25th July 2024

Rapid Assessment for youths and women enterprise growth and employment opportunity (Agricultural Value chain) in Kano and Kaduna states, Nigeria

A report Implemented by the following Partners:
Lutam Farms, Super Tech Food Nigeria Limited, and Dehydrator Hubs Agric Technology Nigeria Limited, in partnership with Freehearts Africa Reach Out Foundation (FAROF), BIMKAF Palace Nig. Limited, CHAD and the Women in Agriculture (WIA) units of the Kaduna State Agricultural Development Agency (KADA) and the Kano State Agricultural Development Agency

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Date: 25/7/2024

Comprehensive Data Collection

For Youth and Women's Enterprise and Employment opportunity in the area of Agricultural value chain Assessment

Introduction:

The following survey questions were developed to collect comprehensive data about youths and women Small holder farmers and SMEs including processors in the states of Kaduna, and Kano. This data collection effort is a collaborative initiative involving the following organizations:

1. Lutam Farms-**Social Enterprise**
2. Super Tech Foods Nig. Limited (STF)- **Social Enterprise**
3. Dehydrator Hubs Agri-food Technology Nig. Limited- **Social Enterprise**
4. Freehearts Africa Reach Out Foundation (FAROF)-**NGO**
5. Centre for community Health and Development International (CHAD INT'L)-**NGO**
6. Bimkaf Palace Nigeria Limited- **Social Enterprise**

Objective:

The primary objective of this assessment is to gain a deep understanding of the diverse needs, circumstances, and challenges faced by Youths and women in these regions. This data will inform the design of interventions that are highly responsive to their specific needs and circumstances.

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Survey Questions

The survey questions encompass various key areas, including:

Section 1: Basic Information

Section 2: Household and Livelihood Information (Employability Status)

Section 3: Current Agricultural Practices

Section 4: Knowledge and Practices

Section 5: Challenges and Needs

Section 6: Market Access and Infrastructure

Section 7: Technology and Innovation

Section 8: Training and Capacity Building

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1. Executive summary

This needs assessment was conducted by a consortium comprising Lutam Farms, Super Tech Food Nigeria Limited, and Dehydrator Hubs Agri=food Technology Nigeria Limited, in partnership with Freehearts Africa Reach Out Foundation (FAROF), with support from the Women in Agriculture (WIA) units of the Kaduna State Agricultural Development Agency (KADA) and the Kano State Agricultural Development Agency.

A total of 1,764 respondents from 320 communities in Kano and Kaduna states were surveyed, comprising 1,499 females and 265 males. With specific primary products of Maize with Vitamin A, Soybeans and the Orange Flesh Sweet Potatoes (OFSP)

The study examined the challenges faced by smallholder farmers/SMEs in the region. Key findings indicate that smallholder farmers/SMEs in the agri-food value chain in the region rely heavily on traditional farming methods and face numerous challenges, including limited access to modern farming equipment, financial resources, and markets. Additionally, knowledge gaps and the digital divide pose significant barriers to agricultural development.

To address these issues, the report recommends increased investment in agricultural infrastructure, expanded financial support, improved market linkages, enhanced capacity building, and increased digital inclusion. By implementing the proposed recommendations, it is anticipated that the livelihoods of smallholder farmers in Kano and Kaduna can be significantly improved, leading to increased food security and overall rural development.

In addition to the findings from the survey, a consultative webinar with 23 participants (16 female and 8 male) was conducted to gather in-depth insights. The webinar revealed a strong preference for organic farming practices, highlighting the potential of organic agriculture as a viable and sustainable livelihood option. Participants also emphasized the critical need for financial support, capacity building, and improved infrastructure to enhance agricultural productivity and market access.

2.   Acknowledgements

The research team would like to express sincere gratitude to the Department of Women in Agriculture of the Kaduna State Agricultural Development Agency (KADA) and the Kano State Agricultural Development Agency (KNADA) for their invaluable support in coordinating the participation of women farmers and SMEs in the data collection process.

Special thanks to the entire Management of the Freehearts Africa Reach Out Foundation (FAROF) for the dedication and commitment of its Resource Mobilization Team in strengthening the data collection process through monitoring and resource allocation.

We are also deeply indebted to Mr. Light A. Michael (Strategic Development Manager of FAROF) for ensure the successful implementation of this Assessment, we also wish to appreciate Mrs. Funmilayo Ishola (CEO of Dehydrator Hub), Mr. Jackson Emokpaire (CEO of Super Tech Foods (STF)), and Mrs. Uche Okoli (CEO of Lutam Farms), for their invaluable contributions to the project and contributions to the facilitation of Focus Group Discussions and consultative meetings with target youth, women, government MDAs, and CBOs. Their support was instrumental in the success of this research.

3. Background of the Project

Nigeria faces a significant challenge in food security, with a growing population and increasing rates of food scarcity. Small and Medium Enterprises (SMEs) and smallholder farmers are crucial to addressing this issue as they are responsible for the majority of food production, transportation, marketing, and consumption in the country. However, these actors encounter numerous obstacles hindering their ability to optimize agricultural value chains and improve food security.

4. Problem Statement

SMEs and smallholder farmers in Nigeria, particularly in the northwestern states of Kano and Kaduna, face a myriad of challenges that limit their productivity and profitability. These include inadequate access to modern farming techniques and technologies, limited financial resources, and a lack of knowledge about food safety regulations and best practices. Furthermore, the perception of agriculture as an unprofitable venture has discouraged youth from entering the sector, exacerbating the skills gap.

This situation has severe implications for food security, as evidenced by the high prevalence of malnutrition, particularly among children, in the region. The Nigerian Demographic and Health Survey (NDHS) of 2018 revealed that nearly two-thirds of Nigerian children suffer from Vitamin A deficiency, while UNICEF reports that child food poverty is as high as 60% in Kaduna and Kano states.

5. Project Alignment

This project aligns with the broader goal of promoting enterprise growth and employment creation within the agricultural value chain. By addressing the challenges faced by SMEs and smallholder farmers, the project aims to contribute to the creation of at least 20,000 direct jobs, with a key focus on women's empowerment.

6. Rapid Assessment

To gain a deeper understanding of the needs and priorities of youth and women in the agricultural sector, a rapid assessment was conducted in Kano and Kaduna states. This survey involved 1,764 respondents (1,499 females and 265 males) across 320 communities. Data collection employed the KoboToolbox platform, followed by rigorous data cleaning and analysis using Google Sheets, Python, and Google Looker Studio.

Gender Distribution of the Respondents
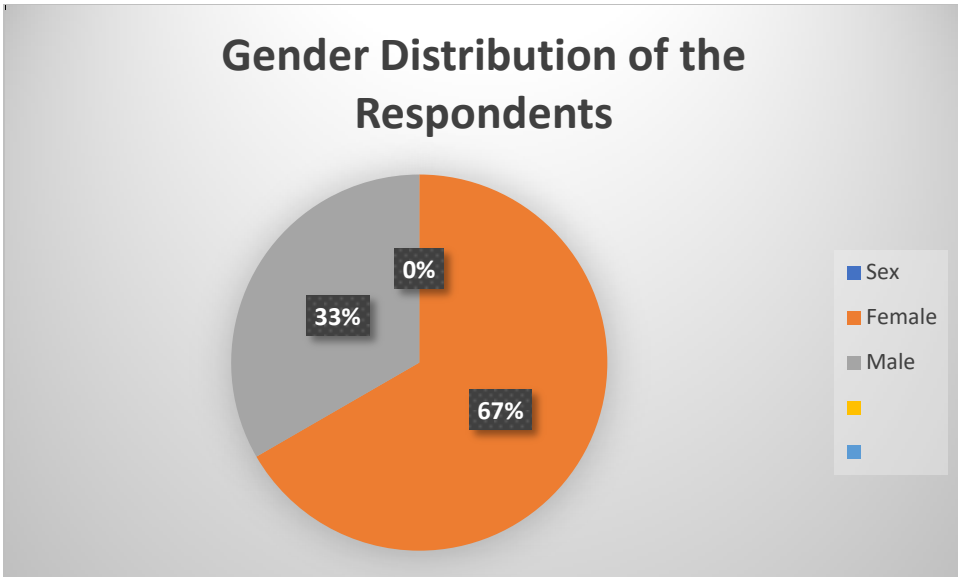
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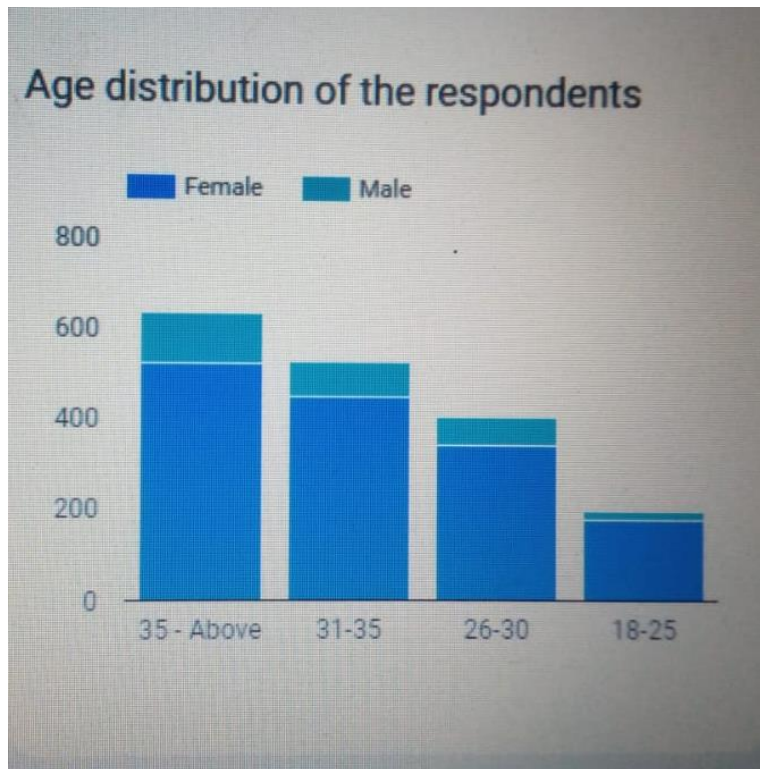
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7.   Limitations

