Ghana

Quality Assurance of Agricultural Products through improved Metrological and Testing Services

Summary of the Evaluation Report

Project Data

Project No.:	2006.2039.3
PTB No.:	95210
Amount of the German Contribution:	€ 1.05 million
Period of current Phase:	12/07-07/12
Total Period:	12/07-11/17
Evaluation Period:	12/07-10/11
Type of Evaluation:	Mid-term
PTB Working Group:	Q.54
Responsible Project Coordinator:	Carola Heider
Evaluator/s:	M. Will Dr. B. Thoms W. Fisseha

This report was elaborated by independent evaluators for the PTB. It reflects the opinions and conclusions of the evaluators' only.

Project Description

Having realised constant positive per capita growth over the past two decades, Ghana has become a leading economy in West Africa with largely stable macro-economic framework conditions. Even if being the first African country to reach the Millennium Development Goal of halving poverty and hunger (MDG 1), there are still about one third of the population living below the national poverty line; mainly, though not exclusively, in rural areas. Despite growth rates in agricultural output, farming is still characterized by low productivity and the post-harvest part of most value chains (VC) by high losses.

Core problem is the weak competitiveness of agricultural producers and other actors in processing and trade in domestic and export markets. Smallholder farmers, in particular, lack knowledge, skills and other resources for upgrading production methods and integrating into national, regional and global value chains. This is partly owed to literally non-existent food safety and quality assurance systems; namely failure to comply with standards on the side of VC actors and failure to perform conformity assessment on the side of the legislator and enforcement institutions. Forming part of the conformity assessment system, Ghana's laboratories are not in the position to carry out the entire scope of analyses necessary to check conformity with export market access requirements. , The laboratories lack furthermore capacities for outreach, i.e. to realise broad-based check of conformity in the domestic market which is characterised by fragmented smallholder production and largely informal processing and trade structures.

As a module of the Ghanaian-German bilateral programme Market Oriented Agriculture Programme (MOAP), the project contributes to the overall programme objective 'Agricultural producers and other agribusiness actors involved in processing, trade and services improve their competitiveness in national, regional and international markets'. The module objective has been defined as follows: 'Ghana has a consolidated quality infrastructure, which is adequate to guarantee the quality and safety of agricultural products and food'.

On the way to reaching this objective, the purpose of the first phase has been defined as: 'A network of testing and metrology laboratories has been established and offers services in the field of agricultural products and food, which are in line with the needs of the market and the consumers'. During the first phase, the interventions focus on three areas: (i) support to setting up a network of testing and metrology laboratories, (ii) support to accreditation of testing laboratories and (iii) support to consolidating the quality infrastructure.

The activities are aligned with the Ghana Growth and Poverty Reduction Strategy (GPRS II) and the Ghana Trade Policy as part of the National Medium Term Private Sector Development Strategy as well as with the Ghana Joint Assistance Strategy (G-JAS), to which Germany has subscribed. The project contributes to the realisation of the focal area concepts of the BMZ for 'Quality Infrastructure, Conformity Assessment – SMTQ' and considers the supra-sectoral strategy for 'Private Sector Development'. The German contribution includes consultancy, training and coaching services, support to participation in international conferences and study trips supplemented by supply of material and equipment. During the first phase, the module works at the national level (not in specific regions of the country).

The total duration is projected to span 10 years (12/2007-11/2017). Overall costs have been estimated to be at EUR 2.3 million. The contribution of the German technical cooperation for the

first phase (12/2007-11/2011; prolonged until 07/2012) amounts to EUR 0.9 million supplemented by EUR 0.15 million for the prolongation period financed through PTB's sector funds.

Assessment of the project

In October 2011, an independent mid-term evaluation was carried out with the objective to review the results of the first phase, assess whether a continuation of the project can be justified and give orientation for the project strategy for a potential second phase. These recommendations are based on an assessment of the project's concept and impact chain, its efficiency, effectiveness and impacts as well as the project's relevance for the Ghanaian and German development policies and the stage of sustainability achieved to date.

Concept and Impact chain

The design of the project as a module contributing to the objectives of the MOAP programme is in general appropriate. The purpose and the three results defined for the first phase provide very relevant contributions to the overall bilateral programme.

However, the module objective is not within reach of the project. While a module objective has to reflect an outcome, for which contributions can realistically be attributed to the development measure, the module objective as formulated originally reflects an impact. Requiring urgent decision-making of different Ministries on a common approach for strengthening the national quality infrastructure, major efforts of sub-ordinate institutions to re-structure and robust support from development partners, the project cannot, even in the longer run, make significant contributions to this process. Furthermore, the current module objective is not consistent with the MOAP programme objective regarding final beneficiaries and the purpose in the narrower sense ('improve their competitiveness'). The mid-term evaluation therefore proposes the following new module objective:

'Agricultural producers and other actors in the agricultural sector involved in processing, trade and services use the services of the National Quality Infrastructure (NQI) to improve the food quality and safety status of agri-food products'.

Following the logic of evaluations of the German Development Cooperation (GDC), this new module objective (and an accordingly newly formulated first indicator) will be used for the assessment of the project's results.

