



Impact of Community Development Initiatives and Access to Community Markets on Household Food Security and Nutrition in Ghana

*Paul Kwame Nkegbe¹ and
Yazeed Abdul Mumin*

January 2021 / No.CRAf004

The context

Recent estimates show that incidence of malnutrition in Sub-Saharan Africa (SSA) has increased from 20.9% in 2015 to 22.8% in 2018 (FAO et al., 2019). In Ghana, for example, an estimated 1.2 million people are food and nutrition insecure with a further 2 million people vulnerable to becoming so (USAID, 2014). This deteriorating situation has made agriculture and nutrition central to Ghana's

1 Corresponding author, Department of Economics and Entrepreneurship Development, University for Development Studies, Wa Campus, Ghana. Emails: pnkegbe@uds.edu.gh; myazeed@uds.edu.gh

development policies. The Ghana Shared Growth and Development Agenda, and Planting for Food and Jobs policies identify nutrition and food security as important cross-cutting concerns for the country to realize the full human potential of its people (MoFA, 2017). In particular, community development interventions and initiatives, and increasing access to markets constitute key policy strategies in promoting food security and nutrition objectives in Ghana (Ministry of Food and Agriculture - MoFA, 2017).

The problem

There is evidence that agricultural development and market interventions can improve household food security and nutrition (MoFA, 2017). Households in communities with community development initiatives (such as community farming, electrification, and storage systems) could enhance household food security and nutrition directly through increased output and value addition. They could also enhance food security indirectly by increasing household income and purchasing power. This would allow them to buy food and other nutrition enhancing complementary food and services. Similarly, access to markets could improve the terms of trade for accessible households; it would reduce related transaction costs, which would reduce consumer prices for any food item and increase producer price for agricultural output. However, inadequate agricultural infrastructure and access to markets in many SSA countries, and Ghana in particular, normally hinder households' ability to transform farm produce into food consumption. This situation also limits households' income as it tends to lower producer prices for their harvests and increase consumer prices for purchased food items (Key et al., 2000).

Furthermore, in spite of the complexity of the relationship between agricultural interventions and nutrition, and the high malnutrition incidence in several SSA countries, and Ghana in particular, policy and research efforts have often focused on food security and calories intake. Little attention has been given to the impact of development and market interventions on micronutrients or other specific composition of the food consumed (Skoufias et al., 2009). This study examined the impact of community development initiatives and community markets on household food consumption score and nutrients in Ghana.

Description of interventions

The research looked at the impact of the Government's Village Infrastructure and the Self-Help Electrification Programme, which aimed to develop on-farm and community level production and market infrastructure (such as rural electrification, community farms and silos). Through these measures, the Government hoped to enhance productivity and improve the efficiency of marketing for farmers so that households

would be food and nutrition secured (Government of Ghana, 2010). A common feature of these interventions is that households and communities were required to initiate the process and to support implementation by meeting qualification specifications and providing part of the logistics, whereas the Government provided financial, technical and supervisory support.

Data and key findings

This study on which this policy brief is based used data from the sixth round of the Ghana Living Standards Survey, which was administered by the Ghana Statistical Service (GSS) between October 2012 and October 2013. The sample is nationally representative and consists of 16,772 households in 1,200 enumeration areas (GSS, 2014). The data has information on types of foods consumed over a seven-day visit period by households, and on the recent community development projects (including interventions of interest) among others.

Interventions that enhance productivity tend to deliver higher food and nutrients consumption

Community development interventions (i.e. community farms and silos) improve households' food security and nutritional intake more effectively than market interventions. Households in communities with community development interventions had 16% higher food security, and about 8% to 13% higher nutrients consumption, while those in communities with markets had 5% higher food security, and 2% to 13% higher nutrients consumption relative to those without any of these interventions.

Pursuing a portfolio of interventions yields the highest impact on food security

Having both community development intervention and functioning market showed 43.9% higher food security over the case of not having this intervention (i.e. the counterfactual case). Also, having both interventions produced more than twice the sum of the separate impacts of each of these interventions on food security.

The impacts of nutrients rich food consumption are also higher for portfolio of interventions

The consumption of protein, vitamin A and iron rich foods was 13.6%, 29.5% and 15.1%, respectively, higher for having both interventions than their counterfactual scenarios. The impact of the portfolio of interventions in terms of vitamin A rich food consumption is twice higher than that of the separate impacts of each of these interventions.

The effects of prices are substantial in communities without markets

Prices tend to reduce household food and nutrients consumption in communities with no intervention and with community development interventions only. For communities with at least a functioning market, prices significantly reduced the consumption of only protein and iron rich foods.

Implications for policy makers

- Food security and nutrition impact of community development interventions are mostly larger than the impacts of community markets, suggesting that it pays in most cases to have a directed policy intervention meant to augment food security and nutrition than to have markets in the community.
- The impact of interventions on food security and nutrition are largest when intervention options are implemented together, which suggests that productivity and market-enhancing policies will be more effective when they are pursued together.
- Policy interventions sometimes come at a cost of economic inefficiency in project allocation and suggest the need for improved engagement with beneficiary communities to ensure that the interventions represent the interests of various groups.

References

- FAO, IFAD, UNICEF, WFP and WHO. 2019. The state of food security and nutrition in the world 2018: Building climate resilience for food security and nutrition. Rome: Food and Agriculture Organization.
- Government of Ghana. 2010. Medium-Term National Development Policy Framework: Ghana Shared Growth and Development Agenda (GSGDA), 2010–2013. Volume I: Policy Framework. Accra: National Development Planning Commission.
- Ghana Statistical Service – GSS. 2014. Ghana Living Standards Survey Round 6. Accra: Ghana Statistical Service.
- Key, N., Sadoulet, E. and de Janvry, A. 2000. “Transactions costs and agricultural household supply response”. *American Journal of Agricultural Economics*, Vol. 82(2): 245–259.
- Ministry of Food and Agriculture – MoFA. 2017. Planting for food and jobs: Strategic plan for implementation (2017–2020). Accra: Ministry of Food and Agriculture.
- Skoufias, E., Di Maro, V., Gonzalez-Cassio, T. and Rodriguez Ramirez, S. 2009. “Nutrient consumption and household income in rural Mexico”. *Agricultural Economics*, Vol. 40(6): 657–675.
- USAID. 2014. Ghana: Nutrition profile. Accra, Ghana.



Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

www.aercafrica.org

Learn More



www.facebook.com/aercafrica



www.instagram.com/aercafrica_official/



twitter.com/aercafrica



www.linkedin.com/school/aercafrica/

Contact Us

African Economic Research Consortium
Consortium pour la Recherche Economique en Afrique
Middle East Bank Towers,
3rd Floor, Jakaya Kikwete Road
Nairobi 00200, Kenya
Tel: +254 (0) 20 273 4150
communications@aercafrica.org