudes toward technology use should also be collected to help identify the most appropriate ICT application.
- **Leverage on CoP membership to provide support to enhance the capabilities of women agri-entrepreneurs in the use ICTs.** Engage relevant stakeholders/or CoP membership (e.g government, women agri-entrepreneur associations, and nongovernment organizations) to work with women entrepreneurs so that they can leverage on existing or new ICTs to increase effectiveness through. Such support could be provision of trainings/or workshops and awareness creation on the use of ICTs.
- **Stakeholders/actors to collaborate with:** *SMEs, CSOs, NGOs, SMEs, State ADPs, IFAD Commodities Associates (e.g. rice, maize, soybeans, etc.)*

Finding 2.3. Restrictive gender norms and attitudes impact access to extension and advisory services. Key informants noted that extension agents are predominantly male, and most often extension agents direct their advisory services to male farmers who are either head of households or in leadership positions in farmers' associations. In Kaduna State this is exacerbated by other cultural and gender norms related to women's mobility and cultural sensitivities about a male extension agent providing advice to women farmers since cultural norms barred married women from speaking to strange men. This is particularly true in Muslim communities where women are in partial or total seclusion. Furthermore, in Muslim communities, there are not enough qualified adult women who are able to take up the post of extension agent at the field level. These constraints present an important challenge in providing extension services to women farmers in the rural communities. Respondents in the FGDs pointed out that untimely access to extension services and delivery of inputs to women and youth are tied to limited access to credit facilities. And that it also places women in a disadvantaged position in purchasing agricultural inputs. FGD participants in Kaduna State particularly highlighted that women's access to labor is further limited due to non-availability of business capital compared to their male counterparts. Although most women report having access to financial services from their own personal savings and loans acquired through group funds.

In Benue State women in the FGDs were quick to point out that men have more access to both family labor and hired labor. In Benue State women having less access to land was noted by respondents as a strong disincentive to adopting new technology and their participation in extensions meeting or trainings.

Recommendation

- **Greater awareness and sensitization must occur amongst government and NGOs providing extension services to promote access to information to both male and female farmers.** In

order to address the gaps in access to information, extension service providers need to be conscious of the way information is being delivered and who is receiving it. Both male and female farmers should be provided with knowledge and support. Information should be delivered with written instructions in relevant local languages, and supplement them with other nonwritten forms of communication, such as audiocassettes, pictorial guides, and organized face-to-face meetings where these issues can be discussed.

- **Women should be encouraged to actively participate in trainings delivered.** Setting up extension office or an information stand in every community would encourage women to access the benefit. Media can be a part of extension service programs to deliver knowledge on insects, pesticides, fertilizers, seeds, and nutrition. Strengthen women and youth farmers' capacity to access and use quality information, training, and products in order to use and adopt to new technologies. Also, tailor extension services to women's needs, and leverage social networks to spread agricultural knowledge.
- **Stakeholders/actors to collaborate with:** *SMEs, CSOs, NGOs, SMEs, State ADPs, IFAD Commodities Associates (e.g. rice, maize, soybeans, etc.)*

Finding 2.4. Public and private extension service providers do not take into account gendered priorities and needs across farmers. Interviews with private and public extension services indicated that the number of field extension offices and extension agents to women farmers is inadequate. In the case of Kaduna State, one of the KIIs mentioned that the shortage of women extension agents as a key factor limiting women's access to agricultural extension and other advisory services. This is compounded by the fact that the proportion of women extension agents in the state agricultural extension system (ADPs) for instance remain very low compared to the number of women farmers. This is worsened by family obligations and the restriction of women's mobility due to cultural norms around women's seclusion. From the analysis, KIIs agreed that increasing the number of women extension workers is important in extension activities as it encourages women's participation and better interaction with women farmers.

