

HTSF GLOBAL DATA ANALYSIS REPORT ON CHALLENGES FACED BY FARMERS IN 4 COMMUNITIES IN GIWA LOCAL GOVERNMENT AREA OF KADUNA STATE

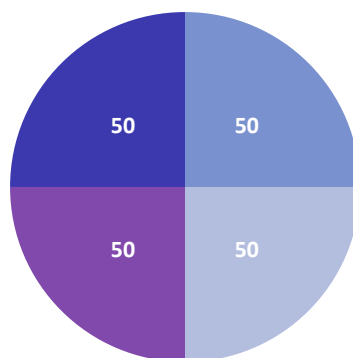
Introduction:

Agriculture remains the backbone of Northern Nigeria's economy, with a significant portion of the population relying on farming as their primary source of livelihood. Despite its critical importance, farmers in this region face a myriad of challenges that hinder their productivity and overall well-being. These challenges range from limited access to modern farming technologies and quality inputs to environmental issues such as water scarcity and unpredictable weather patterns. Additionally, socio-economic factors, including inadequate infrastructure, limited financial resources, and market access, further compound the difficulties faced by these farmers. After carrying out the analysis (exploratory), this report gives a detailed review and understanding of the various challenges that farmers in Giwa local government encounter, providing a comprehensive overview of the factors that impact their agricultural practices and suggesting potential solutions to enhance their productivity and resilience.

This report covers four communities in Kaduna North sampling 200;

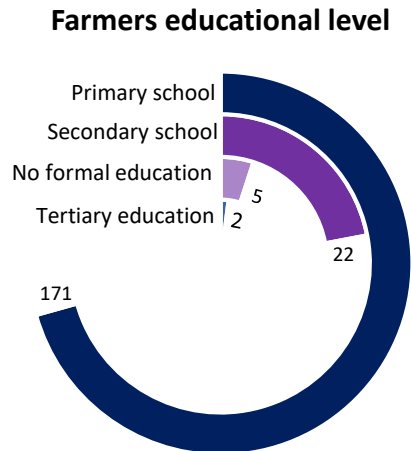
1. Kaduna - Bijimi
2. Kaduna – Panhauya
3. Kaduna - Biye
4. Kaduna – Shika

Total count of communities



■ Kaduna - Bijimi ■ Kaduna - Biye ■ Kaduna - Panhauya ■ Kaduna - Shika

1. Education Level of the farmers



Primary school: 171

Secondary school: 22

No formal education: 5

Tertiary education: 2

Primary School: Has the largest group of farmers 171 (85.5%) in total, which have completed primary education. This segment is prominent, indicating that most farmers have only basic education in the northern region and only 2 farmers the least represented segment, showing very few farmers have advanced education.

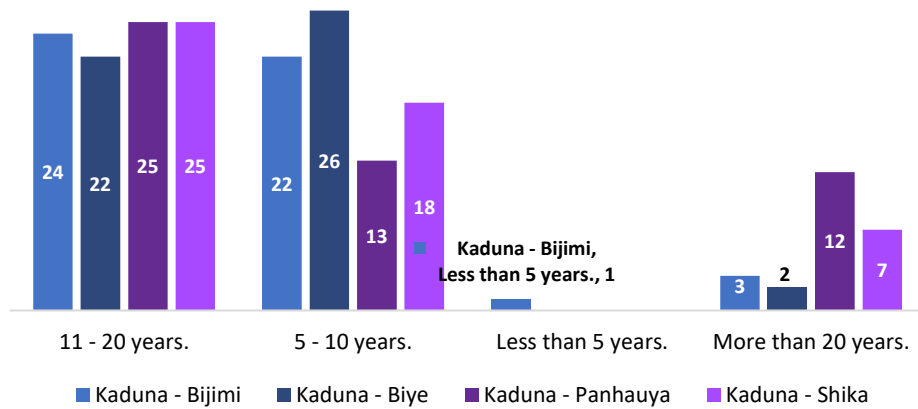
2. Number of years of farming

Years of farming	Count of Name
11 - 20 years.	48%
5 - 10 years.	40%
Less than 5 years.	1%
More than 20 years.	12%
Grand Total	100.00%

This data highlights that the majority of farmers have substantial experience, with most having farmed for at least 5 years, and nearly half having between 11 to 20 years of experience on the farm.

This suggests that nearly half of the farmers are quite experienced, indicating a mature and seasoned farming community, with Kaduna – Panhauya, Shika having higher counts of 25 on experience, Biye the highest in 5-10 years farming range and Bijimi the least (1). This very small

Count of no. of years of farming across four LGA's



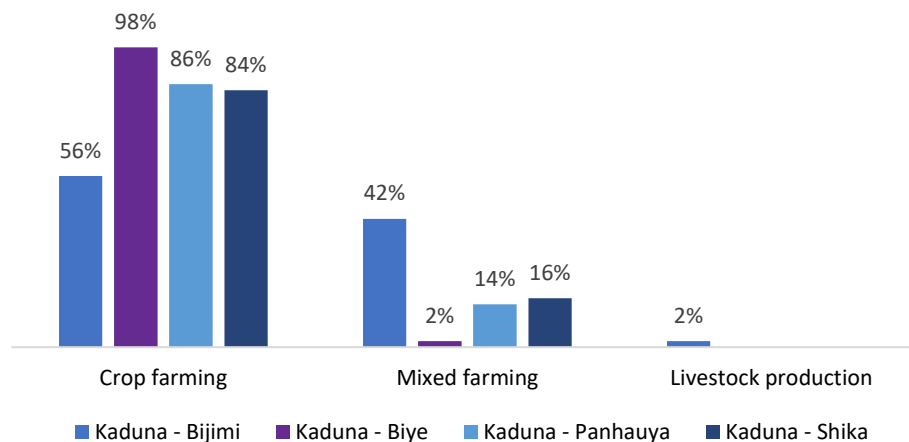
percentage suggests that there are few newcomers or beginners in the farming community as shown above.

3. Type of farming practice mostly engaged in

Type of farming	Count of Name
Crop farming	81.0%
Livestock production	0.5%
Mixed farming	18.5%
Grand Total	100%

The data reveals that crop farming is overwhelmingly the most common farming practice among the respondents showing Biye and Panhauya as the highest crop farmers **with 98% and 86%**. Mixed farming is also present but to a much lesser extent. Livestock production on its own is rare or intangibly practiced in comparison to the other practices. This information can be useful for understanding the agricultural focus of the group and for tailoring support or resources to meet the dominant needs and promote crop farming.