While the assessment provides valuable insights, it is essential to acknowledge potential limitations, such as potential biases in the data, time constraints, and challenges in collecting geo-location data due to network connectivity issues.

8.   Research Design

The study employed a cross-sectional survey research design to gather data from Youths and women smallholder farmers/SMEs in Kano and Kaduna states. This design allowed for the collection of data from a large sample of respondents at a single point in time.

1.   Sampling Technique

A multi-stage sampling technique was used to select respondents for the study. Initially, *320 communities* were purposively selected based on their agricultural significance in both states. Subsequently, a random sampling method was employed to select respondents from each community, resulting in a total sample size of 1,765.

2.   Data Collection Instrument

A structured questionnaire was developed to collect data on respondents' socio-demographic characteristics, agricultural practices, challenges, and aspirations. The questionnaire was designed to be administered both digitally and physically.

3.   Data Collection Process

Data collection was conducted through a combination of digital and paper-based methods. For digital data collection, the KoboToolbox platform was utilized to create and deploy the questionnaire. For respondents with limited access to digital technology, paper-based questionnaires were administered.

4.   Data Analysis

Data collected through both digital and paper-based methods were consolidated and cleaned to ensure accuracy and consistency. Descriptive statistics were employed to summarize the data, including frequencies, percentages, and measures of central tendency. To identify underlying patterns and themes, topic modeling using Python and the BERTopic algorithm was conducted. Visualizations were created using Google Looker Studio to facilitate data interpretation and communication.

5.   Ethical Considerations

The study adhered to ethical principles by obtaining informed consent from all participants and ensuring data confidentiality. Respondent anonymity was maintained throughout the research process.

9. Findings

### 1. Socio-Demographic Profile

The assessment conducted in Kano and Kaduna revealed a population with a relatively high literacy rate, as 90% of respondents had some form of education. This suggests a population capable of engaging in training and adopting new practices. However, the predominantly rural context of both states, characterized by large households with an average of nine members, presents significant challenges. The high unemployment rate of 27%, particularly pronounced in certain rural areas of Kano and Kaduna, indicates a substantial portion of the population without stable income sources. A deeper look into the data reveals that 60% of respondents in these states live below the poverty line, emphasizing the urgent need for targeted poverty alleviation initiatives. These socioeconomic factors, prevalent in both Kano and Kaduna, significantly impact the community's ability to adopt sustainable agricultural practices and improve livelihoods.
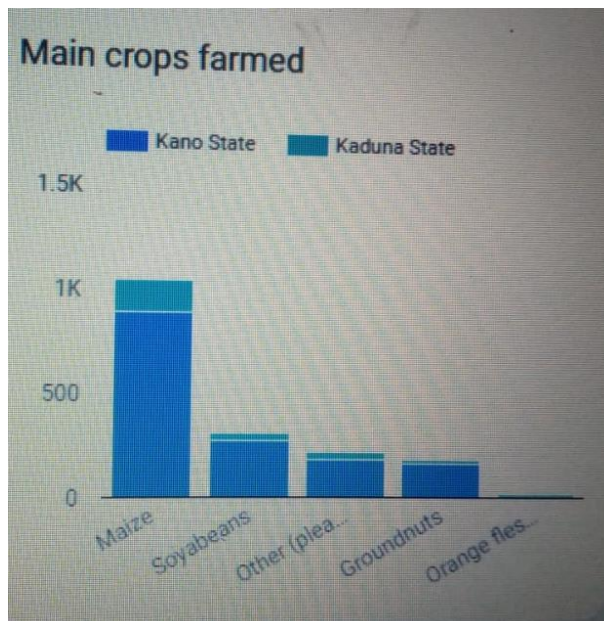

