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MINISTRY OF TRADE, INDUSTRY, PRIVATE SECTOR DEVELOPMENT AND PRESIDENT'S SPECIAL INITIATIVES NATIONAL BOARD FOR SMALL SCALE INDUSTRIES THE REPUBLIC OF GHANA

THE STUDY ON PROMOTION AND DEVELOPMENT OF LOCAL INDUSTRIES IN THE REPUBLIC OF GHANA

SUMMARY REPORT

APRIL 2008

JAPAN INTERNATIONAL COOPERATION AGENCY

UNICO INTERNATIONAL CORPORATION
JAPAN DEVELOPMENT SERVICE CO., LTD.

GNO JR

08-006

The Republic of Ghana



Source: based on the websites of "University of Texas Libraries" and "africa-rikai.net"

Abbreviations

| A | AEA AEE AfDB AGI AGOA ALS ASCO ATC ATL | Agricultural Extension Agent Ajumako Enyan Essiam African Development Bank Association of Ghana Industries African Growth and Opportunity Act Atadwa Loan Scheme Ayensu Starch Company Agreement on Textile and Clothing Akosombo Textile Ltd. |
|---|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| В | BAC BDS BOG | Business Advisory Centre Business Development Service Bank of Ghana |
| С | CBE CSIR CTTC | Cocoa Butter Equivalent Council for Scientific and Industrial Research Clothing Technology and Training Centre |
| D | DA DACF DED DIP DIPI | District Assembly District Assembly Common Fund German Development Service (Deutscher Entwicklungsdienst) District Industrialization Programme District Industry Promotion Initiatives |
| E | ECOWAS EDIF | Economic Community of West African States Export Development Investment Fund |
| F | F/S FAO FFA FIRR FRI | Feasibility Study Food and Agriculture Organization of the United Nations Free Fatty Acid Financial Internal Rate of Return Food Research Institute |
| G | GFZA GIPC GOG GPRS GRATIS GSB GTMC GTP GTZ GWC GWSC | Ghana Free Zone Authority Ghana Investment Promotion Centre Government of the Republic of Ghana Ghana Poverty Reduction Strategy GRATIS FOUNDATION Ghana Standards Board Ghana Textile Manufacturing Company Ghana Textile Printing German Technical Cooperation (Deutsche Gesellschaft fur Technische Zusammenarbeit) Ghana Water Company Ltd. Ghana Water and Sewerage Corporation |
| Н | HACCP HR | Hazard Analysis and Critical Control Point Human Resources |
| I | IFAD ISO ITTU | International Fund for Agricultural Development International Organization for Standardization Intermediate Technology Transfer Unit |
| J | JETRO JICA JITAP JHS | Japan External Trade Organization Japan International Cooperation Agency Joint Integrated Technical Assistance Program Junior High School |

K KEEA Komenda Edina Eguafo Abrem

KNUST Kwame Nkrumah University of Science and Technology

M MASLOC Micro Finance and Small Loans Centre
MDA Ministries Departments and Agencies

MDPI Management Development and Productivity Institute
MEST Ministry of Environment, Science and Technologyy

MESW Ministry of Employment and Social Welfare

MFA Multi Fibre Arrangement MOE Ministry of Education

MOFA Ministry of Food and Agriculture

MOMYE Ministry of Manpower, Youth and Employment

MOTI/PSD/PSI Ministry of Trade, Industry, Private Sector Development and President's

Special Initiatives

MSMEs Micro, Small and Medium Enterprises

N NBSSI National Board for Small Scale Industries

NES National Electrification SchemeNGO Non-Governmental OrganizationNVTI National Vocational Training Institute

O OCC Operational and Capital Cost

OJT On the Job Training

P PAMSCAD Programme of Actions to Mitigate the Social Cost of Adjustment Loan Scheme

PDM Project Design Matrix

PSD Private Sector Development
PSI President's Special Initiatives

R R & D Research and Development RCB Rural and Community Bank

> REDP Rural Enterprises Development Programme REDS Rural Enterprise Development Support

RFLS Revolving Fund Loan Scheme

RTSC Regional Technology Service Centre

S SHEP Self Help Electrification Project
SME Small and Medium scale Enterprise

SNV Netherlands Development Organization (Schweizerische Normen-Vereinigung)

SPEED Support Programme for Enterprise Empowerment and Development

SPS Sanitary and Phytosanitary

SHS Senior High School

SSTS Senior Secondary Technical School

SWOT Strengths, Weaknesses, Opportunities and Threats

T TBT Technical Barriers to Trade

TI Technical Institute

TIPCEE Trade & Investment Program for Competitive Export Economy

TOT Training of Trainers
TP Trial Program

TSSP Trade Sector Support Programme

U UCC University of Cape Coast

UDS University for Development Studies
UNDP United Nation Development Programme

UNIDO United Nations Industrial Development Organization

USAID US Agency for International Development

W WATH West Africa Trade Hub
WTO World Trade Organization

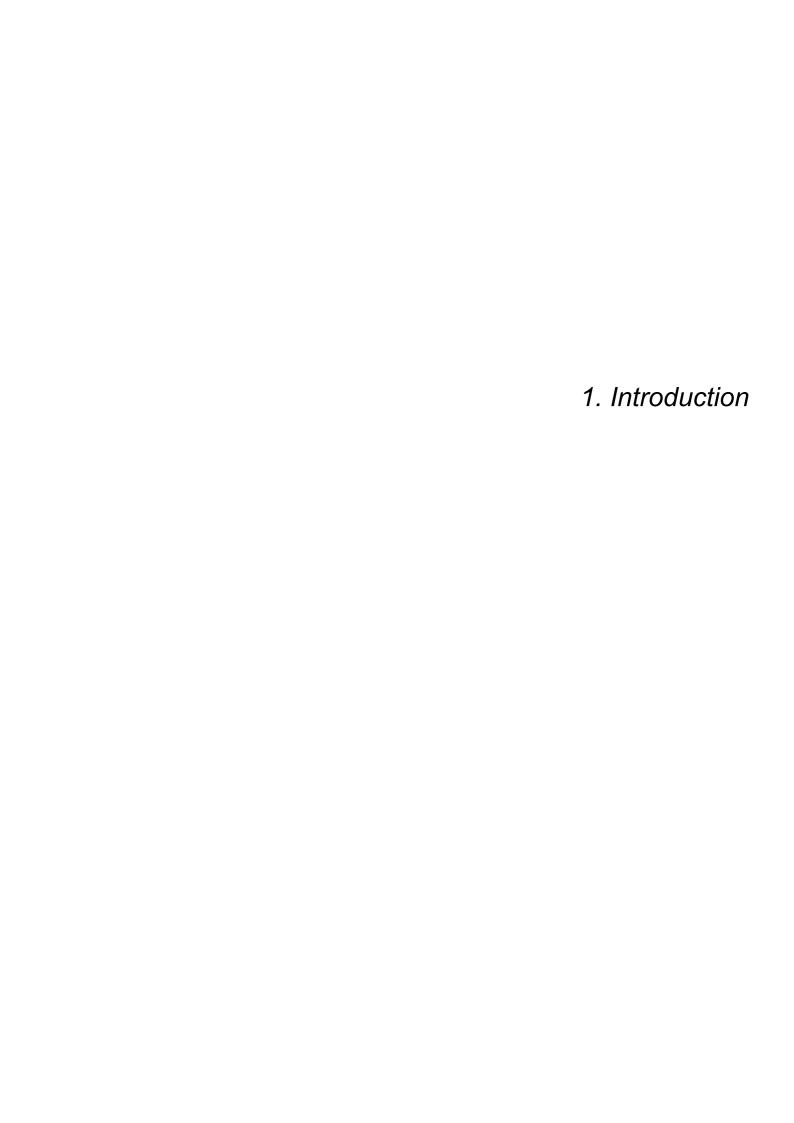
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1. Introduction

1.1 Background of the Study

Favorable macroeconomic indicators have been recorded at an average economic growth rate of 5% plus for 5 years (2001-2005) in Ghana. However, the high growth economy essentially has been supported by donor assistance and capital was spent for rather consumer goods than investment in the production sector¹. The agricultural centered economic structure has not changed much during for the last decade. On the other hand, export has depended mainly on traditional commodities such as cocoa, gold and timber. These primary goods tend to be influenced by the weather and international market, in fact, Ghana economy was affected greatly by them in the past. The country has had chronic trade deficit since import continued to increase year by year due to high consumption. In order to reduce the trade deficit and break away from excessive foreign assistance, it is necessary to promote economic independence through the development of domestic industries, diversification of production structures, as well as the strengthening of value added mechanisms

Over the years, there has been a tendency to increase the gap in income levels of urban and rural dwellers. For this reason, it has become necessary to reverse this tendency by opting for the development of local industries. This new paradigm shift will expand employment opportunities and increase income levels in agriculture based rural communities. Due to challenges identified in management, production technology, sales, capital, human resource and business environment, small and micro enterprises are finding it more and more difficult to grow (See 6.1.2). Even though business support for such companies would be considered as an effective approach this kind of support has not been provided in the rural areas.

In November 2005, the Government of Ghana put in place the Growth and Poverty Reduction Strategy (GPRS II). GPRS II has the overall objective of accelerating economic growth and raising the per capita income of the average Ghanaian to the middle income level by 2015. Private sector development is an important component of this strategy.

The Ministry of Trade and Industry at that time, recognizing Japan's experience in private sector development sought the assistance of the Government of Japan for assistance with the creation of the Business Support System for the purpose of revitalizing local industries.

JICA Country Study for Japan's Official Development Assistance to the Republic of Ghana, August 2002

1.2 Objective of the Study

To formulate the muster plan and action plan of business support system for the establishment and promotion of local industry by undertaking the study of the current condition and surrounding environment of local industries and the analyses of the development potential of the selected industries and the lessons learned from the trial implementation of business support for local industry (hereinafter referred to as "the Trial Program; TP").

Note: Business Support System has almost the same meaning as Business Development Service (BDS). The local industry can be developed by strengthening BDS. Therefore, this report shows the way to develop BDS to assist local industries. In other words, the report proposes measures that need to be taken to support local industries.

1.3 Study Areas

(1) Master Plan and Action Plan for the Business Support System

Based on the results of trial programs the Business Support System was targeted at industries located in four priority regions of Ghana. The Nationwide Master Plan and Action Plan for development of local industries were formulated using results of the basic survey, data and analysis gathered from the trial programs.

(2) Trial Program (Four Priority Regions)

Development plans were formulated and trial programs implemented in the following four priority regions.

- 1) Greater Accra region (Garment)
- 2) Ashanti region (Palm oil processing)
- 3) Central region (Citrus processing)
- 4) Northern region (Shea butter)

However, two candidate industries namely palm oil and cassava processing were proposed for Ashanti region at the beginning of this study. After the survey, the Study Team (hereinafter referred to as "the team") selected palm oil for the trial program and formulated the Business Support System based on an evaluation of the industry's potential.

(3) Classification of the company

For the purposes of this project, the team adopted the following classification² based on size

- 1-5 workers: Micro-enterprises

6-29 workers: Small
 30-99 workers: Medium
 Over 100 workers: Large

1.4 Activities and Tasks of the Study Team

This study can be divided into 3 phases; basic study, trial program and formulation of the master plan / action plan. Eight field surveys have been concluded since the team started the first field survey in February 2006. The activities of the each phase are described below.

Phase 1

1) Study on the economy of Ghana and current condition of local industries

- 2) Study on local industries and selected target industries
- 3) Analysis of target industries
- 4) Formulation of the trial program concept
- 5) Demand and supply survey of business development services
- 6) Preparation of trial programs

Phase 2

1) Implementation of the Trial Program

- 2) Evaluation of progress and result of the Trial Program
- 3) Preparation of seminars to be held during the Phase 3.

Phase 3

- 1) Formulation of development plans for target industries
- 2) Formulation of Master plan and Action plan for the nationwide Business Support System
- 3) Technical seminars for BDS providers and local industry development officials as well as seminars for dissemination of results of the study to be held.

This classification based on the number of worker is used by National Board for Small Scale Industries. No standard government classification is available ..

In addition to the above mentioned seminars, the team conducted four seminars in each region to announce the results of the trial programs. The schedule of the study is described in Figure 1-1.

1.5 Organization of the Final Report

The organization of the final report has been structured along the following lines

- 1. Introduction
- 2. General Outline of Economy and Industry in Ghana
- 3. Current State of SME and Local Industry Promotion in Ghana
- 4. Outline of Target Industries in Four Priority Regions and Trial Programs
- 5. The Business Support System for Target Industries
- 6. Master Plan and Action Plan for Nationwide Business Support System

Chapter 2 to Chapter 3 describes information and analysis based on the basic survey. These issues are summarized at the last sections of both chapters. Chapter 4 summarizes information on the industries selected for the trial program. It also explains selection procedures and issues of the trial programs. The Business Support Systems for target industries are presented in Chapter 5. The Business Support Systems for target industries were fashioned according to the problem analysis and information gathered during the trial programs. Finally Chapter 6 presents basic directions and strategy needed to develop local industries in the country based on information gathered during the basic survey as well as findings and lessons which became clearer when trial programs are implemented and opinions of counterparts sampled.

1.6 Study Team Members and Counterparts

(1) Study Team Members

The names of the team member are as follows;

| | Name | In charge of |
|----|--------------------|---------------------------------|
| 1) | Yoshinari Yamamoto | Team Leader / Policy and System |
| 2) | Shozo Inakazu | Trial Program Design |
| 3) | Teruo Higo | Corporate Management |

4) Seiji Sugimoto Marketing

5) Akihiko Urata Financing / Human Development
 6) Yoshimitsu Isi Production Technology (Textile)
 7) Hiroyasu Asai Production Technology (Garment)

8) Susumu Okata Production Technology (Citrus Processing)

9) Tsuyoshi Shimada Production Technology (Palm Oil / Cassava Processing)

10) Hideki Kidani Trial Program Management / Coordinator

11) Kenichiro Sugiya Feasibility Study and Promotion

(2) Counterparts

 Ministry of Trade, Industry, Private Sector Development and President's Special Initiatives (MOTI/PSD/PSI)
 SME/Technology Division

- National Board for Small Scale Industries (NBSSI)

NBSSI is the implementation agency under MOTI/PSD/PSI. Regional offices of MOTI/PSD/PSI and NBSSI assisted with implementations of trial programs.

ガーナ国地場産業活性化計画調査

| | F | Y200 | 5 | | | | | | FY2 | 2006 | | | | | | | | | | | FY2 | 2007 | | | | | | FY 2008 |
|--------------------------------|---|-----------|------|-----|---|---|---|-------------------|-----|------|----|----------|-----|--------------|---|---|---|---|---|---|-----|------|----|----|---|----------|---|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 |
| 1) First Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2) Second Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3) Third Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4) 4th Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5) 5th Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6) 6th Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7) 7th Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8) 8th Field Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9) 8th Field Survey (addition) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time of Submitting Reports | | △ IC/R | PR/R | (1) | | | | △ TP/ (Plan | | | | ∆ IT/ | R P | △ R/R (2) | | | | | | | | | | | | ∆ DF/ | | △ F/R TP/R |

Note: Field Survey

Figure 1-1 Field Survey Schedule

2. General Outline of Economy and Industry in Ghana

2. General Outline of Economy and Industry in Ghana

2.1 Economy of Ghana

2.1.1 Gross Domestic Product (GDP)

Ghana's economy has been growing steadily with an annual GDP rate of 4-5% since 2001, which is relatively high among African countries (See Table 2-1). Growth further accelerated in 2004 and 2005, achieving the annual rate of 5.8%. The strong growth that started in 2003 is attributed to agricultural production. In particular, cocoa production and sales grew by 16%, 30% and 13% between 2003 and 2005, and served as a vehicle to push GDP upward. These successful results were driven by the continuous rise in cocoa beans price after 2002 and the growth trend in export volume since 2003. This means that the Ghanaian economy is subject to the volatile nature of this international commodity. On the other hand, although diamond exports have been growing on a value basis since 2003, the mining sector's growth rate falls below that of the national economy.

Table 2-1 Gross Domestic Product (constant 1993 prices)

Unit: Billions of Cedis, Growth rate %

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005* | % (2005) |
|-------------------------------------------------------|---------|---------|---------|---------|---------|---------|----------|
| AGRICULTURE | 1,849.1 | 1,923.5 | 2,007.2 | 2,128.9 | 2,288.4 | 2,437.6 | 37.0% |
| | | 4.02% | 4.35% | 6.06% | 7.49% | 6.52% | |
| Agriculture and Livestock | 1,251.7 | 1,314.3 | 1,382.6 | 1,455.9 | 1,533.1 | 1,625.1 | 25% |
| | | 5.00% | 5.20% | 5.30% | 5.30% | 6.00% | |
| Cocoa Production and Marketing | 177.9 | 176.1 | 175.2 | 204.0 | 265.0 | 300.0 | 4.5% |
| | | -1.01% | -0.51% | 16.44% | 29.90% | 13.21% | |
| Forestry and Logging | 182.1 | 190.8 | 200.4 | 212.6 | 225.0 | 237.6 | 3.6% |
| | | 4.78% | 5.03% | 6.09% | 5.83% | 5.60% | |
| Fishing | 237.4 | 242.2 | 249.0 | 256.4 | 265.4 | 275.0 | 4.2% |
| | | 2.02% | 2.81% | 2.97% | 3.51% | 3.62% | |
| INDUSTRY | 1,295.3 | 1,333.3 | 1,396.2 | 1,466.8 | 1,542.1 | 1,628.4 | 24.7% |
| | | 2.93% | 4.72% | 5.06% | 5.13% | 5.60% | |
| Mining and Quarring | 285.9 | 281.4 | 294.0 | 307.8 | 321.7 | 331.4 | 5.0% |
| | | -1.57% | 4.48% | 4.69% | 4.52% | 3.02% | |
| Manufacturing | 471.7 | 489.1 | 512.6 | 536.2 | 560.8 | 591.7 | 9.0% |
| | | 3.69% | 4.80% | 4.60% | 4.59% | 5.51% | |
| Electricity and Water | 132.3 | 137.9 | 143.5 | 149.5 | 155.1 | 165.4 | 2.5% |
| | | 4.23% | 4.06% | 4.18% | 3.75% | 6.64% | |
| Construction | 405.4 | 424.8 | 446.1 | 473.3 | 504.6 | 539.9 | 8.2% |
| | | 4.79% | 5.01% | 6.10% | 6.61% | 7.00% | |
| SERVICES | 1,525.3 | 1,602.7 | 1,678.1 | 1,756.7 | 1,839.8 | 1,939.5 | 29.4% |
| | | 5.07% | 4.70% | 4.68% | 4.73% | 5.42% | |
| Transport, Storage and Communication | 244.9 | 258.4 | 273.1 | 288.9 | 305.1 | 323.4 | 4.9% |
| Wholesale and Retail Trade, Restaurant and Hotels | 351.5 | 369.4 | 390.1 | 409.6 | 429.7 | 455.9 | |
| Finance, Insurance, Real Estate and Business Services | 220.0 | 229.9 | 242.5 | 255.2 | 267.4 | 282.4 | 4.3% |
| Government Services | 564.8 | 593.0 | 614.4 | 639.0 | 667.1 | 700.5 | |
| | 97.3 | 103.6 | 108.2 | 112.6 | 117.3 | 122.3 | 1.9% |
| Producers of Private non-profit Services | 46.8 | 48.3 | 49.8 | 51.4 | 53.2 | 55.1 | |
| | | | | | | | |
| SUB-TOTAL | 4,669.7 | 4,859.2 | 5,081.5 | 5,352.5 | 5,670.3 | 6,005.5 | 91.0% |
| Net Indirect Taxes | 472.4 | 497.9 | 519.3 | 542.2 | 565.5 | 590.6 | 9.0% |
| EQUALS: G.D.P. in Purchasers' Values | 5,142.1 | 5,357.1 | 5,600.8 | 5,894.6 | 6,235.8 | 6,596.1 | 100.0% |
| | | 4.18% | 4.55% | 5.25% | 5.79% | 5.78% | |

Note *: Provisional Source: Bank of Ghana

2.1.2 Trade

Ghana's exports, after reaching \$2.09 billion in 1998, declined until 2001. Then they resumed growth and reached \$2.73 billion in 2004 (See Table 2-2). Cocoa beans are the leading export item (36%) of the total on a value basis, followed by gold (31%), and lumbers and lumber products (7.7%). The value of export other than the above main items amounts to around \$700 million (2005), accounting for 25% of the total. The government strives to promote exports of non-traditional goods, but they have not grown significantly. The main non-traditional items were cocoa paste, plywood, processed tuna, cocoa butter and frozen tuna. On the other hand, import grew faster than export. As a result the trade deficit reached 2.5 billion in 2005. The reasons of high import were the price hike and increasing demand of crude oil caused by increased demand of gasoline.

Table 2-2 Balance of Payment (2002-2005)

Unit: million US\$

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005* |
|---------------------------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|
| Merchandise Trade Balance | -366.9 | -638.3 | -900.8 | -1274.6 | -830.2 | -1101.3 | -691.8 | -436.2 | -1,558.1 | -2,543.2 |
| Exports (f.o.b) | 1570.1 | 1489.9 | 2090.8 | 2005.3 | 1936.3 | 1867.1 | 2,015.2 | 2,796.6 | 2,739.2 | 2,736.6 |
| Cocoa beans & Products | 552.0 | 470.0 | 620.4 | 552.3 | 437.1 | 381.1 | 474.4 | 817.7 | 1,025.7 | 843.2 |
| Gold | 612.4 | 579.2 | 687.8 | 710.8 | 702.0 | 617.8 | 689.1 | 830.1 | 840.2 | 945.8 |
| Timber & Timber Products | 146.8 | 172.0 | 171.0 | 173.8 | 175.2 | 169.3 | 182.7 | 174.7 | 211.7 | 226.8 |
| Other Exports | 258.8 | 268.7 | 611.6 | 568.4 | 621.9 | 698.9 | 669.0 | 974.0 | 661.6 | 720.7 |
| Imports (f.o.b) | -1937.0 | -2128.2 | -2991.6 | -3279.9 | -2766.6 | -2968.5 | -2,707.0 | -3,232.8 | -4,297.3 | -5,279.8 |
| Non-oil | -1677.9 | -1894.3 | -2776.4 | -2946.6 | -2246.4 | -2451.7 | -2,200.0 | -2,669.9 | -3,522.3 | -4,171.6 |
| Oil | -259.1 | -233.9 | -215.2 | -333.3 | -520.1 | -516.8 | -507.0 | -562.9 | -775.0 | -1,108.2 |

Note *: Provisional Source: Bank of Ghana

2.1.3 Foreign Investment

Foreign investment in the country has exceeded 100 cases annually since 2001. In 2007, 211 cases were registered up to September from January. The breakdown of investments made between January 2001 and September 2007 indicates that the manufacturing sector is the largest in the number of cases (376), followed by service (328), tourism (141), and building construction (103). In the amount of investment, the manufacturing sector ranked first with \$2,433 million, followed by service (\$348 million) and building and construction (\$217 million) (See Table 2-3). The amount of investment in the manufacturing sector is fairly large because of the investment in the refinery of bauxite in 2006. Within the manufacturing sector, investment was directed to diverse sub-sectors, including plastic products, bags, and woodwork products. Major countries that made investments in the manufacturing sector included India, China, and Lebanon. Regionally, Greater Accra holds a dominant share of over 83%, followed by Ashanti (5%).

Table 2-3 Investment by Sector (2001/1-2007/9 accumulated)

| | No. of Project | Investment cost |
|----------------|----------------|-----------------|
| | | (million US\$) |
| Manufacturing | 376 | 2,433 |
| Service | 328 | 348 |
| Tourism | 141 | 82 |
| Build & Const. | 103 | 217 |
| Export Trade | 55 | 21 |
| Agrculture | 76 | 66 |
| General Trade | 226 | 172 |
| Total | 1,305 | 3,339 |

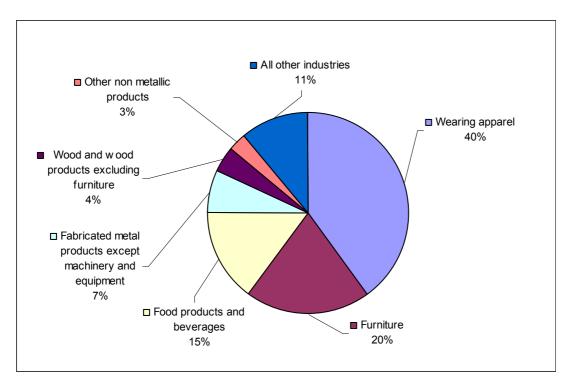
Source: GIPC

2.2 The general condition of the industry in Ghana

A general outline of the manufacturing industry in the country, as presented below, is based on National Industrial Census 2003 issued in June 2006, which was conducted in two phases between October 2003 and February 2005. Industrial classification is based on Standard International Trade Classification (SITC) Version 98. The census covers "recognizable establishments" and does not include all household industries.

2.2.1 Industry Sector

In the country's manufacturing industry, companies manufacturing apparel (40%), furniture (20%), and food and beverage (15%) account for three fourths in terms of the number of establishments, and the apparel industry holds a dominant share. (Number of total establishments is 24,133.)



Source: National Industrial Census 2003

Figure 2-1 Number of Establishment by Industrial Sector

2.2.2 Geographical Distribution of Manufacturing Industries

Analysis of regional indicators shows that manufacturing industries are highly concentrated in the Greater Accra and Ashanti regions, which hold a combined share of 55% of total

establishments (See Table 2-4). In terms of the number of employees¹ as well as persons engaged, Greater Accra holds a much larger share than Ashanti. The region also accounts for around 70% of the total value of production. As for other regions, those south of Ashanti represent predominant share. On the other hand, the three northern regions (Northern, Upper East, and Upper West) hold a combined share of 7% in the number of establishments and less than 1% in the value of production. Aside from the fact that the northern regions are less populated, the value of output per employee in these regions is around one half the national average.

Table 2-4 Major Indication of Industrial Activities by Region

Manufacturing

| REGION | No. of establ. | No. of employees | No. of pers. eng. | Wages and salaries (Million Cedis) | Value of output (Million Cedis) | Cost of mats. and Ind. Serv. (Million Cedis) | Census value added (Million Cedis) |
|----------------|----------------|------------------|-------------------|------------------------------------------|---------------------------------------|----------------------------------------------------|------------------------------------------|
| Western | 1,178 | 18,062 | 24,266 | 200,430.71 | 3,011,238.28 | 1,615,605.50 | 1,411,194.43 |
| Central | 1,808 | 4,710 | 12,712 | 35,851.02 | 289,333.15 | 164,765.63 | 125,159.03 |
| Greater Accra | 6,629 | 51,440 | 75,594 | 1,017,118.39 | 18,167,152.66 | 12,455,669.86 | 5,682,016.87 |
| Volta | 1,246 | 2,985 | 9,275 | 52,930.23 | 670,643.74 | 396,799.08 | 258,833.19 |
| Eastern | 3,038 | 7,199 | 18,615 | 81,539.06 | 578,375.85 | 344,021.54 | 221,746.88 |
| Ashanti | 6,521 | 24,977 | 56,736 | 223,548.06 | 3,010,022.53 | 1,403,982.36 | 1,611,700.95 |
| Brong Ahafo | 1,693 | 4,873 | 12,914 | 30,375.93 | 390,053.61 | 190,954.96 | 209,210.42 |
| Northern | 695 | 756 | 5,041 | 4,423.00 | 176,209.73 | 70,808.89 | 104,998.83 |
| Upper East | 665 | 1,033 | 4,372 | 2,642.21 | 36,691.75 | 25,171.86 | 11,561.11 |
| Upper West | 324 | 739 | 2,428 | 4,208.96 | 46,406.94 | 29,674.00 | 16,304.22 |
| National Total | 23,797 | 116,773 | 221,952 | 1,653,067.60 | 26,376,128.20 | 16,697,453.70 | 9,652,725.90 |

Source: National Industrial Census 2003

2.2.3 Distribution of Manufacturing Companies by Size

The company size category used in the Census is different from that of this report. Despite this difference, the figures indicate distribution of micro, small scaled company well enough. In terms of number of establishment, micro and small scaled companies account for 98% of the total establishment; companies with 1 - 9 persons engaged accounts for 84% of the total whereas companies with 10 - 19 persons engaged 12% and companies with 20 - 29 persons engaged 2%.

Unpaid workers are not included.

Manufacturing

| Size of Establishment by no. of person engaged | No. of establ. | No. of employees | No. of pers. eng. | Value of output (Million Cedis) |
|------------------------------------------------|-------------------|---------------------|----------------------|---------------------------------------|
| 1-9 persons | 20,004 84% | 19,014 16% | 88,778 40% | 1,798,370 7% |
| 10-19 persons | 2,742 12% | 11,444 10% | 35,742 16% | 1,072,656 4% |
| 20-29 persons | 535 2% | 7,227 6% | 12,659 6% | 453,798 2% |
| 30 or more persons | 517 2% | 79,088 68% | 84,774 38% | 23,051,304 87% |
| National Total | 23,798 | 116,773 | 221,953 | 26,376,128 |

Source: National Industrial Census 2003

Table 2-5 Major Indicator by Size of Establishment

2.3 Background of Local Industry in Ghana

2.3.1 Basic Education

Major problems are the shortage of teachers as well as the low enrollment rate in rural areas. In particular, serious shortages are seen in the northern regions, from primary schools to senior secondary schools. Unqualified teachers often provide group education in villages. School teachers are trained at 38 teacher training colleges, universities and colleges of education, but graduates often refuse to work in rural areas which cause the shortage of teachers in rural areas. As a result, the quality of education in rural areas is much lower than that in urban areas. As seen in the table below, the country's school enrollment rate is relatively high, but that in rural areas is much lower than urban areas including Accra and Kumasi.

Table 2-6 Education in Ghana

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
| School enrollment, primary (% gross) | 80.48 | 77.07 | 79.73 | 77.07 | 81.39 | 88.37 |
| School enrollment, secondary (% gross) ² | 37.40 | 35.58 | 37.48 | 38.91 | 41.76 | 43.57 |
| School enrollment, tertiary (% gross) | 2.81 | 3.19 | 3.29 | 3.26 | 3.14 | |
| Ratio of girls to boys in primary and secondary education (%) | 89.41 | 90.89 | 91.16 | 93.65 | 90.57 | 92.56 |

Source: World Development Indicator

² Junior High School + Senior High School

2.3.2 Infrastructure

The status of infrastructure is described in this section as conditions and factors in order to develop local industries. The problem of infrastructure in Ghana is immense and greatly imparts on industry. Undeveloped infrastructure especially in rural areas causes low productivity and high cost. Currently, the Government of Ghana is making great efforts to improve these conditions; however, the gap between urban and rural areas is still large. This has been identified as one of causes of low investment in rural areas and the hindrance to the development of large scale industries.

2.4 Issues Relating to Economy and Industry

In this section, conclusions and issues relating to local industries, as developed on the basis of 2.1 through 2.3, are presented.

(1) Agriculture-centric economy

Because of the agriculture-centric economic structure, local industries are mainly related to the processing of agricultural products. However, most agricultural products – excepting major export items such as cocoa – are not highly competitive and require improvement in terms of quality and production volume. As most local companies are not capable of making products that meet requirements in the export market (price, quality, volume, and delivery schedule), the country cannot diversify export items. To modernize the manufacturing industry within a short period of time, foreign direct investment is required. In reality, however, FDI is concentrated in industrial estates located in Accra and Tema and is thus limited in the ripple effect on local economy.

(2) Characteristics of industrial sectors and major issues facing them

Among industrial sectors, the apparel and furniture industries that have a large number of establishments are dominated by microenterprises and small enterprises, indicating a low value of production per employee. It comes from problems relating to equipment capacity and productivity and there is a significant room for improvement. In terms of geographical distribution, establishments are concentrated in Greater Accra and Ashanti. It suggests the importance of local industry development, particularly in three northern regions.

(3) Importance of education

In the area of basic education, low enrollment rates in rural areas present a problem and restrain the development of local industries. On the other hand, development of a non-agricultural industry in a rural area can induce enrollment in basic education. The emergence of a local industry increases personal income to allow parents to send their children to school, and children grow to join the workforce to support the local industry.

Technical education in Ghana, however, does not always meet the changing industry needs. Availability of competent workers forms an important element of the business environment by constituting a valuable resource for local industries.

(4) Regional disparity of infrastructure

There is a substantial gap in the level of infrastructure between regions and this creates a major handicap for development of local industries in rural regions. Manufacturing operation in rural regions requires higher costs (construction, energy, and transportation) than in urban regions. On the other hand, presence of two commercial ports provides an advantage for industrial development, and progress in road construction, especially in and around Accra, is a good sign for local industries.

3. Current State of SME and Local Industry Promotion in Ghana

3. Current State of SME and Local Industry Promotion in Ghana

3.1 National Development Plans

3.1.1 Growth and Poverty Reduction Strategy II (GPRS II)

GPRS I, issued in 2003, formulated a policy that was focused on the accomplishment of the poverty reduction objectives of the UN's Millennium Development Goals. GPRS II, to be implemented between 2006 and 2009, is intended to introduce a shift of strategic focus toward the private sector development, even though many of the actual programs will be in the same areas as GPRS II. The central goal of the new policy is to accelerate the growth of the economy so that Ghana can achieve middle-income status by 2015.

GPRS II has the following three priorities

- Private Sector Competitiveness
- Human Resource Development
- Good Governance and Civic Responsibility

3.1.2 Private Sector Development Strategy (PSDS)

PSDS was approved by the government in January 2004 and launched by the President in July 2004. PSDS sets forth the building of a world standard business environment in Ghana as a national vision. The three key targets are;

- Ghana is objectively rated as having one of the best investment climate s in Africa;
- Businesses perceive the investment climate in Ghana to be favorable; and
- Key barriers to doing business in Ghana are eliminated.

It then envisages that the government's role is to execute broad-based reforms under the market principle for the purpose of developing the private sector.

3.1.3 Trade Sector Support Programme (TSSP)

MOTI/PSD/PSI established "Ghana Trade Policy" as the first basic trade policy in Ghana in February 2005. The policy sets details of the comprehensive development policy across seven thematic areas under discussions with private and public stakeholders with the aim at realizing export-led and domestic market-led industrialization strategies. The policy provides

clear and transparent guideline to ensure consistency in the trade policy for private sector-led development.

MOTI/PSD/PSI formulated The Trade Sector Support Programme (TSSP) which is designed to systematically implement the Ghana Trade Policy with schemes and measures, as 5 years action plan starting from 2006 to 2010. The TSSP comprises 27 projects covering the following ten thematic areas and aim at increasing Ghana's competitiveness in international and domestic markets and improving the legal and regulatory environment for business and consumers. Currently, most of policies and measures of MOTI/PSD/PSI are implemented based on this program.

- Multilateral Trade
- Import-Export Regime
- Trade Facilitation
- Production Capacity
- Export Trade Support Service
- Standards
- Domestic Trade and Distribution
- Competition and Government Procurement
- Consumer Protection
- Intellectual Property Rights
- Management and Coordination

3.2 Local Industry Promotion Schemes

MOTI/PSD/PSI is currently implementing President's Special Initiative (PSI), District Industrialization Programme (DIP) and Micro Small and Medium Enterprises Project (MSME) as major local industry development and SMEs promotion policies. They are explained as follows

3.2.1 President's Special Initiatives (PSI)

PSI aims at sustainable economic growth by promoting agriculture-based industries which constitutes part of private sector development. Its initial targets are textile and garment, palm oil, cassava starch and salt. For textile and garment, the primary goal is to develop competitive, large-scale enterprises serving American and European markets. Support for the palm oil sector is expected to promote local development. For cassava starch, reduction of poverty, the

earning of foreign currency and industrial development are primarily aimed at. Later, PSI will extend to handicrafts and remote education.

3.2.2 District Industrialization Programme (DIP)

While PSI focuses on export promotion, DIP (formerly Rural Enterprises Development Programme (REDP)) has the aim at supporting local entrepreneurs in their efforts to develop the local and national markets, with the long-term goal of seeking export opportunities. The primary goal is to increase employment in rural areas by means of industrial development, thereby to reduce inequality in income with urban areas. For this reason, the program targets SMEs, rather than micro enterprises. Also, it targets companies engaged in the processing of agricultural products as well as labor-intensive industries. Another feature of the program is that it is jointly implemented by the private sector, raw materials producers and the government (MOTI/PSD/PSI and District Assembly; DA). Thus, it is positioned as a community-based public and private joint project.

3.2.3 Micro Small and Medium Enterprises (MSME) Project

MSME Project is the Government of Ghana Initiative to provide essential financing and technical support to enhance MSME development. The project which was finance by the World Bank Group has a budget of approximately 119 million US\$. The project started May 2007 until the end of 2011. The secretariat is located in the premises of MOTI/PSD/PSI.

The project consists of the following four components:

- Access to finance
- Access to markets, trade facilitation and entrepreneurship development
- Business environment
- Implementation, monitoring and evaluation

3.3 Government and Other Organizations for Local Industry Promotion

3.3.1 Ministry of Trade, Industry, Private Sector Development and President's Special Initiatives (MOTI/PSD/PSI)

(1) Mission and policy goals

MOTI/PSD/PSI is responsible for formulation, implementation and supervision of Ghana's domestic and foreign trade promotion policies. Its mission is to support the private sector

through the following activities, thereby contributing to the sector's high growth and reduction of poverty in the country:

- Promotion of development of individual companies including SMEs
- Promotion of standardization relating to trade and industry
- Promotion of domestic and external trade with consideration to diversification and value added

And MOTI/PSD/PSI sets the following policy goals:

- To promote policy formulation and coordination to ensure the strengthening of inter-sectorial collaborative relationships in connection with implementation of industrial and trade policies.
- To encourage the development of management skills as well as capabilities to use production technology effectively.
- To promote market development.
- To establish a formal system to provide effective institutional support for the purpose of improving productivity at district level.
- To promote the development of production infrastructure and increase exports of non-traditional products.
- To provide stakeholders with industry and trade related information.

(2) MOTI/PSD/PSI's organization

At present, MOTI/PSD/PSI operates most of programs according to TSSP. Upon the formulation of TSSP, MOTI/PSD/PSI has launched organizational reforms, including the formation of strategic work units (generally referred to as project teams) that are responsible for implementation of projects in each of the ten respective fields designated according to the major themes of national trade policy/TSSP. The new organization is centered on the core project teams that cover the following nine areas: 1) research, information and statistics (RIS); 2) multilateral, regional, and bilateral trade; 3) trade facilitation; 4) exports and imports; 5) export trade support service; 6) standards; 7) domestic trade and distribution; 8) SMEs and technology; 9) and investment and finance. They are supported inter-departmentally by three teams specialized in the following three areas: i) finance and HR management; ii) legal system; and iii) Policy, Planning, Management and Evaluation (PPME).

3.3.2 National Board for Small Scale Industries (NBSSI)

(1) Organization of NBSSI

NBSSI started its activities in 1985 (established in 1981) as the agency under the MOTI/PSD/PSI, responsible for implementation of policies and programs covering micro enterprises and small enterprises. Since its establishment, NBSSI has been receiving assistance from the USAID, the GTZ, and the International Fund for Agricultural Development (IFAD).

It has 368 employees (as of February 2006) and its head office is located in Accra, with ten regional offices throughout the country.

(2) Business Support Activities

Analysis of recent trends in Business Support projects, including training projects for MEs and SMEs indicates that training projects in 2004 declined as compared to 2003 – with some exceptions - in both the number of projects and the number of participants, probably due to the budget situation. Counseling and extension services led by BAC increased slightly in 2005 (10,578 entrepreneurs) over the previous year, but the growth rate fell below that of BACs (from 66 to 83).

Currently NBSSI is turning the direction to be BDS facilitators from BDS providers for their clients. However, NBSSI should continue serving as a BDS provider in some rural districts where only BAC is operating to assist micro and small companies.

3.3.3 Business Advisory Centre (BAC)

To summarize the organization and services of the BAC in spearheading the implementation of BDS projects for SMEs, the current state of Tamale BAC is presented below.

Normally BAC consists of a head, a secretary, and a driver. In addition, it hires one national service person and one cleaner in some cases.

Major services are: (a) counseling; (b) extension service; (c) operation of training courses; and (d) follow-up activities.

- (a) Counseling service covers micro enterprises that come to the BAC for consultation in the areas of financing, business startup, and registration procedures. It is said to receive around 20 visitors per month in the case of BAC Tamale.
- (b) Extension service includes technical guidance for preparation of a business plan to be submitted to financial institutions. As the illiteracy rate¹ in the Region is fairly low, however, the technical guidance means that the centre prepares the business plan for loan applicants in most cases. Financial institutions realize that most business plans are prepared by the BAC and visit applicants to verify the actual state.
- (c) The training courses teach management skill, including financial record keeping, customer management and market survey, and various work skills, including soap making, batik fabrication, cake making, and carpentry. Instructors include resource persons. For instance, the BAC Tamale has eight resource persons in the areas of shea butter/peanut oil processing (1), honey making (3), batik fabrication (2), business administration (1), and soap making (1). NBSSI bears 60% of the training cost (maximum). Resource persons provide extension service on a fee basis, upon the request of clients.

3.3.4 Metropolitan / Municipal / District Assemblies

The functions of metropolitan/municipal/district assemblies relating to deliberation, legislation, and public administration are defined in Section 6(3) of PNDCL (Provisional National Defense Council Law) 207 (Local Government Law of 1988), as follows.

- Be responsible for the overall development of the District and shall ensure the preparation and submission to the PNDC² for approval of the development plan and budget for the district:
- Formulate programs and strategies for the effective mobilization and utilization of human, physical, financial and other resources in the districts;
- Promote and support productive activity and social development in the district and remove any obstacles to initiative and development;
- Initiate programs for the development of basic infrastructure and provide municipal works and services in the district;

Literacy rate in 2004 was 53.4% according to "Preliminary Education Sector Performance Report 2006" MOESS.

The role of PNDC was replaced by National Development Planning Commission

- Be responsible for the development, improvement and management of human settlements and the environment in the district;
- In co-operation with appropriate national and local security agencies be responsible for the maintenance of security and public safety in the district;
- Ensure ready access to the courts and public tribunals in the district for the promotion of justice;
- Initiate, sponsor or carry out such studies as may be necessary for the discharge of any of the functions by this Law or any other enactment; and
- Perform such other functions as may be referred to it by the PNDC.

3.3.5 Business Support Organizations

There are a number of public organizations which support for local industries. Among them, those relating to the manufacturing sector are presented in the table below. Subsequently, legal authority, mission and role of each organization are discussed.

Table 3-1 Business Support Organizations

| | | No. of | Year of | | |
|---------|--------|------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Item | Name | person- | establish- | Relationship with local industries | |
| | | nel ³ | ment | | |
| 3.3.5.1 | GIPC | 26 | 1994 | GIPC can make important contribution to local industry development by promoting investment, which serves as a powerful tool to induce growth and expansion of local industries. | |
| 3.3.5.2 | GRATIS | 267 | 1987 | As technical support organizations in Ghana are limited in number, GRATIS assumes important position. In particular, it can make unique contribution to local industry development by using its local activity bases. | |
| 3.3.5.3 | GSB | 268 | 1973 | GSP has been supporting local industries by promoting standardization and providing testing service required for quality control. | |
| 3.3.5.4 | GEPC | 76 | 1969 | Local industries in Ghana include those with export potential, such as garment and shea butter. GEPC plays an important role in helping such local industries to develop export capabilities. | |
| 3.3.5.5 | MDPI | 69 | 1976 | MDPI conducts a variety of training courses relating to management and technology and is expected to serve a place for training personnel engaged in local industry development, in addition to workers and managers of local industries. | |
| 3.3.5.6 | CSIR | - | 1968 | CSIR serves as R&D organization/BDS provider to render technical support, training and consulting services to local industries. | |
| 3.3.5.7 | AGI | 27 | 1950 | AGI is not only a stakeholder in local industry development by using branch offices in each region, but is capable of serving as organization to provide business support for local industries. | |

As of November 2007

3.3.6 Rural Banks and Community Banks

Rural and Community Banks (collectively referred to as "RCBs") are operated in a specific region under the license and supervision of the Bank of Ghana. They meet financial needs in local communities by providing both microfinance and commercial banking functions. Their main activities include the mobilization of local moneys through the acceptance of bank deposits and the lending to micro enterprise owners, farmers, fishermen, and workers, as well as consumer loans covering school tuitions, the purchase and remodeling of houses, and medical costs. Moreover, RCBs take on social responsibility roles by using profits from their business, i.e., contributing resources to local services that need support and assistance such as public education, public health, and cultural events. Some RCBs carry out special programs to help raise the social status of women. Thus, RCBs play an important role in the development of agriculture-based economy by rendering financial service for local communities.

3.4 Business Support Issues (Based on Results of Questionnaire Survey)

(1) BDS providers

- In Greater Accra, there are many private companies serving as BDS providers. In contrast, this function is mainly performed by NGOs and government organizations.
- Overall, the main service fields are market development, corporate management, and technical support, while financial assistance and business environment count much less.
- The BDS service fee is entirely paid by beneficiaries in many cases, in the case of Greater Accra, it is partially paid by beneficiaries whereas it is entirely covered by government subsidy in other regions.
- Problems relating to the BDS provider include the shortage of equipment and tools used for service delivery and a relatively small operating budget.
- Problems relating to the BDS market are the high service fee for smaller enterprises and competition among BDS providers.

(2) BDS demand survey

- The number of companies that have received the actual service is smaller in Greater Accra (garment) than in Ashanti and Central.
- In terms of service type, many companies have received service relating to management, market development, and financial service, in particular, SME loan, management consultation, and entrepreneurship.

- Financial service is most frequently cited in all the regions as the service in most demand.
- It is then followed by management support, production technology, and market development.
- High demand is seen in the participation of an exhibition, management consultation, and SME loan.
- High demand is also seen in the services that companies have already received.

3.5 Issues Relating to Local Industry Development

In this section, major issues relating to local industry development are identified on the basis of discussion in 3.1 through 3.5.

(1) Policy and institution

The present development policy based on GPRS indicates that private sector development is considered to play an important role. Within this framework, TSSP defines the implementation method for private sector development. TSSP specifies project outlines, size and its implementation body. If it is implemented in an efficient manner, it will contribute greatly to the development of the private sector including local industries, although the plan should be finalized in detail prior to actual implementation. From local industry development perspectives, there seem to be three issues.

<u>First of all</u>, there are many TSSP projects and programs that need implementation, which make it difficult for the current staffing of MOTI/PSD/PSI to implement them according to schedule ⁴. In fact, many projects seem to be behind schedule. For instance, SME/Technology division, which is the direct counterpart in the present study, has the largest number of staff members among other organizations and difficulties to implement its projects according to the schedule. A major reason for such delay in project implementation is the failure to secure an original budget according to the plan.

<u>Secondly</u>, TSSP is much segmented and it is difficult to implement many projects with proper coordination. If projects are implemented by aligning a schedule and/or target sector in a certain direction, it will likely have significant impacts on the private sector. However, a single project will be limited in effectiveness.

4

⁴ TSSP Programme Implementation Plan addresses problems relating to the shortage of staff.

<u>Finally</u>, the majority of TSSP projects are oriented to export promotion, while some focus on the invigoration of the domestic market. While export promotion is an important goal, it is still a formidable challenge for many local companies. While it is proposed to build infrastructure (road and market) to correct regional disparity in the business environment, it takes considerable money and time to execute.

PSI and DIP are also export-oriented policies. Also, they are relatively large in size due to an emphasis on economic impacts or job creation effect. Nevertheless, no successful case has been reported. This is partly due to financial constraint and partly due to capacity constraint on the project implementer side.

(2) Government organization for local industry development

<u>To ensure effective use of a limited budget</u>, activities of ministries and agencies involved in local industry development (e.g., MOTI/PSD/PSI, MOFA, MLGRDE, NBSSI, and GIPC) need to be coordinated. In particular, MOTI/PSD/PSI does not seem to have much experience in working for maximum efficiency by mobilizing the ministry's resources.

A major issue facing NBSSI is the proper training of BAC's new recruits, in addition to budget and staffing. As BAC expands its activity bases throughout the country, it should be used as a support organization capable of providing direct support for local industries. Thus, training results of BAC staff govern content and quality of activities to local industry development. Also, BDS facilitator's activities are affected by how the databases on BSD providers/resource persons and the development of micro enterprises and SMEs, which are under development, will be used.

For GRATIS, a major issues is the enhancement and improvement of technical support service. As BDS providers specialized in technical support service are small in number, the presence of GRATIS is important. At the same time, GRATIS obtains most of the revenues from the training service and sales of production equipment and is expected to become financially independent in the future. Under these circumstances, it is difficult for GRATIS to provide service with free of charge or service that is not conducive to profit. Also, production equipment made and sold by GRATIS needs to be improved in terms of ease of use, performance, and durability.

<u>Local industry development activities by DA should be enhanced</u>. As decentralization progresses, local government – in particular, DA – is expected to become the core element of local industry development. It has been conducting various support activities for local industries, such as microcredit and training, which have not been intensive enough, and some DAs do not provide any support. They need to step up efforts to promote the importance of local industry development and to intensify activities.

As for other support organizations, interview surveys and BDS surveys revealed that their services were <u>not always suitable for local industries in terms of service quality and price</u>, although the scope of service was broad. Also, their local activity bases and staffing are limited. Their operating budget is also limited and new activities cannot be expected unless they are funded by an outside source on a project basis.

(3) Expectation for RCB

For the local economy and its invigoration, RCB's <u>more aggressive lending policy</u> plays a critical role. While SUSU and microcredit service can meet short-term needs, there is unsatisfied demand for long-term funds used for capital spending. To meet such demand, two-step loans from the World Bank and other donor organizations are being considered and they may be supplied to SMEs via RCB. RCB searches prospective borrowers, and it is important to match supply and demand.

(4) Support activities by donor organizations

Most importantly, efforts should be made to ensure the continuation of various support activities by donor organizations. Their activities are specific in terms of geographic area or government organization. Support activities for SMEs and local industries are provided through private BDS providers (including NGOs) or public organizations such as BAC and GRATIS. In either case, it is important to continue each support activity – in some forms after the termination of the formal period. In the light of this, government intervention or involvement is very important, even in the case of a donor support activity conducted through a private BDS provider.

(5) Issues relating to private business support service

According to the BDS survey, <u>Private BDS is unevenly distributed</u>. Especially, only a small number of BDS providers are available in the Northern region. Although NBSSI attempts to support micro enterprises and small enterprises by using BDS providers and

resource persons, it faces difficulty in finding the sufficient number of providers in some areas. If BDS is to be entrusted to the private sector, the government should provide support by training private BDS providers.

4. Outline of Target Industries in Four Priority Regions and Trial Programs

4. Outline of Target Industries in Four Priority Regions and Trial Programs

In this chapter, the current statuses of each target industry in priority 4 regions are explained. Subsequently, summaries of each trial program are mentioned to give reasonable grounds for the master plan which is presented in the next chapter. The details of trial programs are described in the Trial Program Implementation Report as a separate volume.

4.1 Selection of Target Industries in the Four Priority Regions

The following four industries were selected as temporary target industries in the minutes of meeting agreed between the Ministry of Trade and Industry and the Preparatory Team of JICA dated on 18 August 2005.

Greater Accra Region: Garment

• Ashanti Region: Palm oil or Cassava processing

• Central Region: Citrus processing

• Northern Region: Shea butter

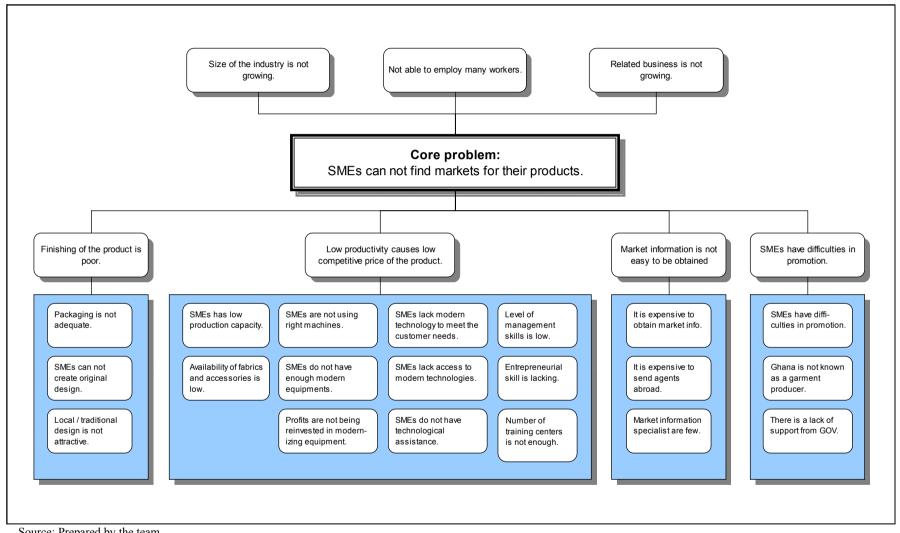
The team accepted the minutes and implemented the basic survey especially on those industries selected by counterparts. The team decided not to change the target industries unless a serious problem was found. However, in the case of the Ashanti Region, since two candidate industries were proposed, the team selected Palm Oil processing as the target industry after consideration of stakeholders' opinions and statistical data.

4.2 Greater Accra: Problem Analysis and Summary of the Trial Program

(1) Problem Analysis

At the workshop conducted on 26 May 2006, the core problem and their causes were identified. They were compiled into the problem tree shown in Figure 4-1. The core problem of the problem analysis was "SMEs can not find markets for their products" and the direct causes identified by participants were classified into the following factors.

- 1) Finishing of the product is poor.
- 2) Low productivity causes low competitive price of the product.
- 3) Market information is not easy to obtain.
- 4) SMEs have difficulties in promotion.



Source: Prepared by the team

Figure 4-1 Problem Tree of Garment Industry in the Greater Accra Region

(2) SWOT Analysis

Based on problem analysis, literature survey and company visits, the team compiled the SWOT analysis shown in Table 4-1. The important factors for designing the TP are listed below.

Strength

- Substantial Afro-centric market in U.S. and Europe
- Ghana is a key production country of African prints

Weakness

- Cheap imported second hand garments dominates the local market
- Low Production efficiency
- Low capability to control production

Opportunity

- Duty free export to US market (AGOA)
- PSI scheme provides machineries
- Training centers provide skilled workers

Thread

- Competition in the export market is getting aggravated
- Declined local textile industry forces the garment industry to rely on imported materials

Table 4-1 SWOT Analysis: Garment Industry in the Greater Accra Region

| | Market | Production Technology | Raw materials | Human Resource | Development capability | Business Environment |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| STRENGTHS | Substantial Afro-centric market in U.S. and Europe. | Traditional fabrics such as Kente can be obtained. | Ghana is a key production country of African prints. Cotton production | Comparative low wage (Min.19,200 cedi/day) Workers are obedient and can be taught in English. | Potential Afro-centric design ability | Stable democratic government |
| WEAKNESSES | Low purchasing power in domestic market Cheap imported second hand garments dominates the local market. | Low production efficiency Old machinery Inadequate maintenance Low capability to control production | High cost of fabrics and accessories. Unstable raw material supplies | Lack of work ethic Low level of skill | Limited information about world fashion trend | Difficulties in access to finance due to the high cost. Lack of management capability Lack of business information |
| OPPORTUNITIES | Duty free export to US market (AGOA). Free zone regime provides favorable conditions to exporters. Potential sales channels in Ghanaian communities abroad. | PSI scheme provides machineries. | Improvement of business environment attracts additional investment in textile industry. | Training centers provide more skilled workers. Training centers establish in other cities. | New generation designer bring more sophisticate Afro-centric design. | Promotion of PSIs. Availability of finance scheme such as EDIF |
| THREATS | Special treatment for importing foreign fabrics in AGOA comes to the end in 2007. Competition over the same niche market is getting aggravated. | | Declined local textile industry forces the garment industry to rely on imported materials. | | | |

(3) Selection of Trial Program

Major problem facing the garment industry is the high production cost due to low productivity. The problem analysis revealed that it was caused by the low level of management capability¹. In addition, low level of the production management capability was identified as the weakness of the industry at SWOT analysis. Also, some of SME managers who participated in the workshop expressed the need for training in the areas of management and factory operation. Furthermore, some companies visited by the team failed to perform proper administration and/or management. Taking all these into consideration, training of product management and management diagnosis was set as the theme of the TP in the stakeholder workshop.

Program: Training of SME managers to modernize their management

The major question was which target group should take the training. The following opinions were expressed by potential beneficiaries and other stakeholders.

- Technology transfer to local consultants is considered to be better than manager training in terms of effectiveness, extent and continuity.
- There are no qualified consultants. No effective support can be expected from consultants.
- SME managers may not have time to receive training for a long period of time.
- It is more urgent to improve the present manager's capability, rather than younger or next-generation managers.

In consideration of the above opinions, it was decided to make technology transfer to local consultants in the formal training program, who would then provide training for SME managers with the team. It is considered to be the best way to ensure the program's sustainability.

(4) Outline of Trial Program

The summary of this TP is described in Project Design Matrix (PDM) shown in Table 4-2.

- 1) Purpose: SMEs managements are modernized.
- 2) Expected Output

ä

- a) Organization for manager training is prepared
- b) Self-diagnosis and management improvement are implemented by a trained manager
- c) Dissemination system of manager training is prepared.

The management capability mainly consists of production management, marketing, financial management, labor management and etc.

Table 4-2 Project Design Matrix — Greater Accra Garment Industry

Name of trial program : Training of managers toward modernizing management

Target group : Small and medium sized garment companies

Implementation Area: The Greater Accra RegionImplementation period: August 2006∼July 2007

| Narrative Summary | Objectively Verifiable Indicators | Means of Verification | Important Assumptions |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Overall Goal | | | * |
| SMEs gain competitiveness. | Sales expansion | Total sales volume | |
| Project Purpose | ^ | | |
| SMEs managements are modernized. | Improvement activities are done according to the results of self-diagnosis. As result of improvement activities the overall condition of management is improved. | Inquiry about improvement activities Score of self-diagnosis after improvement | Business environment of garment change dramatically. |
| Outputs | | | |
| 1 Organization for training is prepared. | Number of trained trainersManuals for trainingContent of curriculum | Participants list Manuals Curriculum | Trainers change their jobs after training. |
| 2 Trained managers implement self diagnosis and management improvement. | Number of mangers trainedImprovement plan | • Participants list • Reports | |
| 3 Manager training method is disseminated. | Number of participants in W/S. Plan for dissemination Satisfaction of participants | Participants listReportsQuestionnaire | |
| Activities | Inputs | | |
| 1-1 Invite and select local consultants as trainer candidates. 1-2 Compile manuals for the training. 1-3 Determine the curriculum contents 1-4 Train selected local consultants as trainer candidates. 1-5 Improve manuals in line with the | JICA Study team Japanese experts Operating expense Employment costs of Ghanaian st Transportation and accommodation Expenses of training, meetings, w Expenses of training materials | on costs | The government changes the policy for the garment industry. |
| current conditions of the industry. | | | Pre-conditions |
| 1-6 Invite and select managers for training. 2-1 Provide training (classroom lecture) to managers by local trainers. 2-2 Practical training at a sample company 2-3 Implement self-diagnosis and management improvement. | Ghanaian counterparts Counter personnel Office space, office equipment and Operating expense administrative and management of | Adequate local consultants agree to become trainers. Adequate participants agree to join the | |
| 3-1 Evaluate results of self-diagnosis and management improvement. 3-2 Present results of self-diagnosis at the workshop. 3-3 Formulate dissemination plans. | | | program. |

(5) Trial Program Achievements

- Major achievements and results:
 - Training for 20 trainers (4th field survey)
 - Training for 18 owners / manages from 14 different companies (5th field survey)
 - On the site training of 5S and follow up (6th field survey)
 - Training of garment production management technology for supervisor of PSI garment training center (6th field survey)
 - Follow up survey on participant companies and guidance (6th field survey)
 - Producing teaching materials of garment production management technology (videos and slides) (6th field survey)
- The program was implemented mostly according to the PDM without a significant problem. The inputs were also made as planned, but the involvement of NBSSI's district office was limited to selection and participation of trainers.
- Outputs have been mostly achieved. As for participation in the training program, the target number was achieved for trainers, whereas the number of participants representing owners and managers fell below the target, i.e., 14 versus 20 companies contemplated for the plan.
- As for training results, priority was given to implementation of 5S and production management techniques, rather than implementation of self diagnosis. This is because owners could not see direct or immediate effect of self diagnosis, while the course was rather advanced and thus difficult to understand.
- Regarding the project purpose "modernization of management of SMEs," actual progress in improvement of production activity and practice in the form of 5S and layout modification was confirmed by the follow-up survey.

(6) Lessons learned from trial program

• The program has proven that the initiative introduced under the program – 5S, small group activity, and production management techniques² – would be highly useful for the apparel industry in Ghana. On the other hand, other initiatives - self diagnosis and kaizen planning – have failed to gain understanding or acceptance of owners and managers who participated in the trial program.

Production management techniques are situation analysis, motion study, time study, production planning and factory layout.

- The trial program has trained and produced human resources and teaching materials that can be used as the basis of continuing it as a permanent program.
- It has been confirmed that the apparel industry does not have international level of
 production technology and thus the training program such as the one conducted under
 the trial program plays an important role in raising their technological base.
- The training program was accepted by participants because of their practical
 applicability. However, it tried to cover rather broad subjects, some of which were
 difficult to understand and/or did not meet immediate needs. Clearly, the curriculum
 should be reviewed and refined in consultation with related parties.
- Among the activities offered in the trial program, field trip and practical training at various factories was proven to be highly effective. Coupled with use of visual aids, participants have gained high level of understanding.
- Closer collaboration with polytechnic and PSI Training Center, e.g., participation from the planning stage, could have improved the program's sustainability.

4.3 Ashanti: Problem Analysis and Summary of the Trial Program

(1) Problem analysis

At a workshop conducted on 30 May 2006, the core problem and their causes were identified. They were compiled into a problem tree shown in Figure 4-2.

On the problem analysis at the workshop, the core problem is set as "Secure Sustainable Market of Palm Oil" and the direct causes identified by participants were classified into the following factors.

- 1) Quality of palm oil does not meet market requirements.
- 2) Production cost of palm oil is high.
- 3) The target groups have low capability to access market.
- 4) Supply chain from procurement of raw materials to markets is not built.

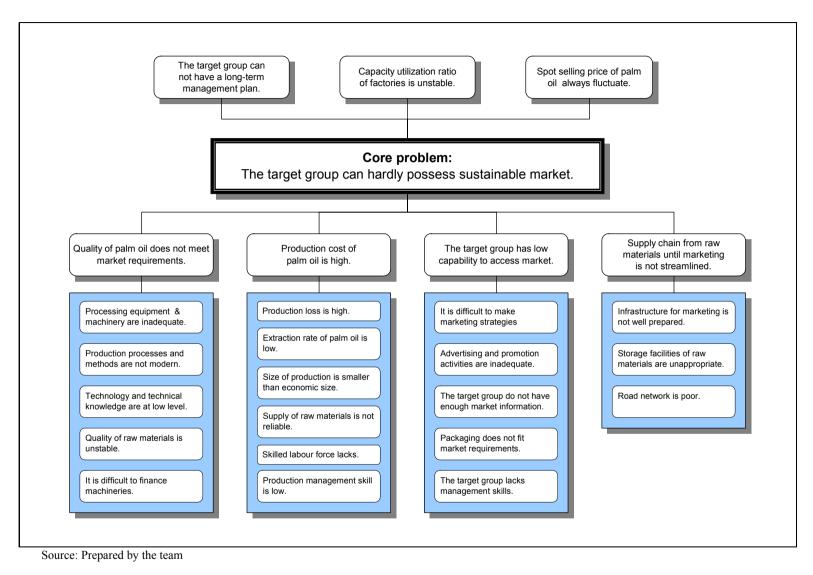


Figure 4-2 Problem Tree of Palm Oil Processing Industry in the Ashanti Region

(2) SWOT Analysis

Based on problem analysis, literature survey and company visits, the team compiled the SWOT analysis shown in Table 4-3. The important factors for designing the TP are listed below.

Strength

- Increasing domestic consumption
- Easy to buy palm fruit
- Palm and oil research in local universities and research institutes

Weakness

- Mostly sold as edible oil (limited diversification)
- Production management method is not well developed
- Dura with low oil content has often been used

Opportunity

- Strong demand from other than general consumers
- Great possibility to increase production by improving extraction rate
- Promotion of Tenera plantation by PSI

Thread

- Import of higher quality edible oil with lower price
- Setting up a large scale factory may cause the shortage of palm

Table 4-3 SWOT Analysis: Palm Oil Processing Industry in the Ashanti Region

| | Market | Production / technology | Raw material | Human resource | Development capability | Business environment |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| STRENGTHS | Easy access to local market Increasing domestic consumption | Availability of affordable processing equipment | Easy to buy palm fruit around factory. | Abundant supply of labor. | Palm and oil Research in domestic universities and research institutes | Transportation cost from Ghana for EU is cheaper than that of south-east Asia. |
| WEAKNESSES | Mostly sold as edible oil. (Limited diversification) | Production management method is not well developed. | Small scaled palm plantation Dura with low oil content has often been used. | Lack of technical staff | Poor development capability in palm oil processing companies | Lack of transportation means. Inferior storage condition for raw material |
| OPPORTUNITIES | Production volume is less than domestic consumption. Strong demand from other than general consumer. | Great possibility to increase production by improving extraction rate. | Promotion of plantation increases volume of palm production. | | Development of palm oil related products | |
| THREATS | Import of higher quality edible oil with lower price. | | Setting up a large scale factory may cause the shortage of palm. | | Imports of high quality palm oil related products | |

(3) Selection of Trial Program

At the workshop on program analysis, high production costs were identified as a major issue, and production loss and the low extraction rate were pointed out as their main causes. On the other hand, palm oil production in Ghana remains at an annual rate of 120,000 tons since 1998, whereas consumption grows substantially. Furthermore, palm oil consumption and imports in the EU – a major export market for Ghana – is on the steep rise. If the Ghanaian palm oil industry can boost production and lower the cost by raising the extraction rate, it will be able to take advantage of the growing demand, creating large impacts on the national economy.

Program name: Palm oil process improvement (KAIZEN) program

The program accords with the Ghanaian government's policy direction to promote expansion of palm tree plantations under President's Special Initiative (PSI). Also, each district assembly accepts that the program will contribute to reduction of poverty by benefiting not only manufacturers but farmers as well.

(4) Outline of Trial Program

The outline of trial program is summarized in the Project Design Matrix (PDM) shown in Table 4-4.

- 1) Purpose: Increase the yield rate of the target group
- 2) Expected Output
 - a) The implementation structure consisting of participating companies and research institute is established.
 - b) The performance (outputs) of each process in participating companies is measured.
 - c) Improvement plans of yield rate based on the analytical work are proposed to participating companies.
 - d) The results of the trial program are disseminated through printed materials and workshops

Table 4-4 Project Design Matrix — Ashanti Palm Oil Processing Industry

Name of trial program : Increase yield and reduce loss of palm oil process

Target group : Small and Medium sized company with certain mechanical equipments

Implementation Area : The Ashanti Region

Implementation period : August 2006~August 2007

| Narrative Summary | Objectively Verifiable Indicators | Means of Verification | Important Assumptions |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Overall Goal The total palm oil production increase | • Increase of palm oil production | • Total production volume | |
| Project Purpose | | | |
| Increase the yield rate of the target group | Improvement in the yield rate. | Inquiry about improvement | The demand of palm oil does not decrease |
| Outputs | | | |
| 1 Establish the implementation organization consisting of participating companies and research institute. | Name of implementation organization and activities Number of participants companies | AgreementsScope of workLetter of content | Supply of oil palm is stable. The demand of palm oil does not |
| 2 The performance (outputs) of each participating company is measured. | The results of measurement of material balance in each company | Comparison table of measurement results | decrease |
| 3 Participating companies receive the improvement plans of yield rate based on the analytical work. | Submission of proposalSatisfaction of recipients | Proposal documentsFeedback from participating companies | |
| 4 The results of research are disseminated through printed materials and workshops. | Workshop Printed materials | Participants listFeedback from stakeholders | |
| Activities | Inputs | | |
| 1-1 Hold a motivational workshop 1-2 Establish the implementation organization 1-3 Determine the detail of the program 2-1 Calculate a standard material balance 2-2 Develop measurement plans for factories 2-3 Measure performances of factories 2-4 Make a comparison table of results. | JICA Study team • Japanese experts • Operating expense - Employment costs of Ghanaian si - Transportation and accommodati - Expenses of research on sample f - Expenses of training, meetings, w | The government does not change the policy for the palm oil industry. | |
| 3-1 Analyze causes of differences in results | - Expenses of publishing materials | Pre-conditions | |
| 3-2 Develop proposals for improvement of sample factories yield rate. 3-3 Propose improvement plans to factories Hold a dissemination seminar. | Ghanaian counterparts Counter personnel Office space, office equipment and Operating expense | Adequate no. of participant in the program | |
| 4-2 Implement dissemination activities. | - administrative and management of | costs | |

(5) Trial Program Achievements

- Major achievements and results:
 - Measurement of yield rate at 10 sample companies to understand the present situation. (4th to 5th field survey)
 - Drawing the table of measurement results (5th field survey)
 - Finding causes of low yield rate (6th field survey)
 - Making proposed measures to improve yield rate (6th field survey)
 - Improvement measures were implemented at 4 sample companies (7th field survey)
 - Analyzing and verifying the results of yield improvement (7th field survey)
 - Making Improvement manuals (100 copies) (7th field survey)
 - Holding the workshop for improvement of yield rate (7th field survey)
- Inputs have been made generally according to the plan and the schedule
- As for the improvement of yield that is set as the project purpose, 70% 90% improvement was realized among micro enterprises and small enterprises.
- On the other hand, the program failed to offer a direct method to improve yield for medium sized companies of sample companies.
- As the improvement initiatives implemented under the trial program did not involve substantial investment, their results – yield improvement and increase in production – led to the decline in per-unit production cost.
- In addition to yield, other improvement activities such as misalignment of operation lines or transportation of raw materials within the factories can help decrease the overall production cost.

(6) Lessons learned from the trial program

- Uncertainty lies in impact, which depends largely upon the method for dissemination and continuation as well as its extent.
- Collaboration with universities has significant effects, but it is subject to various restraints such as class schedule. Also, universities are not accustomed to activities like the trial program.

- Like the palm oil processing industry, other industries seem to face the similar situation. One reason is the lack of knowledge on production management and techniques on the management side.
- A similar program such as yield improvement can be applied to other industries. It is necessary to review other industries for adaptation.
- The program results are generally applicable to palm oil industries in other regions and can easily be disseminated by NBSSI (BAC).
- Improvement of the production system leads to sales promotion and industrial growth of the palm oil industry.

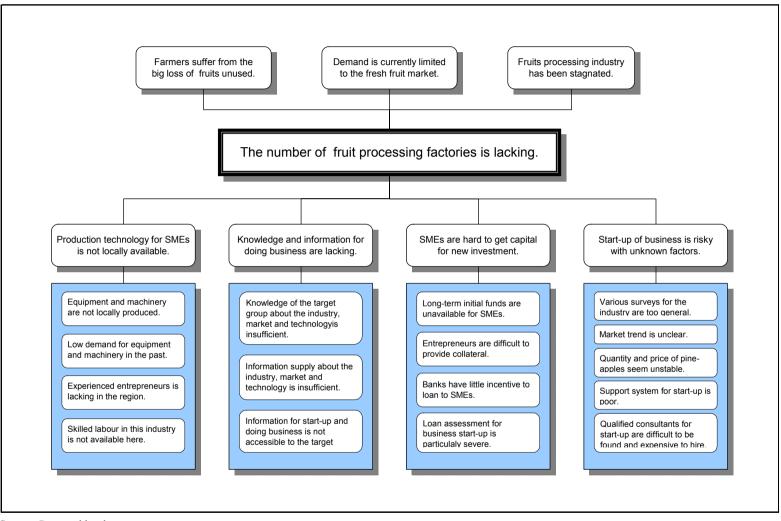
4.4 Central: Problem Analysis and Summary of the Trial Program

(1) Problem analysis

At the workshop conducted on 6 June 2006, the core problem and their causes were identified. They were compiled into a problem tree shown in Figure 4-3.

During the problem analysis workshop, the core problem is set as "The number of fruit processing factories is lacking" and the direct causes identified by participants were classified into the following factors.

- 1) Production technology for SMEs is not locally available.
- 2) Knowledge and information for doing business are lacking.
- 3) SMEs are hard to get capital for new investment.
- 4) Start-up of business is risky with unknown factors.



Source: Prepared by the team

Figure 4-3 Problem Tree of Citrus Processing Industry in the Central Region

(2) SWOT Analysis

Based on problem analysis, literature survey and company visits, the team compiled the SWOT analysis shown in Table 4-5. The important factors for designing the TP are listed below.

Strength

- Easy access to large market such as Accra and Kumasi
- Easy access to raw materials

Weakness

- Domestic demand for processed products is not clear
- No appropriate locally made machinery in terms of capacity and price
- Luck of skilled person

Opportunity

- Possibility to export to neighboring countries
- Increasing demand of fruits encourage breed improvement
- Some students are willing to start a processing plant

Thread

- Importing better quality products with lower price
- Increasing damage of Medfly

Table 4-5 SWOT Analysis: Citrus and Pineapple Processing Industry in the Central Region

| | Market | Production / Technology | Raw materials | Human Resource | Development capability | Business Environment |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STRENGTHS | Easy access to large market such as Accra and Kumasi. | | Abundant orange and pineapple Price is low during the peak season. Easy access to raw materials | Abundant labor force FRI provides basic knowledge of processing. | | Growing interests in fruits processing from local authority. Support from professors and students in Cape Coast University (Dept. of Management Studies). |
| WEAKNESSES | Domestic demand for processed products is not clear. The product specification which is accepted by the market is not known. | No appropriate locally made machinery in terms of capacity and price. No manufactures specialized in this sector. | Price fluctuation of raw materials may cause difficulties for processors to get necessary amount of raw materials. | Luck of skilled person in areas of marketing, finance and production. | Luck of product development capability | Luck of own fund for business start-up. Difficulties in borrowing money. Troublesome procedure for business start-up. Performance of a few operating processor in the region discourage the processing business. |
| OPPORTUNITIES | Possibility to export to neighboring countries with improved quality and package. | | Increasing demand of fruits encourage breed improvement. | Some students are willing to start a processing plant. | GRATIS has the plan to develop machineries for SMEs. | |
| THREATS | Importing better quality products with lower price. | | | | | Unstable packaging material supply Unstable electricity and water supply. |

(3) Selection of the trial program

At the problem analysis workshop, the small number of fruit processors was raised as a core problem. The major cause, as pointed out there, was a large risk to start up fruit processing business due to the lack of information required for making an investment decision. In response, the team proposed to carry out a feasibility study for fruit processing.

Program: Feasibility study on construction of the citrus processing factory in the Central Region

The team checked directly with the local citrus and pineapple producers' association and confirmed their expectation for the construction of a fruit processing factory. While the Central Region is known for production of oranges and pineapples, producers are often forced to sell them at fairly low prices due to limited local demand. Because of this, they hope the presence of a fruit processing factory would be ready to purchase their fruit products regularly.

Generally, the fruit processing industry can enjoy various advantages when it is located near the source of raw materials, i.e., the transportation cost can be saved significantly as processing near the source reduces the volume of fruits to one third that in the case of remote processing. Besides, fresh juice can be produced because fruits can be processed soon after their harvesting. Also, loss due to rotting or moisture evaporation can be minimized. Moreover, local processing offers a great advantage for Ghana where the means of transportation is limited and costly.

(4) Outline of Trial Program

The outline of the trial program is described in Table 4-6.

- 1) Purpose: Increase potential investors for fruit processing factories
- 2) Expected Output
 - a) Marketability of the product is clarified in size, channels and prices.
 - b) Suppliabilty of raw materials in the Central Region is clarified.
 - Specifications of products, production capacity and a factory site are determined for F/S.
 - d) Production facilities are designed as a module factory.
 - e) Project and operation costs are summarized.
 - f) Project implementation plan is finalized.

Table 4-6 Project Design Matrix — