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TRADE AND INVESTMENT PROGRAM FOR A COMPETITIVE EXPORT ECONOMY

Final Report

NOVEMBER 2009

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A tightly bunched pineapple flower begins forming a fleshy fruit at its crown.

TIPCEE



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TIPCEE

TIPCEE introduced this new variety of okra to small-scale farmers.

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CD-ROM	INSIDE BACK COVER

FRONT COVER: A field manager records conditions in a newly planted MD2 pineapple field, enabling fruit exports to conform with export quality standards. Plastic mulch reduces weeds and improves yields.

TIPCEE

BACK COVER: Bound for tables in Europe, bananas from a plantation get a cushioned ride from field to pack house.

TIPCEE



TIPCEE

A worker at Dansak Farms, Nsawam, Ghana, harvests a mature Golden papaya by breaking the stalk, or peduncle, where it meets the tree. TIPCEE used demonstration plots to introduce this new variety of papaya, which consumers prefer because of its golden color and longer shelf life.

ACRONYMS

CEPS	Customs, Excise, and Preventive Service
FASDEP	Food and Agriculture Sector Development Policy
FBO	farmer-based organization
GIS	geographic information system
GTZ	<i>Deutsche Gesellschaft für Technische Zusammenarbeit GmbH</i>
MOFA	Ministry of Food and Agriculture
MOFEP	Ministry of Finance and Economic Planning
MOTI	Ministry of Trade and Industry
SPEG	Sea-freight Pineapple Exporters of Ghana
TIPCEE	Trade and Investment Program for a Competitive Export Economy
WTO	World Trade Organization
YiPoCoMa	yield, post-harvest, cost, and marketing



TIPCEE

A young man bags maize using a portable sheller deployed by TIPCEE's private sector partners. The project team stressed improved practices far beyond the field: from post-harvest handling to logistics to marketing systems. All are steps needed for getting a competitively priced, high-quality product to distributors and consumers.

EXECUTIVE SUMMARY

Ghanaian agribusiness has most of the key elements to compete in the global marketplace: a stable government, a good growing climate, unused arable land near the coast, and good logistical connections — two accessible ports and direct airline service to nearby European and growing Middle East markets. In fact, the sector accounts for 35 percent of gross domestic product and

employs more than half the work-force, mainly small landholders who often represent the poorest households in the country.

But five years ago, most of these smallholders lacked knowledge about export-quality cultivation; poorly integrated agriculture value chains discouraged initiative and profitable market

TIPCEE Key Results

Value of sales by assisted firms	\$82,835,422
Volume of sales by assisted firms	89,289 MT
Value of sales by assisted producer groups	\$31,130,143
Volume of sales by assisted producer groups	57,636 MT
Number of rural households benefiting directly from TIPCEE interventions	21,298
Number of agriculture-related technologies made available	160
Number of policies analyzed	33
Number of laws, regulations, and administrative procedures reviewed and drafted	19
Number of public-private policy dialogues supported	99

linkages; and the government often developed competitiveness policies in isolation from private sector realities.

Horticultural export growth stalled in the face of the sector's lack of competitiveness and minimal investment in modernization and post-farm gate management. Compounding that was continued consolidation of retailers in export markets, which reduced the number of buyers and increased supplier competition, along with more stringent rules on food quality and safety. Most exporters gave up sourcing from smallholder farmers, deeming them unreliable and their produce unsafe and of varying quality.

In 2004, USAID initiated a \$30-million project — Trade and Investment Program for a Competitive Export Economy (TIPCEE) — to promote economic growth by enhancing productivity and sales of nontraditional agricultural exports and improving the enabling environment for private sector growth. One and a half years later, TIPCEE sharpened its poverty alleviation focus through domestic food crop production. Both goals were consistent with USAID's objective of increasing the country's private sector competitiveness in world markets and the Ghanaian government's strategy of reducing poverty and reaching middle-income status by 2015. TIPCEE built on previous USAID agribusiness programs, whose successes meant it was the right time to focus on linking the production end of value chains to markets.

At the end of five years, the selected value chains are stronger, farmers are more market-savvy, and the legal and regulatory environment for agribusiness is more open to the needs of the private sector. Those benefiting from TIPCEE activities know that Ghana can compete internationally and that agriculture is a business requiring cooperation along the full value chain, in tandem with informed government policy dialogue and evidence-based decision-making.

The project had two components: export business development (later broadened to agribusiness development) and enabling environment. Activities in both were designed to build on public and private sector needs. The first component integrated and streamlined value chains in the selected export horticulture and domestic food crop subsectors, engaging with actors at all levels — from smallholder farmers and industry-level associations to buyers, processors, and exporters. In the second, the TIPCEE team worked with the Ghanaian government to improve its policy development capacity through policy analysis and regulation/legal drafting exercises, public-private dialogue events, and advisors embedded in public sector institutions.

The project not only linked with Ghanaian government initiatives and other USAID projects, it also worked with other donors such as Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ), the Millennium Challenge Corporation, and the

TEAM EFFORT

The Chemonics consortium included seven international sub-contractors, three of which had long-term staff on the project:

CARE International

Dexis Consulting Group

Elan International LLC

Geomar/SNC-Lavalin Group Inc.

International Business Initiatives

TechnoServe/Ghana

The Services Group/AECOM

International Fund for Agricultural Development, reinforcing the perception in the agribusiness sector that all were working toward the same goals and leveraging available funds and expertise to magnify results.

TIPCEE's geographic span was wide: 11 commodities in all regions benefited. Its technical reach embraced smallholders, producer associations, the private sector, the Ministry of Food and Agriculture (MOFA), Ministry of Finance and Economic Planning (MOFEP), Ministry of Trade and Industry (MOTI), Bank of Ghana, Ghana Standards Board, and district-level MOFA offices, among others. It supported

development of new government agencies such as the National Labour Commission and the Tariff Advisory Board (precursor to the proposed Ghana International Trade Commission), as well as fledgling farmer-based organizations (FBOs).

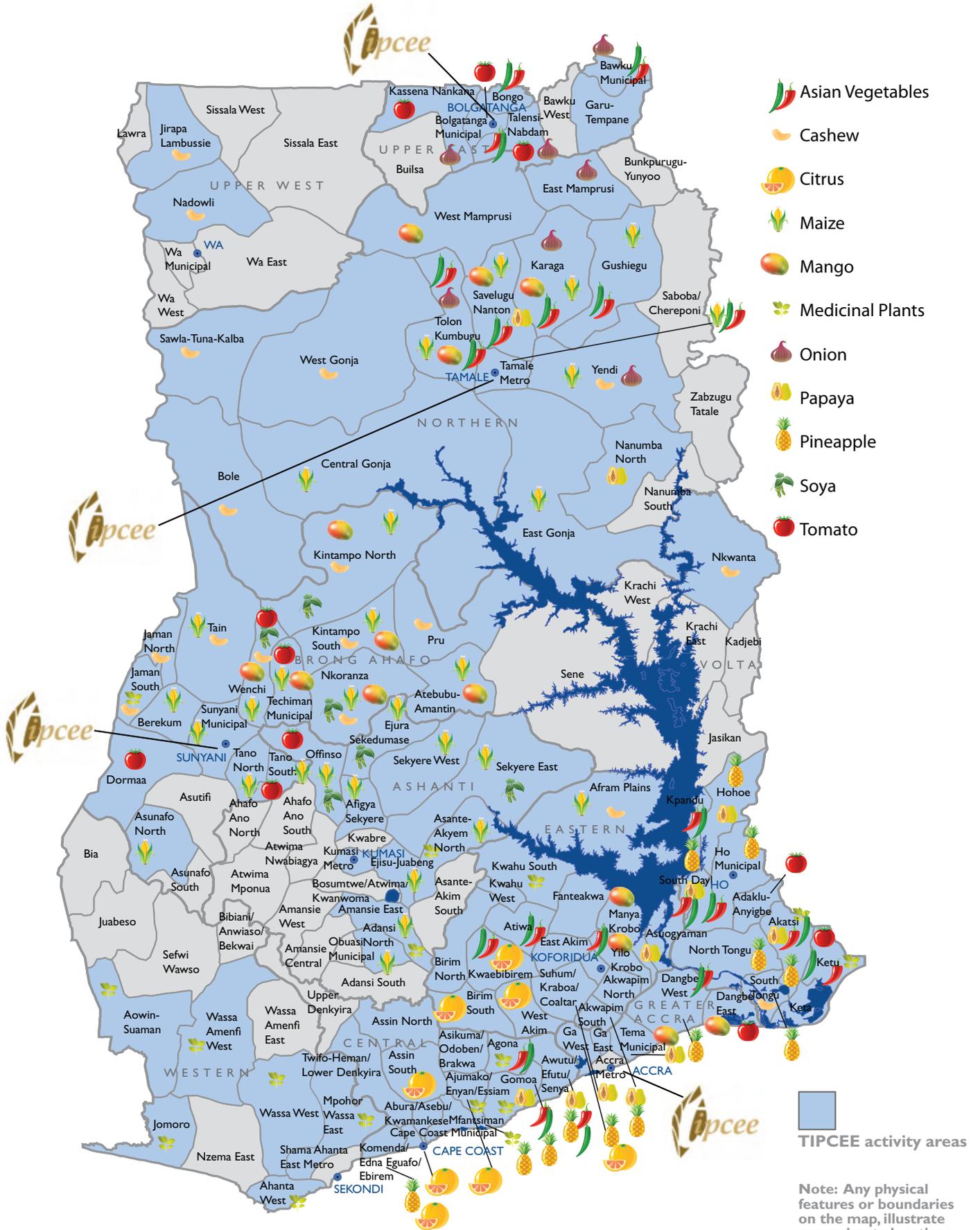
The TIPCEE model rested on gaining buy-in — from smallholder farmers who had not imagined that they could substantially increase yields to earn more money or even produce for export, from processors and exporters who learned they could trust farmers to meet their needs, and from government officials who saw the importance of basing policy and regulations on

TIPCEE BROADENS FOCUS, EXPANDS RANGE OF COMMODITY INTERVENTIONS

At USAID's request, TIPCEE ramped up its outreach targets sixfold, to 100,000 rural households after Year 1. This required significant expansion in the range of interventions, adding food crops such as maize, tomato, soya, and orange to complement the export crop focus. After a restructuring of project activities and staffing, TIPCEE is proud to have exceeded that target, reaching 121,298 rural households.

In the end, much of the targeted results for value and volume of sales for assisted firms came not from high-value pineapple, as predicted, but from other sources. After the collapse of the export market for Smooth Cayenne pineapples, exporters did not pursue a growth strategy for the popular MD2 variety on the scale expected. While pineapple still forms the core of fresh horticulture exports from Ghana, TIPCEE's sales figure increase reflects a more balanced aggregate from many commodity value chains. In addition, many of the targeted exporters and growers, who formerly served the fresh-export market, now choose a lower-risk option with a vibrant fruit-processing industry, led by a key anchor firm — Blue Skies — that seeks high-quality, certified produce for its own export market. This shift in the dynamic did not change TIPCEE activities designed to increase quality, productivity, and certifications, but it did allow the marketing activities to adapt from a solely international buyer focus to a mixed approach to serve this growing, locally sited processing market, as well as fresh exports to international markets. In the end TIPCEE achieved more than 95 percent of sales targets.

TIPCEE PROGRAM DISTRICTS, 2005 – 2009



Note: Any physical features or boundaries on the map, illustrate approximate locations. They may be incomplete and do not represent actual borders.

TIPCEE's agribusiness development activities supported 11 commodities, and reached rural households and farms in 131 districts in every region in Ghana. The project's enabling environment work involved policies and regulations that were national in scope and reached all citizens.

the needs of the private sector. Through TIPCEE interventions, each group came to recognize the difference it could make in increasing the country's competitiveness.

Broader and more open communication built awareness along the food and export value chains of the importance of each link. Farmers learned that just producing more was not enough. The market required just-in-time delivery of consistent quality product meeting consumer demand; if they did so, their market would expand. They learned that they could negotiate with buyers through their FBOs they could negotiate with buyers. Most important, they learned that their farms were part of an industry they could help develop.

Officials at targeted ministries, departments, and agencies learned the necessity of develop-

ing strategic policies and the value of basing those policies on industry-wide input. TIPCEE guided some officials through a process of gaining stakeholder contributions to evidence-based policy development, and gave them a template for conducting the process on their own. The team also produced studies examining key policy and regulatory constraints to business, new policies or laws to remedy the problems, and assisted new government institutions or units to administer changes.

Governments do not change policies overnight, and the private sector can encounter difficulties coming together to effect change. Both require intensive, sustained guidance and a glimpse of what the changes would mean. TIPCEE left both sectors with tools to help create a thriving agribusiness economy and the capacity to use them.



Philemon Mennia, of the Ghana Statistical Service, makes a point about policy reforms during a public-private dialogue sponsored by the Ministry of Trade and Industry and TIPCEE.

TIPCEE



A lead farmer and an extension agent from the Ghana Ministry of Food and Agriculture demonstrate ways to space maize plants for maximum yield. The duo trained local farmers in good agricultural practices, from site selection through post-harvest handling. Laminated “Good Life of Maize” posters reinforced their message.

TIPCCE

CHAPTER ONE

FOCUSING ON COMMODITY CHAINS TO BOOST AGRIBUSINESS DEVELOPMENT

When TIPCEE began, small-holder farmers struggled to supply the ever-changing market shifts demanded by domestic buyers, processors, and exporters. Many smallholders produced only for their families and the local market, selling at whatever price was offered. They had little bargaining power — because of inconsistent quality of produce, lack of key certifications, and scant knowledge of market needs — and little prospect of a higher standard of living.

Those few who did engage in exporting viewed it as an endgame, where the buyer had the upper hand in defining terms of sale and payment. In emerging horticulture export value chains, trust was nonexistent between buyers and the scattered farmers.

The project worked with farmers in selected subsectors, educating them about each link of

their commodity's value chain, starting with their choice of seed and ending with the domestic or foreign consumer. In some cases, the crops were for export to European or Middle Eastern markets, while in others the produce was for sale to local market women or processors. Farmers learned that in both instances, they must use good agricultural practices (GAPs) to ensure their crops meet certain standards and achieve a level of productivity to be profitable. They saw that by treating farming as a business they could look forward to a more prosperous future. TIPCEE's approach to both markets was the same: identify and integrate the entire value chain with the market always in view.

THE VALUE CHAIN

The project identified commodities with market opportunities and for which Ghana had a competitive advantage. Some

crops would face well-established competitors, while others could replace imports from neighboring countries. The team looked at who was already growing a crop, what university research existed on it, which companies could use the produce, and whether the market was expanding or changing. In the end, the team settled on six export commodities and five domestic/regional ones.

Integrating and strengthening the value chain for each commodity — scattered smallholders, nucleus firms, associations, and the market — became the yardstick for planning project activities. Each value chain was

different, and not all were at the same stage of development. TIPCEE examined each link in a chain and identified the best ways to strengthen it. A total of 160 new or improved technologies and management practices were introduced during the life of TIPCEE.

THE FARMERS

At the production end, TIPCEE introduced new technologies, approaches, and standards for selected commodities. Demonstration plots, set up on lead farmers' land, gave neighboring farmers a chance to see the results of the new practices: higher yields, better quality, and higher profits.

SUPPLY CHAIN FOR FRESH PRODUCE AND ASSOCIATED TASKS (AND POTENTIAL PITFALLS)



A CORNUCOPIA OF COMMODITIES

TIPCEE supported development of these commodity value chains:

FOR EXPORT

Pineapple
Mango
Papaya
Asian vegetables
Cashew
Medicinal plants

FOR PROCESSING AND DOMESTIC MARKETS

Maize
Tomato
Orange
Onion
Soya

FARMERS HELPING EACH OTHER

One maize FBO, Suktamdo (translated as Help Each Other), meets weekly to discuss problems with the crop and to train new members. The organizer of the female members of the group, Yaa Kuma, said that when the women saw how much more money they could earn, they wanted to compete with the men. She said it was easier to help each other because they were all growing the same variety.

But, factoring in the cost of inputs needed to boost the yields and quality could mean a drop in a farmer's income if the higher input costs are not matched by higher yields or higher prices for the crop. Farmers learned to identify a market before investing in improved practices.

After learning new practices and seeing the results in demonstration plots, farmers realized the value of supporting each other to adopting improved methods. The output of many smallholders is too small for a major buyer to consider, but farmers learned that by setting up FBOs with their neighbors they could approach exporters or processors they had never before dealt with. Although TIPCEE supported farmers in forming these groups, they were self-initiated.

In addition to pooling their crops to negotiate better prices at harvest, the groups meet regularly to discuss their experience with the new practices, offering advice when a member has a question or problem with a crop. Women play an active role in some of the groups and find the new practices easy to follow. When other farmers — seeing the success of the groups — want to join, the original farmers offer to train them and help them set up their own group. Members of one FBO pooled their money and rented a 200-acre plot for joint cultivation. Others charge a small fee for membership, which they use to buy shared inputs. TIPCEE has supported other FBOs in setting up bulking points for their crops,

to eliminate rejection of spoiled fruit or vegetables that were merely dumped on the ground.

THE BUYERS

Integrating these smallholder farmers into the value chain with intermediary and commercial farmers gives the smallholders something to aspire to. Particularly with regard to exports, getting farmers to understand that they were competing regionally and globally and so could not cut corners was a challenge. But, once they saw the rewards, they realized the advantages.

Processors and exporters look for quality, quantity, reliability, and price in the commodities they buy. TIPCEE connected FBOs with buyers and explained the importance of those four requirements. Through this improved communication between buyers and producers, Ghanaian agribusiness will be able to react more quickly to changing market needs. Farmers are learning that sales depend on cooperation with buyers, and buyers are realizing they can depend on farmers for reliable output. This mutual trust comes from consistent behavior, and so is an ongoing struggle.

CROP-FOCUSED ACTIVITIES

Innovations used in most value chains include training in good agricultural practices, Global-GAP certification for export crops, geographic information system (GIS) mapping, and development and promotion of

“With GAPs ... I have seen a major change to my farm and others (in our association). We were made to understand pruning, scouting, sanitation — we had posters, training guides, and instruction.”

**DAMIEN ADZAKOR,
SECRETARY, DANGME
WEST MANGO
GROWERS**

“One of the first questions we ask when buying pineapple from someone new is whether they are GlobalGAP-certified. GlobalGAP certificates are required by all our customers abroad.”

**FRANK OBERSCHILP,
GENERAL MANAGER,
PEELCO LTD., A
TROPICAL FRUIT
PROCESSOR AND
EXPORTER**

crop-specific norms and standards. All activities were geared toward improving the competitiveness of both smallholders and anchor firms and integrating them within value chains.

Good agricultural practices. TIPCEE trained more than 100,000 farmers in GAPs designed for their particular crops and markets. These practices spanned the entire production cycle, including seed selection, site preparation, nursery development, planting, integrated pest management and pesticide handling, fertilizer application, weed control, harvesting, packaging, transportation, and short-term storage. Additional practices included selection of suckers, forcing, and degreening of pineapples, pruning of tree crops, and irrigation of crops such as tomatoes and onions.

After receiving training, lead farmers conducted field days, explaining their successful practices and showing demonstration plots to neighboring farmers. To prove to certification bodies and buyers that farmers had been trained in the latest practices and safety protocols, TIPCEE introduced the Farmer Passport. The portable booklet allows farmers to maintain and retain their records as they transfer from FBO to FBO.

GlobalGAP. At the outset of TIPCEE, certification of Ghanaian agricultural products by the private sector body EurepGAP was “nice to have.” Today, renamed GlobalGAP to acknowledge its reach to more than 80 countries, it is the passport many crops need

to enter the dominant European Union supermarket segment. The certificate covers all processes from inputs until the product leaves the farm. TIPCEE’s vision was to ensure that Ghanaian smallholders would be able to meet the required set of standards — a view that few in Ghanaian agribusiness shared at the outset.

EurepGAP had already certified large-scale pineapple producers when TIPCEE began, but smallholder certification appeared to be too complex and costly on a per-farm basis. Project technical specialists set up a partnership involving MOFA, TIPCEE, the Sea-freight Pineapple Exporters of Ghana (SPEG), GTZ, and GlobalGAP itself to expand training and certification to smallholders, under GlobalGAP Option 2, which certifies an entire group. That practice minimizes inspection and certification costs to any one farmer and makes it easier for GlobalGAP to provide feedback after an inspection. TIPCEE cost-shared certification with the FBOs, easing the way for them to launch into export markets. A total of 34 FBOs were GlobalGAP-certified by project end.

GIS mapping. Scattered smallholders are at a disadvantage compared to large-scale farms with surveyed, well-identified plots and detailed crop data. The use of GIS mapping technology relying on global positioning system data is not new to larger farms around the globe, where it is viewed as strategic for monitoring supply and productivity. TIPCEE and MOFA introduced

Good Life of Tomato

Bad Life Practice X

Using own seeds

No sterilization of soil

Dense sowing

Unhealthy seedlings

No drip irrigation

Dense planting

Incorrect dosage of pesticides
Insufficient fertilizer

No staking

High night temperature during flowering and fruit formation causes flower and fruit abortion

Good Life Practice ✓

- 1** Using hybrid seeds
- 2** Sterilizing soil for nursery beds
 - 15-20cm
 - 1m
 - 10m
 - Prepare the bed
 - Moisten the soil
 - Cover with straw
 - Set fire
 - Level the surface
- 3** Sowing at right intervals
 - 15cm
 - 2cm
 - 15cm
 - 2cm
 - Healthy seedlings
- 4** Appropriate fertilizer and pesticide application
 - For one family drip system
 - 500m² (1/8 acre)
- 5** Drip irrigation
- 6** Planting at right intervals
 - 30cm
 - 30cm
 - 1m
- 7** Staking
 - Put stakes before the roots start to develop
 - Loop the string so that it won't fall
 - Tie every two weeks
 - Make sure that flowering and fruit formation stage does not coincide with Harmattan

Bad period

North South

North South

March January

November March

April February

December April

Good period

North South

North South

March

Week

Nursery

1

2

3

4

5

6

7

8

HELPING FARMERS REACH THE GOOD LIFE

Most smallholders had been following the same steps to grow their crops for years, with no knowledge of how small changes could make a big difference. Many were semiliterate or illiterate and so had not read about the latest techniques or research. TIPCEE found an effective way to show them how to enhance the quality and yield of their crops.

Project staff convened crop-specific workshops consisting of farmers and farmer organizations, local market women, processors, exporters, and technical experts from ministries, international agencies, nongovernmental organizations, and research institutes. Buyers described the quality of the crop needed; technical advisors determined which practices would result in that quality; and farmers agreed on which practices were feasible to implement. The result: a “top 10” list of things farmers could do to improve their practices.

After the workshops, TIPCEE prepared laminated “Good Life” posters showing farmers when and how to do each step. Using photographs, drawings, and simple instructions, the posters showed both what farmers had always done — starting with choice of seed and preparation of the ground and ending with an illustration of normal yield or harvest losses — and what they could do. The recommended practices added a step in some cases, but led to yields two or three times larger than before. Farmers could easily see their mistakes and how they could improve.

Farmers then visited demonstration sites to see the practices in use and the results. During these field days, lead farmers and MOFA agricultural extension agents taught from the posters. Participants took copies home, where they often hung on a wall, and referred to them before going to the field. The posters were also used to show buyers how the crops are produced on improved fields. TIPCEE disseminated “Good Life” posters for maize, tomato, pineapple, orange, organic orange, soya, okra, onion, and chili.