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Education levels of the respondents
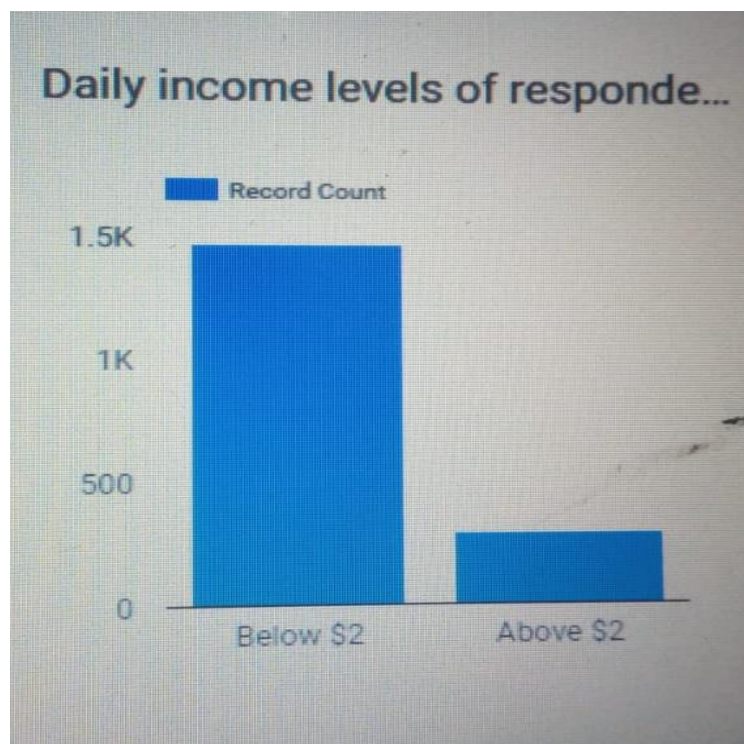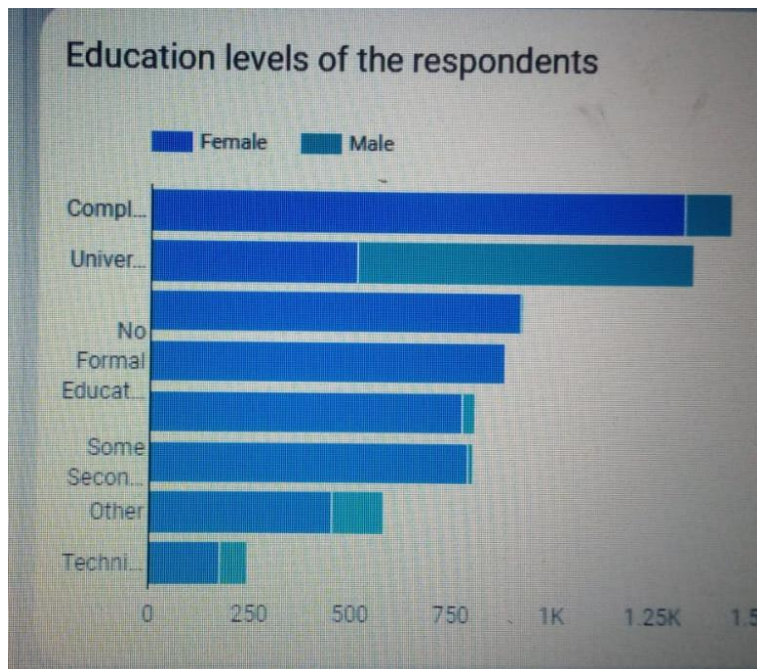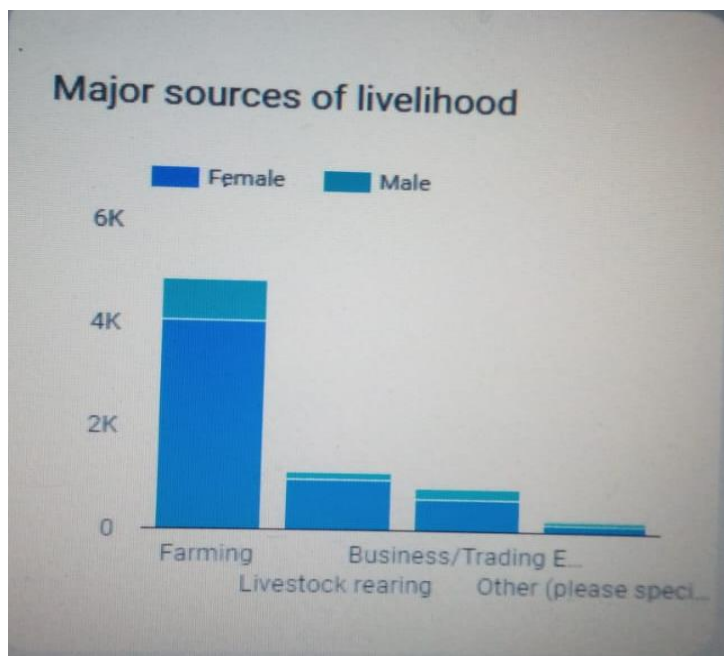
Major sources of livelihood

