AT-A-GLANCE:

THE MARKET FOR MAIZE, RICE, SOY, AND WAREHOUSING IN NORTHERN GHANA

Northern Ghana is relatively poor, isolated, dry, and politically unstable when compared to the rapidly developing and urbanizing south. However, in recent years the northern regions above the 8th parallel (the "SADA North") have received much government and donor attention in the form of agricultural subsidies and social programs. This so-called Breadbasket Initiative aims to transform the north into a more stable and prosperous area, with a focus on smallholder production of staple grains and legumes, particularly maize, rice, and soybean. Much of this investment has paid off, with higher agricultural yields and greater market connectivity contributing positively to local economic development.

The Government of Ghana, its bilateral and multilateral donors, and commercial agricultural investors now have an opportunity to refine their goals and target future investments. The key to success will be a thorough, nuanced, and disaggregated assessment of market demand for Northern Ghana's agricultural products, and a candid evaluation of its productive potential. This rapid study was conducted over several weeks of field interviews and site visits, and is based on the premise that acceptance of market realities will result in lower risk and greater returns for small and large agribusinesses.

Each commodity (maize, rice, and soy) market was assessed independently to evaluate current market demand; current supply (production, processing, and imports); likely future market demand; and potential supply to meet this shifting market. In addition, the study evaluated a number of proposed warehousing investments to determine which are likely to thrive.

USAID FROM THE AMERICAN PEOPLE
EAT Enabling Agricultural Trade
JANUARY 2012

EVALUATION OF POTENTIAL INVESTMENTS

KEY MARKET OPPORTUNITY

SUBSTITUTION FOR IMPORTED, NON-AROMATIC RICE, APPROACHED IN PHASES AND TARGETING SPECIFIC MARKET SEGMENTS

The market for rice in Ghana is highly segmented. The near-term import substitution opportunity for Northern Ghana is not aromatic rice. Rather, it is to work toward substitution for the 485,000 MT of non-aromatic, low quality (5 to 25 percent broken) rice that is currently imported. Generally speaking, milling capacity is sufficient for these volumes. However, processors would require improved grading, cleaning, storage and operations process management. The immediate opportunity is for 31,500 MT of high percent broken rice that is imported. Domestic production already makes up almost half of this market segment. Once these volumes of imports have been met by domestic production, Northern producers and processors can start to look at substitution for higher quality (5 percent broken) rice, which represents the lion's share of the current market and is now met exclusively through imports. Harvesting and processing would need to improve significantly to consistently and efficiently reach this level of quality without waste.

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RISKIER INVESTMENT

STEERING NORTHERN GHANA'S RICE PRODUCTION TOWARD HIGH QUALITY JASMINE

Everyone wants to invest in aromatics. The potential margins for this variety are indeed attractive, however, the market segment is not as large as many estimate, with about 145,000 MT of aromatic rice imported this year. More importantly, Northern Ghana is a long way away from the yields, production and harvesting efficiencies, milling, and local marketing systems necessary to compete with imports. Some domestic commercial production ventures will succeed, but this is more likely to be those already launched in the Southern Volta area. However, in the long-term, there is indeed an opportunity for market development of aromatics and as Ghanaian incomes rise and more consumers shift into this market segment, demand will grow but production around urban centers in the South is likely to keep pace.

KEY MARKET OPPORTUNITY

SUBSTITUTION FOR A LIMITED BUT GROWING AMOUNT OF SOY THAT IS CURRENTLY IMPORTED

Near-term, only modest expansion of local production processed in existing facilities could substitute for the 35,000 to 63,000 MT of imported soybeans demanded by the poultry industry, which is dominated by layers. The soybean oil produced as a result will substitute for crude soybean oil imported by the paint industry located in Accra. Longer-term, the domestic soybean market will roughly double with the development of a strong, competitive broiler (poultry) industry, capturing the market currently met by imports of 'ready to cook' chicken. The production opportunity can be met largely through a focus on yield gains and concentrated production zones to decrease the logistical costs of origination by the industry.

RISKIER INVESTMENT

WIDESPREAD PRODUCTION OF SOYA AND MAIZE, PARTICULARLY SMALLHOLDER-FOCUSED

It would be dangerous to promote intensive and large-scale maize and soy production with smallholder producers given relatively limited market opportunities today. The market for white maize is static, since per capita consumption is on the decline and brewers' interest in grits is price sensitive. The poultry market is not growing at a fast enough pace to warrant increased yellow maize production, and current import levels are relatively low. For both soy and maize, buyer contracts are not scalable solutions as commodity markets mature, based on experience in other countries' grain trade. Soy is largely grown as a cash crop, and promotion as a food security crop may falter with volatile markets. Producers are inherently risk averse and unlikely to produce more consistently if the market demonstrates uncertainty. An additional risk is that as processers scale up, imported raw materials may become more accessible (if they can import by the container load), and they may abandon local procurement. Export markets may exist, but trade policy is either restrictive or uncertain, the cross-border linkages are not there, and neighboring countries are also investing in improved production of staple grains.