Distribution of Type of farming practice across 4 communities



4. Size of farmland mostly used for cultivation by farmers

1 - 5 hectares.	89%
6- 10 hectares	9%
Less than 1hectare.	2%

The data results show that 89% of farmers in the northern region farm on scale of 1-5 hectares with Panhauya LGA having the highest proportion (100%), Shika 94% and Biye the least of them.

5. What crops are mostly grown in the North?

Count of [Legumes (e.g, beans, soybeans, groundnuts)]	Response
Location	Yes
Kaduna - Bijimi	100%
Kaduna - Biye	100%
Kaduna - Panhauya	100%
Kaduna - Shika	100%
Grand Total	100%

[Cereals (e.g, maize, rice, sorghum)]	Response
Location	Yes
Kaduna - Bijimi	100%
Kaduna - Biye	100%
Kaduna - Panhauya	100%
Kaduna - Shika	100%
Grand Total	100.00%

[Vegetables (e.g, tomatoes, onions, pepper)]	Response
Location	Yes
Kaduna - Bijimi	100%
Kaduna - Biye	100%
Kaduna - Panhauya	100%
Kaduna - Shika	100%
Grand Total	100.00%

[Fruits (e.g, mangoes, oranges, Cashew)]	Response	
Location	None	Yes
Kaduna - Bijimi	25.0%	0.0%
Kaduna - Biye	25.0%	0.0%
Kaduna - Panhauya	24.5%	0.5%
Kaduna - Shika	24.5%	0.5%
Grand Total	99.00%	1.00%

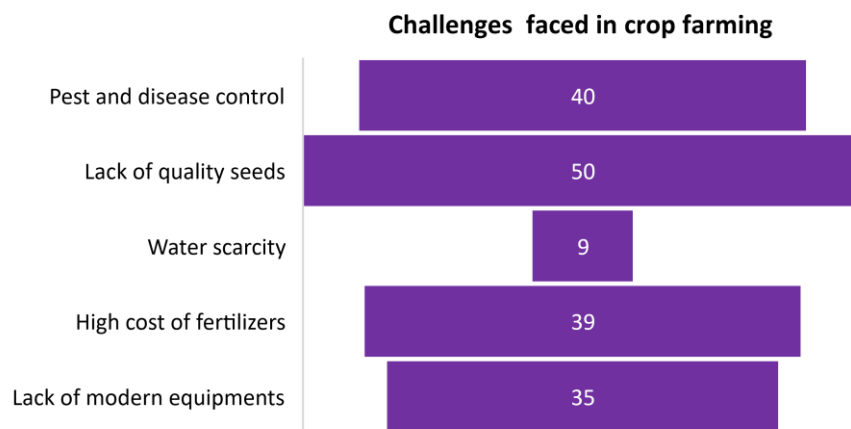
As shown from the results represented in the tables above, all the farmers in the four LGA's of Kaduna are into full cultivation of Cereals, legumes and vegetables, and fruit cultivation is extremely uncommon in the surveyed areas of Kaduna. Only 1% reported growing fruits, with a significant 99% not engaging in this type of agriculture.

Suggestion:

Exploring growth potential action, should be taken: Shown that such a small percentage of farmers are involved in fruit cultivation, there may be untapped potential in these regions for expanding fruit farming, especially if market demand or other supporting conditions like climate and soil suitability are favorable.

This data suggests that any initiatives aimed at increasing fruit production in these areas may need to address significant barriers, whether they are related to knowledge, resources, soil type or market access.

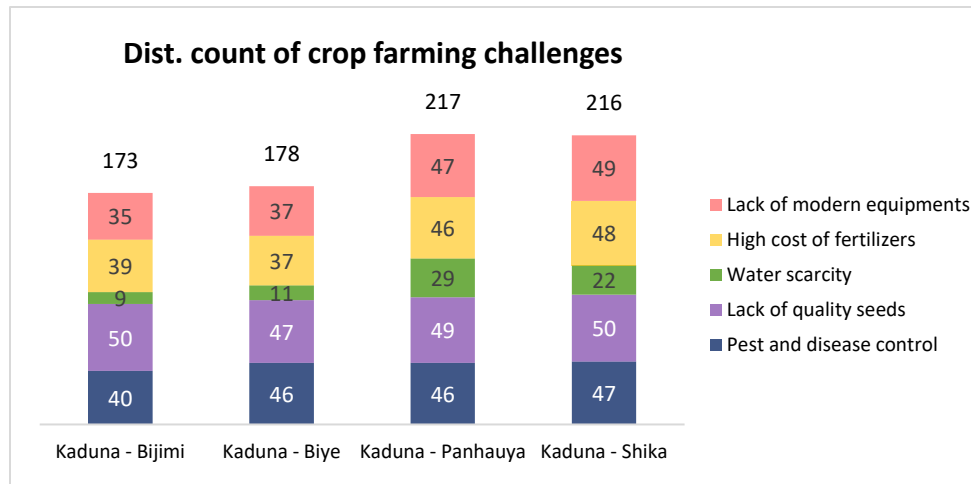
6. Crop farming: What challenges do you face in crop production?



Insight and suggestion:

The chart highlights that the primary challenges in crop farming in the surveyed areas include a **lack of quality seeds** (the major problem), **pest and disease control**, and **the high cost of fertilizers**. These issues are critical barriers to improving crop productivity and may require targeted interventions to enhance agricultural output. **HTS Farms** and other organizations can partner with NGO's and provide seeds at subsidized rates to farmers, and the relatively lower concern about water scarcity suggests it is a lesser problem in these regions, though it should not be overlooked because, this survey is been carried out during the rainy season and as well the respondents might not feel the effect due to the presence of water at the moment but it is believed that water is a major challenge in the Northern part of Nigeria.

The data chart below shows the distribution of the challenges across the local governments, having Shika and Panhauya as the most affected areas.