2.   Agricultural Practices

Agriculture is a mainstay of the economies of Kano and Kaduna, with 69% of respondents engaged in farming. Crop cultivation, particularly the production of staples like maize, soybeans, and sorghum, is the primary activity, accounting for 60% of farming households. However, the reliance on traditional farming methods, exacerbated by limited access to modern equipment (69%), is particularly evident in many rural areas of both states. This hinders productivity and income generation, leading to low yields and incomes for 57% of farmers. There is a clear need for technological interventions and capacity building tailored to the specific agro-ecological zones of Kano and Kaduna.

Main crops farmed

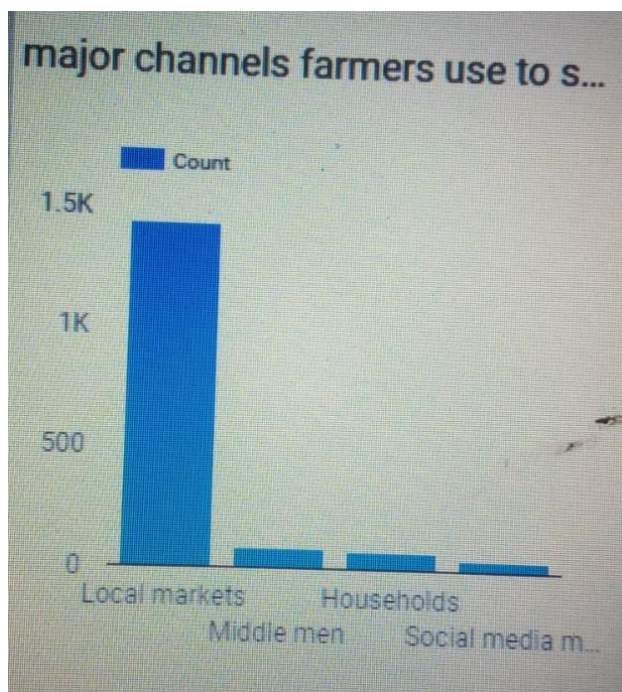### 3. Economic Constraints and Challenges

Financial constraints are a major challenge for farmers in both states, with 66% reporting difficulties in accessing capital. This limited investment in essential inputs, such as high-quality seeds, fertilizers, and improved tools, is particularly pronounced in areas with poor infrastructure. Compounding the economic challenges, pests and climate change, including the challenges posed by desertification in some parts of Kano, and flooding in certain areas of Kaduna, pose significant threats to crop production, leading to income losses and reduced farming scales for 17% of respondents. These factors underscore the vulnerability of farmers in both states to external shocks and the urgent need for climate-resilient agricultural practices.


Major challenges in business operationsns

Employment Status of the respondents

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**major channels farmers use to s...**

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4. Knowledge Gaps and Capacity Building

While the majority of respondents (98%) have received some form of agricultural training, critical knowledge gaps persist. A significant portion (82%) lacks awareness of climate-smart agricultural practices, hindering their ability to adapt to changing climatic conditions and mitigate risks. Additionally, limited knowledge of high-value crops such as vitamin A maize and orange-fleshed potatoes (40%) and limited knowledge on food processing regulation and bestpractise (63%) restricts opportunities for diversification and increased income generation. These knowledge gaps highlight the need for targeted capacity building initiatives to equip farmers with the skills and knowledge necessary to improve their livelihoods.

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limited knowled on food processing regulation and best practise

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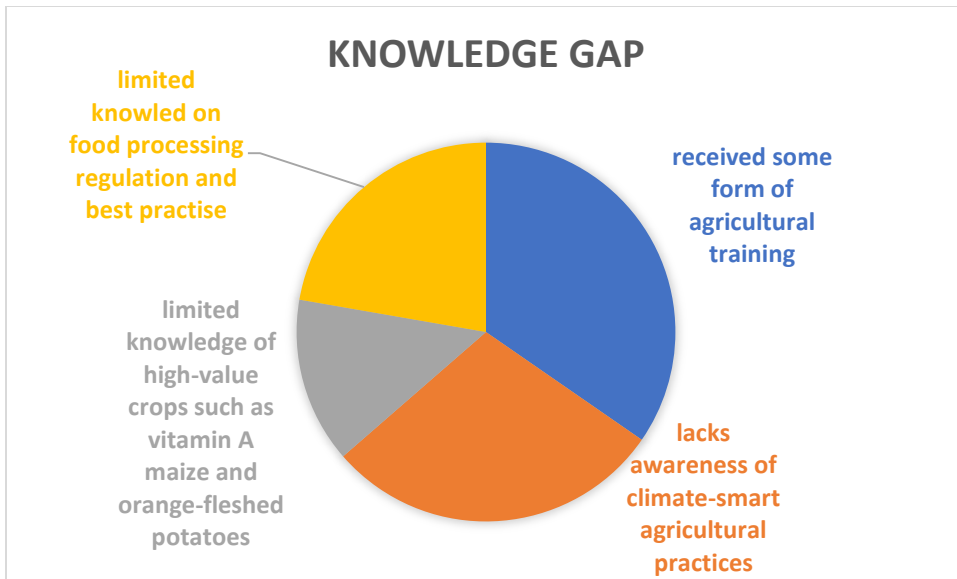
5.   Market Access and Infrastructure

Access to markets is a persistent challenge for farmers, with 90% relying on informal channels. The absence of linkages to national and international markets limits their ability to achieve better prices and expand their customer base. Moreover, inadequate storage and transportation facilities (46%) contribute to post-harvest losses, while high transportation costs (34%) further erode farmers' profits. These infrastructure bottlenecks hinder the smooth flow of agricultural products to markets, reducing farmers' incomes and discouraging investment in the sector.

Infrastructural challenges of farmers
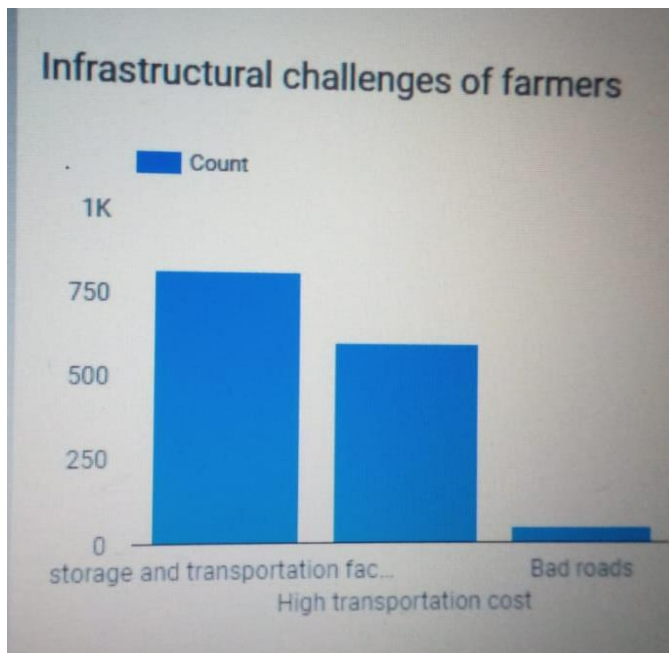
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6.   Digital Divide

The limited adoption of digital platforms (83%) among farmers exacerbates the challenges they face. Access to information, market trends, and agricultural extension services through digital channels can significantly improve decision-making and productivity. Bridging the digital divide is essential for empowering farmers and enhancing their resilience to shocks.
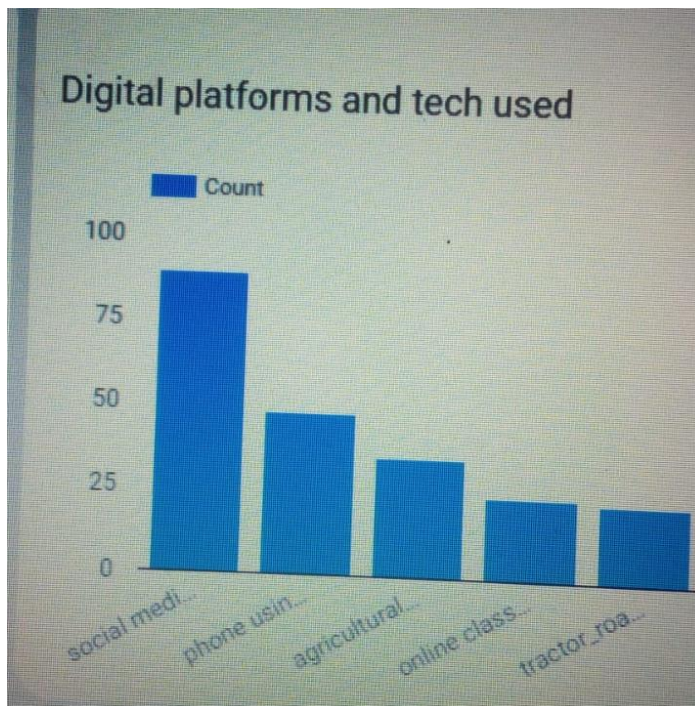
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## 7.   Focus Group Discussion/Consultative Meeting (Webinar) Findings