Concluding, the project design features some weaknesses. In addition to the unachievable module objective, the indicators have mainly been established at input levels and hardly reflect outputs and outcomes. In general, the project lacks a comprehensive and clear overview of objectives, results and related indicators and activities (e.g. in the form of a logical framework) that would have facilitated planning, monitoring, steering and evaluation of the development measure.

The impact chain: By strengthening the capacities of metrology and testing service providers to meet international best practice standards in conformity assessment, the project contributes, in cooperation with other development measures, to the enhancement of the capacities of agricultural producers, processors and traders to comply with good practices in food safety and quality assurance. By doing so, the project makes a contribution to reducing currently high losses along

value chains, improving the food quality and safety status of local produce and thus finally to strengthening the competitiveness of MOAP's final beneficiaries and fostering their access to domestic, regional and international markets while improving consumer protection (outcome). At the impact level, incomes will be generated, jobs created, public health improved and finally poverty and food insecurity reduced.

Relevance

According to Ghana's poverty reduction and relevant sector development strategies, the objectives of the project are highly relevant. The measure is in line with the Food and Agriculture Sector Development Policy (FASDEP) II and the associated Medium Term Agriculture Sector Investment Plan (METASIP), 2011-2015 of the Ministry of Food and Agriculture (MoFA); with the Ghana Trade and the Ghana Industrial Policies as part of the country's Private Sector Development Strategy (PSDS) II, 2010-2015 of the Ministry of Trade and Industry (MoTI); and with the Health Sector Programme of Work: 2007-2011 of the Ministry of Health (MoH). Given the growing importance of regional economic cooperation, the development measure is also relevant in respect of the envisaged harmonisation of quality policies and the establishment of reference laboratories within the Economic Community of West African States (ECOWAS), to which the GDC makes a contribution.

Forming part of MOAP, the project is fully aligned with the Ghana Joint Assistance Strategy (GJAS), to which GDC subscribes. The project also contributes to the realisation of the focal area concept of the BMZ for 'Quality Infrastructure, Conformity Assessment – SMTQ', to the supra-sectoral strategy for 'Private Sector Development' and to several focal areas, especially trade policy and health.

Effectiveness

All in all, the project achieved a good effectiveness in accreditations of laboratories, the primary focus during the first phase. Even if partly considerably delayed (testing), the targets set will in all probability be achieved during the prolonged first phase. Supporting the upgrading of laboratories to international best practices (accreditation standard ISO 17025), the project has laid the foundations for reaching out with testing and calibration services to the programme's final beneficiaries (agricultural producers, processors, traders and service providers) in the proposed next phase. By improving basic services within the country's quality infrastructure, the laboratories are increasingly recognised at national and international levels for in-country testing and calibration services. International recognition, especially by the European Union's (EU) Food and Veterinary Office (FVO) responsible for inspecting equivalence with mandatory EU market access requirements, is expected to be reached soon.

While the objective of setting up a network of laboratories has been achieved, more has to be done to also attract private company test laboratories as members (module indicator). So far, the network unites five public laboratories with the ones benefitting most from the project's inputs showing greatest commitment. The motivation of other public and private laboratories to become and stay members of the network depends on the cost-benefit-'plus' of committing resources to membership.

In a bid to promoting a more equal partaking of women in qualification measures, the project was able to assure a participation of 30% on average.

Development policy impacts

In recent years, food quality and safety gain increasing attention in Ghana's development agenda. Different Ministries have set objectives for developing capacities for compliance with regulations and standards being the primary responsibility of VC actors and for market surveillance as sovereign responsibility. During the first phase, the project has successfully contributed to achieving ambitious goals at the laboratory level as part of the national quality infrastructure. The foundations have been laid for achieving impacts in the medium to long run. However, higher aggregated impacts will only be achieved once and if the project partners succeed in reaching out to the beneficiary level.

Efficiency

Input-output relations have been especially efficient in the metrology area. Building on results achieved during an orientation phase (2005-2007), accreditation of three metrology laboratories was achieved in 2008 already. However, in some areas outputs were considerably delayed (accreditation of the Metal Contaminants and Mycotoxin laboratories, establishment of network, cooperation with various partners). Even if the project only had limited influence on most of the shortcomings, a more carefully thought-through strategy, a more realistic planning and especially in-time plan revision in the course of implementation would have reduced inefficiencies. Furthermore, a more continuous representation of the project on the ground for the follow-up of short-term consultancy missions and for a constant maintenance of contacts with partner organisations would have been useful.

Sustainability

The project's sustainability depends among others on pending policy decisions on an appropriate layout of the national quality infrastructure and food safety systems. Even so, the project's interventions remain reasonable and justifiable, since they contribute to leveraging the upgrading of testing and metrology services, which represent essential elements of the national quality infrastructure.