TIPCEE also created illustrated “Norms and Standards” posters for several key crops, helping smallholders and pack house employees assess quality.

TIPCEE was one of the first donor-funded projects in Ghana to apply GIS in the agricultural sector. More than 13,000 farms were mapped and more than 750 farmers and MOFA staff were trained to use the software.

GIS to large and small-scale farmers to build more integrated networks from which buyers could source a predictable supply.

GIS data give the farmers an address, while telling them exactly how much land they are planting, which helps them calculate the correct amount of seeds and inputs to buy, the number of laborers they need to hire, per-acre or per-plot

costs, and the projected harvest. The maps indicate to buyers, exporters, and certification bodies exactly where farms and farmer associations are located, and provide information on acreage planted and certification — literally putting farmers on the map for potential purchasers and helping to meet GlobalGAP Option 2 requirements for traceability. Overlaying this data with roadmaps and climate data creates a powerful tool for organiz-



A field monitor collects data using a global positioning system unit. The data, fed into a GIS mapping system, creates farm and plot maps and an associated database for planning, managing, and calculating productivity of the field. The mapping also assists with traceability, a Global-GAP certification requirement.

TIPCEE

“(GIS) has helped as a management tool to establish which (outgrower) farms do well and which farms need attention.”

**LOUIS DE BRUNO AUSTIN,
GENERAL MANAGER,
INTEGRATED TAMALE
FRUIT COMPANY**

ing production and harvest programs. Finally, providing banks with such precise data enhances transparency and facilitates due diligence and follow-up when contracting for a loan to a farmer or farm association.

The Ghana Environmental Protection Agency and MOFA were conducting GIS mapping, but TIPCEE ramped it up and tied it to commercial agriculture. The project also cut the cost of

mapping by training stakeholders (largely agricultural extension agents and farmer association members) to map acreage, create shape files, and integrate map data with farm data.

The mapping helps meet one of MOFA’s biggest challenges — collection of data on agriculture, which it needs for planning. GIS mapping supplies this data in a usable form, giving MOFA information for strategic planning and

“TIPCEE’s work on norms and standards has changed the whole face of the pineapple industry in terms of quality.”

**EMMANUEL OWUSU,
TECHNICAL MANAGER,
SPEG**

“Before YiPoCoMa, agriculture was a way of life. The farmers would grow a crop, keep some to eat, and if someone bought it, good. Now, it is a business.”

**TOM GAMBRAH,
MANAGING DIRECTOR,
PREMIUM FOODS,
GHANA’S LARGEST
MAIZE MILLER**

infrastructure placement. The Ghana Investment Fund for Telecommunications, for example, installed new cell-phone towers to increase coverage in productive export-oriented regions. GIS mapping also aids agricultural extension agents in tracking crop progress and pest infestation. Nongovernmental organizations and private sector representatives who come to MOFA for data also can use it.

Norms and standards. In many cases, farmers were unaware that they could earn more from their crops if they met certain quality standards. Smallholder cashew producers, for example, bagged whole and broken cashews together and sold them “as is.” They didn’t know that separating them according to grade and selling the whole cashews separately was worth the effort and small collateral investments, because they could get a much higher price. To disseminate industry norms throughout the value chain, TIPCEE supported the Ghana Standards Board to incorporate private sector industry players into the standard-setting process and to introduce the “Norms and Standards” posters. TIPCEE worked with the board to develop norms and standards for three varieties of pineapple, mango, two varieties of papaya, two types of medicinal plant, cashew, orange, and okra. The illustrated posters were given to farmers and posted at pack houses and other consolidation points. The Ghana Standards Board retains the templates for the original posters so they can make changes as needed after

TIPCEE and use the illustrated format for future crops.

Yield, post-harvest, cost, marketing methodology (YiPoCoMa).

When TIPCEE technical experts were working with maize smallholders, they kept hearing the farmers doubt there was a market for their increased output. The experts realized the farmers wanted to engage with the market but didn’t know how. The farmers needed to learn to relate their potentially higher yields to the costs involved and the market prices they could expect.

So, TIPCEE created a simple methodology to help farmers understand how they could move from near-subsistence existence to a commercial farming mindset. The model, taught in a series of sessions, guided farmers through simple calculations of expenses, yields, and post-harvest losses to estimate their profit. It showed them how to lower costs and risks and raise output.

Farmers learned that the price they receive for their crop depends on what the market is willing to pay, not what the farmers think it is worth. So, they have to work backward from the price they expect from the buyer, to determine how to balance their mix of inputs to boost productivity and post-harvest practices to minimize losses and come up with unit costs with an adequate risk margin. The methodology was piloted with maize farmers, to get them thinking about their return on investment and hidden costs. It helped them answer questions like: Should I take out

a loan? How much must I produce? How many bags and how much money do I lose through poor storage? What quality is the market looking for? As the contract farming relationship solidifies with a reliable buyer, the buyer often plays a more substantial role in guiding the farmers in the specific timing and cultivation techniques required.

The success of the methodology in getting maize farmers to consider all the challenges they face in growing, harvesting, and marketing their crops led to expansion of the training to tomato farmers. MOFA agricultural extension agents have been trained as YiPoCoMa trainers, so

they can continue spreading the methodology.

THE CROPS

Exports. TIPCEE faced a challenge in getting farmers to understand that to export they cannot cut corners, because they are competing with established suppliers. They were reluctant to invest. The demonstration plots served a triple purpose: showing farmers the improved yields and quality from new techniques, convincing them an investment was worth the effort, and showing buyers the higher-quality product they would get.

Pineapple. When TIPCEE started, pineapple farmers were losing their market for the traditional



Isaac Acquah, a member of the Bawjiase Pineapple Growers Association, had stopped growing pineapples when the European market began demanding the MD2 variety. Now, he is back in the pineapple business. MOFA supplied suckers, and TIPCEE and MOFA provided training. Mr. Acquah is planning to buy new acreage to increase his output.

JENIFER OTWELL/TIPCEE



A pre-shipment inspection at a pack house ensures that the quality of Ghana pineapples remains high. TIPCEE, SPEG, and the Ghana Standards Board introduced enhanced quality control procedures as a final step in improving norms and standards for export horticulture.

TIPCEE

Workers generate new pineapple plantlets in a private sector tissue-culture lab in Ghana. Such cultivation techniques are helping expand exports of sweet MD2 pineapples.



TIPCEE



“TIPCEE taught us good planting practices, disease control, irrigation, and how to fertilize. We knew crops needed fertilizer, but we didn’t know how to do it. Now, we are getting a higher yield.”

**LEMUEL MANTEY,
ALLOMAL FARMS,
SMALLHOLDER PAPAYA
FARMER**

Lemuel Mantey is a member of an outgrower group that began with 9 farmers and has grown to 19. The farmers had previously sold 20 percent of their crop for export, but, with the new Golden variety, they are able to sell 80 percent for export at 10 times the price.

TIPCEE

Smooth Cayenne variety, as consumers of fresh pineapple in Europe switched to the sweeter MD2 fruit. This left the Cayenne-based Ghanaian industry scrambling to develop a supply of the new variety; most smallholders, who were unable to invest in new planting material, lost everything.

Pineapple has a 13- to 15-month growing period, with many activities required in a short time. Flowering must be induced at the

right time to produce a continuous supply of uniform fruit throughout the year. The induction process for MD2 is different from that for Smooth Cayenne pineapples, so farmers had to learn the new process. Application of a ripener to turn the fruit from green to yellow — degreening — must be done properly so the pineapple is ready to harvest at the right time. And, after harvest, farmers need to take care of the mother plants from which the

SUCCESS STORY

Where Money Does Grow on Trees



Mesh Atteh Gidisu, a mango farmer near the village of Kpong, saw his harvests — and markets — expand after receiving GAP training and, as a member of a local farmers' group, GlobalGAP certification. TIPCEE also helped members market their fruit. Before, Mr. Gidisu sold his mangoes for as little as 7 U.S. cents each. Now, he gets several times that amount.

When mango farmer Mesh Atteh Gidisu harvested his major-season crop in July 2009, he was pleased. He had a larger harvest than in previous years, more of it was saleable, and he no longer was limited to selling his fruit at a low price at the local market.

As one of 250 members of a local farmers' group the Many Krobo Mango Farmers' Association — he was introduced in 2007 to good agricultural practices — by TIPCEE experts. Mr. Gidisu and his fellow farmers were unaware that their traditional way of growing mangoes could be improved.

“We were just peasant farmers,” he said. We didn't realize that mango farming was an industry and we didn't realize the potential.”

“Before, the trees were just growing wild. We didn't do any pruning,” he said. “We used chemicals, but we didn't do it effectively. We also learned how to handle them correctly when we spray.”

TIPCEE also taught the them about harvesting and post-harvest handling.

“For harvest, we just pulled the mangoes off the tree or used sticks to hit the fruit. Now, we know that if we do it right, the trees will give fruit for another season,” Mr. Gidisu said. With proper handling and cooperative climatic conditions, farmers in southeastern Ghana can harvest mangoes twice a year.

The Many Krobo farmers' group also underwent GlobalGAP training, to be able to export to high-value European markets.

“TIPCEE made sure our group is strong. Their lectures brought us more together around development. They taught us that our leaders should be elected and committed to knowing that the members need each other.”

He said that because of what he has learned, he is able to sell to companies like Shoprite, the South African supermarket chain with stores in 17 African countries. Now that his fruit has become competitive, he has invested in cardboard boxes for packing and labeling his mangoes for such buyers, as he sees a future in mango farming.

“They opened our minds to newer markets. For export, we know one day we will have big results.”

“This will help us solve our poverty. It will get us more money to pay for school fees. And it helps the community because we have hired people during harvest periods.”

DANIEL FUAFO, OKRA FARMER AND MEMBER OF THE KOTOKO TAKPOOM VEGETABLE GROWERS FBO, TALKING ABOUT THE INTRODUCTION OF A VIRUS-RESISTANT OKRA SEED AND IMPROVED FARMING PRACTICES

pineapples were picked so that they produce suckers that can be transplanted to start the next crop. By using suckers, farmers do not need to buy new planting material for each crop.

As an initial response to the changing market, MOFA’s Horticulture Export Industry Initiative established 83 MD2 nurseries to supply suckers to multiplication plots. TIPCEE and MOFA collaborated to show farmers the difference new cultivation practices could make and provide an initial base to re-start pineapple suckers. The team also demonstrated simple yield-increasing practices, such as covering the soil with plastic mulch before planting to

control weeds. As a result, pineapple farmers using improved practices increased yields by 60 percent and gross margin by more than 200 percent over their former Smooth Cayenne fields.

TIPCEE continued USAID’s association with the SPEG by working with the group on GAPs training. The project developed export norms and standards for three pineapple varieties, and hired a third-party inspection firm — Bureau Inspection Valuation Assessment Control — to provide quality inspections against these norms at the port. The inspection firm also trained SPEG packhouse staff in conducting pre-shipment inspections to ensure



A lead farmer demonstrates how to apply a pesticide using GlobalGAP-compliant safety gear and procedures. TIPCEE activities stressed reduced pesticide application techniques and enhanced safety protocols.

TIPCEE

that quality of the Ghana brand remains high. The inspections approach continues to this day.

GlobalGAP certification instructed farmers in the agronomic protocols for MD2, promoted low-cost, low-tech solutions to infrastructure needs and measuring devices, and provided a methodology for developing an FBO-generated quality management system — all approved by GlobalGAP. Before TIPCEE, only one smallholder group was GlobalGAP-certified. By project end, 27 groups were certified and selling pineapples throughout the export value chain.

Most processors of fresh-cut and dried pineapple use MD2. Ghanaian juice processors, however, preferred to stay with Smooth Cayenne, which has a better balance of flavor, sugar, and acidity, and more juice. TIPCEE worked with GTZ to teach improved protocols for processed pineapple, focusing on sugar content, pulp, and weight. In collaboration with GTZ and selected processors, 21 Smooth Cayenne demonstration sites were established.

Mango. Several Ghanaian agencies helped introduce improved mangoes to Ghana. Previous USAID food security programs also promoted the planting of fruit trees and introduced grafted mangoes to the country. That project met its initial objective, and mangoes became a novelty on Ghana's urban markets. However, farmer incomes plummeted because of low yields. Farmers sold their fruit to local markets, as export markets could not be tapped

because of low quality and high levels of pest infestations. Solving the problem was urgent, as the popularity of the crop had induced many smallholders to plant orchards and this production was due to hit the market over the coming years with no export outlet.

TIPCEE laid the groundwork to ensure an upcoming surge in production would find a commercial outlet in urban and export markets. At the outset, farmers were trained on critical pruning and pesticide application techniques to control major pests while ensuring conformity with pesticide residue requirements. Mango farmers cultivating and harvesting with improved practices raised quality and increased yields and sales. After training FBO members in GAPs, integrated pest management, and harvest and post-harvest protocols, the project began preparing large associations in the south to embrace GlobalGAP safety procedures and undergo certification. TIPCEE introduced GIS technology to the sector, mapping farms to give them greater visibility to agro-input dealers, access to credit, the ability to track pest infestation, and the use of technology to attract infrastructure development, such as bulking points and feeder roads. From work with an initial group of about 20 farms, there are 172 GlobalGAP-certified mango farmers across six associations. In partnership with GTZ, the program was expanded to the Brong Ahafo Region, where certification audits were completed by the end of the project.

TIPCEE also assisted the Integrated Tamale Fruit Company, an organic mango exporter that works with more than 1,300 farmers from the Organic Mango Out-growers Association, to establish and disseminate appropriate

production practices. The company adopted GIS technology for monitoring and traceability with technical assistance from TIPCEE, and now manages its own platform and database. To improve standards for all



A member of a farmer-based organization in the Volta region harvests a new variety of high-yielding, virus-resistant okra. TIPCEE staff introduced the new variety and trained farmers and pack house employees on improved techniques to cultivate, harvest, package, and market their crops.

TIPCEE

Ghanaian mangoes, the company worked with TIPCEE and the Ghana Standards Board to sponsor printing of mango “Norms and Standards” posters. The team also helped the company prepare training materials for fair trade organic production, as one buyer TIPCEE linked to the growers — Volta River Estates Ltd. — needed fruit with that certification.

The achievement of certification enabled TIPCEE to mentor leading groups such as the Yilo-Krobo and Dangme West mango farmers associations in partnerships with European buyers and local exporting firms on adopting export norms and standards, export grading and post-harvest prac-

tices, improved shipping boxes, and trials of sea-freight shipments. This will set the stage for a growing export base that will give farmers a stable outlet for their produce in the coming years.

TIPCEE also pioneered sea-freight shipments of mangoes to Europe, the first time exports had been delivered other than by air. Sea freight offers cost savings, but it presents its own challenges. The industry has learned from the first shipment and would like to try another one. At the same time, a growing fresh-cut fruit export business has expanded and requires GlobalGAP-certified products, providing yet another outlet for high-quality mango.

A farmer refers to a Good Life poster for a top-10 list of ways to improve her maize crop. The TIPCEE-prepared visual manuals, given out at demonstration plots, show the increased yields possible with best practices.



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Farmers celebrate their harvest of a new variety of maize that poultry producers favor because it results in eggs with a bright yellow yolk and higher protein content. TIPCEE introduced the high-yielding hybrid to reduce poverty among farmers and boost domestic production.

MOBILE SHELLERS FIND A MARKET

To process crops more quickly, thus ensuring healthier food for animals and humans, TIPCEE deployed mobile maize and soya shellers to supply-chain innovators: a food-meal processor, a food-oil manufacturer, and an agronomic service provider. The team first worked with GRATIS, a Ghanaian machinery manufacturer, to replicate high-efficiency shellers imported from Asia. TIPCEE advised GRATIS on ways to improve the machines' performance and reduce manufacturing costs. Initial production of 10 shellers soon brought the GRATIS office in Sunyani orders from two major companies for 40 more.

Papaya. TIPCEE used demonstration plots to introduce a new variety of papaya — Golden — and to help farmers form the Nsa Papaya Growers Association and learn about the new variety. European buyers prefer Golden papayas, which have a thicker golden skin and longer shelf life than the previously grown variety. Norms and standards were established for Golden and Sunrise Solo varieties. Demonstration plots also introduced farmers to low-pressure drip irrigation. The method allows growers to better target the water to the plant and uses less energy and water than other types of irrigation. It produces larger, better-quality fruit, and a higher yield. Harvest training showed growers how plastic crates could reduce post-harvest losses. Papaya farmers cultivating with drip irrigation and improved practices increased yields, quality, and sales. During peak production periods, gross margins

more than tripled over cultivation of the Solo variety.

Asian vegetables. For export vegetables, demonstration plots showcased good agricultural practices for okra, chili, and baby corn, and introduced high-yielding, disease-resistant seeds. TIPCEE piloted low-pressure drip irrigation for chili and okra, and developed norms and standards for okra. Poor access to pre-shipment cooling facilities hampered exports of baby corn. Exports of all targeted vegetables suffered from a lack of bulking points or hubs and well-equipped pack houses but TIPCEE helped FBOs establish three packing shed consolidation points.

Okra farmers planting disease-resistant varieties now enjoy an increase in yield and quality. For chili, yields for new varieties cultivated with improved practices increased, and quality was greatly

Workers at a community depot use a machine to shell and bag maize before weighing it for sale to the animal-feed industry. The process reduces shelling time and broken kernels, adding value to the product.

TIPCEE



enhanced, with higher-quality planting material leading to higher sales. However, chili farmers have not realized the full potential of the new varieties, as they continue to master the GAP protocols.

The Ghana Association of Vegetable Exporters wants to become more active, so TIPCEE helped it prepare a business plan to guide it in conducting more activities. One challenge for the sector is sourcing seeds, because seed companies are

not represented in West Africa. As a result, growers have used seeds from previous harvests, which do not often produce a good crop. The association has been able to import okra seeds, and wants to import chili seeds for its members.

Cashew. TIPCEE worked with the Cashew Growers and Processors Association of Ghana, MOFA's Cashew Development Project, and the Ghana Standards Board to develop and promote standards

and posters on grading, sorting, quality, maturity, and packing to bring growers and processors up to international standards. The project also trained agricultural extension agents to be able to pass on these requirements to farmers. The extension agents also conducted GIS mapping in the Eastern, Brong Ahafo, and Northern regions, reaching 3,583 farms.

Medicinal plants. TIPCEE collaborated with Agribusiness in Sustainable Natural African Plant Products to train collectors on improved sustainable harvesting methods and post-harvest collection of two medicinal plants: *Voacanga africana* (used to enhance memory) and *Griffonia*

simplicifolia (used for insomnia, anxiety, and depression). With the Ghana Standards Board, TIPCEE also helped establish norms and standards. The plants are gathered from the wild and sold to informal partners acting as trading agents.

Local/regional markets. For food crops, the project had to reach rural households spread over wide areas (growing maize, oranges, tomatoes, and onions). The farmers needed to learn to produce crops at a level of quality for the expanding processing industry, which requires appropriate post-harvest handling and distribution.



The seeds and bark of the native *Voacanga africana* tree, one of Ghana's most important medicinal plants, are prized as a memory enhancer. TIPCEE worked with the group Agribusiness in Sustainable Natural African Plant Products to train collectors to harvest the plant more sustainably, and package and market it more effectively. The team also worked with the Ghana Standards Board to distribute export norms and standards posters.

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“With what TIPCEE taught us, almost all the seeds will grow and the yields increase.”

**MAMA AFOLEY,
HEAD OF THE GHANA
NATIONAL TOMATO
TRADERS ASSOCIATION**

TIPCEE



Commercial maize. Ghanaian maize smallholders, representing some of the country’s poorest households, achieve low average yields per acre, and this inefficient production, along with poor post-harvest activities, has made them uncompetitive in the marketplace. TIPCEE collaborated with district agricultural extension agents to provide extensive training to help tens of thousands of farmers increase yields varying from 10 percent to 100 percent, depending on the degree of GAP adoption. By increasing the productivity of their fields, improving the quality of harvested maize, and reducing post-harvest losses, farmers can exploit the situation when prices are high and better tolerate downturns in market price or price hikes on needed inputs. Project activities also substantially improved market links, leading to increased private enterprise investments in the supply chain serving the animal-feed market.

Seeds are one of the lowest-cost inputs for maize, which should lead to higher incomes from increased yields. Working with MOFA, TIPCEE introduced farmers in the poultry zone — Ashanti and Brong Ahafo regions — to a high-yielding yellow hybrid, Golden Jubilee, and to improved white maize varieties. Poultry producers prefer corn from Golden Jubilee seed, as opposed to the white corn farmers used to grow, because it results in eggs with a bright yellow yolk and higher protein content.

To ensure that the new seed produced up to its potential, TIPCEE trained the farmers in good agricultural practices. In the first year of assistance, farmers learned by observing demonstration plots to plant in lines rather than in a broadcast pattern. With improved certified seed, they only needed to plant one or two seeds per hole rather than four; each seed then gets

more nutrients and produces more maize. So, the number of seeds that would have been used for one acre now stretches to two acres.

The following year, farmers were shown how to compete for higher sales. An important part of this training was YiPoCoMa. This changed the mindset of some farmers to applying business principles to their farms, resulting in a shift from a more subsistence-minded approach to commercial-level operations. This is evident in negotiations with market partners, usage of improved farming technologies, adoption of post-harvest management, input credit sourcing and management, and strong advocacy initiatives. TIPCEE taught lead farmers YiPoCoMa and conducted training-of-trainers with the farmers and MOFA extension agents, so they can train others. It also introduced them to a bank so they could continue to expand their production.

An example of this success is Jeremiah Addai, a lead farmer near the village of Kona. His yield has increased from 6 bags per acre to 15. He is able to plant two crops per year now (including one in the minor season). Before his training, he sold to local market women. Now he is selling to poultry farmers, who in early August were pressuring him to harvest early so they could get their supply.

In anticipation of a growing demand within the grain and processed food sector, TIPCEE initiated the public-private partnership between Kwame Nkrumah University of Science and Technology

in Kumasi and the processed food and feed industries by establishing a commercial mycotoxin laboratory. The presence of aflatoxin and other mycotoxins, produced by fungi that colonize crops, is a major deterrent to sales for human and animal consumption. The partnership involves poultry farmers, feed mills, and grain, legume, and chili processors, with support from USAID. The lab will help promote a mycotoxin management surveillance regime for food safety.

Tomato. Ghana imports a large proportion of its annual consumption of tomatoes from Burkina Faso, as buyers complain about the poor quality and insufficient supply of the Ghanaian crop. Producers have been no happier, citing poor-quality seed, high-cost inputs, and difficulty in marketing. TIPCEE worked with the 6,000-member Ghana National Tomato Traders Association and lead farmers to introduce new varieties and improved farming practices and technologies. The project introduced high-yielding seeds to farmers in the mid- and northern tomato belt. Through GAPs training, TIPCEE also introduced better nursery management practices, meaning the farmers could use one-tenth the seed for the same acreage. Although the project team explored low-tech drip irrigation for families with small plots, its cost-effectiveness was closely tied to the productivity of the farmer and the prevailing price for tomato, and it was not a suitable technology for every farm. The project also brought growers together with the traders, association so they could learn

what buyers wanted. As a result, tomato farmers using improved practices more than doubled their yields using improved inputs and drip irrigation technology for dry season farming. Input supply companies were so impressed with the results that they funded the production of “Good Life of Tomato” posters.

Orange. The orange industry was highly fragmented between

growers and buyers (processors and fresh market) and lacked data for pests and diseases, rainfall, yield, and sales. The TIPCEE intervention in this sector has been instrumental in creating several substantive market links between smallholder associations and processors. TIPCEE held several industry-wide forums that have created new product quality standards, market protocols, and food safety training, which have improved the supply chain. In

A citrus grower teaches others how to properly space orange trees and intercrop them with maize or plantain, just two of the steps illustrated on the Good Life poster beside him.

TIPCEE





Farmers pick through oranges that have been piled in the open along with damaged fruits and twigs. By spreading the crop under a shade and removing twigs and bad fruit — TIPCEE best practices — farmers can earn higher yields and more profit.

partnership with the University of Ghana Agricultural Research Centre at Kade, TIPCEE established 30 demonstration plots to generate this data, which was disseminated to farmers, processors, and MOFA. The project trained farmers in GAPs for organic and conventional production, resulting in higher yields and quality. Particularly important were post-harvest techniques of sorting, grading, loading, and transport. Field days gave farmers an opportunity to learn about treating diseases, tracking fruit fly infestation levels and treatment tactics, pruning, and applying manure. TIPCEE trained farmers on standards for processing and linked them to Sunripe Food Processing Company. The project also coordinated with MOFA-Central Region, GTZ, and the Citrus Growers and Marketers Association of Ghana to develop a GIS database to help processing plants locate smallholders.

Onion. Ghana imports many of its onions from Niger, Mali, and Burkina Faso. To encourage buyers to look at the domestic supply, late in the project TIPCEE worked with the Ghana National Onion Traders Association and the Ghana Agricultural Producers and Traders Association to establish an onion market network in the Northern and Upper East regions. The project introduced almost 9,000 farmers to good production and post-harvest management practices through demonstration plots, including staging a drip irrigation trial and introducing the popular Niger-grown Violet de Galmi variety, which reaches maturity 25 days earlier than the traditional variety. TIPCEE also trained growers in harvesting at the correct time and in post-harvest handling practices. Using what they have learned, farmers will be able to produce

Inspecting okra bound for supermarkets, a vegetable packer works to meet increasingly stringent standards for food quality and safety, including an unbroken temperature-controlled supply chain. TIPCEE's introduction of a virus-resistant okra seed and improved farming practices is helping Ghana capture more of the specialty vegetable market, especially in the United Kingdom.

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onions at a time of year when neighboring countries cannot.

LOOKING FORWARD

The agribusiness sector for the targeted commodities has a strong foundation for growth. Farmers have learned techniques to improve

the quality and quantity of their harvest; new, popular varieties have been introduced and accepted; and production norms and standards have been established when needed. New international market opportunities have been opened for farmers who have achieved

GlobalGAP certification. Growers have learned that by working together, in farmer-based organizations, they can build their knowledge of proper production procedures and can negotiate better prices from buyers.

TIPCEE cost-shared certification with the FBOs, easing the way for them to launch into export markets. Buyers will need to assist these groups with financing for continued expansion and maintenance of GlobalGAP audits.

Some smallholders now have more acreage and may need help to move to a larger, commercial level. They are proactively seeking buyers on their own — a sign that

they have absorbed the lessons TIPCEE taught and will continue applying them.

Importantly, communications among industry players for these crops — producers, government ministries, district-level agricultural extension agents, and processors and exporters — is broader and stronger. Links established between smallholder farmer groups and purchasers of their crops have the potential to continue benefiting both. The value chains are more solid.

GIS mapping and database management is becoming mainstreamed as a key management tool. Norms and standards have



An employee of a member of Sea-freight Pineapple Exporters of Ghana tends suckers that will be transplanted for the next crop of MD2 pineapple. Improved nursery techniques are enabling Ghanaian farmers to respond to European consumers of fresh pineapple, who have switched from the traditional Smooth Cayenne variety to the sweeter MD2 fruit.

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TIPCEE identified market opportunities where Ghanaian suppliers could apply their competitive edge, then strengthened market linkages and improved the flow of market information within specific value chains. With industry partners in the National Horticulture Task Force — exporters, producers, and public sector agencies such as MOFA, Ghana Export Promotion Council, and universities — TIPCEE supported development of multiple products, including:

- National horticulture logo (above) helps brand Ghana at international trade fairs and with marketing materials.
- www.ghanafreshproduce.org updates market prices for selected commodities, with market intelligence reports, industry statistics and news, technical documentation, horticultural events, and a directory of suppliers. Managed and updated by the Federation of Associations of Ghanaian Exporters.
- Market intelligence reports for each product describe seasonal market opportunities, import evolution over the last 10 years, comparison between supplying countries, logistics used by foreign suppliers (sea or air), and competition for the last 12 months.
- Support to industry participation in the Berlin Fruit Logistica trade fair representing key decision makers (more than 40,000 visitors from 120 countries) at various levels of the European Union fruit and vegetable supply chain. With the National Horticulture Task Force, TIPCEE redesigned the Ghana booth to increase visits and impact on the market players.



By the time this pack house employee stacks open-tray boxes of papayas for export, the fruits have been harvested, transported, weighed and sorted, washed, dipped, dried, and packed. Such attention to detail — reinforced by TIPCEE's training guides — means ripe, uniform, healthy fruit.

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always been a priority for the government, but now the Ghana Standards Board has a new poster format for expanding dissemination efforts.

MOFA agricultural extension agents are equipped to continue GIS mapping and training for good agricultural practices, norms and standards, and GlobalGAP certification. Printed training materials were packaged in crop-

specific toolkits for use by industry, government, or other donors. The toolkits include fact sheets on the state of each commodity, including TIPCEE interventions, and suggestions for next steps. TIPCEE also provided agricultural extension agents with detailed guidelines for continued YiPoCoMa training, along with instructions for customizing the training beyond maize and tomato.



Stakeholders at a public-private dialogue confer on ways to encourage trade through national policy improvements.

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CHAPTER TWO

IMPROVING THE ENABLING ENVIRONMENT FOR PRIVATE SECTOR GROWTH

EMBEDDED ADVISORS SERVE DUAL PURPOSE

TIPCEE advisors, in concert with other project consultants, conducted and assisted with analyzing 33 policies, reviewed and drafted 19 laws, regulations and administrative procedures, supported 99 public-private dialogues, and enhanced capacity in key research and policy analysis units.

The project focused on three primary economic sectors — trade, finance, and agriculture — assisting with policy analysis, development, and implementation, and building institutional capacity to create government policies that will encourage private sector growth. In addition, the project worked with public and private sector partners on labor, macro-economic policies, information and communication technology, and energy issues. TIPCEE linked its approach to Ghanaian government strategies, including the Trade Sector Support Programme, Financial Sector Strategic Plan, Private Sector Development Strategy, revised Food and Agriculture Sector Development Policy, and Growth and Poverty Reduction Strategy II, as well as to ongoing donor-supported projects.

Embedded advisors in the ministries of trade and finance,

plus the Bank of Ghana, served a dual purpose of building institutional capacity to create business-friendly policies and assisting with development of selected policies judged necessary to encourage growth. The advisors were respected Ghanaians, aware of U.S. government interests and constraints, who worked day-to-day within their assigned institutions. They were dedicated to working with ministers and senior staff to promote best practices in policy analysis and implementation, as well as to assist with mentoring junior staff. Placing the advisors within government institutions allowed them to be an intimate part of the policy development process and to see first-hand the technical and analytical capacity building that was needed. Their onsite presence helped TIPCEE gain ministry attention and encouraged communication of ministry needs back to the project.

Advisors educated ministries on the importance of strategic policies and introduced models for developing them. TIPCEE advisors also showed officials new methods for analyzing the consequences of policy changes before implementing them.

A significant part of evidence-based decision-making is stakeholder involvement. TIPCEE supported extensive public-private sector discussions to vet potential policies and get private sector buy-in. The team kept the opposition party informed throughout policy development exercises before the December 2008 presidential election. As a result, the new government adopted the proposed changes. One embedded advisor was even asked to advise the transition team.

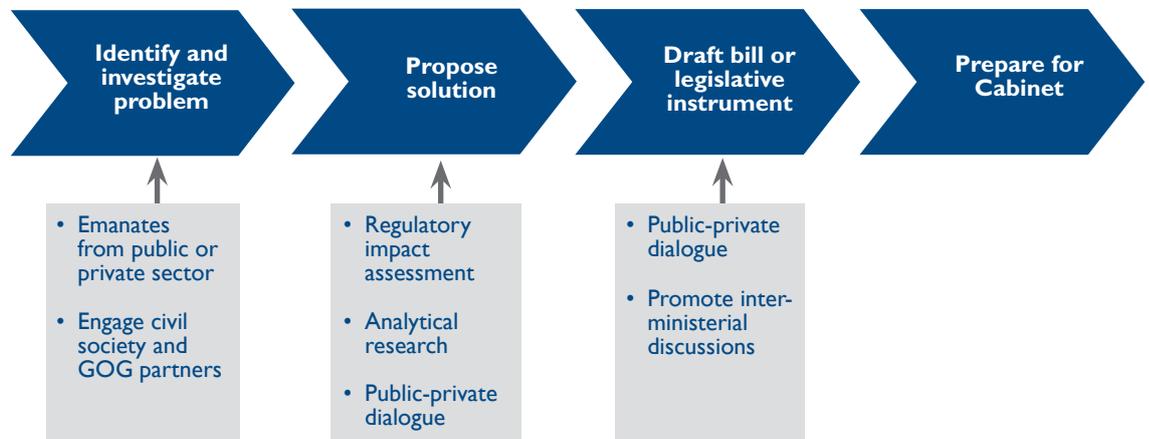
TIPCEE's embedded advisors, staff, and consultants advised on

numerous policy issues, conducted studies, assisted with analysis, and helped draft legislation in seven policy sectors. In addition to the highlights discussed below, further details are provided in Annex B on the CD-ROM.

IMPROVED TRADE REGIME

The underlying principle of Ghana's national trade policy is that the private sector is the engine of growth, with the government providing a trade-enabling environment. TIPCEE embedded a full-time advisor in the Ministry of Trade and Industry to work with MOTI on examining private sector competitiveness issues and facilitate public-private dialogue on policies to encourage growth. Within the government's medium-term trade strategy, TIPCEE provided support on trade facilitation and import-export issues.

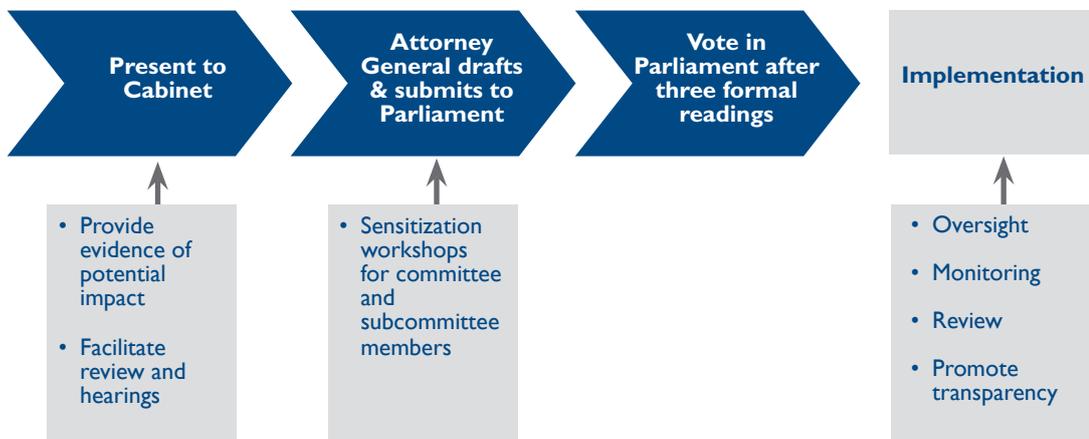
Policy Development Process





Port workers at Tema load pineapples onto a ship for export. The fruits are protected in dry, rigid, food-grade packaging that can stand up to stacking. Each package reveals fruits of similar maturity, size, and color — a mark of high-quality post-harvest handling.

TIFCEE



“The Tariff Advisory Board flows from the Ghana Trade Policy which, in the main, seeks to provide a clear and transparent guideline for the actions of government in the trade sector and also increase the access to and competitiveness of Ghanaian business in international and domestic markets.

Indeed, the establishment of the Tariff Advisory Board is to strengthen institutional arrangements for tariff review and determination of trade contingency measures. In addition, it will serve as the focal point for collating and analyzing information and data to guide decisions on tariff-related issues.”

**HANNA TETTEH,
MINISTER OF TRADE AND
INDUSTRY, SPEAKING AT
THE INAUGURATION OF
THE TARIFF ADVISORY
BOARD, SEPTEMBER 1, 2009**

Establishment of the Tariff Advisory Board. A major accomplishment was creation of a Tariff Advisory Board, the precursor of the Ghana International Trade Commission. When TIPCEE began, the government had been unable to exercise its rights as a World Trade Organization member because it had no laws or agency to administer trade remedies. The private sector sometimes asked the government to impose anti-dumping duties, but industries didn't know how to demonstrate the need for them and the government had no way to respond. The government also lacked a mechanism for balancing the revenue benefits with the costs to industry of specific tariffs.

MOTI wanted more than a consultant to assist it with creating a unit to respond to these requests. So, MOTI officials met with TIPCEE experts nearly every week for almost two years to design a Tariff Advisory Board based on Ghana's particular circumstances. The design included not only the institutional framework for the board, but also draft legislation. That provided the basis for detailed consultations with the government and private sector. The process also was an opportunity for MOTI staff to build their own capacity.

The previous government initiated steps for the board and the future Ghana International Trade Commission. Because the measures were carefully prepared and well documented — something achieved with TIPCEE support — the plans were clear enough

for the new trade minister to submit the Cabinet memo to begin the process and to proceed to appoint board members. The Tariff Advisory Board, launched in 2009, will test procedures and build capacity and knowledge within the board's technical secretariat and the private sector for the launch of the commission in three years. Lessons learned will be incorporated as the transition occurs.

To show the government how to measure the economic consequences of decisions on tariffs, TIPCEE worked with ministry staff to develop the Effective Rates of Protection tool. Working with project technical experts, MOTI staff surveyed more than 100 firms to determine where tariffs weighed heavily on industry. They asked industries what inputs they used and what other constraints, such as energy, infrastructure, or water, they faced. MOTI staff also collected finance and operating data. The aim was to ensure that tariffs are used to promote trade, by projecting costs and benefits of specific tariffs. The government will be able to use the tool to help ensure that tariff rates enhance private sector competitiveness.

Doing Business indicator. The World Bank's annual Doing Business survey is a benchmark for measuring the relative ease of doing business in about 180 countries, and a basis for understanding and improving the regulatory environment for business in those economies. Countries vying for foreign investment realize the importance of improving

“Working with TIPCEE on the Tariff Advisory Board was a very consultative process involving our stakeholders. They helped us clarify the structure, rules, process, and legal framework. They didn’t just come in from somewhere and tell us what to do. TIPCEE gave us support to design what we really wanted.”

**GEORGE FYNN,
FORMER DEPUTY CHIEF
COMMERCIAL OFFICE, MOTI**

their ranking. A technical team from TIPCEE, GTZ, and MOTI adapted the World Bank’s approach to create a methodology more representative of the situation in Ghana for two indicators: measuring time and costs involved in starting a business, and trading across borders. The team then completed a baseline survey of these two indicators and recommended changes to combat policy constraints and administrative bottlenecks. The Registrar General’s office incorporated recommendations from the report into its reform process. Combined with an on-going automation reengineering effort, the government has cut the time needed to register limited liability companies in half, from 14 to 7 working days. Officials expect to cut that in half again by the end of the year using improved forms. Ministry officials were trained on how to repeat the survey, which will be conducted

in addition to the World Bank’s own review, to give the government the basis for in-depth reforms. The Ghanaian government also plans to customize other indicators.

Economic Partnership Agreement. The European Union is negotiating these accords with 76 countries in Africa, the Caribbean, and the Pacific, under the framework of the Cotonou Partnership Agreement, which aims to reduce and eradicate poverty and gradually integrate the countries into the world economy. The agreements govern tariffs and trade with the European Union, calling for reciprocal market access.

Failure of the Ghanaian government to enter into an economic partnership agreement would effectively mean freezing many exporters out of the lucrative European market. Working with the Federation of Associations

With ship-to-shore gantry cranes and a dedicated container terminal, the port of Tema, near Accra, handles the majority of Ghana’s import and export cargo. TIPCEE developed a roadmap to help Ghana’s government take over core customs-valuation procedures, now performed by destination-inspection companies, in 2010.



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A gantry crane loads a container ship with exports at the Port of Tema, a process that also depends on unseen mechanisms that enable the Ghanaian government to balance revenue benefits of specific tariffs with the costs to industry. TIPCEE supported Ghana's Ministry of Trade and Industry as it launched the Tariff Advisory Board, which is an interim step to establishing the Ghana International Trade Commission. The board and commission will hear private sector complaints of unfair practices and administer remedies, and analyze potential consequences of proposed tariffs using a new effective-rate-of-protection methodology.

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of Ghanaian Exporters, TIPCEE educated association leaders on the ramifications of the accord, and then helped them gather data to support their position. The federation informed the news media about the agreement and presented its case to the government. In December 2008, the government signaled its intention to enter into an agreement.

Collaboration with Customs through the Trade Sector Support

Programme. MOTI's Trade Sector Support Programme identified numerous issues involving Ghana's Customs, Excise, and Preventive Service (CEPS) and the private sector. TIPCEE provided technical support to address several of those issues, including the private sector's concerns with duty drawback and value-added tax refunds. CEPS is expected to take over the valuation and classification functions beginning in 2010.

AVOIDING FINANCIAL PITFALLS

Building on the draft regulations developed by TIPCEE, the Ghana Securities and Exchange Commission is now working on a final code for over-the-counter trading to protect all investors in public companies, whether in listed or unlisted securities.

TIPCEE's work on the project plan and on two studies of WTO compliance for valuation and fees will support them in that effort. Further technical assistance was provided to determine the WTO consistency of fees charged for import and export and to compare the fees with those of other West African countries. These studies provided CEPS, as well as other ministries, departments, and agencies involved in trade transactions, a well-researched analysis of Ghana's competitive strengths and weaknesses and recommendations to increase its competitiveness in the region.

IMPROVED FINANCIAL INTERMEDIATION

The government's Financial Sec-

tor Strategic Plan, completed in 2003, had 98 recommendations for reform. TIPCEE advisors helped to move forward many of the recommendations, and looked for opportunities to add value to the activities, particularly in legal and regulatory reform. They helped with policy analysis, drafting of legislation, stakeholder consultations, support for the legislative process and Parliament Finance Committee, and in some cases, implementation of laws after passage.

Capacity building at MOFEP by TIPCEE's embedded advisor resulted in creation of two units. TIPCEE was involved in designing the structures and work plans, and in setting up procedures

Bank transactions are just one step in starting a business in Ghana, a process the government is working to streamline. TIPCEE, working with the Ministry of Trade and Industry and GTZ, helped develop a Ghana-specific methodology to measure the time and cost of starting a business and trading across borders.



TIPCEE

of these two units. The Project and Financial Analysis Unit will ensure that large capital government projects go through a rigorous value-for-money analysis and bring the private sector into construction of large infrastructure projects. The Financial Sector Division will work to create an enabling environment for insurance, banking, stock markets, pensions, and venture capital.

Sovereign bond. In 2007, the Ghanaian government signaled its intention to diversify its sources of funding following completion of its program under the International Monetary Fund's Poverty Reduction and Growth Facility in 2006. It went on to issue a 10-year, \$750-million Eurobond, which was more than four times oversubscribed. In doing so, Ghana became the second sub-Saharan African country, after South Africa, to tap the global capital market.

The project supported the government in this process, even though issuance of the bond was not a TIPCEE activity. However, TIPCEE participation illustrated how the government valued the embedded advisors and often called on them for assistance with many ministry priorities. The transaction was managed by a core team of senior ministry officials, including TIPCEE's technical advisor to the Ministry of Finance and Economic Planning, who was embedded in the ministry, along with the deputy governor of the Bank of Ghana (formerly a TIPCEE embedded advisor), and a USAID treasury advisor. In the initial stages,

it was necessary to mount a sensitization program within the government on the operation of international capital markets and the demands that market participants would make on Ghana in terms of economic discipline.

The transaction was a turning point in financing Ghana's development, with a growing use of capital-market resources to complement traditional concessional financing from multilateral and bilateral sources. This assumption of capital-market debt imposes fiscal discipline on Ghana, as these borrowers expect full, on-time payments for the loan. The transaction also integrates Ghana more fully into the global financial market: The country's private sector is in a better position to enter international credit markets on the back of this benchmark sovereign issue.

Financial literacy. TIPCEE provided technical assistance to the Ministry of Finance and Economic Planning to enhance financial literacy. This included urban and rural literacy studies to provide baseline data and inform the design of two financial literacy weeks in 2008 and 2009. Details of the studies are included in Annex B. Working with GTZ, TIPCEE also supported the creation and printing of financial literacy educational materials for distribution across the country. The ministry has now established a permanent financial literacy desk and developed a national literacy strategy to ensure Ghanaian small businesses and consumers understand both the benefits and

costs related to different financial services.

IMPROVED AGRICULTURAL POLICIES

The project's aim for agricultural policy assistance was to enhance competitiveness by improving transparency in policy formation and private sector regulation. Public-private sector collaboration was key, along with an emphasis on use of evidence-based policy decision-making.

Largely through a technical advisor to support MOFA and technical assistance from the University of Ghana, TIPCEE joined other donors to support review of the Food and Agri-

culture Sector Development Policy (FASDEP) over a two year period. Deficiencies in the policy were remedied in FASDEP II, and TIPCEE created a short, easy-to-understand summary of the policy's objectives and strategies for distribution to agricultural extension officers, junior and senior high schools, farmer-based organizations, and others. As a result of extensive consultations, an informed private sector will be able to monitor whether the government is living up to its promises.

Commodity studies. After this policy was developed, the government realized that its limited resources needed to be allocated

Workers wrap harvested banana bunches in plastic sleeves and hang them from racks for transport to distant pack houses. Improved record-keeping and post-harvest handling have increased the health many horticulture commodities reaching export markets — and farmers' profits.

TIPCEE



Workers cut banana “hands” from bunches, placing them in water. Other workers will cut the hands into clusters of five to seven fingers and send them on to be labeled, boxed, and exported. After visits from Chiquita and other multinationals, TIPCEE presented decision-makers from MOFA and MOTI with comprehensive studies detailing opportunities for expanding banana exports and improving the enabling environment for investment.



TIPCEE

“In terms of tracking and managing and filing, the case management system is really going to help us. Now, when we receive a complaint, we will not be totally dependent on a physical document.”

**BERNICE WELBECK,
ADMINISTRATIVE OFFICER,
NATIONAL LABOUR
COMMISSION**

based on competitiveness and the viability of each farm subsector. To help show MOFA how to decide on the use of public resources and on future policy, TIPCEE conducted an economic benefit assessment of the banana sector. The study looked at the policy environment of Ghana’s competitors for banana exports and the comparative advantages of the sector. The goal was to demonstrate to the government how it could use hard research data to drive policy. After the banana assessment was complete, MOFA asked for similar studies on rice and mango. The project left a template for the assessments with policymakers and the private sector that detail the costs and projected direct and indirect benefits, including gains in employment.

Sector profiles. TIPCEE also supported publication of two profiles assessing the competitiveness of

the agribusiness sector. “Ready for Takeoff” presents the potential of Ghana’s fresh horticulture sector. “Winning the Processing Game” covers the processing sector. Both will depend on motivated entrepreneurs and supportive policies for success, but each has other requirements. Ghana distributed “Ready for Takeoff” overseas through embassy commercial offices and used it in marketing the sovereign bond. Details of these studies are in Annex B.

REMOVAL OF LABOR MARKET-DISTORTION POLICIES AND THE NATIONAL LABOUR COMMISSION

As TIPCEE was launched, the government of Ghana had recently enacted a new Labour Act, which established Ghana’s National Labour Commission, but changes in the law had not yet been implemented. In 2006, TIPCEE helped the commission

“This new Foreign Exchange Act, by opening up Ghana’s current and capital account, will support Ghana’s goals of increasing export competitiveness ... this means higher growth and lower poverty.”

**MAHAMUDU BAWUMIA,
FORMER DEPUTY
GOVERNOR, BANK OF
GHANA**

create an operational plan and develop a communications strategy to aid the body in publicizing the law. Educational posters, brochures, and bookmarks were disseminated throughout the government and private sector, while the commissioners held awareness forums. In the first two years of the project, TIPCEE supported public-private dialogues to educate the government, private sector, and citizenry on the commission’s purpose and procedures.

TIPCEE supported the commission with capacity building for commissioners, arbitrators, and mediators, including workshops for mediators and a study tour

for officials to become familiar with operations of the U.S. National Labor Relations Board and the Federal Mediation and Conciliation Services. During the tour, the Ghanaian staff became familiar with best practices and learned how to respond to pressure from multiple stakeholders who had conflicting ideas about how the new commission should operate.

During the U.S. study tour, Ghanaian officials saw an electronic document management system and realized that such a system would help them track petitions and research cases. TIPCEE tailored a document management application for the commission’s



An educational poster promotes Ghana’s nascent National Labour Commission, which was authorized in the Labour Act that passed just before the launch of TIPCEE. While the commissioners held awareness forums, TIPCEE assisted them in disseminating materials and supported the commission in efforts to educate public and private sector stakeholders.

TIPCEE

Armed with a certificate of registration for his company, an entrepreneur faces a short wait at the bank. Doing business in Ghana has become easier, in part due to reforms in the Registrar General's office undertaken with support from a technical team from TIPCEE, GTZ, and MOTI.

TIPCEE



processes, procured the hardware, and trained staff in its use. Before the system was installed, staff had wasted time looking for documents, some of which were lost. With the new secure system, petitions are scanned and saved electronically, so all commissioners have access to them. The software also allows commissioners to compare similar cases, and automatically alerts officials when a deadline is near. The commission receives about 60 cases a month, with nine people to handle them. The electronic system makes it easier for staff to accurately and efficiently handle the workload.

BETTER MACROECONOMIC MANAGEMENT

Foreign Exchange Act. Under the Ministry of Finance's strategic plan, the foreign exchange regulatory framework was identified as a major constraint to Ghana's

economic competitiveness. The existing Exchange Control Act severely restricted a variety of payments, particularly transactions on capital accounts.

During the project's second year, TIPCEE provided technical assistance to review the existing legal framework, before assisting with drafting a new foreign exchange bill. TIPCEE facilitated discussion that led to passage of the bill, with a forum for stakeholders and a sensitization workshop for parliamentarians.

USAID has actively supported the revision of Ghana's foreign exchange laws under its previous Trade and Investment Reform Program and TIPCEE through an embedded advisor at the Bank of Ghana, external consultants, and public-private dialogues. TIPCEE's contributions included analysis of the existing

policy and recommendations for reform, a review of international best practices in regulation of capital accounts, a stakeholders' conference to elicit input into proposals, and preparation of final recommendations and a draft bill.

The Foreign Exchange Act is expected to usher in a new era of financial liberalization, integration with the global economy, and deepening of capital markets. An immediate impact: offshore investors are actively participating in the domestic bond market.

Exchange rate studies. Politicians everywhere have a tendency to want their country's currency to

be strong, seeing it as an indicator of the economy's health. But, policies aimed at doing so can hurt export-oriented businesses, whose products become more expensive in the global economy. That policy also encourages imports, effectively transferring demand outside of the country. Ghana's policy resulted in an overvalued cedi. TIPCEE studies looked at what drives the value of the cedi and the efficiency of the market in determining the rate. They energized the private sector to see that it could influence the government's policy, made Parliament aware of the need for consistent policy, and showed the need for Bank of Ghana policy changes, most of which have



Ghanaian consumers and business owners benefit from Ghana's biometric smartcard, which allows them to make financial transactions almost anywhere. Users authenticate themselves with a finger scan, taken at the top of the reading device. TIPCEE helped the Ministry of Communications draft the Electronic Transactions Act, which creates a secure environment for electronic transfers, as well as three other laws strengthening telecommunications, e-commerce, and Internet security.

TIPCEE

been made. Two monographs detailed this research and recommendations (see Annex B).

IMPROVEMENTS IN INFORMATION AND COMMUNICATIONS TECHNOLOGY REGULATORY BODIES

An improved policy and regulatory environment in Ghana should lead to more competition, lower costs to consumers, and increased access to information and communications technology for all economic sectors. TIPCEE worked with the Ministry of Communications to draft four bills, which were approved by Parliament and received presi-

dential assent. These laws provide a stronger regulatory environment for telecommunications and a secure legal framework for e-commerce, electronic transactions, and Internet security:

- *Electronic Communications Act.* This regulates telecommunications and broadcasting services, including setting required quality of service provisions.
- *Electronic Transactions Act.* This provides a safe, secure, and effective environment for consumers, businesses, and the government to conduct electronic transfers.
- *National Communications Authority Act.* This law ensures the independence of the regulator



Members of a trade delegation from Ghana discuss tariff issues with officials at the International Trade Commission in Washington, D.C. Ghana's Tariff Advisory Board, launched in 2009, is testing procedures and building capacity for the launch of the Ghana International Trade Commission in three years.

KEVEN BLAKE USTIC/TIPCEE

and its openness and transparency in using its powers.

- *National Information Technology Agency Act*. This establishes an agency to regulate the provision of information communications technology services under the *Electronic Transactions Act*.

IMPROVED NATURAL GAS REGULATIONS

TIPCEE developed a road map for a secondary natural gas market for industrial and commercial use. It included a policy and regulatory framework, regulations, and a tariff outline for pricing. The plan should lead to an efficient market with reduced costs to users. The project also advised the Ministry of Energy and the Ghana Energy Commission on international best practices for secondary market safety and management practices in anticipation of imported gas via the newly constructed West African Gas Pipeline.

LOOKING FORWARD

Wide-ranging, recurring discussions by relevant stakeholders

educated participants on the process for developing policies and at the same time, gained their buy-in to those policies created as a result of their involvement. Intensive stakeholder involvement in development of FASDEP II is an example, where the new government adopted the document prepared by the preceding government, in part because of the scope and number of those participating in its creation. It is hoped the stakeholders will continue to use this consultative model.

TIPCEE advisors also left behind skills and tools for the relevant government institutions to continue evidence-based decision-making, thoroughly analyzing options before deciding on a policy or action.

Importantly, because project activities were closely linked to the Ghanaian government's sector strategies, their effects should be long-lasting.



Pack house employees verify and grade internal and external fruit attributes, packaging, and pallet quality of pineapples before export.

TIF/CEE

“... past interventions in the agriculture sector in Africa have had limited results. This was because they were designed to address on-the-farm production constraints, without due consideration to marketing and other backward and forward linkages.

TIPCEE will certainly contribute to a sustainable increase of agricultural incomes by promoting market-driven initiatives such as outgrowers’ schemes. In my view, it is an excellent programme that should be expanded and replicated in other parts of Africa.”

**AN AFRICAN
DEVELOPMENT BANK
OFFICIAL**

CHAPTER THREE

PROJECT LEGACY

TIPCEE highlighted the fact that farming can be a business. It showed some of the country’s poorest farmers how to increase yield and quality, linked them to exporters and processors, and created models farmers can use to decide how much to invest in improved procedures and technologies. It changed the mindset of beneficiary farmers: they realize they can do better.

TIPCEE advisors were successful across many sectors in handing over ownership to recipients. In addition to the handing over tangibles, the intangibles that were passed on — a new attitude of empowerment, the value of testing alternative approaches and the will to innovate and grow on one’s own accord, these will be TIPCEE legacies not easily recorded, yet they will make substantial difference for the future of Ghanaian agriculture.

Farmers quickly adopted the good agricultural practices they were taught, after visiting demonstration plots to see the resulting higher yields and better quality. They set up groups with their neighbors, to pool their new knowledge and negotiate together for better prices from buyers. Some are setting up new value chains on their own, and forming separate farmer organizations, with farmers from the original group sharing their expertise.

A key legacy is GlobalGAP certification of smallholder groups. TIPCEE’s approach, including the promotion of low-tech, low-cost infrastructure and hands-on interactive training materials, was cited by the GlobalGAP Secretariat as a key innovation.

The project contributed to modernizing the agribusiness sector, by introducing practices

Bigger profits for pineapple farmers in Ghana start with tiny bits of MD2-variety tissue cultivated in a private-sector lab. The tissue, far cheaper than imported planting material, is helping Ghanaians respond to growing market demand for the sweeter variety.

TIPCCE



and technologies common in competitor nations, instilling the need for formalized relationships between producers and buyers, and raising the bar on quality and adherence to international safety standards for producers and their products.

In many subsectors, market demand now drives agriculture and agribusiness. Farmers are treating agriculture more as a business and less as a lifestyle. A new mantra has been established among farm-

ers: *Don't sell what you produce, Produce what you can sell.* By planting and producing for a contract with an identified market or buyer and understanding changing market trends, farmers can more accurately predict the profitability of their investments and the likelihood of successfully selling their crop.

To improve the policy environment, the project worked intensely with selected government institutions to demonstrate the

Hand shears and a harvest rack allow a mango grower to pick fruits, turn them upside down to drain latex, and keep them off the ground and away from possible contamination.

JENIFER OTWELL / TIPCEE



advantages of open engagement with the private sector to design policies and activities based on relevant data. With TIPCEE's support, the government and private sector discussed and made policy changes needed for the trade and agribusiness sector to become competitive.

Trade and agriculture issues (such as energy) are often wide in scope, so TIPCEE didn't limit itself to MOTI or MOFA. TIPCEE encouraged discus-

sions with other ministries involved in trade issues, as well as the private sector. As a result, monthly inter-agency meetings were institutionalized for all ministries, departments, and agencies whose activities affect the private sector in trade and industry.

A full list of indicators and results is presented in Annex A on the enclosed CD at the back of the report.

Workers haul a refrigerated container, or reefer, to a waiting ship at Tema port. Ghana's cold chain of packing and transport services speeds fruits and other perishable, high-value products to European consumers.



TIPCEE

CHAPTER FOUR

LESSONS LEARNED

TIPCEE's model illustrated that agribusiness aid need not be limited to handouts of money or equipment. In both components, the project enhanced technical expertise, but complemented this by strategically buying down risk to demonstrate new technologies or approaches. Without that expertise, the private sector is unable to respond to inevitable impediments to its success, and a government can become inefficient and unfocused in administering funds.

MAINTAIN A FOCUS ON MARKETS

Finding serious, reliable buyers was key to building and reinforcing the value chains, and involving them in training activities was important to solidify the links.

TIPCEE underestimated the lack of trust within the private sector. The difficulty in finding win-win situations among exporters,

among producers, and between producers and buyers was formidable, and continues to hinder development of the sector. A careful balance is required to simultaneously build up the producers' ability to compete, while encouraging buyers to have confidence in a new sourcing network's ability to produce high-quality goods at a level of productivity to be sustainable.

Higher fuel prices meant looking for an alternative way of getting the fruit to market other than by air. TIPCEE provided the technique and logistical support for a trial sea shipment, which costs much less than air. That said, sea freighting perishable goods requires strict adherence to harvest and post-harvest protocols. In the nascent Ghanaian horticulture expert industry, producers are still "testing" the limits of these protocols, which leads to continuing challenges

“We had ambitious expectations, and loaded a lot of activities up front. As we began implementation, we realized we needed to scale back. We saw that we needed to work more closely and continuously with TIPCEE. So, we gave up numbers of reforms for depth.”

**PATRICK NIMO,
COORDINATOR, TRADE
SECTOR SUPPORT
PROGRAMME, MOTI**

in meeting the markets’ export quality demands.

LISTEN TO PROJECT CLIENTS AND DEMONSTRATE PRACTICAL SOLUTIONS

Farmers appreciated that TIPCEE asked them what they needed, rather than just telling them what the project would do. The work with lead farmers paid off, as the demonstration plots easily convinced growers of the value of adopting the new agricultural practices. Farmers noted another difference with TIPCEE was that technical staff spent most of their time on the farms, rather than working in the project office. In that way, they were able to reinforce the

training, respond to unexpected challenges or opportunities, and gain the respect of beneficiaries.

One unexpected result was the level of enthusiasm and ability of the semiliterate farmers to quickly embrace the tenets of GlobalGAP certification, new agricultural practices, and financial analysis skills when they were presented in simplified methods that tapped into the farmers’ existing knowledge and experience.

STAY FLEXIBLE DURING IMPLEMENTATION

TIPCEE started as a competitiveness project focused on horticulture, but expanded to include high-value exports and domestic

“In the first year, TIPCEE went around and talked to the farmers. Other organizations say ‘This is how we are going to help you.’ Maybe I’m aching in my eye and you want to give me a balm for my foot. Most farmers are becoming wary of donor organizations. TIPCEE asked what we wanted and did a scope of work for what they could do.”

**JOHN NKANSAH,
DANSAK FARMS**



TIPCEE

“TIPCEE came to understand where we were. TIPCEE didn’t hijack the project, but by understanding the local environment and limitations that we had, helped us realize our goals.”

**GEORGE FYNN,
FORMER DEPUTY CHIEF
COMMERCIAL OFFICER,
MOTI**

food crops. There were challenges in focusing simultaneously on improving rural livelihoods and creating competitiveness in export markets. Smallholders lacked basic knowledge about production and marketing, while cutting-edge technology was needed for high-value crops. With a mid-project adjustment to the dual objectives of wide outreach to vulnerable populations producing food crops and intense capacity building to produce export-quality commodities, a longer contract period would have enabled TIPCEE to more fully consolidate its successes.

SECURE GOVERNMENT BUY-IN FOR EFFECTIVE POLICY REFORM

Similarly, policy changes take longer to manifest and measure, especially when several government institutions are involved. Achieving stakeholder buy-in and building sustainable capacity to analyze and implement numerous policy reforms takes time. True impact is often achieved years after a new law or procedure is implemented. Allowing time to build trust and relationships between government staff and project staff was key to TIPCEE’s successes, as was the linking of project activities to the government-developed strategic plans. It is also important that policy changes are politically neutral. TIPCEE kept

the opposition in Parliament informed, so the new government was on board.

ENSURE EMBEDDED ADVISORS ARE RESPECTED AND INDEPENDENT ACTORS

The use of embedded advisors is another long-term approach. In deciding whether to embed an advisor, a government unit must first show interest; then, the project designs a scope of work in consultation with the ministry, department, or agency. It is important that embedded advisors are independent and respected in their field. To be effective, they must have direct access to high-level officials, including the minister or institution director. Once in place, they are typically available to political officials who need technical help, but they work with civil servants, so even when there is a change of government, the work can continue. Although they sometimes take on assignments for the government that complement the project’s core activities, this helps to build relationships and can expand the project portfolio. The challenge is for advisors to handle these additional assignments as well as their agreed scope of work.

Workers review nursery records for the next crop of sweet MD2 pineapple. Building on TIPCEE, future projects could target FBOs for continued training on how to negotiate the best price for crops, and exporting firms to how to incorporate GlobalGap certification and auditing costs into their own pricing, as is done in competitor countries.

TIPCEE



CHAPTER FIVE

NEXT STEPS FOR CONTINUED PROGRESS

Although TIPCEE activities have done much to improve the regulatory environment for agribusiness in Ghana and to strengthen farmers' position in the global marketplace, much remains to be done.

ADDRESS DEFICIT IN BUSINESS MANAGEMENT SKILLS

Ghanaian farmers of targeted crops have learned how to turn their farms into businesses. They now have a good basis from which to grow these businesses, with links to buyers. Some farmers and FBOs have already expanded, but much of the produce being sold is still on consignment. The intermediate-size farmers and FBOs would benefit from enhanced management training, including further mentoring on negotiating the best price for their crop. As the value chains for these commodities integrate, trust will improve,

information will flow more freely, and mutual benefits to working as a team will emerge. Market demand still exceeds supply for all export crops, with multinational buyers eager to fill their requirements. Management training could help targeted farmers and FBOs learn how to respond quickly and efficiently to market opportunities and manage their own bulking facilities to achieve the volumes needed for efficient export.

INCREASE VALUE-CHAIN FINANCING OPTIONS FOR GROWTH OF AGRIBUSINESS SECTOR

Against the odds, a core of GlobalGAP-certified smallholder groups now exists. But for this to be maintained and expand, the exporting firms need to recognize their stake in the smallholders' success and help fund the certification and auditing costs, and incorporate them into their

own pricing, as is done in competitor countries such as Kenya.

Incorporating a financing structure came late in TIPCEE's timeline after basic capacity was built in small and medium exporters and processors and within FBOs. Toward the end of the project, TIPCEE staff raised the interest of commercial banks in getting involved in agribusiness and seeing how they could profit from it. Farmers have a poor repayment history, so it will take time to convince banks of their creditworthiness; and capacity building within the banking sector on commodity-specific loan product development and services is also

needed. The management training should include deepening farmers' knowledge of their financial needs and can build on the YiPoCoMa approach begun with FBOs.

CONTINUALLY SEEK NEW MARKET OPPORTUNITIES

Looking toward new crops for export, Ghanaian yams, plantains, and sweet potatoes could compete in markets in the European Union. And consumption of tropical products is increasing in the Balkan countries and the Middle East, which have fewer market barriers. Currently, exports to those two regions are shipped through Italy, but direct shipments

Year-round, high-value vegetable production requires investments in irrigation systems, including a filter about to be added to a standpipe. TIPCEE piloted low-pressure drip irrigation techniques for farmer-based organizations and a lower-cost "family drip unit" for small-scale production, increasing yield and quality of produce.

TIPCEE



would be possible with the right brokers.

DEEPEN POLICY DISCUSSIONS BETWEEN MOTI AND MOFA

MOTI is more aware of the need for relevant strategic policies; the next few years will show if there is follow-through on implementation and if the improved policy-making process has been institutionalized. Ghana's trade policy is well thought-out, with each activity bringing its own stakeholders. Agriculture interests need to be brought into that consultative process on trade.

CONTINUE MODERNIZING THE AGRICULTURE SECTOR

There is now awareness of the need for a national agriculture policy. Subsequent projects could focus on bringing together MOFA and the private sector in extensive discussions to ensure buy-in by both on a final policy and finalization of a strategic plan similar to the Trade Sector Support Program.

GROW A ROBUST TARIFF ADVISORY BOARD TO FACILITATE AND STREAMLINE TRADE

Both the government and private sector have embraced the government's efforts to address tariff reform. While USAID assistance helped MOTI launch the Tariff Advisory Board and establish its core functions, much additional technical assistance is required for it to function fairly and efficiently. Further mentoring of board members in their core

functions, continued training of secretariat staff and education of the private sector in the rules and procedures governing the process to seek remedies are still required to ensure sustainability.

ENHANCE EVIDENCE-BASED POLICY-MAKING

Successor projects could productively focus on building capacity in the ministries of agriculture, trade, and finance to use the economic benefits analysis tool to enhance evidence-based policy-making and decisions about the distribution of scarce resources. Putting in place the proper legal framework is only the first step. Often, challenges and obstacles emerge at the implementation phase when public sector capacity deficit can slow progress. Building on policy reform efforts supported by TIPCEE, the Government of Ghana could benefit from additional support.

- *Support Customs in Transitioning to Classification and Valuation:* CEPS could use support in assuming, in 2010, the core functions of classification and valuation, now performed by destination-inspection companies. This might include training in WTO practice or assistance in bringing some of their legislative instruments into conformance. TIPCEE's work collaborated directly with CEPs and the assistant commissioner, Wallace Akondor.

- *Assist in consolidating revenue agencies:* From TIPCEE's assessment of VAT procedures, technical assistance may be requested as the government consolidates all the revenue agencies into one,

in 2010 if all goes according to plan. There will be many challenges to solve and much education of stakeholders to inform them of the new integrated system. Such an activity might be led by Revenue Agencies Governing Board, with collaboration with MOFEP through the Internal Revenue Service, VAT, and CEPS.

- *Streamline duty-drawback procedures:* Despite several efforts, there is still a need to modernize and streamline duty-drawback procedures and policies to create an efficient and fair system for reimbursing firms. Such an activity will require a coordinated effort with MOTI's Import/Export Division with MOFEP, CEPS, and the Bank of Ghana.

- *Assist in Educating People on Their Rights as Borrowers:* Building on the passage of the Borrowers and Lenders Bill, MOFEP's Financial Services Division (cooperating with the Bank of Ghana) may request assistance in educating the general populace on the consumer protection provision of the new law to better understand their rights as borrowers.

IMPROVE PUBLIC-PRIVATE DIALOGUE FOR MORE EFFECTIVE POLICIES

Effective policy comes from continuous input and advocacy by business and industry. Long-term mentorship of two or three large farm associations, with private enterprise involvement, would help educate the associations on how to present their issues to

policyholders. Communication and advocacy skills are needed throughout much of the private sector to hone the messages and support positions with compelling analysis of the costs and benefits of a current or proposed policy action.

ADOPT DEMAND-DRIVEN POLICY INTERVENTIONS

Finally, effective work in any policy sector is challenging, but adopting a demand-driven approach worked best. Ministries that have strategic plans are best able to collaborate and make good use of technical assistance. In the case of TIPCEE, work on the Trade Sector Support Programme in the trade sector and on projects outlined in the Financial Sector Strategic Plan proved most successful. In the agricultural sector, a strategic plan, FASDEP II, was developed with technical assistance from TIPCEE and other partners, and a sector plan was developed to take the process forward. Any successor project should focus on supporting the strategic plans in agriculture, trade, and finance. In all three cases, the plans have been adopted or carried on by successive governments of different political parties, attesting to their value as politically neutral development tools. Key projects under these plans are in critical periods and should be supported in any follow-on project — in agriculture (and finance), design of an agricultural credit finance system; in trade, development of the Ghana International Trade Commission; and in finance, the final plan for the Financial Sector Strategic Plan II.

CD-ROM INDEX

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ANNEX B: ABSTRACTS OF KEY STUDIES

ANNEX C: AGRICULTURAL INNOVATIONS
INTRODUCED

ANNEX D: REPORTS AND DELIVERABLES



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