

Could capacity building increase rural women involvement in climate change adaptation initiatives in Nigeria?

Gender responsive Climate Change Adaptation Initiative in Nigerian Agriculture (GCAINA) *GCAINA Policy Brief, No. 1*

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Key Messages

- Rural women are more exposed and vulnerable to climate change impacts as a result of their poor economic, knowledge and capacity levels.
- Rural women possess valuable skills that are key to achieving successful climate change adaptation in the agricultural sector in the country.
- The contributions of rural women in climate change adaptation in the agricultural sector will be enhanced and maximized if their knowledge and capacity in climate change adaptation is developed.

Executive Summary

Nigeria is among the vulnerable countries to climate change impacts¹ while the agricultural sector, due to its heavy reliance on weather signals and poor infrastructural state, is adversely impacted. Moreover, the women, who constitute 75% of agricultural workforce in Nigeria² are categorized among the most vulnerable groups to climate change impacts³. Women's vulnerability is partly due to their low income, educational, knowledge and capacity level, poor access to resources and information as well as poor representation in the decision-making space^{4,5}. Evidently, the low representation of women in parliament accounts for absence of gender-sensitive legislations while on the other hand, their low economic and literacy level limits their adaptive capacity thereby deepening their vulnerability level and further placing them below the poverty line. Women are known to be naturally endowed with enterprising and management skills, perhaps as a result of their role in household responsibilities. This talent could be developed and applied in furthering climate change adaptation initiative in the country if the women are equipped in knowledge, capacity and skill. The Gender responsive Climate change Adaptation Initiative in Nigerian Agriculture (GCAINA) posits that building the adaptation capacity of rural women holds great potentials for attaining effective and successful climate change adaptation in the Nigerian agricultural sector. Insights from rural women leaders trained by GCAINA on Climate Smart Agriculture (CSA) ascertained that capacity building will increase rural women's involvement in adaptation initiatives in the country. It therefore recommends a regular and structured training that integrates rural women in planning and implementation.

¹United Nations Population Fund (2018) 'Strategic Plan: 2018- 2021' available from https://www.unfpa.org/sites/default/files/pub-pdf/18-044_UNFPA-SP2018-EN_2018-03-12-1244_0.pdf

²Department of Climate Change, Federal Ministry of Environment. National Action Plan on Gender and Climate Change for Nigeria. www.climatechange.gov.org

³National Bureau of Statistics (2018) 'Statistical Report on Women and Men in Nigeria' available from file:///Users/ebimboereseyefa/Downloads/Women_Men_Publication%20_SG%20FN.pdf

Introduction

Climate change influences Nigeria's economy and ecology and this is demonstrated by huge records of fierce rivalry for land by herders and farmers, floods, and high temperatures, among other causes. Excessive rainfall, for example, has a negative influence on agricultural productivity, resulting in low yield, crop damage, and the spread of pests and diseases. Women farmers suffer a double time strain in the face of changing climate. They work harder; even to access sufficient resources for household upkeep despite depleting resources and having to cope with adverse impact of climate change in their farming activities⁶. Women are disproportionately affected in climate-related catastrophes, when resources are short as a result of the disaster; they spend more time collecting water, food, and fuel, which are essentially a woman's role⁷. Women are more vulnerable to the consequences of climate change than males, owing to the fact that women make up the majority of the world's poor and rely more on natural resources that are under threat from climate change. Furthermore, they suffer socio-economic and political obstacles that limit their ability to cope. Despite growing awareness of gender mainstreaming, there are gaps between men and women, particularly in the socio-economic and socio-political spheres⁸. Climate change adaptation requires effective engagement of women and rural people at all levels of decision-making. Understanding how climate change impacts women differently than males is critical to successful adaptation as "Gender-blind" solutions may never be effective. In order to achieve sustainable development, food and nutrition security in a changing environment, it is necessary to address the basic issue of gender disparity while also strengthening the adaptive ability of both men and women⁹. The importance of adaptation action and capacity development is recognised by the Paris Agreement and it was affirmed that rural women may not be able to actively participate in climate change adaptation initiatives in the country without possessing the needed knowledge and capacity and this will be detrimental to the adaptation effort. Women's indigenous knowledge is a valuable resource that could inform adaptation measures. They are versed in knowledge of soil and crop management as well as pesticides and value addition.