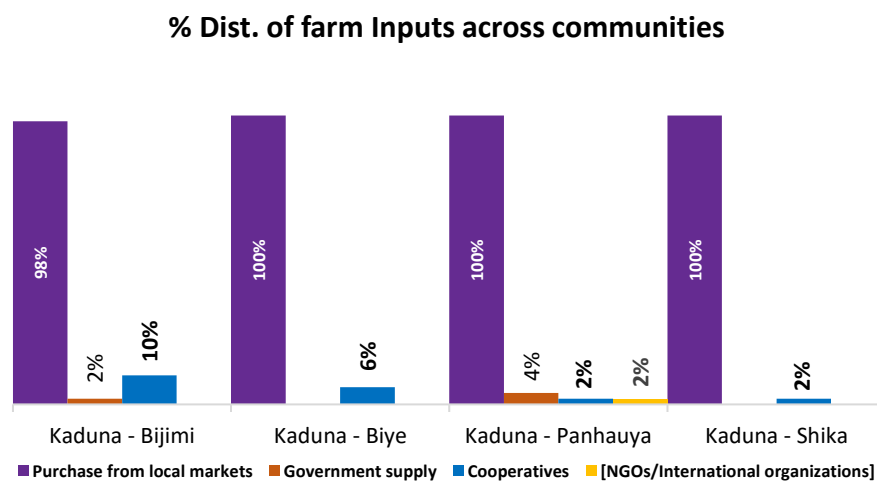


7. How do you obtain your farming inputs (seeds, fertilizers, pesticides)?

The analysis reveals the form in which the farmers from the 4 LGA's obtain their inputs thus;

- Purchase from local markets – **99.5%**
- Government supply – **1.5%**
- Cooperatives – **5%**
- NGOs/International organizations – **0.5%**

The distribution of the acquisition by the areas is shown below;



Insights

- In these three communities Biye, panhauya and shika **100%** of the farmers acquired their farm inputs through **Purchase** and **98%** from Bijimi.
- This indicates a complete reliance on market-based transactions to obtain necessary farming supplies. Biye and shika have none or little assistance from government on methods of acquiring inputs, and overall no impactful benefit from NGO's.

- The reliance on **Purchase** from markets as the primary method of acquiring farm inputs across all communities suggests a **well-established market for these goods**.

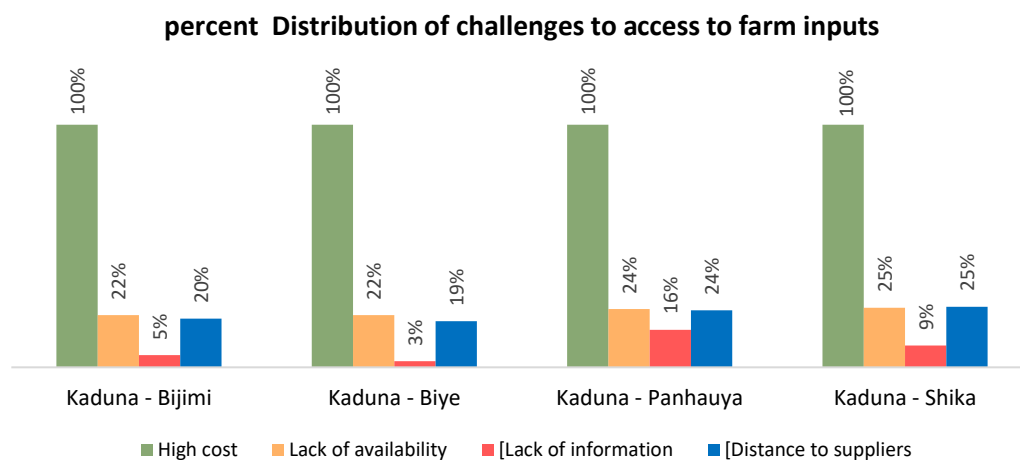
Suggestion

- The data reveals a strong dependence on market-based transactions for acquiring farm inputs in all four communities, with minimal reliance on alternative sources of support. **This might indicate a need for strengthening government programs** or other forms of assistance to reduce the burden on farmers who currently must purchase all their inputs.

8. What are the main barriers to accessing agricultural inputs and resources?

The analysis reveals the following cumulative percentage result for all the respective LGA's (Kaduna – Bijimi, Biye, Panhauya, Shika) narrowed down as follows, it will also show the chart distinct percent distribution of the challenges among the four LGA's.

- **High cost** (Kaduna – Bijimi, Biye, Panhauya, Shika) – **100%**
- **Lack of availability** (Kaduna – Bijimi, Biye, Panhauya, Shika) – **91.50%**
- **Lack of information** (Kaduna – Bijimi, Biye, Panhauya, Shika) – **32%**
- **Distance to suppliers** (Kaduna – Bijimi, Biye, Panhauya, Shika) – **88%**



Insights

High cost: This is identified as the most significant barrier across all four areas, with **100%** of the farmers in each community reporting it as a challenge. This indicates that the cost of farm inputs is a universal problem for these communities.

Lack of Availability: The next most common barrier, reported by **22%** of farmers in Kaduna-Bijimi and Kaduna-Biye, and **24%** in Kaduna-Panhauya and Kaduna-Shika. This suggests that even if farmers have the financial means, they may still struggle to find the inputs they need due to shortages or lack of supply.

Lack of information : This is reported by **5%** of farmers in Kaduna-Bijimi, **3%** in Kaduna-Biye, **16%** in Kaduna-Panhauya, and **9%** in Kaduna-Shika. This is less of a barrier compared to **High cost, cost and availability**, but it still affects a noticeable percentage of Panhauya farmers.

Most affected Areas

Kaduna-Panhauya and **Kaduna-Shika** are the most affected by "**Lack of availability**" and "**Distance to suppliers**," with 24% reporting these issues which more efforts should be channeled in. However, the difference is minimal compared to other areas.

Suggestion:

Financial barriers are the most pressing issue, improving the availability of inputs and reducing the distance to suppliers could significantly enhance farmers' access to the resources they need.

The potential weaknesses in the local supply chain or distribution networks, could be addressed **through improved logistics, local production of inputs, or better transportation infrastructure**. Information, could be addressed through better extension services, education programs.

