



Transforming Nigeria's cassava seed entrepreneur policy guidelines for inclusivity and gender responsiveness

Olamide Nwanze¹, Olajumoke Adeyeye¹, Adeola Alabi¹, Abolore Bello¹, Tessy Madu², Joseph Onyeka², Benjamin Okoye², Chiedozie Egesi², Olusegun Osundiya⁴, Millicent L. Liani³, Steven Cole³, and Béla Teeken¹

¹International Institute of Tropical Agriculture (IITA), Idi-Oshe, PMB 5320, Ibadan.

Executive summary

Seed policies and guidelines aim to boost crop productivity and provide a framework for dissemination of certified quality seeds, in line with the objectives of national food security and broader agricultural development goals. Case studies in Oyo, Abia, and Benue states in Nigeria examining gender-based constraints affecting farmer participation as cassava seed entrepreneurs (CSEs) found women, the youth, and migrant farmers to have limited awareness on CSE certification criteria and to face restricted access to resources like land, credit, and finance. An added complication was the requirement of male family members to stand as guarantors for credit for these groups. Cultural barriers such as biased inheritance norms and mobility restrictions were challenges to women's participation as CSEs. Migrants or non-indigene populations faced biases in land allocation, with their land portions being in distant, insecure land, impacting their participation as CSEs and compliance with National Agricultural Seed Council (NASC) standards and reinforcing existing inequalities. Inclusive strategies such as involvement in cooperative associations to meet land requirements and create finance opportunities, plus fostering community support can enhance participation and create a more diverse, gender-responsive and resilient seed entrepreneurship ecosystem.

Key results

- 1. Awareness levels on CSE criteria varied, with men having better understanding of factors like site selection, land size, field inspection, and agronomic practices requirement. Women, the youth, and migrant farmers were primarily aware that large landholding was a criterion for CSE participation.
- Implementation of policies through the CSE initiative disproportionately disadvantaged women, the youth, and migrant farmers, owing to inclusion of unfavorable eligibility criteria and certification guidelines such the requirement for minimum landholding of one hectare, substantial financial capital, and mandatory training with farm inspections. Women faced additional barriers resulting from their land ownership arrangements shaped by discriminatory gender norms that required community, family, or spousal consent for their use of land. Other challenges were in accessing credit and restrictions on travel.
- Efforts should focus on simplifying education about certification criteria through using local language materials and decentralizing training, making it flexible, and delivering it within safe common spaces.
- 4. Incorporating community mapping tools to identify and engage young women and migrant farmers, less strict eligibility criteria involving intersectional group participation comprising women, the youth, and indigene and non-indigene groups or migrants, as well as co-creating a flexible inspection calendar that considers women's multiple roles and time use can foster equity in the CSE initiative.
- 5. Gender-transformative actions such as community enlightening conversations on harmful gender norms and sharing of success stories can encourage support for women, the youth, and migrant farmers' accessibility to land, labor, and finance, enabling their participation as CSEs.

1

²National Root Crops Research Institute (NRCRI), Umudike, Nigeria

³IITA, Mwenge Coca-Cola Road, Dar es Salaam, Tanzania

⁴National Agricultural Seed Council, FCT-Abuja, Nigeria

Background

In Nigeria, the decentralization of certified improved seed production and distribution is part of the strategy that aims to generate income, employment, and diversified livelihoods, reduce poverty, and enhance farmers' resilience to climate change and biotic and abiotic stressors. This strategy led to the establishment of the CSE initiative and specific policy guidelines (Atser et al., 2021) designed to enhance productivity, increase participation, and ensure the effective dissemination of certified improved seeds. These efforts are aligned with Nigeria's national food security agenda and its broader seed policy and agricultural development goals. Despite commendable progress and increasing adoption of improved varieties through the CSE initiative, some challenges persist. These include the limited availability of female extension staff and training, the rigorous certification process, and complexities in quality assurance (Legg et al., 2022).

Addressing these challenges necessitates collaboration across breeding, extension, and seed systems to integrate socially inclusive and equitable delivery pathways that ensure improved varieties effectively reach all farmers, leaving no one behind. For cassava, this connection is established through innovative approaches such as outgrower schemes, processor-led models, and CSE initiatives. These models have been developed and implemented under the Building an Economically Sustainable Integrated, Cassava Seed System project in Nigeria (see http://www.rtb.cgiar.org/sites/basics/index.html). The CSE initiative executed in partnership with NASC, which defined the guidelines for field

inspection, accreditation and certification of CSEs, and the National Root Crops Research Institute, which handles farmer selection and engagement, demonstrates a viable seed agribusiness model for sustainable scaling.

Methods

Qualitative case studies were undertaken June to August 2024 to capture insights on gender-based constraints impacting women, the youth, and migrant farmers in Nigeria's CSE initiative, focusing on Benue, Abia and Oyo states, known for cassava production and encompassing three geopolitical zones (see Table 1). Seven focus group discussions (FGDs), held separately for men, women, young women, and young men and involving 40 women and 15 men farmers, focused on challenges to land usage, credit availability, and access to certified seeds. Fifteen key informant interviews (KIIs) were held with four women and 11 men representing association leaders and executives, extension officers, migrant groups, and youth leaders, who shared insights on the CSE policy guideline gaps and opportunities for reform.

Data were analyzed using the content analysis approach and focusing on constraints within the CSE eligibility criteria and certification process and how they affected women, the youth, and migrant farmers. The insights were synthesized into actionable recommendations emphasizing the need for policy guidelines and reforms that recognize the challenges and needs limiting participation of women, the youth and migrant cassava farmers.

Table 1: Focus group discussants and key informants

Table 1.1 ocus group discussants and key informants						
State	Local government area	Community	Instrument type	Females	Males	Total participants
Abia	Umahia South	Amakama Olokoro	FGD	9	-	9
			KII	1	1	2
	Bende	Uzuakoli	FGD	8	-	8
	Umahia North	Oriendu Ohuhu	KII	-	3	3
Benue	Otukpo	Otukpo	FGD	-	3	3
	Gboko	Gboko	FGD	6	5	11
			KII	3	5	8
Oyo	Lanlate	Ibarapa East	FGD	9	-	9
			KII	-	1	1
	Okeho	Kajola	FGD	8	7	15
			KII	-	1	1
Total			FGD KII	40 4	15 11	70 15

Results

Awareness on and compliance with CSE eligibility criteria and certification guidelines are limited among women and youth cassava farmers

The interviews and discussions revealed varied levels of awareness among CSEs regarding NASC eligibility criteria and certification process. Men had solid understanding of specific requirements for example for site selection, field inspection routines, agronomic practices, and minimum land size. Women, the youth, and migrant farmers, on the other hand, knew only about large landholding being a criterion for CSE participation and compliance. Barriers to awareness and compliance were especially pronounced for women, who often juggled multiple domestic responsibilities, limiting their availability for full participation in trainings. Furthermore, cultural expectations and family dynamics frequently restricted women's autonomy in farming decisions, which hindered their capacity to meet certification standards.

Gender-based constraints in accessing resources critical for CSE participation are pronounced

The CSE criteria and guidelines, while essential for ensuring quality control and promoting sustainable certified seed production and profitable income generation, posed significant barriers particularly for women, the youth, and migrant farmers, who often lacked access to the required resources. The CSE eligibility criteria of ownership of at least one hectare of land and substantial financial capital create structural disadvantages for women, the youth, and marginalized farmers, who typically own smaller plots and have limited access to credit from microfinance banks or cooperatives. Discriminatory inheritance norms and practices limit women's access to land use, reducing their eligibility for CSE certification. Furthermore, seed associations' executives face challenges in engaging women and the youth, who often lack the financial capital, require spousal and household head permission to participate and purchase certified cassava seeds, and might face mobility restrictions to attend technical business training.

Discriminatory gender and social norms, particularly concerning land accessibility and mobility restrictions, impacted women's ability to meet NASC eligibility criteria for selection and certification. In Abia and Benue states, women participants ascertained existence of cultural practices that hindered their access to land. Without motivating factors, family support systems, responsive intervention, and transformative action

through enlightenment programs, participation of women and the youth in the seed business may remain low or continue to diminish. The high cost of inputs and transportation exacerbated by removal of fuel subsidies highlights the significant impact of external economic policies on farmers' operational costs. These costs are critical components in a seed business and can become prohibitive without responsive policies.

Empowering women, the youth and marginalized farmers as part of the CSE initiative is essential

The practice of NASC and implementing institutions of certifying women groups and cooperative associations as CSEs fosters inclusion and encourages participation and collaboration. This strategy could be complemented with community mapping tools to identify and engage more marginalized farmers, ensuring inclusion of individuals and intersectional groups of youth and women and indigene and non-indigene farmers to increase participation. In addition, a supportive community for women, the youth and migrants from crisis zones should be created to help them harness and manage resources to boost their eligibility for certification and build resilience.

The strategies we suggest highlight an intentional effort to foster inclusivity. By incorporating less strict eligibility criteria for land use, the CSE initiative may gain a more diverse and resilient pool of stakeholders and eligible participants.

Policy recommendations

To effectively address the challenges experienced by CSEs and prospective farmers, a comprehensive approach is necessary that involves policy-makers, NASC, implementing institutions, seed project leads, stakeholders, and local leaders.

