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“Solidarity in a competing world —
fair use of resources”

Smallholders and Quality Infrastructure. Safeguarding Quality of Agricultural Products and Natural Resources by Ghanaian Farmers

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Abstract

Global consumers of agricultural products are disconnected from food growers. Food safety and quality of products are commonly assured through Quality Infrastructure (QI) services. Assured quality enables agricultural producers to access new markets, beyond the local level. Examples of QI services include the use of laboratory tests, universal measurements, and certification schemes. Ninety percent of Ghana's agricultural sector is characterised by smallholder production. Do smallholders have equal chances to engage in product quality assurance as do large farmers? Is there a need to examine soil properties in times of growing land pressure? These and other questions guided this research commissioned by the National Metrology Institute of Germany. The study looked into the utilisation of QI by maize and pineapple smallholders. In the maize value chain some analysed aspects included the use of laboratory services and test field kits to determine grain moisture and mycotoxin levels. The pineapple value chain was analysed with respect to, amongst others, the utilisation of soil testing and weighing scales on farm level. Main study sites were in Ghana's capital Accra, Brong-Ahafo, a maize growing region, and the emerging pineapple growing Volta region. A qualitative methodological approach consisting of 137 extensive semi-structured interviews, 7 focus group discussions and a workshop allowed interviewing 105 farmers and 137 representatives of ministries, traders, scientists and other stakeholders. Additionally, four soil analyses were performed to assess soil profiles and estimate the need for good soil management. Benefits of fertiliser interventions were assessed with the help of cost benefit analyses. The results showed that very few smallholders use QI services. In contrast, products from large scale farmers undergo food safety and quality tests which allow them to access export and processing markets. Further findings revealed that incentives to use QI for reducing economical, health and environmental pressures need to be linked with other identified obstacles. Such obstacles include lacking market connections, storing facilities and access to finances for smallholders. Soil analyses showed soil deterioration. With the help of QI, soil fertilisation can be improved with relatively low costs, thus contributing to ensuring food safety in times of rising demand for land.

Keywords: Maize, pineapple, quality infrastructure, rural areas, value chains