9. Type of farming method / technique used.

- Traditional- **98.5%**
- Modern – **100% NO**
- Both - **1.5%**

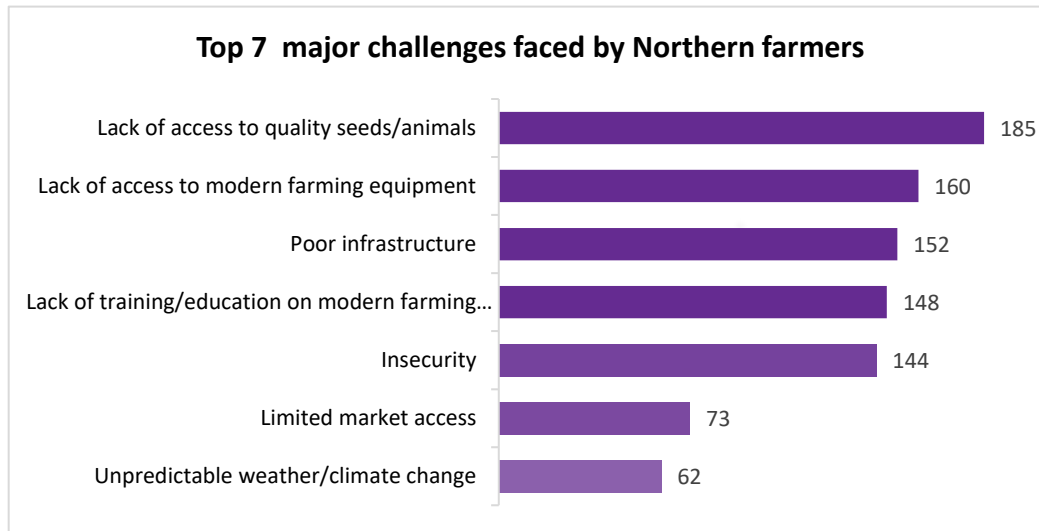
98.5% of the farmers rely on traditional farming methods. This shows that the vast majority of farmers in the area are still using age-old practices. **0%** of the farmers reported using modern farming techniques, while **1.5%** of the farmers use a combination of both traditional and modern farming methods.

Suggestion

The whole reliance of farmers on traditional farming practices suggests a need for education, training, and resources to encourage the adoption of modern farming methods. The lack of modern farming could be due to various factors such as lack of access to modern equipment, knowledge, or financial resources. Integrating modern techniques could potentially increase productivity and sustainability in these farming communities.

10. Major challenges faced in farming by northerners

The result below reveals the major challenges that are faced by farmers in the four communities as drilled down to seven which are of most concern and showing the major communities which are affected most.



Key

Insights

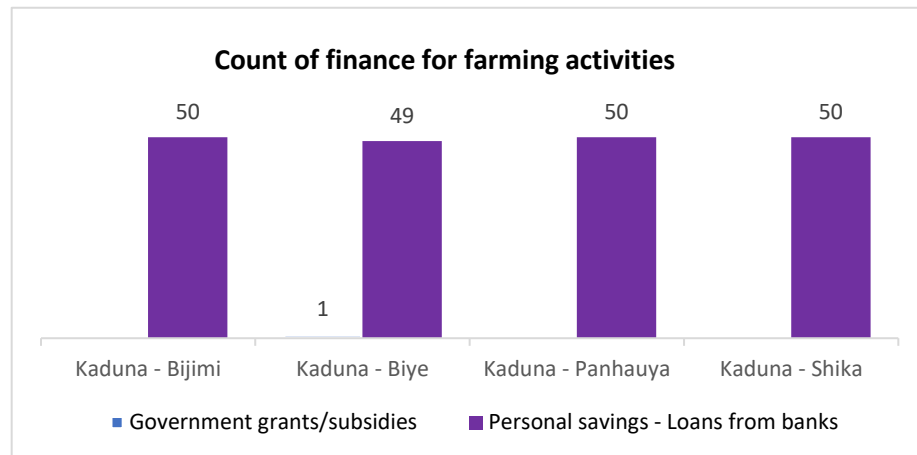
- The primary barriers to agricultural productivity in Northern Nigeria revolve around **access to quality inputs (seeds/animals), equipment, and infrastructure, along with inadequate training in modern practices** which shows a significant gap in knowledge and skills acquisition, thus affecting their extent of farming.
- Insecurity and limited market access also pose significant challenges, potentially affecting the economic stability and growth of the farming sector in the region.
- Although climate change is a concern, it ranks lower on the list, which may indicate that farmers are more immediately affected by practical, day-to-day issues.

Suggestions

- **Improve Access to Quality Seeds and Livestock:** HTS farms, can utilized the opportunity by partnering with retail sellers in the region and supply seeds to them at good prices to take over the market or Initiatives should be undertaken to ensure that farmers have better access to high-quality seeds and animals, or through government subsidies, improved distribution networks, or partnerships with NGO's and agricultural organizations.
- **Modernize Farming Equipment:** Providing affordable access to modern farming equipment through loans, grants, or rental services could help farmers enhance productivity and reduce labor-intensive practices.
- **Increase Training and Education and enhance Infrastructure:** Conduct trainings and educate farmers on modern tools and sustainable farming practices, Investment in rural infrastructure, including roads, storage facilities, and irrigation systems, is crucial to support the farming community etc.

11. What is the major source of finance for farming activities?

The chart illustrates the sources of finance for farming activities in four locations: **Kaduna - Bijimi, Kaduna - Biye, Kaduna - Panhauya, and Kaduna – Shika** year in and year out.



Key Insights

- **High Dependence on Personal Savings/Loans:** Personal savings or loans from banks are the dominant sources of finance across all four locations. In each location, 50 respondents (or nearly 100%) rely on these sources, except for Kaduna - Biye, where 49 respondents use personal savings or bank loans. Implying that, farmers either lack access to or are not receiving substantial government support in the form of grants or subsidies.
- **Little or No Government Support:** The very low count of respondents receiving government grants or subsidies (only 1 out of 200 total respondents across all locations) indicates either a lack of available loan government programs or possibly a lack of awareness among farmers about such programs existing in such areas.

Suggestion:

- **Increase Access to NGO & Government Grants/Subsidies:** By this method, I mean;

Carrying out Awareness Campaigns: conduct awareness programs to reach and educate farmers about available government grants and subsidies. This could involve collaboration with local agricultural agencies and community leaders.