Such knowledge could be better harnessed and its use maximized if the knowledge and capacity level of the rural women are developed. Furthermore, they will be better equipped and positioned to contribute to climate change dialogue in the agricultural sector if they possess meaningful knowledge and skills in climate change adaptation. GCAINA does not only advocate capacity building as a veritable tool for a more gender inclusive climate change adaptation in the Nigerian agricultural sector, it further posits that capacity building must be demand and need driven in order to better address the peculiar needs of the rural women. Hence, it employed the use of field survey and pre workshop training to profile the climate change adaptation knowledge and capacity building needs of rural women prior to training. The Participatory Integrated Climate Services for Agriculture (PICSA) technique was used. PICSA is a participatory approach to climate services and agricultural extension that combines historical climate data and forecasts with farmers' knowledge of what works in their own context, and then uses participatory planning methods to assist them in making informed decisions about their agricultural practices. Cassava, maize and vegetable farming systems were found to be dominant among rural women in Nigeria while crop and soil management practices were the prevalent adaptation strategies used by the rural women. Hence capacity building for rural women was conducted in climate smart crop and soil management practices in Cassava-Maize and Vegetable farming systems. In addition, the need to cascade knowledge acquired informed the selection of rural women leaders for the GCAINA CSA capacity building.

Rural Women and Climate Change Adaptation

According to the Food and Agriculture Organization¹⁰ the agricultural sector in many developing countries is underperforming, in part because women, who play critical roles in agriculture and the rural economy as farmers, labourers, and entrepreneurs, face more severe constraints in access to productive resources than men. According to United Nations WomenWatch¹¹, rural women make up the bulk of the world's poor, and their livelihood is based on natural resources, which are predominantly impacted by climate change. Even when they have access to production resources, their efforts are hampered by natural catastrophes, human activities, and ineffective management practices. Women make up 75 percent of Nigeria's farming population hence important stakeholders in the agricultural economy¹², but unfortunately, they own fewer assets and have less access to land, fewer inputs, and fewer financial and extension services than males¹³. Rural women have higher rates of illiteracy, which may impede them from receiving knowledge that might aid in climate change adaptation¹⁴. They are frequently excluded from decision-making both inside and outside of their households. They are less likely to take leadership or managerial roles in rural community associations particularly in mixed rural community groups. Women farmers endure double time strain of climate change as both their household maintenance resources and farming activities all rely on favourable weather. When ecosystems change and the supply of these resources become depleted due to climate change, women face increased time and effort in accessing them. Rain-fed agricultural methods, pastoral and nomadic animal husbandry activities all rely on favourable climate conditions and women's livelihoods are heavily dependent on these factors. The possession of limited information, education and knowledge on the part of rural women reduces their adaptive capacity. Achieving sustainable food security in the face of climate change requires an integrated approach that is responsive to specific local conditions¹⁵, actors, groups and processes. CSA though presents promising social, economic and environmental potentials; studies¹⁶ have shown that the adoption of CSA practice is low among smallholder farmers in Africa including women mainly because of low capacity. An increase in the adoption and utilisation of CSA practices could be achieved through capacity building.

⁴United Nations Development Program (2007) 'Gender Mainstreaming, A Key Driver of Development in Environment and energy available from

https://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Sustainable%20Energy/Gender_Mainstreaming_Training_Manual_2007.pdf

⁵Ifeanyi-Obi, C. C., & Henri-Ukoha, A. (2022). Strengthening Climate Change Adaptive Capacity of Rural Women Crop Farmers through Reduced Social Exclusion in Nigeria. *European Journal of Agriculture and Food Sciences*, 4(1), 54-60. <https://doi.org/10.24018/ejfood.2022.4.1.436>

⁶Aderinoye-Abdulwahab, S. A. & Chingonda-Nkhoma, J. J. (2015): A measure of pastoralist women's vulnerability to the impact of seasonality: Evidence from Nigeria. *International Journal of Agricultural Management and Development (IJAMAD)*. 5 (3): 207- 220

⁷World Bank, 2017 Help Women Farmers 'Get To Equal

⁸Department of climate Change, Federal Ministry of Environment. Nigeria National Adaptation Plan on Gender and Climate Change

⁹FAO. 2011. Women in agriculture: Closing the gender gap for development. Rome: FAO. <http://www.fao.org/do>

¹⁰Food and Agriculture Organisation. Women in Agriculture; Closing the gender gap for development. <https://www.fao.org/3/i2050e/i2050e.pdf>

¹¹United Nations WomenWatch (UNWomenWatch) (2009). Women, gender equality and climate change. Unwomenwatch fact sheet. Retrieved from http://www.un.org/womenwatch/feature/climate_change/

¹²Federal Ministry of Agriculture and Rural Development. 2019 National Gender Policy in Agriculture

¹³Aderinoye-Abdulwahab, S. A., Dolapo, A. T., Adisa, R. S. & Matanmi, B. M. (2016): Ownership of Productive Resources: A panacea for Empowering Rural Women in Kwara State, Nigeria. *PAT: Production, Agriculture and Technology Journal*. 12 (1); 17-26.

Capacity Building as a Veritable Tool for Increased Adaptive Capacity of Rural Women

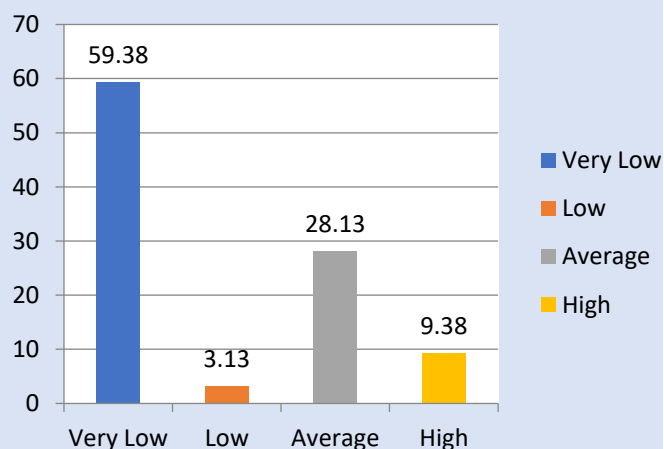
Women are limited by socio-economic and political barriers¹¹ which affect their coping strategies and reduce their capacities to adapt to climate change impacts. Capacity building have been recognised as an important driver of economic and social development. It holds great potential in adoption of innovation by farmers especially when their knowledge and skill are developed as this will make them more disposed and equipped to adopt innovative strategies that can improve their productivity. In the face of changing climatic variables, building rural women farmers overall knowledge of the concepts of climate change, climate smart innovations and technologies would position them to respond effectively to these changes. Level of education and climate change knowledge have been found to be major determinant of smallholders’ adoption of CSA technologies¹⁶. GCAINA project recognises that rural women knowledge and capacity in climate change adaptation is low hence worked to significantly contribute to strengthening their capacity with the intent of making climate change adaptation in Nigerian agricultural sector more effective. The project did not only train rural women leaders on their most prevalent farming system (Cassava-maize-vegetable farming system), it further empowered them with improved Cassava and Maize varieties to enable them put into practice lessons learnt from the training activities in order to benefit maximally.

Insights and Lessons learnt from the capacity building

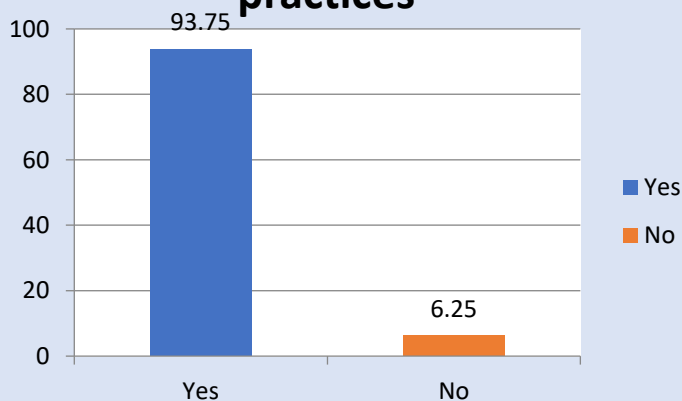
These three major insights were drawn from the interaction with the rural women during the training:

- The level of knowledge of CSA among rural women is low and needs to be improved
- Capacity building improved rural women’s readiness to adopt CSA practices
- Capacity building increased rural women’s involvement in CSA initiatives in the agricultural sector

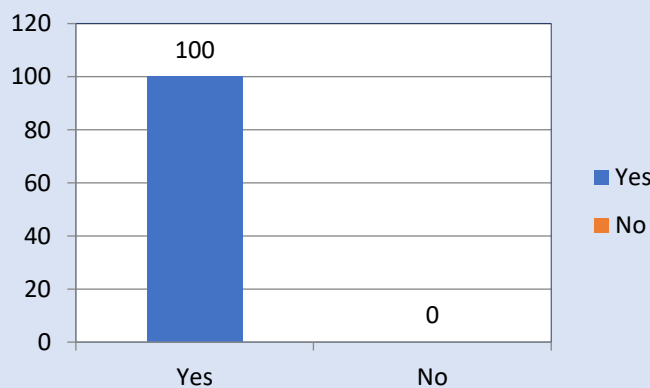
Level of Knowledge on CSA



Do you think the training has impacted your readiness to adopt CSA practices



Do you think the training has equipped you to get more involved in CSA Practices



Recommendations

1. Regular and structured approach to capacity building. CSA capacity building for rural women should not be a one-off event as this will not produce the required results. Rural women need longer time to properly learn CSA practices. Federal Ministry of Agriculture, private agencies and NGOs should consider having a structured and regular capacity building programme for rural women. This approach will enable rural women farmers learn from experienced experts over a longer period of time and ensure that the learner gains sufficient practical skills that are relevant to their needs.
2. The Federal Ministry of Agriculture and other agencies involved in climate change adaptation should partner with women community-based organization leaders in planning and implementing such programmes. This will go a long way in making the training demand-driven hence better addresses rural women's areas of need as well as stimulate their commitments to the programme.
3. The Federal Ministry of Agriculture, research institutes and Universities should consider establishing Climate Smart Villages. This will aid with field demonstration in capacity building for rural women farmers making the training more impactful and easier to understand.
4. Researchers should put more effort in producing training manuals and participatory videos to aid understanding. The trainees could resort to these materials after training to refresh their memory. This could even be done in local languages for easier understanding.
5. Capacity building programmes for rural women should have follow up components and reward for adherence to lessons learnt during the training. This will serve as an incentive to motivate the rural women to practicalize lessons learnt in the training.



¹⁴Kristin Williams. 2019. *How Climate Change Impacts Women Farmers—and What We're Doing About It*. <https://rootcapital.org/climate-change-impacts-women-farmers/>

¹⁵Food and Agriculture Organization (2013). *Climate-smart Agriculture Sourcebook*. Food and Agriculture Organization

¹⁶Ogunyiola, A., Gardezi, M. & Vij, S. (2022). *Smallholder farmers' engagement with climate smart agriculture in Africa: role of local knowledge and upscaling*. *Climate policy*, doi:10.1080/14693062.2021.2023451

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