

Communiqué:

Call for joint action to create a sustainable and inclusive horticulture sector in Nigeria



Summary

The HortiNigeria program, funded by the Embassy of the Kingdom of the Netherlands, held a learning event in Kano, Nigeria, on July 11-12, 2023. This event convened key stakeholders in Nigeria's horticulture sector to collaborate, share insights, and discuss key actions to foster sustainable growth in the sector. This communiqué encapsulates the event's collaborative spirit and ideas for action, focusing on eight critical topics:

- 1. Climate-smart approaches to improve production and livelihoods: Climate change poses a huge challenge for horticulture. Proposed actions include knowledge-sharing on climate-smart approaches, efficient funding systems for action research, and public-private partnerships (PPPs).
- 2. Inclusion and empowerment: Achieving gender equality and youth inclusion in horticulture must be a priority. Strategies include forming producer organizations (POs), engaging men to realize the importance of women in the sector, improving market access, and promoting diversification of entrepreneurial choices.
- 3. Access to financial services: Access to finance remains a challenge for many horticultural stakeholders. Recommendations include enhancing financial literacy and facilitating low-interest loans to boost investment.
- 4. Business-to-business opportunities: Strengthening agribusiness linkages is essential for improving efficiency, reducing losses, and ensuring fair prices. Recommendations include establishing a market information-sharing platform and ensuring year-round input availability.
- 5. Agro-input dealers and services along the value chain: Agro-input dealers play a vital role in improving yields and providing advisory services. Recommendations include enforcing regulatory standards and improving access to finance.
- 6. Awareness of food safety and the nutritional value of vegetables: Increasing awareness of safe food production and the nutritional value of vegetables is crucial. Recommendations include promoting the safe use of inputs, building capacity, and conducting intensive awareness campaigns.
- 7. Policy dialogue for sector development: The horticulture sector needs more policy interventions to thrive. Advocacy efforts to enhance current policies and promote government involvement in fostering innovation need to be undertaken.
- 8. Technology and innovation: Innovation can enhance productivity, environmental sustainability, and climate resilience in horticulture. Solutions must address challenges such as plant diseases, pests, and post-harvest losses.

These recommendations give insight into the sector's vision for positive change and growth, emphasizing collaboration, innovation, and policy advocacy to drive sustainable development. While the recommendations represent the sector's own ideas for improvement, comprehensive validation among all stakeholders has not yet taken place. Therefore, further discussions and refinement are advised.

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Introduction

On July 11-12, 2023, HortiNigeria held the first learning event within the horticulture sector in Nigeria. The city of Kano was the setting for a dynamic gathering of stakeholders, all of whom are instrumental to the growth and vibrancy of Nigeria's horticulture sector. Over the course of the two-day event, stakeholders not only shared their expertise, but also forged new collaborations and discussed ways to move the sector forward.

This communiqué serves as a comprehensive record of the event, encapsulating the collaborative spirit, shared insights, and significant outcomes that emerged. Furthermore, it provides key aspirations and opportunities for action for future collaborations and growth, centered around eight topics.

These eight topics have emerged through the journey of the HortiNigeria program so far and are considered key to inciting change and sustainable growth in Nigeria's horticulture sector:

- 1. Climate-smart approaches to improve production and livelihoods
- 2. Inclusion and empowerment
- 3. Access to financial services
- 4. Business-to-business opportunities
- 5. Agro-input dealers and services along the value chain
- 6. Awareness on safety and the nutritional value of vegetables
- 7. Policy dialogue for sector development
- 8. Technology and innovation

The aspirations and actions presented in this communiqué were generated in a workshop setting in collaboration with sector stakeholders. As such, they give insight into the sector's own ideas on how to bring about improvements. However, due to time constraints, these ideas have not undergone a comprehensive validation process among all pertinent stakeholders. Therefore, these ideas should not be interpreted as fully endorsed or confirmed at this stage.

Box 1 Introducing HortiNigeria

This communiqué is an initiative of the HortiNigeria program. HortiNigeria is a four-year (2021-2025) program funded by the Embassy of the Kingdom of the Netherlands (EKN) in Nigeria and implemented through a consortium involving the International Fertilizer Development Center (IFDC), East-West Seed Knowledge Transfer (EWS-KT), Wageningen University and Research (WUR), and KIT Royal Tropical Institute.