Simplifying the application processes: ensuring that the process of applying for government support is simplified and made accessible to all farmers, particularly those in rural areas.

- **Enhance Collaboration with Banks:** Partner with banks to design loan products tailored to the needs of farmers, including lower interest rates, flexible repayment schedules, this could help reduce the financial strain on farmers who rely heavily on personal savings.
- **Support in Diversifying Income Sources:** Provide training on income diversification strategies, such as integrating value-added activities or exploring alternative crops that have higher market value, which could reduce the reliance on loans for financing.

By implementing these strategies, this will bring a shift towards more sustainable and diversified financial support for farming activities, leading to increased agricultural productivity and economic stability in these regions.

12. When possibly granted or have access to loans, what's the Interest rate on return?

Location	Interest rate on return if granted any	Count
Kaduna - Bijimi	10%	50
Kaduna - Biye	10%	50
Kaduna - Panhauya	10%	50
Kaduna - Shika	10%	50
Grand Total		200

Key Insights:

The table shows that the interest rate on loans in four different locations (**Kaduna - Bijimi, Kaduna - Biye, Kaduna - Panhauya, and Kaduna - Shika**) is consistently set at **10%**.

Potential Financial Burden: While 10% might be seen as a moderate interest rate, for small-scale farmers who might already be financially constrained, this could still represent a significant burden, particularly if their farming activities do not yield high returns.

Limited Flexibility: The uniformity of the interest rate across different locations suggests a lack of flexibility or consideration for local economic conditions, which could vary significantly between these regions.

Suggestion/recommendation

To reduce the interest rate these processes are recommendable,

Subsidized Loan Programs like **Interest Rate Buydown** where the government, community organizations, or NGOs could partner with financial institutions to buy down interest rates, making loans more affordable for farmers.

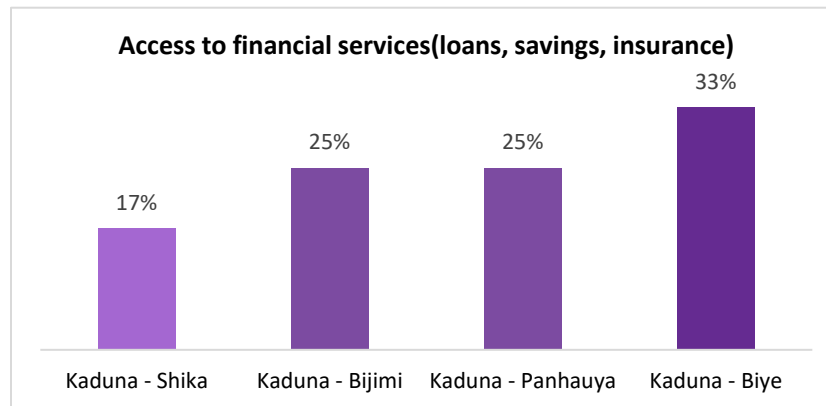
Group Lending: Promote group lending models where small groups of farmers collectively secure loans

Strengthening farmer cooperatives through collective bargaining and savings and credit schemes where cooperatives can also establish their own savings and credit schemes, providing low-interest loans to their members

Diversification of Funding Sources: **NGO and International Funding** tap into funding opportunities provided by NGOs, international development agencies, or CSR (Corporate Social Responsibility) initiatives, which might offer grants or zero-interest loans to farmers.

13. When the Loans are available, how are they distributed to the communities?

The chart below illustrates the percentage of people with access to financial services (such as loans, savings, and insurance) in four locations within Kaduna: Shika, Bijimi, Panhauya, and Biye.



Insights

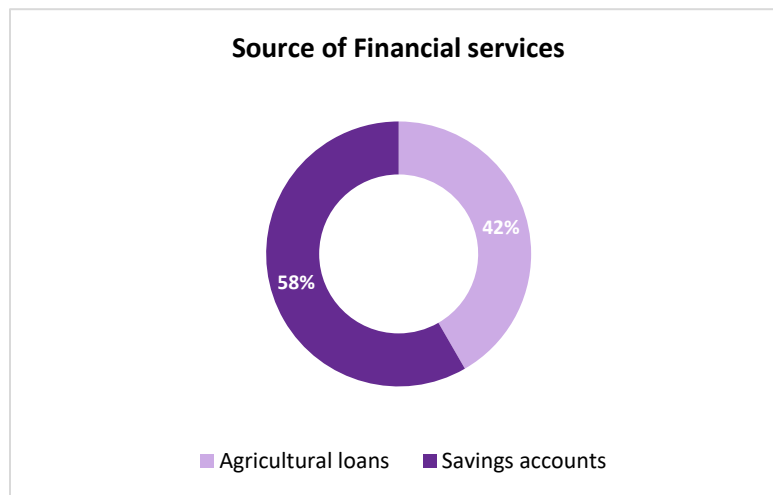
Kaduna - Biye has the highest percentage of people with access to financial services whenever there is a possibility, loans, or any financial service available at **33%**, **Kaduna - Bijimi** and **Kaduna – Panhauya 25%**, and **Shika 17%**.

The disparity in access to financial services across the four locations in Kaduna, with Biye having the most access and Shika the least. This could reflect differences in financial infrastructure, literacy, or economic activity in these areas.

Suggestion/recommendation

- Shika, should be given more concentration and trainings, and campaigns should be carried out in the community on how to access loans using little technologies, because they are major contributors to large scale farming in terms of farm size (1-5 hectares) making up **94%** of that scale of farming. Ref (question 4. Page 3)
- Expand awareness and outreach by conduct workshops and campaigns to educate farmers on available grants and how to apply for them.
- Simplify application processes
- Financial Literacy Programs to enable them keep up to date about broadcast about financial services and loans.

14. What type of financial services do you use?



Insights

The chart below illustrates the percentage of source of financial services in four locations within Kaduna: Shika, Bijimi, Panhauya, and Biye showing that the main source of financial services comes from farmers **personal savings** indicating 58%.

- The preference for savings accounts which shows **58%** over agricultural loans, suggests that individuals are more focused on saving their income rather than borrowing money for agricultural activities, this indicates a cautious approach toward debts.
- 42% of respondents using agricultural loans, reflects a significant reliance on borrowed funds for agricultural activities still suggests that a notable portion of the respondents requires external financial assistance to support their farming activities to produce more.