A consultative webinar was conducted with 23 participants (16 female and 8 male) to gather insights on the challenges faced by SMEs, farmers, and industry experts in the agricultural sector. Key findings from the webinar include:

Strong preference for organic farming: Participants expressed a keen interest in organic farming practices and the potential of organic fertilizers to improve soil health and crop yields.
Inadequate funding: Participants highlighted access to finance as a major constraint, emphasizing the need for financial support to invest in agricultural inputs, equipment, and processing facilities.
Capacity building needs: Participants identified a gap in agronomic training and capacity building, particularly in areas of value addition and improved farming practices.
Infrastructure challenges: Participants underscored the importance of addressing infrastructure gaps, such as poor road networks and inadequate storage facilities, to facilitate market access and reduce post-harvest losses.

FDG Attendnace Record Count
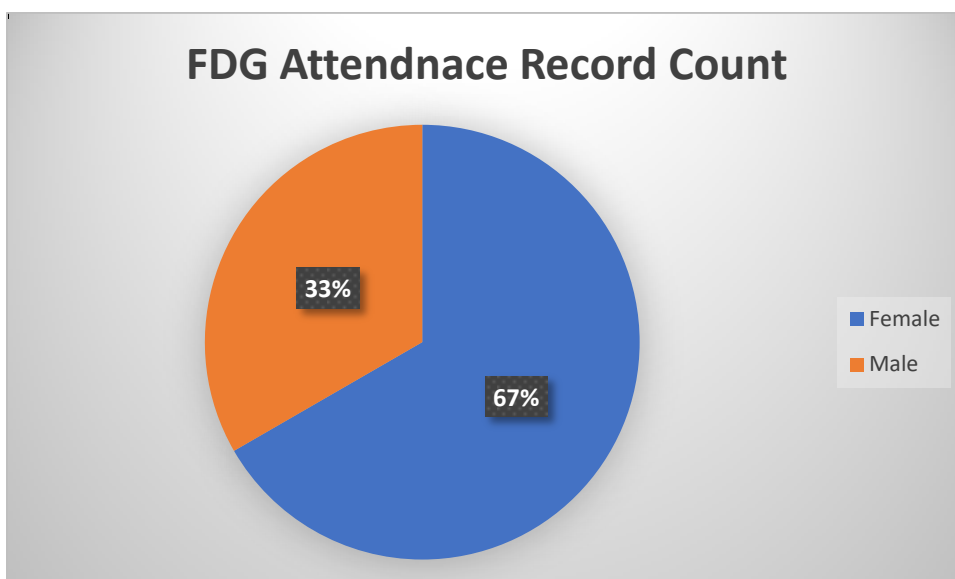
Kindly download Full report on: FGD/Consultative meeting Report

To watch Full Video Of the FGD/Consultative Meeting: Click Here

9.2. Critical Needs

Investment in agricultural infrastructure: Expanding access to modern farming equipment, irrigation systems, and post-harvest handling facilities is crucial for enhancing productivity and reducing losses.

Financial support: Providing farmers with access to credit, subsidies, and insurance can help them invest in their farms and manage risks.

Market development: Establishing robust market linkages, including access to national and international markets, is essential for improving farmers' incomes.

Capacity building: Implementing comprehensive training programs on climate-smart agriculture, financial management, and business development is vital for empowering farmers.

Digital inclusion: Expanding internet connectivity and providing digital literacy training can bridge the digital divide and facilitate access to information and services.