Its goal is aligned with the Dutch and Nigerian food security and private sector development objectives and fits within the framework of the larger transformation of food systems in Nigeria. The project will enhance the social capital and contribute to the empowerment of smallholder farmers and value chain actors, with a particular focus on women and youth, and it will incentivize value chains and support the sustainable integration of entrepreneurial farmers into profitable markets. We will foster change through scaling proven eco-efficient production technologies for sustainable intensification, deepening value chain relations and performance and promoting innovation in the enabling environment.

Bearing this goal in mind, since November 2021, several activities in Kaduna, Kano, Ogun and Oyo states have been implemented within the seven value chains in the horticulture sector consisting: cabbage, cucumber, okra, onions, pepper, tomatoes, watermelon and sweetcorn through the four program components which are:

- Increasing productivity and income
- Pilot innovation technologies and regional diversification
- · Facilitate access to finance for SME's
- Enhance sector coordination and business to business linkages

Climate-Smart Approaches to Improve Production and Livelihood



Amid the challenges posed by a rapidly changing climate, the horticulture sector stands as a critical arena where innovative strategies lie at the heart. Climate-smart approaches designed to harmonize agricultural practices with environmental sustainability have emerged as an avenue for dealing with the current impacts of the climate. The effectiveness of climate-smart approaches can vary based on local conditions, available resources, and the level of community engagement.





- 1. Increase knowledge-sharing opportunities through collaborations and awareness-raising activities on climate-smart approaches. Different types of stakeholders have been building their knowledge on climatesmart approaches. The potential impact of this knowledge can be maximized by ensuring that it is broadly shared. Knowledge should be actively disseminated, and future collaborations in the horticulture domain must include a diversity of actors.
- 2. Create efficient systems that provide funding for action research, data utilization, and infrastructural and entrepreneurial development. Funding for research should be connected to opportunities for its uptake. This can be achieved through PPPs. A sustainability plan, with practicable business models based on the local environment, should be considered a key deliverable.
- 3. Foster public-private partnerships for creating business opportunities and innovations in agriculture. The public and private sector can both benefit from such collaboration. An enabling environment for private investors in horticultural programs would be a good starting point. At the project proposal and planning stage, project interventions should consider practical roadmaps in the intervention approaches that address investment decisions over the long term.

Inclusion and Empowerment



The 2019 national population survey in Nigeria found that men are over three times more likely than women to own a house or land: 37% of men own a house and 38% own land alone or jointly, compared with only 11% and 12% of women. Global research shows that if women had the same access to productive resources as men, they could increase the yield of farms by 20-30% and reduce hunger by up to 17% (WEF, 2018). Other common challenges – for both young people and women – include low access to water and limited mobility, time availability, decision-making power, basic agronomic skills, startup capital, access to finance, market information, fair hired labor, business acumen, and inputs. The high cost of purchasing or leasing land and rent tenure expiring during the peak harvesting period, with the farmer forfeiting unharvested produce, are some common experiences of women and young producers. There are opportunities to create more inclusive agribusinesses, in which women and youths involved in the sector have access to more productive resources and can increase their confidence in decision-making.



- 1. Establish and support producer organizations for women and youth farmers. Within POs, women and youth (W&Y) farmers can increase their power to achieve results. Women farmers currently have to divide their limited time between a number of responsibilities. The formation of POs can allow them to help one another use their time efficiently. Women can agree on the times to be on the field for agricultural activities for activities such as sowing, transplanting, and weeding. Using a PO as a platform for dialogue between women representatives and village or state leaders can also raise awareness of the limiting effect of land resources on advancing women's participation in farming. Additionally, women's POs can help women lease uncultivated land in local government areas (LGAs) and actively advocate for women's rights in land policies. POs can be upgraded to form village savings and loan associations (VSLAs) to increase access to financial resources.
- 2. Engage men to recognize the value of women's participation in and their contribution to horticulture. Men need to understand the value of their wives' and daughters' activity in horticulture and see that their time investment is worthwhile, and their buy-in is needed for attending training sessions. This could mean addressing the topic of gender in training provided to both men and women. Moreover, lessons learned when engaging farmers and other stakeholders on and off field about barriers and enablers of W&Y in horticulture should be considered during program activity planning.
- 3. Improve access to markets. Without formal business linkages for offtaking, W&Y farmers rely on farm-gate prices and are at risk of becoming price takers. Informal markets deceptively refuse to accept price differences between hybrid and local produce for want of excessive gains. This sometimes discourages farmers from adopting the best agronomic practices, as this would increase their investment. POs can be linked to offtake partnerships or agreements with marketers or aggregation hubs. Actors implementing agricultural development programs should place more emphasis on formalizing business linkages and creating an enabling environment. Producing for standardized export markets, target markets, and outgrower arrangements should be encouraged among young farmers who have been found to quickly accept new ways of vegetable production.
- 4. **Diversification of entrepreneurial choices.** In addition to being producers, W&Y farmers can function across other horticulture value chains as agripreneurs. The development of specific agronomic skills can create opportunities for economic and entrepreneurial empowerment. For example, women can produce seedlings for targeted markets. Young female and male farmers can provide spraying services, post-harvest processing and storage, farm machinery installation and servicing, etc. They can be supported with business and financial management training to own and manage their agribusinesses.