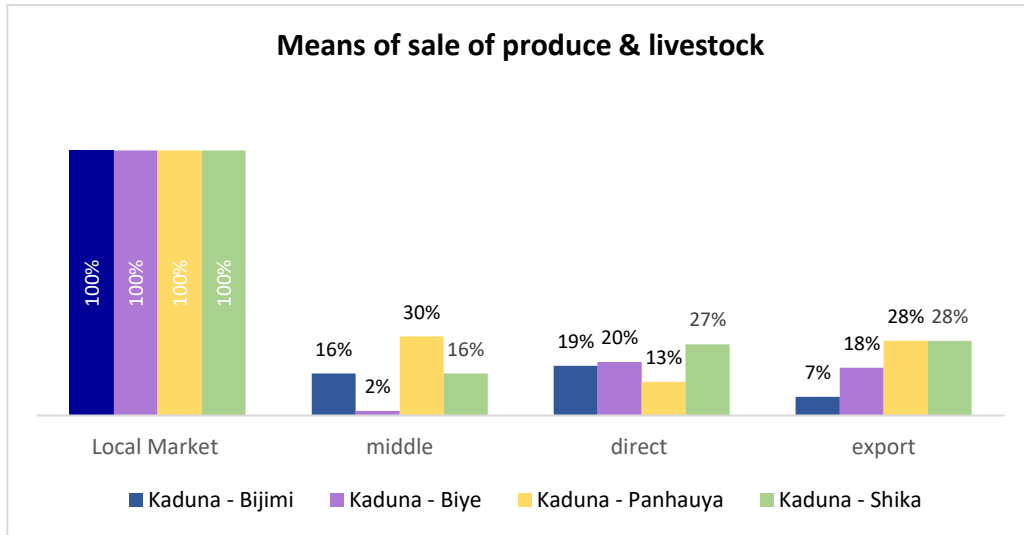
Suggestion/recommendation

- Encourage saving measures
- **Improve access to agricultural loans:** There could be a push to make agricultural loans more accessible or attractive, by reducing interest rates or offering more flexible repayment terms, this will encourage the farmers to take more loans and increase their productivity.

15. Where/how do you primarily sell your produce/livestock?

The chart displays the various means by which produce and livestock are sold across four communities: Kaduna-Bijimi, Kaduna-Biye, Kaduna-Panhauya, and Kaduna-Shika. The sale methods include:

- Local Market
- Middlemen
- Direct sales and Export means.



Which com. Is closer to the market?

Key Insights

- I. **Dominant sale method: Local Market** is the most used means of sale across all the communities, with 100% of respondents from the four communities relying on local markets to sell their produce and livestock. This indicates that the local market is the primary outlet for the sale of agricultural products in these communities.
- II. **Secondary sale methods used;** the data reveals several sales method here as;
 - Export:** The export option is notably the next common used method of sales with the highest usage in **Kaduna-Shika (28%)** and **Kaduna-Panhauya (28%)**, with Kaduna-Biye and Kaduna-Bijimi using it much less (18% and 7%, respectively) cumulatively making up **81.25%** wholly after **Local method used**.
 - Direct Sales:** Direct sales are another significant method, particularly in **Kaduna-Shika (27%)** and **Kaduna-Biye (20%)**, with lower usage in Kaduna-Panhauya (13%) and Kaduna-Bijimi (19%) this makes up **79%** as grand total following **Exports**.
 - Middlemen:** The method of selling through middlemen is the least method used compared to others except for Biye with 30%, all with grand percent total of **63.2%**.

NOTE

- **Local Market** is the most utilized means of sale across all communities, making it the primary method for selling produce and livestock (100%)
- **Export** is secondary, particularly by **Kaduna-Panhauya** and **Kaduna-Shika**
- **Middlemen** and **Direct Sales** serve as other methods, with **Kaduna-Biye** leading in the use of middlemen and **Kaduna-Shika** in direct sales.

Why Biye might still be using Middlemen for sales;

Looking at the data, the reliance on middlemen in Kaduna-Biye could be due to logistical challenges, lack of market access or knowledge, financial needs (Biye might need quick cash to cover daily expenses, leading them to sell to middlemen who offer immediate payment), and established cultural

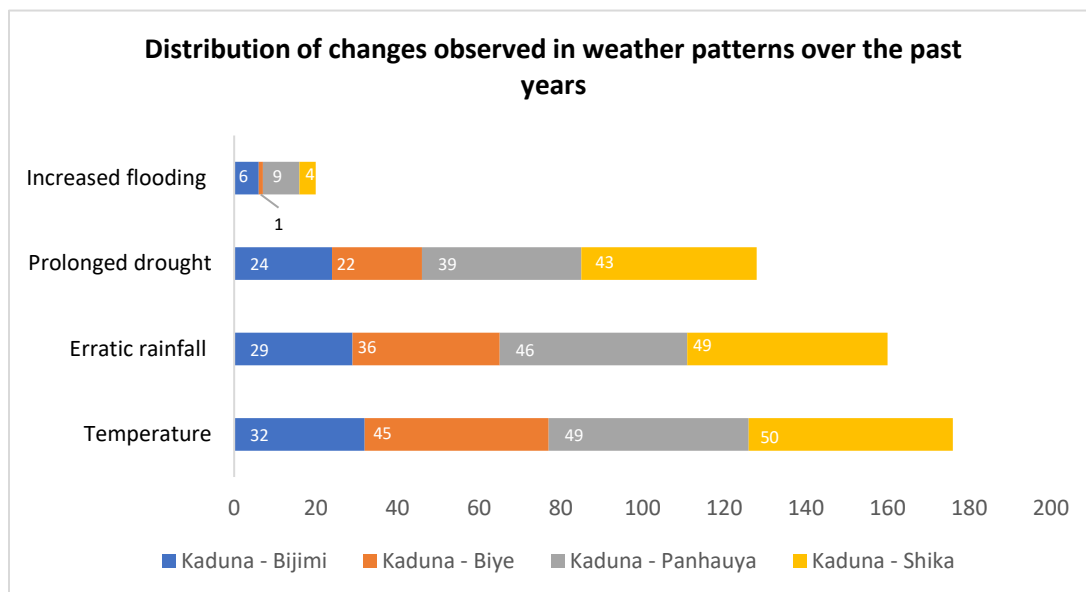
practices. Addressing these factors through infrastructure development, market information systems, and financial support could help reduce dependence on middlemen in the community.