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Major support needed by the farmers
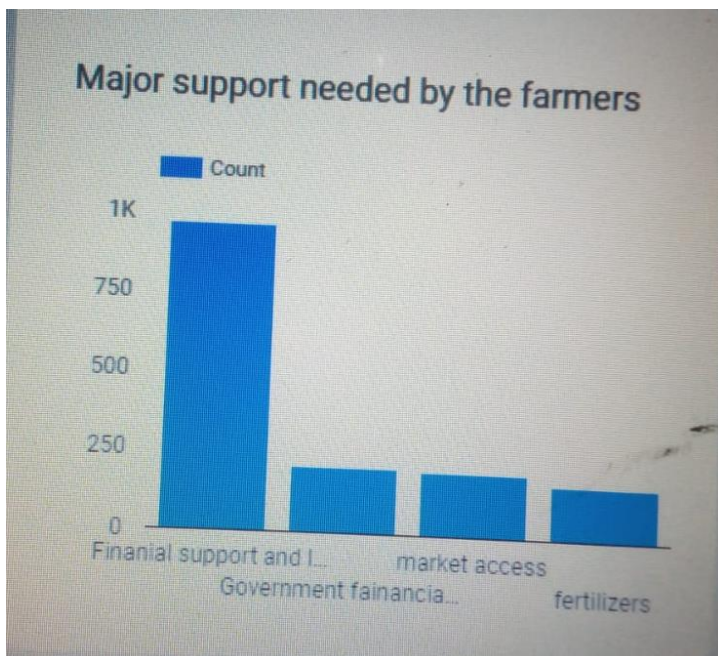
10. Recommendations

- **<u>Enhance Agricultural Infrastructure</u>**

Justification: The findings indicate a critical shortage of modern farming equipment and inadequate storage facilities, leading to low productivity and post-harvest losses.

Recommendation: Invest in the provision of subsidized or leased agricultural equipment, such as tractors, harvesters, and threshers, to smallholder farmers, particularly women, youth, and vulnerable groups. Establish and equip modern grain storage facilities in strategic locations across Kano and Kaduna states, prioritizing areas with high agricultural production and post-harvest loss rates.

Target Beneficiaries: Smallholder farmers, with a specific focus on women, youth, and vulnerable groups.

Implementation Strategy: Collaborate with government agencies, private sector partners, and farmer cooperatives to establish equipment rental schemes and storage facility management committees. Provide training and capacity building to farmers on equipment operation and maintenance.

- **<u>Expand Financial Inclusion</u>**

Justification: Limited access to credit and high poverty rates hinder farmers' ability to invest in their farms.

Recommendation: Establish or strengthen microfinance institutions and agricultural credit schemes specifically targeting women and youth farmers. Develop financial products tailored to the needs of smallholder farmers, such as input loans, equipment loans, and crop insurance.

Target Beneficiaries: Smallholder farmers/SMEs, with a specific focus on women and youth.

- **Strengthen Market linkages**

Justification: The lack of access to profitable markets limits farmers' income and discourages investment in agriculture.

Recommendation: Facilitate the formation of farmer cooperatives, particularly women-led cooperatives, to improve collective bargaining power and market access. Invest in rural infrastructure, such as roads and transportation, to improve market connectivity, focusing on areas with high agricultural production. Promote value addition and processing through training and support for small-scale processing enterprises.

Target Beneficiaries: Smallholder farmers, farmer cooperatives, and processors.

- **Improve Agricultural Extension and Capacity Building**

Justification: Knowledge gaps among farmers hinder the adoption of improved agricultural practices.

Recommendation: Strengthen agricultural extension services by providing gender-sensitive training on modern farming techniques, climate-smart agriculture, and financial management. Prioritize training for women farmers and youth. Invest in research and development to generate location-specific agricultural knowledge.

Target Beneficiaries: Smallholder farmers, with a specific focus on women and youth.

- **Promote Digital Agriculture**

Justification: Limited access to digital platforms hinders farmers' access to information and market opportunities.

Recommendation: Increase internet penetration in rural areas, focusing on areas with high agricultural potential. Develop and disseminate farmer-friendly mobile applications providing weather information, market prices, and extension services, with features tailored to women farmers. Promote the use of digital payment systems for agricultural transactions.

Target Beneficiaries: Smallholder farmers, with a specific focus on women and youth.

11. Conclusion

The needs assessment of smallholder farmers in Kano and Kaduna states has revealed significant challenges hindering agricultural productivity and livelihoods. Limited access to modern farming equipment, financial constraints, inadequate market linkages, knowledge gaps, and the digital divide are among the primary obstacles faced by farmers in the region. Addressing these issues is crucial for improving food security, reducing poverty, and promoting sustainable agricultural development.

The findings of this assessment provide a solid foundation for developing targeted interventions to support smallholder farmers. By investing in agricultural infrastructure, expanding financial access, strengthening market linkages, enhancing capacity building, and promoting digital inclusion, it is possible to empower farmers and create a more resilient and prosperous agricultural sector in Kano and Kaduna states.

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13.   Appendix

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