Access to Financial Services



The role of finance and investment in the development of the agriculture sector in Nigeria, especially the horticulture sector, cannot be overemphasized. The actors along the agricultural value chain need different types of financial products and services to procure inputs, purchase or rent farm equipment, secure sales, manage cash flow, increase income, and expand their businesses. The agriculture sector is a major contributor to Nigeria's gross domestic product, and small-scale farmers play a dominant role in this (Rahji and Fakayode, 2009), but their productivity and growth are hindered by limited access to credit facilities (Odoemenem and Obinne, 2010). HortiNigeria's baseline study in Kano and Kaduna revealed that 45% of men and 26% of women have bank accounts and only 13% of men and 7% of women have successfully taken out loans for agricultural purposes.



- 1. Build farmers' and agro-input dealers capacity for financial literacy. Increased financial literacy and business development training will help sector actors increase their access to financial services. Financial literacy training should be facilitated through collaboration with actors such as the Federal Ministry of Agriculture and Food Security (FMARD), the State Ministry of Agriculture, the Central Bank of Nigeria (CBN), agro-input dealer associations, and development partners. Increased financial literacy will help farmers increase their access to financial services.
- 2. Facilitate provision of low-interest loans. A flourishing horticulture sector is a public good, but high interest rates make it unattractive to invest in the sector. As such, the sector should be privy to lower interest rates. The government, through the CBN, should compel banks to lend to actors within the sector by establishing a policy that all banks should allocate a percentage (0.5-1.5%) of their total loan portfolio to lending to the horticulture sector. Banks that refuse to comply will face a fine. Cooperatives, non-governmental organizations (NGOs), and governments should also play a role in either providing low-interest loans or grants.
- 3. Promote an effective monitoring and evaluation system for financial institutions. Banks should develop a strong monitoring and evaluation system to track the activities of farmers in the field at the different stages of production until harvest and review their performance and lessons learned at the end of each project. A monitoring and evaluation system will help financial institutions guard against defaults on loans. This will require the support of the CBN, the Nigerian Financial Intelligence Unit (NFIU), and the National Bureau of Statistics (NBS).

Business-to-Business Opportunities



One of the obstacles to a well-functioning horticulture sector is the challenging agribusiness landscape and environment, characterized by weak coordination among stakeholders and insufficient agribusiness linkages. These shortcomings result in significant inefficiencies within the sector, such as fluctuating input and output prices, information asymmetries, post-harvest losses, and market gluts (Ibeawuchi et al., 2015). Creating a strong agribusiness infrastructure in the Nigerian horticultural landscape is therefore paramount to harnessing the sector (Sambo et al., 2016).

Focused efforts to strengthen the agribusiness component can have a transformative impact on promoting the Nigerian horticultural value chain. Enhancing linkages between service providers and farmers or entrepreneurs can lead to increased availability and adoption of high-yielding and resilient seed varieties, irrigation systems, and appropriate fertilizers. Agribusiness intervention could facilitate dissemination and adoption of innovations, such as better post-harvest infrastructure, including transportation and refrigeration systems (Ojukwu, 2016). Moreover, by establishing these strong agribusiness linkages, farmers gain better access to profitable markets, ensuring that their produce reaches buyers efficiently and at a fair price (Adenle et al., 2017). Overall, to effectively foster the development of Nigerian horticultural agribusinesses, a sectorwide approach is imperative. This approach necessitates the commitment and participation of a diverse array of actors, with different roles and capacities across the value chain.