PRIVATE OUTGROWER SCHEMES THAT GENERATE PROFITS ON INPUT MARGINS AND COMMODITY TRADE

KEY MARKET OPPORTUNITY

The more successful outgrower models in Northern Ghana are those designed to profit the primary investor. In these arrangements, a farmer will be dropped immediately if he or she is not performing, and any side-selling or contract infringement will be punishable by law. The model is not designed as a way to provide a service to farmers. However, successful participating farmers do benefit from these systems because they guarantee a market, and the most successful outgrowers provide a wide range of business and social services to their suppliers, understanding that it is good business to do so. The positive impact on smallholder participants is enhanced if marketing surplus to the outgrower is voluntary, and if there are multiple private outgrower schemes operating in the same area, competing for producers.

HIGH DEMAND EXISTS FOR THROUGHPUT CENTERS NEAR MARKET CENTERS

KEY MARKET OPPORTUNITY

While warehouse space is sufficient in terms of total capacity in the North, supply near market hubs is scarce and therefore rents are at a premium. Returns justify the investment for the construction of large, simple warehouses, which would operate under high rates of turnover rather than long-term storage. Such facilities could be built by a real estate investor in order to lease them out to medium-scale traders (in three month leases), or built by traders themselves if their operations are large enough to justify year round use or sublet. However, the business of being a landlord is quite different from that of grain trading, so care should be taken before credit is extended to traders frantic to own their own facilities if sublet is required to break even. An effective business plan would quantify financial returns from improvements over the status quo (e.g. reduced transport costs due to the strategic and centralized location, reduced losses from improper storage).

CONSTRUCTION OF WAREHOUSES DESIGNED TO STORE GRAIN FOR LONG PERIODS OF TIME

RISKIER INVESTMENT

Temporal speculation in Northern Ghana, particularly for maize, is market by high risk for relatively low returns. Unpredictable trade policy and "government intervention" have made traders justifiably wary. Furthermore, the unique timing of staggered harvests for maize means that when Northern farmers harvest maize there is market pressure to send it south. Add to this the fact that in recent years, maize prices throughout the country have not fluctuated enough to warrant temporal arbitrage if the investor must incur any opportunity cost or finance cost associated with tying up liquidity. For smallholders in particular, storing grain in this current market is not advisable. One exception: some amount of increased storage capacity for paddy at rice mills is warranted, but must come hand-in-hand with improvements in efficiency and infrastructure at the mill itself, and should not be considered as a separate investment.

The market for farm services in Northern Ghana cannot be expected to support "win-win" centers.

FARM SERVICE CENTERS DESIGNED TO BE "WIN-WIN" FOR BOTH FARMERS AND SERVICE PROVIDERS

RISKIEST INVESTMENT

When the concept for an agribusiness center is designed to provide farmers with easier access to what they need, not necessarily what they'll pay for, the model is not sustainable from a purely financial perspective. A profit-driven center will likely evolve into a trading enterprise, and a mission-driven center should be considered a social service that will require continued donor or government support (e.g., Farmer Services Company [FASCOM]). The only way such a center could be sustainable is if it meets the following criteria, which are not met in the context of Northern Ghana;

- High crop yields that will minimize expanse of 60,000 MT coverage area (decreasing logistical costs)
- A network of well-situated community warehouses (aggregation points) in the catchment area
- Farmers' willingness to pay cash for services rendered instead of in-kind transactions
- The ability to compete with entrepreneurs who have specialized in the provision of profitable farmer services such as tractor operators and input suppliers
- A grains market that attaches value to brand and associates it with quality

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This publication was produced for review by the United States Agency for International Development. It was prepared by Fintrac Inc. Photo(s) by Fintrac Inc.

ABOUT THE ASSESSMENT

This assessment was produced by USAID's Enabling Agricultural Trade (EAT) Project, and implemented by Fintrac, Inc., a worldwide leader in generating rural income and food security.

The full version of this report can be found online at **www.eatproject.org**.

The full report assesses the current market supply and demand for rice, soy, and maize in Northern Ghana, and evaluates proposed warehouse and farm services models, in order to identify potential markets and inform future investments.

To do so, our team conducted extensive data gathering and analysis on the ground. We conducted over 200 interviews with an array of stakeholders ranging from producers, markets, and agribusinesses, to institutions, government ministries, and NGOs. While the analysis focused on the Northern region, the team also visited multiple locations in Ashanti, Upper West, Brong Ahafo, the Greater Accra region, Volta, and Upper East.

ABOUT THE EAT PROJECT

The Enabling Agricultural Trade (EAT) project, funded by the United States Agency for International Development (USAID), supports the U.S. government's global efforts to create conditions for agricultural growth. USAID established EAT based on substantial academic and field experience suggesting that a sound legal, regulatory, and institutional environment is a pre-requisite to economic growth in the agricultural sector. EAT offers a suite of targeted and customizable analytical tools and implementation support to identify, diagnose, and reform agribusiness enabling environment (AgBEE) constraints that hinder start up and growth across the agricultural sector.