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## Affordable Solutions to Cereal Productivity Increase in West Africa

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### Abstract

The Economic Community of West African States (ECOWAS) is home to 254 million people in 15 low-income countries. Agriculture accounts for 65 % of employment and 35 % of gross domestic product (GDP) in West Africa, but poverty is highest in rural areas where most of the population depends on agriculture for subsistence, 70 % of rural households depend on agriculture for their livelihood, however, Africa remains a net importer of food, especially cereal grains. Despite the importance of agriculture and the vast potentials, cereal grain productivity in West Africa has remain low. Agricultural growth remains undermined by low investment in agriculture, poor infrastructure, high population growth rate, and low adoption of technologies. Other challenges to cereal productivity include inherently high climate variability, the looming threat of higher temperatures and more vicious droughts, high incidences of diseases, insect-pests, and parasitic plants, and sub-optimal soil nitrogen. Other factors contributing to food insecurity in Africa are low rural incomes, high poverty levels, high population rate (3 % annually) that is not commensurate to the rate of food production, and low investment in mechanisation. There are also issues with land degradation, climate change, conflict, low use of fertiliser (African average use is 11 kg/ha compared with the world average of 62 kg/ha), limited use of improved seed, limited access to markets, low level of knowledge, food losses due to pests and diseases in the field, high post-harvest losses, policy orientation, trade imbalances, low use of technology, and lately economic shocks due to COVID-19. These are threatening to undermine the continent's pursuit to achieve the Sustainable Development Goals (SDG) number 2 of ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture by 2030. In other to combat this menace constraining cereal productivity, possible and affordable solutions has been proposed by Genevieve from Mali, Jennifer and Joshua from Nigeria, Sayouba and Maggy from Bokinafaso in their study projects with a common goal of promoting affordable cereal productivity in west Africa.

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