- 1. Develop a market information-sharing platform to facilitate direct exchange between sellers and buyers of horticultural produce (e.g., on pricing). This platform should be accessible at any time and should include both pictorial and verbal information to cater to all audiences. A functioning platform will require the participation of various stakeholders. In particular, the active engagement of extension officers, who play a paramount role in ensuring the information of the platform is accessed and shared widely, will be required to make it inclusive for all stakeholders. Moreover, farmer associations will also play an active role, channeling experiences, information, and practices and ensuring members stay updated on the latest agricultural trends.
- 2. Establish year-round availability of inputs for vegetable crops to bolster farmers' income. Year-round vegetable production holds potential benefits, such as ensuring farmers achieve a more consistent income stream and generate a steady cash flow. Moreover, enabling farmers to produce vegetables throughout the year can ensure less price fluctuation and result in more stable prices for consumers and enhanced food security. To achieve these objectives, strengthening of linkages between actors in the horticulture sector is vital. These improved linkages will facilitate the provision of quality seedlings to farmers, awareness of both local and new high-quality, high-yielding seed varieties of vegetable crops that are resistant to pests and diseases, and the cultivation and adoption of those varieties. Marketing efforts will be required to encourage farmers to purchase quality seed and support the establishment of linkages with vendors and retailers close to the farmers' locations.

Agro-input dealers and services along the value chain



Agro-input dealers provide access to improved seeds, appropriate fertilizers, and quality agrochemicals, which farmers can use to improve their yields. Agro-input dealers also serve as trainers within their communities, where farmers are located. Agro-input dealers provide advisory services to farmers on the best practices of seed, fertilizer, and agrochemical use. As such, agro-input dealers are key actors in the productivity of the entire horticulture value chain.

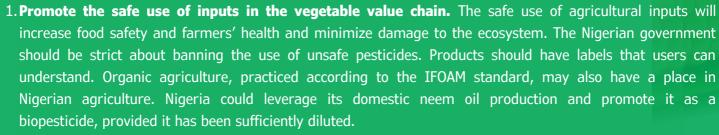


- 1. Enforce regulatory standards to prevent adulterated or counterfeit inputs. Adulterated agro-inputs can reduce yields and pose a threat to farmers' health. Regulations regarding the quality of agro-inputs exist, but they are not properly enforced. A task force should be established to enforce the standards at the local government level. Sensitization on the dangers of adulterated agro-inputs should also be conducted at the community level. NGOs can participate in the sensitization campaign and carry out capacity building for people within the community on the importance of quality agro-inputs.
- 2. **Improve access to finance.** Access to finance is a major issue for agro-input dealers. Actions on this subject can be found in the section on Access to Finance.

Awareness of food safety and the nutritional value of vegetables



Vegetables are a critical component of a healthy diet. They are a source of fiber, vitamins, and minerals. Currently, Nigerians do not meet the recommended daily intake of vegetables of at least 200 grams (Our World in Data, 2020), which raises the risk for non-communicable diseases (WHO, 2020). In addition, human health is also affected by food safety, and issues with this are prevalent in Nigeria. Over 200,000 people die from foodborne illnesses (not just from vegetables) each year (Ezirigwe, 2018). The annual economic burden associated with foodborne illnesses is around U.S. \$3.6 billion (Ezirigwe, 2018). Safe food is food that is free of contamination by harmful bacteria, viruses, parasites, or chemical substances (WHO, 2022). Contamination can occur at any point while growing, preparing, processing, storing, selling or serving food. That makes food safety a complex problem to address. One weak link in the process that takes food from farmer to fork can cause the efforts of the other actors along the chain to be futile. This is why an effective approach to food safety requires a sector-wide approach.



- 2. Continue to build the capacity of farmers, other value chain actors, and consumers on safe food production and handling protocols. The sector has observed deviations from safe food production protocols at various points along the value chain, leading to the conclusion that there is a lack of capacity for proper food handling processes. Stakeholders see a role for the government in ensuring that all actors in the vegetable value chain can be certified on food safety regulations in a standardized way. Furthermore, food safety should be firmly embedded in consumer campaigns to improve healthy diets.
- 3. Intensify current awareness-creation efforts on the nutritional value of vegetables and ensure accessibility to everyone. Some existing efforts that have been found to be effective include the promotion of home and school gardening and mass media campaigns. However, their current reach is considered inadequate. And specific groups have not been sufficiently reached by current efforts, for example, due to language barriers. These groups may be best served through more intensive efforts, such as town hall meetings and demonstration trials, as well as ongoing large-scale media efforts (television, radio, flyers, social media, and newspaper). Furthermore, awareness-creation efforts require repetition to be effective.

