

FORESIGHT FOOD AND FARMING FUTURES PROJECT AFRICA SUCCESSES

THE GHANA GRAINS PARTNERSHIP

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Introduction

A strong surge in international food prices that began in the first quarter of 2008 affected a large range of commodities including staple crops such as maize. Governments' responses to the food crisis range from short-term measures including forms of price controls, trade restrictions and food security stocks to facilitating longer-term supply side increase in production capacity. In Ghana current development objectives place a great deal of emphasis on broad-based, pro-poor agricultural growth with emphasis on expansion of high-value and export-oriented cash crops and improved production of food crops. The assumption underpinning the Ghana Grains Partnership initiative was an agreed national shortfall of 200,000 - 400,000 metric tonnes of maize and other grains in the country. It is generally agreed that the shortfall can be met through improved efficiencies in the grains value chains if undertaken through a coordinated and market-led value chain development approach supported by the right national policies.

The Partnership Process

Lessons learnt in similar Partnerships, such as the Tanzania Agricultural Partnership – (focusing on rice and other grain crops) and the Malawi Agricultural Partnership – (focusing on rice and cotton) have shown that to address a multi-stakeholder rural development programme it must be driven by two underlying strategies: Public Private Partnerships and Value Chain development.

A *Public-Private Partnership* (which focuses on the value chain actors) promotes participation and strategic dialogue among partners; shares ownership, risks and opportunities; identifies common objectives, needs and priority actions; introduces best practices; and builds and implements investment plans involving all major partners. The potential benefits include synergies, increased efficiencies, cost sharing and a common platform to boost sectoral development.

The complementary approach of *Value Chain* development (which focuses on specific agricultural commodities) captures the entire system for specific commodities; establishes an agreed common platform for action within all value chain participants; provides a focus for efficiency and profitability; identifies practical, 'real-life' constraints and opportunities; clarifies roles and responsibilities of all key participants; defines operational and financial risks; and leads to the development of a clear and defined plan of action (or roadmap for development) for the commodity in question.

The GGP therefore introduces three particularly innovative factors. First, the intimate and coordinated twinning of commercial and development, non-commercial, objectives at a national level is a new approach. This is achieved through the Partnership operating within a strong and supportive policy and a regulatory environment established by the Public Sector. Second, attention is given to complete agricultural value chains to provide both a uniquely

holistic approach to meeting the needs of Ghanaian farmers for realistically priced, agronomically and economically efficient, inputs and finance, as well as addressing constraints to more effective agricultural commodity output markets. The third is the encouragement of open, well-informed dialogue between the public and private sectors that generates financial and economic benefits to, primarily, three groups: (i) farmers/farmer associations; (ii) commercial rural enterprises such as input retailers and (iii) the GGP partners.

The partnership-building process responds to needs in a creative and innovative way, adopting fresh approaches and testing new systems whenever necessary. This creates an environment of business as unusual. For the partnership to be effective, each member has a clear role that does not create excessive duplication. It also establishes clear linkages between partners, and makes best use of each partner's comparative technical and financial advantages. The general areas of specific expertise are clear, with distinct accountability. This operates within an agreed system of joint responsibility for the overall process and shared risk.

The Partners

The GG Partnership is between (a) an international and national consortium of private sector actors Yara¹ and Wienco², (b) the Africa Enterprise Challenge Fund (AECF),³ (c) farmers and farmers associations initially in Wienco's outgrower scheme in the Northern Region (d) the Ministry of Food and Agriculture, the sector policy maker and regulator; (f) commercial banks; (g) Technoserve an NGO and, (g) output buyers (including processors) and traders.

In Ghana, Prorustica⁴, together with its local partner MCM Associates, is providing advisory services to the Partnership. In the partnership, their role is facilitation of partnership agreements, monitoring and evaluation activities as well as benchmarking and comparative analysis between Ghana and eastern African initiatives where it is replicating the Partnership model.

The Objectives

The specific GGP objectives are to:

- Focus on the grains value chains and particularly in northern Ghana;
- Provide a practical demonstration of effective collaboration along the maize value chain between government, donors, private sector, scientists, AND farming communities to fulfil the Partnership aims;
- Ensure farmers have access to affordable inputs and profitable output markets through effective institutional arrangements (e.g. outgrower schemes) training, extension and more effective information flows;

¹ A leading international fertilizer Company based in Norway

² A Ghanaian based inputs trader and developer of some of the leading commodity Associations in Ghana including the Cocoa Abrabopa Association (CAA), Wienco Fibres Ltd and the Integrated Tamale Fruit Company

³ Supported by the Alliance for a Green Revolution in Africa (AGRA), Bill & Melinda Gates Foundation (BMGF) and the United Kingdom's Department for International Development (DFID)

⁴ Prorustica works at the interface between public and private institutions providing strategic guidance to the development of joint business and social development initiatives

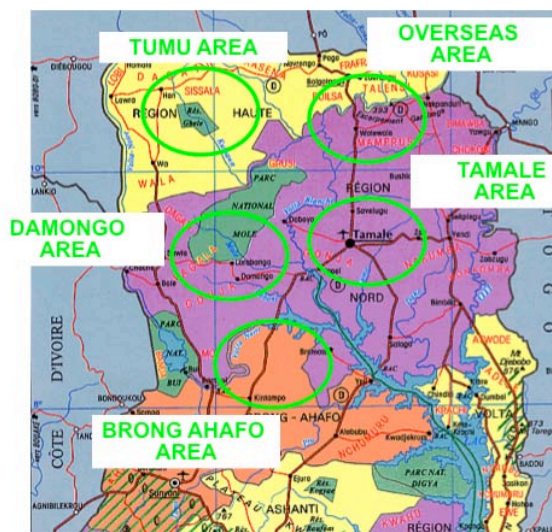
- Establish a private sector led input financing facility that will act as a catalyst for wider private sector participation in rural agricultural finance;
- Provide assurances to encourage relevant involvement by others and improve transaction efficiency along the value chain;
- Reduce risk to encourage further private sector involvement in the sub-sector;
- Improve farmer knowledge and choice regarding new technologies;
- Identify specific clusters within the value chain to address key constraints and promote viable business opportunities at both local and national level.

The Principles

The Partnership's basic principles include (i) sharing costs, benefits and risks among partners; (ii) building trust among parties; (iii) providing a learning platform through openly sharing information; (iv) leaving the Partnership open to new members if similar risk sharing methodologies are adopted. It carries out business as **unusual** by (a) running with minimal formalities and procedures, (b) concentrating on maximum efficiency of service delivery to the field, (c) addressing prioritized constraints along the entire length of the value chain, (d) defining the role of each partner through a pragmatic process based on the capacity of each partner to deliver specific operational output in the field, or necessary support and inputs and (e) ensuring a focus on appropriate functions by partners within the maize value chain and exploiting their comparative advantages.

The Project

The Partnership is building on an existing initial maize partnership pilot (field tested during the 2008 season) to leverage resources to improve access by trained Ghanaian small-holders to appropriate credit, suitable inputs and profitable output value chains in northern Ghana. Yara Ghana and Wienco are also developing and co-financing with financial institutions, a



credit facility to pre-finance inputs. An AECF matching grant (USD 1 million) and interest-free loan component (of USD 250,000) is being used to co-finance a set of specific field-based activities under the initial two-year roll out programme to complement and enhance the performance of the commercial Partnership along the maize value chain. The funds are also being used to monitor and evaluate the programme, support the facilitation and coordination of the stakeholders activities and also develop, through lessons learned, the broader aims of the GGP, particularly in the development of similar grains programmes, such as identified rice programmes.

Further funds (to include additional funds from Yara and Wienco) will be sought from finance institutions and others to reach the desired target to be achieved by 2012 of 20-25,000 farmers producing some 180,000–200,000 mt of maize. The AECF funding represents an incentive package for private operators to venture into commercial relations with small farmers in northern and central Ghana. It mitigates risks associated with reduced

capacity of producer associations, difficult access to credit for producers, lack of transport, irrigation and market infrastructure thus encouraging the private operators to invest in domestic production for both import substitution and export.

The Masara N'Arziki Association



The main commercial partners have provided financial and technical help to set up the Masara N'Arziki Association. The Association was set up and operationalised in 2009. The project covers the three northern regions of the country. The name means Maize for Prosperity, and the overall objective of the Association is to use maize growing as a means of creating wealth and prosperity in rural communities. The Association has a Board in place, and a governance structure that defines the relationship between the partners and between the partners and farmer members. To date the Association has recruited 35 staff - 7 management, 18 field officers and 10 supporting staff.

A sensitization exercise was undertaken in early 2009 to explain the benefits of joining the Association to farmers and to secure their commitments to join. Farmers were required to form joint liability groups of between 8 and 12 members and to acquire land in blocks of 20 to 50 acres for block farming, with each farmer cultivating an estimated five acres. Individual farmers with capacity, credibility and commitment were also accepted – individual plots had to be about 5 to 10 acres.

The response to the marketing and sensitisation drive was good; for the 2009 season about 2,200 farmers signed up with the Association (the year's target was 1,800 farmers). About 25% of the farmers who signed up adopted the block farming approach. Adoption of block farming was lower than was projected, and is attributed to the fact that land preparation is a tedious and time-consuming process and block farming is usually on virgin land that requires prior preparation. A number of farmer groups also worked with two or three smaller blocks in different locations, but close to each other. In the absence of blocks farmers were put into clusters for the provision of services such as inputs and extension.

Farmer Development and Training

During the pilot phase of the project contract agreements were entered into with farmers for the supply of inputs from Yara Ghana, spelling out the terms and conditions on which the inputs were supplied. With the setting up of the Association this process was taken a step further. In addition to contract agreements farmers wanting to join the Association are required to sign group resolutions based on terms and conditions that are binding on all the members of the group. The process for selecting group members is undertaken by the farmers themselves without any involvement from the Association. The group guarantees each other's performance and agrees to be held collectively responsible in their relationship with the Association. Each group is required to select a three-member executive to represent them, and also agrees to open a group bank account.



Detailed profiles of the group members are completed and filed with the Association. The Association also has unrestricted access to the records and accounts of the groups. The introduction of the resolution has been a key step in formalizing the farmer groups and developing a platform for strengthening governance structures; advice and support will be provided to the groups as part of the training program. Until the Association was formed the relationship between the partners

and the farmers was purely commercial; going forward the Association's regulations and procedures will define the relationship between the partners and between the partners and farmer members.

The majority of farmers in the project locations viewed agriculture as a way of life and not a business. One of the main objectives of the Association is therefore to reorient the farmers to business. It is doing this by providing quality inputs and extension services. The project extension agents have begun educating farmers on the proper and effective application of inputs; the large number of extension agents is to ensure adequate coverage of the wide geographic area. Every farmer that has signed up receives inputs on credit and benefits from the GAP training/extension. The extension and zonal managers undertake continuous monitoring of the fields to ensure that farmers are adopting what they've learnt and to provide additional support and advice as needed. A MoU was also signed with Technoserve to provide Governance and Business Management training for the farmers.

Technoserve has been following up on the training provided to farmers and observes that governance among the farmer groups has improved and members that do not adhere to the agreed norms for the group are being deselected. Farmers also have a better understanding of credit, and repayment for inputs supplied is expected to benefit from the increased awareness. The literacy level of farmers was noted to be particularly low in the project locations, and in a number of cases literate children did the training recording and notes on behalf of the farmers. For the 2010 season Technoserve plans to start the training before the planting begins to give farmers adequate time to understand and utilise what they learn.

Inputs Development

The supply of fertiliser for the planting season was coordinated by Yara Ghana as part of the supply of seeds and chemicals. Wienco have arranged and are currently developing a maize development programme with South African-based Pannar Seed Company. A total of some 13 acres is currently under seed maize for replication and disbursement to farmers. The farmers are trained on the correct application of relevant fertiliser and spacing of seed. The stipulated fertilizer applications are some 2 bags (50 kg)/acre compound fertilizer and 1 bag urea/acre. Yara works closely with the Association/partners to plan for demonstration plots and the technical processes required ensuring effective land cultivation and conservation practices. Furthermore, they train the farmers to move towards the above recommendations as they match with maize requirements and do not have the acidity impact as more traditional fertilizer have such as ammonium sulphate. Yara and Wienco have also jointly

developed small plots within the communities to communicate the message of new inputs techniques and the financial implications of embracing new technology. To ensure a sustainable land use management program the farmers setting up land blocks are being encouraged to secure 20-year leases that enable a longer-term land-planning horizon.

Post-Harvest



The expected average yield for the 2009 season is 1.2mt/acre or 3.0mt/hectare compared to a 2009 target of 3.5mt/ha average. The total production into the Association's warehouses is expected to be about 6,000 mt. The target total production was expected to be some 12,000mt for the 2009/10 season. The difference can be attributed to a combination of side selling by the farmers (estimated at some 20% or 1,200 – 1,500 mt), particularly poor production figures in Overseas area due to water-logging (an additional 7-10% loss) and finally to a smaller than expected total area planted – see "Challenges" below). The project rented four main warehouses and eight minor warehouses where the maize is initially stored before it is bulked and transported to the main warehouses. The quality of the maize produced during the year

was generally perceived to be good; the maize was also generally very dry, attributed to the dry weather conditions in the project locations. There were only a few places where the quality of the maize was not good because there were heavy rains towards the end of the season. All the warehouses are fumigated and maintained in good condition by the owners of the warehouses.

The Association purchases the total maize produce of the farmer groups and pays them for the maize supplied less the cost of inputs they received. The contract price for the season is GHC 400 per mt, compared to between GHC 300 to 350 per mt on the open market, and the market price is only just beginning to match what the project is offering. The Association pays farmer groups by cheque and groups have to open bank accounts where they had not already done so. Isolated incidents of difficulties in opening bank accounts were reported where the farmer groups were unable to meet particular bank KYC requirements.

With regards to repayment by the farmers for the inputs supplied, groups of farmers are able to pay back when all the members have harvested and shelled. Farmers with personal farms can pay immediately and those farmers that have sold their maize to other independent traders (not the Association) are paying back their input loans. A 88-90% loan recovery rate is expected.

Credit Facilities

In the absence of initial external financing support Yara and Wienco financed the initial inputs requirements and logistics in 2009 based on its capacity. This amounted to some USD 1 million, however as the programme develops and larger amounts of inputs are required this will rise to some USD 8-10 million in short term inputs finance by 2011. The recent improvements in lending terms in the country have been reversed in the last year with the global economic and food crisis and an energy crisis in Ghana; the prime rate has increased

from a low of 12.5% at end 2007 to 18% in December 2009, resulting in lending rates of 28 – 32%; inflation has also risen from 10% at the end of 2007 to a current 16%.

At end 2009, the Partnership had discussions with a local bank to negotiate their role in the partnership as well as a potential short-term input financing facility at favourable rates. The bank has agreed to become part of the partnership, with a first step of providing a credit term sheet to the Association in January 2009. It is hoped that this will pave the way towards the provision of short term working capital to enable the Association to purchase, on behalf of its farmer members, inputs and, later, small-scale machinery and implements.

In the interim the capacity of the farmer groups is being developed as part of the requirement that they operate group bank accounts. It is expected that the farmers will develop a banking culture and the discipline and track record required to enable them benefit from future credit facilities.

Outcomes and projections

The results of the GGP so far have been:

- A maize value chain partnership management model developed, with organisational linkages to other key existing programmes in the sector, that promotes, private sector led, small scale farmer growth in targeted districts;
- Successful implementation of a fast track in 2008 and development of the subsequent larger-scale roll out model;
- Farmers/out-growers brought into the partnership/ Association:

Date	Target	Actual
2008	1,250	1,250
2009	1,800	2,200
2010	5,000	-
2011	14,000	-
2012	20,000	-

- Average yields improved through relevant training, extension and inputs distribution; From an initial base (current non-programme farmers) of just over 1.0 mt/ha to an average 3.0 mt/ha in 2009 and a projected average of some 4.5 mt/ha by 2012;
- Increase the total area under commercial maize production from approximately 1,300 ha in 2008 to some 30,000 - 40,000 ha by 2012;
- Training and extension in the use of new inputs relevant to enhanced and profitable maize production
- Increase total net benefit to each farmer from an actual USD 460/ha in 2009 (Target USD 400/ha) to a projected USD 950/ha by 2012;
- Commitment of financial institutions to develop a credit facility (for pre-financing inputs) under a risk sharing partnership with the private sector – by 2012 a facility of some USD 10 million;
- The development of a model that can feasibly be a) further scaled up at a national level as additional resources become available to achieve (by 2012) a production target of some 200,000



mt of maize and b) used to stimulate and develop further grain value chain models that fulfil the aims of the GGP;

- A verified market orientated farmer learning and empowerment programme developed, that draws upon sustainable agri-business development models, to support improved access to inputs and enhanced promotion of cropping system innovations in the maize (and other grains) subsector;
- Development of an appropriate agronomic inputs and crop development training framework relevant to the maize subsector;
- Demonstrated and verifiable business case for active private sector involvement in promoting small scale farmer development in the main grains crop subsectors;
- A knowledge management system developed and the Project's lessons-learned and knowledge disseminated among a wider group of partners.

The wider scale roll out will also help to improve farmer knowledge and choice regarding new technologies and identify specific clusters within the value chain to address key constraints and promote viable business opportunities at both local and national level.

Challenges



While the project has met and even exceeded many of its targets, it also experienced a number of challenges, lessons from which will guide future operations. One of the major challenges during the 2009 season was with tractor services. Many of the smallholder farmers were at the mercy of tractor operators, who indiscriminately cleared lesser plots of land because the farmers do not have accurate measurements and demarcation of their land. This has therefore lowered the amount of actual area planted quite significantly and thereby effected total production estimates. The tractor operators perpetuated this practice because of the long wait list for their services, the urgency leaving the farmers with no choice but to accept what was offered. To address this challenge the Association is introducing a GPS system to map and provide

coordinates for farmers' land for the next season.

The main challenges facing the warehouse development component are that currently neither the Association nor Wienco own these assets. They are therefore renting warehouse space from third parties. The larger warehouses are limited in Tamale and rental costs are high. During the planning of the programme it was acknowledged that there was limited space in the larger warehouses, however, given there were many smaller town/village storage this was expected to be sufficient for the programme. To address this challenge the project is developing two additional warehouses in Tamale (total 5,500mt capacity) that are expected to be completed in 2010.

The main challenges with harvesting were that there were only 37 mechanized shellers available, with no spare shellers. Breakdowns occurred during transportation from one place to another and time was wasted transporting the shellers around. The shellers were locally manufactured – the general observation is that they were not hardy enough for the rough terrains across which they had to be transported. For the 2010 season the Association is

looking at importing some of the shellers, as they are hardier, and ensuring that spare shellers are available in each of the project locations.

Training was provided for all the extension agents on good extension practices. While extension agents were seen to utilise what they had learnt, a general observation was that many of them still do not appreciate farming as a commercial venture because of socialist tenets in their educational backgrounds and experiences. They are thus unable to impart the fundamental commercial nature of the program to the farmers. To address this, an evaluation of all extension agents is being undertaken and additional training/reorientation will be provided as needed.

Options for replicability

The Ghana Grains Partnership is developing specific commodity value chain programmes of coordinated private-public activities with the aim of significantly scaling up current national initiatives along specific grain value chains and in so doing make a significant and lasting impact on rural livelihoods. The current first stage initiative along the maize value chain will serve as a catalyst for similar value chain led initiatives in other grain and commodity sub-sectors, particularly rice. The Partnership is using its skills and resources to scale up core value chain activities (inputs, production, warehousing/logistics, credit and marketing) to catalyze significant small farmer development in the maize sub-sector and to build the capacity for local private-public partnership in the wider grain and agriculture sector.

The Partnership model is being replicated by Prorustica and its partners in Malawi, Tanzania, Mozambique (within the Beira Agricultural Growth Corridor Partnership) and very recently through the Southern Agricultural Growth Corridor of Tanzania. All the programmes use a commodity value chain analysis model to identify partners and resource needs to develop and support specific commodity value chain partnerships.

The use of the value chain helps to achieve strong linkages between partners, developing better resource allocation and more cost efficiencies that help achieve a competitive edge. The coordination and facilitation services ensure that each partner's investment is complimentary and supportive along individual value chains as well as allowing each partner to draw reassurance that other elements of the value chain are being supported in similar ways. The use of a "neutral" facilitator helps to fulfil a number of objectives:

- Ensuring that investment needs of the commercial agribusiness sector balance with the primary goals of the partners by acting as an identifier and mobiliser of funds
- Engaging and building on existing initiatives both in agriculture and infrastructure
- Developing new models for the support and integration of smallholder farming into mainstream commercial agriculture
- Facilitating the resources that are both committed and promised to fulfil common objectives in agricultural development supported by infrastructure improvements
- Using best practice and lessons learned from similar Partnership initiatives (specifically related commodity value chains)
- Developing linkages amongst those partnerships to help create a critical mass of experience and resources

- Through knowledge of various financing facilities, enable effective access by agricultural/agribusiness entities to appropriate finance and technical support in a timely and efficient manner

Prorustica is developing local facilitation and coordination services by transferring skills and knowhow to local specialist teams and institutions. The company is currently bringing together a group of Africa-focused partners who understand the new business and socially driven models. The current partners are developing a “partnership brokerage network” and extending Prorustica’s partnership model across countries in which they are operating.