Suggestion/recommendation

- **Diversification of Sales Channels:** To reduce dependency on the local market, communities could be encouraged to explore other channels, such as direct sales and export.
- **Strengthening Market Linkages:** Initiatives to strengthen linkages between farmers and buyers (both locally and internationally) could be beneficial, particularly in improving access to export markets.
- **Training and Support:** Training on how to negotiate better deals with middlemen or directly with buyers might help communities like **Kaduna-Biye** and **Kaduna-Shika** get better prices for their products.

16. Have you noticed any changes in weather patterns over the past years?

Here, the weather patterns analyzed include increased flooding, prolonged drought, erratic rainfall, and temperature changes across all the communities.



Insights

Highest, common and least identified patterns

The **temperature change** is the highest observed weather pattern across all the communities, with the highest counts recorded in Kaduna-Shika (50) and Kaduna-Panhauya (49).

The data reveals that temperature changes are the most prominent weather-related challenge facing these communities, followed closely by erratic rainfall and prolonged drought. Increased flooding, while present, appears to be the least observed issue in the communities.

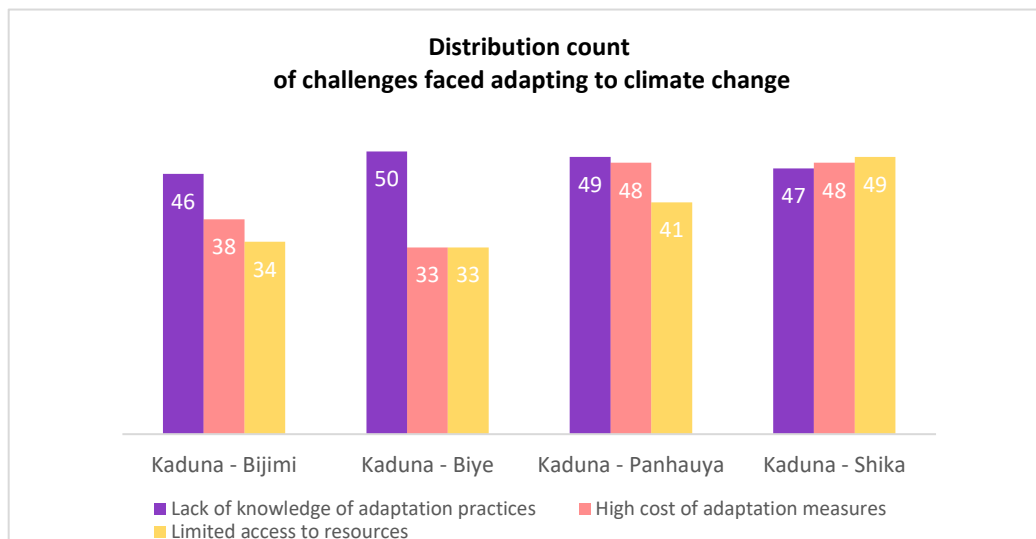
Suggestion/recommendation

Adaptation Strategies: The affected communities should focus on developing and implementing adaptation strategies to deal with increasing temperatures and erratic rainfall, such as drought-resistant crops and improved irrigation systems.

Flood Management: Creating drainages to mitigate this potential risk.

Climate Education

17. What are the Challenges faced adapting to climate change?



The chart presents the distribution count of challenges faced by different communities in adapting to climate change. The challenges are categorized into three groups: lack of knowledge of adaptation practices, high cost of adaptation measures, and limited access to resources.

Insights:

Kaduna-Bijimi

- I. **Lack of Knowledge of Adaptation Practices:** This is the most significant challenge (46), faced followed by high cost (38), and limited access to resources (34).

Kaduna-Biye

- II. **High Cost of Adaptation Measures:** This is the highest challenge (50), while both lack of knowledge and limited access to resources share equal weight (33).

Kaduna-Panhauya

- III. **High Cost of Adaptation Measures:** Similar to Kaduna-Biye, the high cost (49) is the top challenge, followed by limited access to resources (48), and lack of knowledge (41).

Kaduna-Shika

Limited Access to Resources: This is the most pressing challenge (49), with high cost (48) and lack of knowledge (47) following closely behind.

Highest Challenge:

The Lack of knowledge of adaptation measures emerges as the most significant challenge across the communities, particularly in Kaduna-Biye (50) and Kaduna-Panhauya (49) and shika.

Most Affected Community: **Kaduna-Biye** faces the highest challenge overall, with the highest count (50) for the lack of knowledge of adaptation measures.

The data indicates that the **lack of knowledge and high cost of implementing adaptation measures** are the predominant barriers for these communities in dealing with climate change. The need for financial support or subsidized programs is crucial to mitigate this challenge.

Recommendations:

- Financial Support
- Educational Programs: Initiate community-based educational programs focusing on cost-effective adaptation strategies to improve knowledge.
- Resource Accessibility

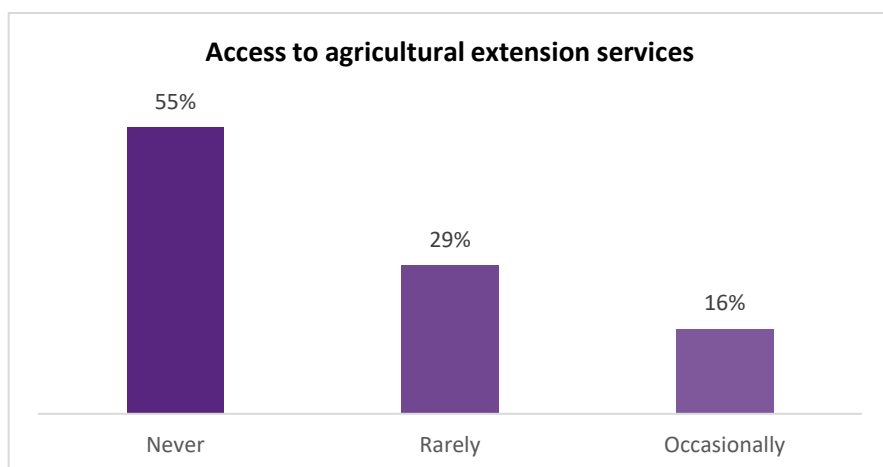
18. Do you have access to agricultural extension services?

Count of Access to agricultural extension services	Access to agricultural extension services	
Location	No	Yes
Kaduna - Bijimi	98%	2%
Kaduna - Biye	98%	2%
Kaduna - Panhauya	98%	2%
Kaduna - Shika	96%	4%
Grand Total	97%	3%

The results show that farmers in these communities have little or no access to agricultural extension services, as only **3%** of the respondents from the communities can access the services.

19. If yes, how often do you receive extension services?

The chart below, shows the frequency at which the 3% get access to those services in their communities whenever they are available, as shown



20. Have you received any trainings on modern farming techniques?

The table indicates the distribution of responses regarding training on modern farming techniques within a certain population. The data reveals

Training on modern farming techniques	Count of Training on modern farming techniques
No	99.5%
Yes	0.5%
Grand Total	100.00%

No Training: An overwhelming **99.5%** of respondents reported that they have not received any training on modern farming techniques.

Yes Training: Only a very small fraction, **0.5%**, indicated that they have received such training.

21. If yes, who provided the training?

If yes, who provided the training?	Count of If yes
Cooperative societies	47.9%
Other	31.3%
Private companies	20.8%
Grand Total	100.00%

The data reveals that from the 0.5% fraction who received trainings, accessed it from 48% cooperatives, 31% private companies and 21% from other unknown sources, this indicates that cooperatives contributes larger at training or introducing farmers to modern ways of farming.

Key Insights

- **Lack of Modern Farming Training:** The data clearly shows that almost all individuals within this population lack access to training in modern farming techniques. This is a significant gap, as modern farming methods are crucial for improving agricultural productivity, sustainability, and income.
- **There is potential for improvement:** Seen that only 0.5% have received training, there is substantial room for interventions to improve on trainings to expand.

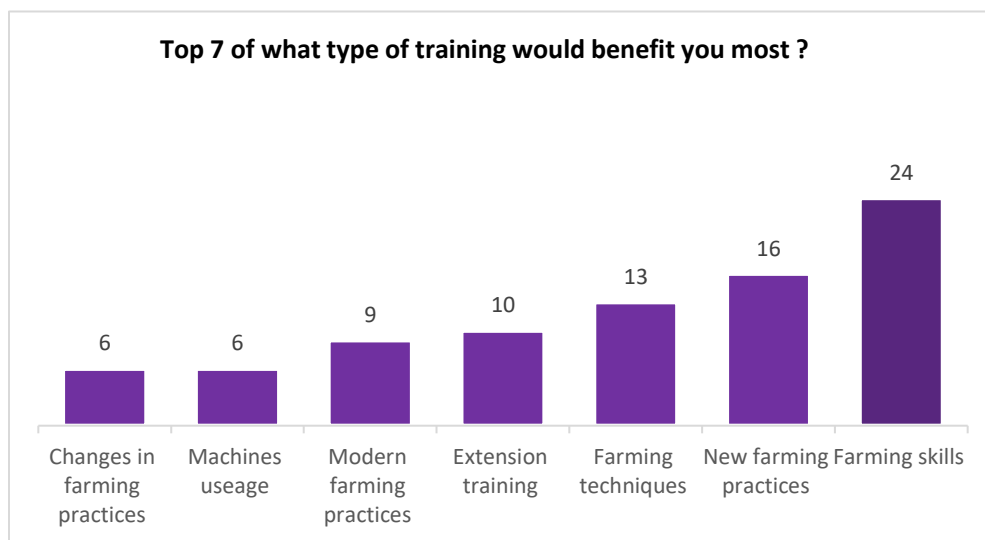
Suggestion/recommendation

Urgency for Agricultural Development: The near-total absence of modern farming training shows an urgent need for agricultural development initiatives. Without proper training, farmers may continue to rely on traditional methods.

Community Outreach: Increase awareness and encourage participation in modern farming training through community outreach programs, emphasizing the benefits of adopting modern practices.

22. What type of training do you think would benefit you the most?

The chart presents the top seven types of training that respondents believe would benefit them the most.



Driven Insights

- **Prioritization of Basic Skills:** The highest interest in "Farming skills" suggests that many farmers feel they need to strengthen their foundational agricultural knowledge.
- **Interest in Innovation:** The notable interest in "New farming practices" and "Farming techniques" indicates that farmers are eager to adopt new and potentially more effective methods.
- **Mechanization Awareness:** Although fewer respondents selected "Machines usage," the fact that it is included in the top seven suggests a recognition of the need for mechanization, even if it's not the top priority.

Suggestion/recommendations

- i. Promote Mechanization: Even though "Machines usage" was less frequently identified, it's important to promote the benefits of mechanization as part of modernizing agriculture.
- ii. Develop Comprehensive Training Programs
- iii. Incorporate Innovation: Introduce and encourage the adoption of new farming practices and technologies, with support systems in place to help farmers implement what they learn.

Overall Recommendations

- i. Enhance training on modern farming techniques: Research shows that an overwhelming 99.5% of farmers have not received any training on modern farming techniques. Additionally, the data shows a strong demand for training in farming skills, new farming practices, and farming techniques thus, there should be a significant investment in agricultural training programs that focus on modern farming techniques.
This could involve collaborations with agricultural extension services, NGOs, and government agencies to offer targeted training.
- ii. Introducing climate-smart agriculture and resource management techniques: This policy should focus on improving infrastructure to mitigate the impact of climate-related challenges like increased flooding, prolonged drought, erratic rainfall, and temperature changes.
- iii. Improve access to quality inputs and modern equipment
- iv. Expand financial support and access to credit loans
- v. Address climate change and adaptation challenges
- vi. Improve market access and sales channels

Conclusion

The data clearly highlights the pressing challenges faced by farmers in Northern communities, particularly regarding access to training, financial services, quality inputs, and the ability to adapt to climate change. Addressing these issues through targeted policies, improved access to resources, and enhanced training programs will be critical in improving agricultural productivity and resilience in these communities. By implementing these recommendations, this will solve 90% of the problem, farmers in these communities will also be better equipped to overcome the challenges they face and contribute to the overall development of the agricultural sector in these regions.