Policy Dialogue for Sector Development



Nigeria has policies to engender a sustainable food system. For instance, the Anchor Borrowers' Program has facilitated access to inputs for producers, and import quotas have been implemented to stimulate investments in the rice value chain. Over the past decade, a growing emphasis has been placed on food and nutrition security in Nigeria's policy landscape. This evolution encompasses the 2016 revision of the National Policy on Food and Nutrition, the formulation of the Agricultural Sector Food Security and Nutrition Strategy (2016-2025), and the establishment of the National Council of Nutrition (NCN) in 2017. Recently, the NCN approved a five-year National Multi-Sectoral Plan of Action for Food and Nutrition (NMPFAN) 2021-2025.

However, the horticulture sector has seen only limited policy interventions: the 2017 Tomato Policy and the newly revised Tomato Policy of 2021. In this less well-defined environment, the importance of policy advocacy and positive influence becomes paramount. These efforts are essential for fostering coordination among horticulture projects, establishing platforms to identify synergies and partnerships, and addressing sector-wide bottlenecks. Nurturing such platforms and engaging in policy advocacy will lead to meaningful sector dialogue and policy advocacy that drive positive changes in the horticulture sector.



- 1. **Enhance current policies.** This includes a revision of the 2021 Tomato Policy to account for the interest of the private sector active in the tomato value chain and ensure transparency in the implementation of the policy.
- 2. **Strengthen market insights and financial access.** The establishment of a robust database of active players in the market is a pivotal step. Similarly, ensuring easier access to finance for businesses operating within the horticulture sector can significantly enhance investment prospects.
- 3. Advocate for government involvement in fostering innovation through financial support and resources. For example, enactment of the National Fertilizer Quality Control Act needs to be pursued vigorously, and implementation of the law needs rapid engagement.

Technology and Innovation



Innovation is a process by which a product or service is improved by applying new processes, introducing new techniques, or establishing successful ideas to create added value. Agricultural innovation is primarily concerned with the need for increasing production (of food, fodder, and secondary products) and enhancing quality (of produce, production process, and growing conditions). For the horticulture sector, production system innovation is referred to as any knowledge, intervention, skill, or tool that helps to accomplish horticultural production better, more cheaply, in a sustainable manner, and with improved profit. Innovations may be new or available but underutilized, depending on the challenges of the farmers. They are relative to what is currently practiced by an individual farmer. Therefore, an innovation can be a single technology or a practice or skill, and a farmer can apply several innovations at the same time. Technologies and innovation have the potential to contribute to the Nigerian horticulture sector, but realizing this potential will require strong sector collaboration. By sharing knowledge and experiences, coordinating efforts, and pooling resources, stakeholders can cocreate solutions that are tailored to the specific needs of Nigerian horticulture and disseminate innovative practices and technologies across the sector.



- 1. Use innovations to improve the environmental sustainability and climate resilience of horticultural **production.** Nigeria is faced with a variety of challenges in the environmental domain. Specific innovations that should be implemented to address some of these challenges include afforestation campaigns, application of biodegradable organic mulch, and flood reduction measures. Sensitization efforts may be required to encourage the uptake of these innovations among the target stakeholders. The use of storytelling in this effort has been recommended.
- 2. Promote innovations to improve farmer productivity and income. The potential exists for innovations to contribute to an increase in production quality and quantity, for example, by decreasing or preventing the effects of plant diseases and pests on crops. Another example is the localization of some agriculture inputs, such as soluble fertilizer, at a reduced cost, so farmers can save money on their purchase.
- 3. Apply innovations to increase the availability of produce in the market. Innovative methods can contribute to the availability of produce in the market by reducing post-harvest losses. They can also reduce the effects of seasonality, making products available year-round.



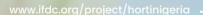
Methodology —



This communiqué is the result of a participatory World Café session at a sector-wide learning event that took place on July 11-12, 2023. Participants included stakeholders from a variety of categories, including farmers, agrodealers and other private sector actors, NGOs, foundations, government, research institutes, networks, and associations. Eight topics were hosted at dedicated tables, where HortiNigeria staff facilitated two rounds of discussion at 60 minutes each. After the first round, the participants moved to a different table. The participants in the first round of discussion focused on identifying strengths, weaknesses, and opportunities related to the topic at hand and translating those into key objectives for the horticulture sector. The participants in the second round refined those objectives and brainstormed on actions that various stakeholders can take to contribute to meeting them. The resulting objectives and actions were translated into this communiqué after review by HortiNigeria staff and selected sector actors.

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