- Incorporate community mapping tools to identify and engage young women, the youth, and migrant farmers, and initiate participation of mixed/intersectional groups and cooperatives.
- Co-design less strict and gender-responsive eligibility criteria regarding land size and a flexible inspection calendar that considers women's multiple roles and time-use constraints.
- Improve education on eligibility criteria and certification process through use of simplified materials in local dialects and flexible training sessions within associations and cooperatives to help women and the youth meet certification standards more easily.

- 4. Address traditional land ownership structures by collaborating with the local community and men and women cooperative associations' leaders to improve women, the youth, and non-indigene farmers' access to secured lands.
- 5. Integrate gender-transformative action by organizing enlightening community conversations for married men and male or

female household heads on harmful impact of discriminatory norms, and share <u>stories of impact</u> and <u>success</u> on benefits of providing support and approval to women and migrants to access secured land and labor resources to participate as and become CSEs.

Table 2: Solutions proposed by interviewees to increase participation of women, the youth, and migrants

CSE eligibility criteria	Challenges for males	Challenges for females	Challenges for migrants and the youth	Actions for gender and social inclusion
Willingness to venture into seed production	Risk of herders, kidnapping, and overgrazing	Lack of spousal/family support; Untrustworthy laborers	Lack of community leader/household head support	Sensitize community leaders, married men, and household heads on supporting women, youth, and migrants.
Minimum 1–2 hectares of land for seed production	Difficulty accessing large farms	Unfavorable land inheritance rules for married women; Women's need for permission to use land	Farmer collaboration can enable access to large land portions	Support mixed or women and youth groups for trusted labor and security.
Accessible land for marketing within catchment areas	Farms are in remote forests; poor roads	High land leasing costs; Requirement of a male guarantor	Land usually limited to insecure and remote portions	Encourage community- provided secure land for women, the youth, and migrants
Training interest and participation	High travel costs due to subsidy removal	Need travel permission; Time constraints; Child care responsibilities	Travel permission often required	Provide group transportation, child care support, blended learning, peer mentoring, and decentralized training
Willingness to learn GAPs and business training	High input costs	Laborers are inefficient in GAPs and have difficulty applying inputs	High input costs	Use flexible schedules and localized GAP training via jingles, edutainment, fliers, and decentralized outreach
Financial capital for 1–2 hectares (\text{\tint{\text{\tin\text{\texicl{\text{\texicl{\text{\text{\texict{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi\texi{\texit{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\t		Lack of collateral for loans; Collateral not in female name; Youth (except first-born child) cannot access loans	-	Facilitate interest-free loans/cooperative savings; Subsidize registration fees for women, youth, and migrant groups
Compliance with NASC inspection protocols	High compliance costs	Rigorous and costly inspections	-	Subsidize or waive inspection fees for widows, married women, the youth, and migrant farmers

References

- Godwin, A., Lateef S., Kapinga, R., Diebiru-Ojo, M., Kulakow, P., Kumar, L., Legg, J., Abass, A., Dixon, A. et al. (2021). The case for developing a sustainable cassava seed system. https://cassavamatters.org/wp-content/uploads/2021/09/BASICS-Model-for-Sustainable-Cassava-Seed-System.pdf
- Legg, J. P., Diebiru-Ojo, E., Eagle, D., Friedmann, M., Kanju, E., Kapinga, R., et al. (2022). Commercially sustainable cassava seed systems in Africa. In G. Thiele ed. Root, tuber, and banana food system innovations. Berlin: Springer. 1–583.
- Bentley, J., Olanrewaju, A., Madu, T. & Olaosebikan, O. (2016): Cassava monitoring survey: Nigerian farmers' preferences for varieties by gender and region, with reference to seed dissemination. IITA.

Acknowledgements

This publication is a product of the Policy Innovation Projects (PIPs) under the Gender Responsive Agriculture Systems Policy (GRASP) Fellowship. The GRASP Fellowship is a career development program growing a pool of confident, capable African women to lead the design and implementation of gender responsive policies in Africa. The fellowship is implemented by African Women in Agricultural Research and Development (AWARD). The PIPs were partly funded by the CGIAR GENDER Impact Platform, which is grateful for the support of CGIAR Trust Fund contributors (https://www.cgiar.org/funders).

Data collection and operational support were provided by the IITA – Cassava Breeding Program and PROSSIVA Project (Programme for Seed System Innovation for Vegetatively Propagated Crops in Africa). IITA, as a member of the CGIAR and a not-for-profit organization, and the Cassava Breeding Unit gratefully acknowledge the generous support received from our many donors, sponsors and partners. In particular, we thank our national partners for their vital research contributions.

Technical review

Dr Margaret Najjingo Mangheni, Senior Manager Gender and Programs, AWARD

Editing

Kellen Kebaara

Graphic design

Conrad Mudibo