"This discrepancy in the ratio of women and men as input distributors is due to the capacity differences, because you must be able to carry or purchase a particular volume or quantity of products to be able to qualify, so most women lack this capacity, that is, inability to raise money to buy products in large quantity" Male KII, Cross River State

"Definitely if you are women there are limits to where you can go look at the extension workers for an example before you see one female extension worker, you must have seen ten male, reason for this is, some men don't allow their wives to talk to other men. So, gender inclusiveness is an issue in the extension services" – Female KII, Kaduna

Respondents in the FGDs pointed out that untimely access to extension services and delivery of inputs to women and youth are tied to limited access to credit facilities. These factors also place women in a disadvantaged position in purchasing agricultural inputs. FGD participants in Kaduna State highlighted that women's access to labor is further limited due to non-availability of business capital compared to their male counterparts. Although most women report having access to financial services from their own personal savings and loans acquired through group funds. *"There is a lot of problem for us as women to get farm inputs like fertilizers and to help ourselves in our farmers' group we contribute little money together during our meetings and sometime use the contributions to buy seeds and fertilizers during farming season and this has help us very well but this is not enough for us" - Women FGDs, Kaduna State*

Recommendation:

- **Incorporate gender awareness and sensitization in meetings and workshops.** Support SMEs to maximize opportunities and leverage on various meetings and workshops to inform better gender mainstreaming strategies. This will include sharing the experiences of “positive deviants” and benefits of gender equality. The Extension Activity will support SMEs to use progressive leaders and role models to promote gender equality in those meetings using transformative approaches as such GALS.
- **Location and quality of extension service provisions to take into account gendered priorities and needs.** Encourage SMEs to use existing facilities and locations that are gender-friendly including considerations for proximity, neutrality considerations, availability of childcare facilities, etc. to promote women’s participation in learning to enhance their businesses. inputs. Enhance the capacity of SMEs to effectively respond to the needs of women through gender related trainings and how to expand access to information and agri-inputs;
- **Stakeholders/actors to collaborate with:** *Cropit and Alluvial Trade, Thrive Agric, Africa Exchange Holdings (AFEX), ADPs*

Cross-Cutting Best Practices

Over the course of the data collection, the team met with several development partners who shared their most impactful practices and lessons learned to galvanize diverse extension and advisory service stakeholders to improve agricultural extension programs, policies, and services. Organizations surveyed implement programs and develop research-based solutions extending the reach of information, resources, and people to key development stakeholders, including governments, NGOs, academic and research institutions, community-based organizations, and farmers. These efforts support advancements in agriculture, nutrition, and women’s empowerment so that smallholder farmers thrive. Development agencies interviewed included PYXERA Global, Alliance for a Green Revolution in Africa, Fadama, and IFAD/VCDP. They are largely donor-funded and seek to address major gaps in access to agricultural inputs and agricultural extensions services. The development agencies use specific channels to target farmer groups, as well as offer an alternative solution to extension services to farmers, especially in rural communities.

Confirming what was learned from meeting with target beneficiaries, development partners shared the challenges in increasing women’s and youth participation. Socio-cultural norms, mobility constraints, and gendered patterns of decision-making can complicate ensuring that men, women, and youth have equal access. In making extension and advisory service accessible to youth and women, there seems to be a common belief that using direct targeting and quota systems explicitly increase access to extension. Many development partners shared that one of the more successful strategies to implement were to make capacity strengthening activities gender-sensitive, including scheduling training times to be

“Sometimes when our field officers want to render this extension service to these women, they don’t find them in good number as expected because the men take the land and take the lead in leadership of the farmers’ organizations” – KII with Development worker in Benue State

“There are places in the north where men can’t get there you know. And there are more males that are involved in agric extension service delivery than their female folks’ so some husbands may not allow a male extension agent to interact with their wife to some extent. The restriction by husbands also extended to how far away their wives could travel to attend extension trainings or meetings” – KII with Development Worker in Kaduna State

convenient for women, identifying training locations that are easily accessible to women, and respond to women's limited resources and decision-making authority.

Included in this section are several best practices that have proven to maximize engagement and participation from women and youth; as well as employ a gender-sensitive lens into programming.

- **Engaging male champions.** In Kaduna State, engaging male family members and community members in discussions on changing social and cultural barriers for women was highly stressed as a best practice. Such activity, they added, included getting a husband's permission to talk to his wife, and working with local women's organizations and community leaders who are the gatekeepers. Community leaders can also be quite strategic in facilitating introductions of male extension agents to the community and gain acceptance.
- **Employing innovative group approaches.** Using innovative group approaches provide a pathway towards overcoming women's illiteracy and restriction on women's ability. Participatory approaches provide a great opportunity for women to collectively demand services. For example, in Kaduna State, facilitating youth-only and women-only groups provided them a safe space to voice their needs and benefit during the extension programs through collective actions.
- **Engaging community-based advisors to promote input adoption.** Across all locations, it was found that using community-based advisors or network agro-dealers as a vehicle for promoting input adoption among small-scale farmers did not only increase outreach to women in remote communities, but created opportunity for youth to provide service for fees as a means for livelihood.
- **Using a value chain credit financing model to facilitate access to credit.** Key informants from development partners highlighted the challenges associated with access to credit, support savings and loan groups, or link women and youth to credit facilities and training opportunities. In Benue State this recognition, according to a key informant, led them to form credible farmer groups that respond/payback to inputs credit from off-takers. Some of the off-takers are aggregators and processors at SME level.
- **Changing perceptions around agriculture to interest youth.** Changing youth perceptions is important, but even more so is creating ways to make agriculture more manageable and more profitable. With the right information and training, young farmers can be more efficient and productive. In Benue, a development partner highlights that youth are not necessarily disinterested in agriculture, but rather they do not believe it can be profitable and efficient. Hence there is the need to continuously train youth to see agriculture as a career.
- **Socialize the introduction of mechanization into a community and consider its impact on gender roles.** During the data collection, respondents indicated that mechanization may have unintended negatives consequences on women's roles (i.e. male household members taking over previous women's work when it becomes less labor intensive or more profitable). There is a need to integrate a gender perspective in the delivery of farm inputs, especially in locations such as Kaduna State, where some technologies are seen as exclusively for men.
- **Consider training service providers on gender-sensitive engagement.** Trainings service providers or staff members should be mandatory so they can better understand how to incorporate

gender issues. They should also learn how to treat men and women farmers equitably while considering their different needs. Moreover, the training facilities should be organized at the local level so that maximum numbers of people can join. Flexible scheduling would be the best option, possibly in the evening, so that women can join.

Conclusion

Upon approval of the Gender and Social Inclusion Analysis, the team will ensure that findings and recommendations are reflected in project activities. An integral component of the GESI Analysis roll-out is to offer guidance both to staff and partners to be better oriented to constraints and opportunities. The GESI Specialist for the Extension Activity will design and deliver a staff training to orient colleagues on the outcomes of the analysis as well as the recommendations to take the project forward. The project will also have annual pause and reflect sessions to determine what is working and what may need to be corrected; and will incorporate both stand-alone and integrated GESI activities into work planning documents. The Extension Activity will integrate GESI considerations into key approaches and deliverables of the project, including the Mapping to Markets (M2M) and value chain analysis to ensure that the opinions of women and youth are reflected, as well as within the Lean analysis.

To the greatest extent possible, the Extension Activity should be cognizant of opportunities to employ the following cross-cutting recommendations to support a holistic approach to integrating gender and social inclusion issues.

Enhance staff capacity in gender mainstreaming. The Extension Activity will leverage on the findings of this study to enhance capacity of staff members in gender mainstreaming. This is to help increase their understanding in gender integration and enable them to recognize risks involved in gender exclusion. It will include conducting gender trainings for staff, holding meetings that reflect on gender-related progress, and involving staff in the development of gender-integrated results chains.

Hold learning events and disseminate best practices and innovations around gender and social inclusion. The Extension Activity will work with SME cohorts and through the CoP to promote the identification and sharing of business solutions to reach women/youth smallholder farmers. Through this process, the Extension Activity will also reflect on gender inequalities during the pause sessions and in learning briefs to improve on implementation performance.

Encourage women and youth focused targeting. In compliance with the Extension Activity's market system approach, youth and women SMEs will be encouraged or specifically targeted during the identification and development of business solutions that will impact on smallholder farmers. This biased targeting method will enable the Extension Activity to increase the number of women workers/extension advisory from the supply side, as well as facilitate reaching women and youth stallholder farmers at the demand side. Other efforts in this direction include encouraging women SMEs to engage women workers to deliver the business solutions while at the same time provide extension messages to smallholder farmers.

Enhance youth and women involvement in off-farm agribusinesses: The Extension Activity will support youth and women to imbibe off-farm business solutions as part of the strategy to grow their businesses. In this context, the Extension Activity will recognize youth and women participation in the use of ICT channels to deliver extension messaging to smallholder farmers.

Identify women and youth friendly financial products: The Extension Activity will enhance the capacity of participating financial institutions to identify and promote women friendly financial products that will facilitate women's access to credit. It will involve a deliberate effort to identify and work with partners that demonstrate potential to create a systemic change for achieving women and youth empowerment through better access to financial credit or services.

Increase awareness and sensitization among the youth to see agriculture as a business. The Extension Activity will partner with N-Power Program of the Federal Government to engage youth interns to provide monitoring and coordination services to SMEs. It will also help them to gain greater experience in farming, and thereafter pursue farming as a paid job.

In general, the Extension Activity will liaise with key stakeholders including PIND and the government at state level in providing thematic workshops to respond to specific women and youth needs, targeted at increase women and youth participation in agriculture.

Encourage SMEs to work with farmer groups. This will enable them to take advantage of economies of scale in the supply of their inputs and services to reduce their transaction cost. It will also encourage value chain financing through on-lending facilities from financial institutions to the SMEs for smallholder farmers.

REFERENCES

Abdulwahid, S. (2006). Gender Differences in Mobilization for Collective Action: Case Studies of Villages in Northern Nigeria (available at <http://www.capri.cgiar.org/pdf/capriwp58.pdf>). CAPRI Working Paper No. 58. Washington, DC, CAPRI.

Ajani, Olubunmi Idowu Yetunde. 2009. Gender dimensions of agriculture, poverty, nutrition and food security in Nigeria. NSSP Working Paper 5. Abuja, Nigeria: International Food Policy Research Institute (IFPRI)

<https://ebrary.ifpri.org/digital/collection/p15738coll2/id/22646>

Anouka van Eerdewijk & Katrine Danielsen (2015) Gender Matters in Farm Power

https://www.kit.nl/wp-content/uploads/2018/08/551bcea41f1f2_Gender-Matters-in-Farm-Power-final-150227-AE-KD.pdf

Arora D, Rada C. Gendered Model of the Peasant Household: Time poverty and Farm Production in Rural Mozambique. *Feminist Economics*. 2017; 23(2):93–119. <https://doi/abs/10.1080/13545701.2016.1220676>

Blackden M, Wodon Q (2006). Gender, Time Use and Poverty in sub-Saharan Africa. World Bank Working Paper No. 73

AKF CARI NG PB 0002, Sept 2015 Policy Briefing. Increasing Access To Agricultural Extension Services Among Rice Value Chain Actors - New Approaches

https://www.cari-project.org/wp-content/uploads/2016/12/Nigeria_Extension-Services.pdf

Automated Directive System (ADS) 205. Retrieved

<https://www.usaid.gov/sites/default/files/documents/1870/205.pdf>

British Council (2012), Gender in Nigeria report 2012: improving the lives of girls and women in Nigeria. Issues Policies Action.

<https://www.britishcouncil.org/sites/default/files/british-council-gender-nigeria2012.pdf>

Carr, M., & Hartl, M. (2010). *Lightening the Load: Labour saving technologies and practices for rural women*. Rugby, UK: International Fund for Agricultural Development and Practical Action

CoP 2015 USAID/Nigeria: https://2012-017.usaid.gov/sites/default/files/documents/1860/Nigeria_CDSCS_2015-2020.pdf

Cultural Norms: <http://www.fao.org/3/i2050e/i2050e03.pdf>

Damisa and Yohanna (2017), Role of Rural Women in Farm Management Decision Making Process: Ordered Probit Analysis

https://www.researchgate.net/publication/267363113_Role_of_Rural_Women_in_Farm_Management_Decision_Making_Process_Ordered_Probit_Analysis

Dikwal, M.M. and Jirgi, A.J. (2001), The Role of Women in Agriculture: A case Study of Mangu local Government Area of Plateau State, in Abubakar, M.M., Adegbola, T.A. and Butswat, I.S.R. (Ed.), Proceedings of the 34th Annual Conference of the Agricultural Society of Nigeria, Abubakar Tafawa Balewa University, Bauchi, October 15th – 19th 2000, Ramadan Press, Bauchi. pp. 26-31

Djurfeldt AA, Hillbom E, Mulwafu W, Mvula P, Djurfeldt G. “The family farms together, the decisions, however, are made by the man” Matrilineal land tenure systems, welfare and decision making in rural Malawi. *Land Use Policy*. 2018; 70(2018):601–610.

Dore Ousmane (2015); <https://www.premiumtimesng.com/news/top-news/191777-nigerian-women-contribute-70-per-cent-of-agricultural-workforce-afdb.html>

Emeasoba, U. R. B. (2012). Land Ownership among the Igbos of South East Nigeria: A Case for Women Land Inheritance. *Journal of Environmental Management and Safety* 3(1), 97– 117.

EFInA (2019): Assessment of Women’s Financial Inclusion In Nigeria December 2019 <https://www.efina.org.ng/wp-content/uploads/2019/12/Assessment-of-Womens-Financial-Inclusion-Exec-Summary-2.pdf>

FAO (2016). Sex-Disaggregated Data and Gender Indicators in Agriculture A Review of Data Gaps and Good Practices Publication prepared in the framework of the Global Strategy to improve Agricultural and Rural Statistics (2016). <http://www.fao.org/3/ca6444en/ca6444en.pdf>

Federal Republic of Nigeria, The Federal Ministry of Women Affairs and Social Development (2019). Federal Republic of Nigeria, National Gender Policy. Federal Ministry of Women Affairs and Social Development 2007, Abuja, Nigeria.

Federal Ministry of Women Affairs and Child Development, Abuja (2006), National Gender Policy, situation Analysis and Framework Federal Ministry of Women Affairs and Social Development, Abuja 2006, National Gender policy.

Federal Ministry of Women Affairs, (nd) “African Union Solemn Affairs Declaration on Gender Equality in Nigeria

The Federal Ministry of Women Affairs & Social Development, Abuja (2008), National Gender Policy Strategic Framework (Implementation Plan) Federal Republic of Nigeria 2008 – 2013

Fletschner Diana (2009) Rural Women's Access to Credit: Market Imperfections and Intrahousehold Dynamics.

https://www.researchgate.net/publication/24017486_Rural_Women%27s_Access_to_Credit_Market_Imperfections_and_Intrahousehold_Dynamics

Funmi J. Para-Mallam (2010) Promoting gender equality in the context of Nigerian cultural and religious expression: beyond increasing female access to education, *Compare: A Journal of Comparative and International Education*, 40:4, 459-477, DOI: [10.1080/03057925.2010.490370](https://doi.org/10.1080/03057925.2010.490370)

Global Strategy to Improve Agricultural and Rural Statistics – the Global Strategy: Sex-Disaggregated Data and Gender Indicators in Agriculture: A Review of Data Gaps and Good Practices. Technical Report Series GO-12-2016. prepared Stephan Klasen, et.al

http://gsars.org/wp-content/uploads/2016/05/TR_Sex-Disaggregated-Data-and-Gender-Indicators-in-Agriculture_120516.pdf

Hafkin J Nancy and Odame Helen (2002), Gender, ICTs and Agriculture. A Situation Analysis for the 5th Consultative Expert Meeting of CTA's ICT Observatory meeting on Gender and Agriculture in the Information Society

https://www.researchgate.net/publication/259258410_Gender_ICTs_and_agriculture_A_situation_analysis_for_the_5th_Consultative_Expert_Meeting_of_CTA's_ICT_Observatory_meeting_on_gender_and_agriculture_in_the_information_society/link/5ca7a3d2299bf118c4b5858b/download

Hafkin, Nancy and Nancy Taggart. (2001) Gender, Information Technology, and Developing Countries: An Analytic Study. Academy for Educational Development (AED) For the Office of Women in Development Bureau for Global Programs, Field Support and Research United States Agency for International Development June 2001.

https://www.researchgate.net/publication/237479049_Gender_Information_Technology_and_Developing_Countries_An_Analytic_Study/link/54d3ea0f0cf25013d027a851/download

IFAD (2014), Lessons learned Youth and land tenure

<https://www.ifad.org/documents/38714170/40196966/Land+tenure+and+youth.pdf/38e4c76f-5f9e-45e3-8ef7-7349759339d4> Izechi Oriaghan (2016). A quick look at women's land and inheritance rights in Nigeria, <https://www.landsa.org/a-quick-look-at-womens-land-and-inheritance-rights-in-nigeria/>

Kiptot E. and Franzel S. 2011. Gender and agroforestry in Africa: are women participating? ICRAF Occasional Paper No. 13. Nairobi: World Agroforestry Centre

<http://apps.worldagroforestry.org/downloads/Publications/PDFS/OP16988.pdf>

Karl, M. (1997) Higher Agricultural Education and Opportunities in Rural Development for Women: An Overview and Summary of Five Case Studies,' Report No. 40997-AFR, Rome: FAO

Lyon S, Mutersbaugh T, Wortten H. The triple burden: The impact of time poverty on women's participation in coffee producer organizational governance in Mexico. Agriculture Human Values. 2017; 34(2):317–331.

MADE (2014), Poverty and Gender Assessment . <https://pindfoundation.org/made-poverty-gender-assessment-report-february-2014/>

MEAS, Reducing the Gender Gap in Agriculture Extension and Advisory Services, <http://www.culturalpractice.com/site/wp-content/uploads/2013/04/3-2012-39.pdf>

MEDA (2019): Women's Time Use, Work and Wellbeing in the Nigeria Way Project: Baseline Study: Nigeria Way Learning Series.

<https://www.meda.org/waylearning/resources/1067-nigeria-way-womens-time-use-letter/file> Njobe

Bongiwe (2015) Women and Agriculture The Untapped Opportunity in the Wave of Transformation: :

Feeding Africa , Background Paper

https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Economic_Empowerment_of_African_Women_through_Equitable_Participation_in_Agricultural_Value_Chains.pdf

Peterman, A., Quisumbing, A. & Behrman, J. 2010. Review of empirical evidence on gender differences in non-land agricultural inputs, technology, and services in developing countries. Background paper prepared for The State of Food and Agriculture 2010–11. Rome, FAO

PWC (2020): Nigeria Economic Alert. <https://www.pwc.com/ng/en/assets/pdf/economic-alert-september-2020.pdf>

Rola-Rubzen F Maria, Paris Thelma, Hawkins Jacob, and Sapkota Bibek(2020). Improving Gender Participation in Agricultural Technology Adoption in Asia: From Rhetoric to Practical Action <https://onlinelibrary.wiley.com/doi/epdf/10.1002/aapp.13011>

Saito, K.A., with contributions from H. Mekonnen and D. Spurling. 1994. “Raising the Productivity of Women Farmers in Sub-Saharan Africa.” Washington, D.C.: The World Bank.

SOFA (2011) Gender differences in assets <http://www.fao.org/3/am317e/am317e00.pdf>

Suleiman, S (2010) World Food Program (2011), Agricultural Learning and Impacts Network (ALINe) P4P and Gender: Literature Review and Fieldwork Report. <https://documents.wfp.org/stellent/groups/public/documents/reports/wfp239392.pdf>

Suleiman, S. H. (2010). Statement by the Honourable minister of women affairs and social development of the Federal Republic of Nigeria at the 54th session of the commission on the status of women/ Beijing 15Review Conference. https://www.un.org/womenwatch/daw/beijing15/general_discussion/NIGERIA.pdf

USAID/Nigeria: Gender Analysis Report: Nigeria 2020

World Bank (2006), Gender, Time Use, and Poverty in Sub-Saharan Africa: World Bank Working Paper No. 73 *C. Mark Blackden & Quentin Wodon eds* <http://documents.worldbank.org/curated/en/530891498511398503/pdf/116829-WP-P151842-PUBLIC-EICM-Global-Conference-Edition-June-27.pdf>

World Bank, FAO and IFAD (2009). Gender in Agricultural Innovation and Education In: World Bank, FAO, and IFAD. Gender in Agriculture: Sourcebook. World Bank, Washington DC.

World Food Program (2011), Agricultural Learning and Impacts Network (ALINe) P4P and Gender: Literature Review and Fieldwork Report. <https://documents.wfp.org/stellent/groups/public/documents/reports/wfp239392.pdf>