Representatives of the implementing partner organisations clearly emphasised that there is an urgent need for the laboratories to reach out to customers. Otherwise, unit costs of testing and calibration services will remain high and threaten the sustainability of the laboratories and the competitiveness of the Ghanaian products in the domestic, in regional and international markets. For reaching sustainability, it will also be necessary to bring services to the programme's final beneficiaries by developing low-cost on-the-ground testing and calibration services. This is especially true for value chains largely dominated by smallholder farmers, informal cottage-level processors and street vendors like in the case of maize.

The laboratory network is still far from being sustainable, which is not astonishing since the development of membership-based organisations needs sufficient time and inputs into organisational and service development. Since the network can play a decisive role in bringing member laboratories forward (e.g. joint procurement, joint action for outreach, joint proficiency testing and training for assessors, information on trends in international standard setting and laboratory technologies, lobbying for upgrading the quality infrastructure), further developing the network has to form part of the project's strategy to achieve sustainability.

The overall rating of the project regarding the OECD/ DAC criteria relevance, effectiveness, impact, efficiency and sustainability is good (2).

Other relevant issues

The impact monitoring system evidently needs to be improved (e.g. revision of indicators; improvement of traceability between phase, module and programme objectives). In the future, the monitoring system should also be used for steering the project. The design of the monitoring system has to consider that it needs to be as comprehensive as necessary while remaining as simple as possible to be manageable. To reduce complexity, necessary data may be collected in cooperation with partner monitoring systems (e.g. MOAP, laboratories).

Regarding the concept of sustainable development, the project features well: the improvement of competitiveness of agri-food value chains contributes to economic sustainability; the support of smallholders' inclusion into VCs and the improvement of consumer protection contribute to social sustainability; and the reduction of currently high post-harvest losses contributes to a more sustainable use of natural resources and hence to environmental sustainability.

It is recommended to apply the Capacity WORKS success factors in the conceptualisation and implementation of the next project phase.

Recommendations

The results of the mid-term evaluation unambiguously suggest to implementing a second project phase (08/2012-11/2015) with the primary objective to rise impacts and improve sustainability through increased outreach. It is proposed to re-structure the project design to better reflect the logic of a holistic approach with interventions (i) at the micro level: improving quality assurance along the maize value chain (result 1); (ii) at the meso level: strengthening the laboratory network (result 2) and upgrading testing and metrology and other quality infrastructure services (result 3); and (iii) at the macro level: transferring experiences to the policy level (result 4).

Result 1 – Improving quality assurance along the maize value chain: Since maize is very susceptible for Aflatoxin infestation, quality assurance systems have to be established to reduce risks of post-harvest losses and hazards to public health. The project will apply the Calidena approach for analysing constraints in quality assurance systems along the maize VC and opportunities for improvement. Furthermore, strategic partners (public, private, development partners and non-governmental organisations respectively) will be identified for joint implementation of the upgrading strategy developed in a Calidena workshop.

Result 2 - Strengthening the laboratory network: Sufficient time and assistance are required to build a sustainable network; especially since the initiative did not emerge bottom-up but was introduced from outside. The laboratory network will only sustain if it provides a cost-benefit-'plus' to members as a platform for the solution of common problems. It is recommended to strengthen the network through capacity and organisational development measures and building up its reputation by implementing part of the project activities in form of network services. It is furthermore recommended to reinforce the network through the placement of a development worker who, at the same time, assures full-time representation of the project on the ground, also to follow-up activities implemented by the project.

Result 3 - Upgrading testing and metrology and other quality infrastructure services: Main focus will be on consolidating results achieved to date, especially by assisting in the improvement of laboratory management and processes. This will include cost-benefit analysis to be used, for example, for investment decisions on the extension of the scope of accreditations or new accreditations; or, if accreditations are not required, on the upgrading of laboratory capacities without accreditation. Any of these improvements of laboratory services may be assisted by the project, however, under consideration of already rising incomes following earlier support to accreditation. Advisory services will certainly be required for the development of an outreach strategy including a concept for decentralised testing and metrology services for moving closer to final beneficiaries. In addition, further quality infrastructure services (e.g. standards development) may be supported according to requirements identified in the Calidena process under result 1.

Result 4 – Transferring experiences to the policy level: Considering the already long-lasting impasse at the policy level and the major efforts necessary for developing a concept for restructuring the national quality infrastructure and getting the approval of diverse Ministries, it cannot be expected that the quite limited resources of the development measure will suffice to exercise major influence. However, transferring experiences made and good practices developed under the first three results to the policy level can inform the development of appropriate concepts for upgrading the national quality infrastructure.

The success of the planned outreach to the beneficiaries' level will be decisive for achieving impact and sustainability and will depend on an efficient and effective cooperation within the GDC programme. Close working relations have therefore to be established between the MOAP modules. Especially for coordinating joint maize activities, it is recommended to assign a MOAP staff member to participate from time to time in network meetings and a network representative to participate in MOAP's extended Management Team meetings. However, for assuring close coordination and cooperation in daily work routines, it is recommended to place a development worker with the network and locate the network office within one of MOAP's offices.

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Physikalisch-Technische Bundesanstalt
Bundesallee 100
38116 Braunschweig
Germany

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9.01 Processes of International Cooperation
evaluierung-9.3@ptb.de
www.evaluierung.ptb.de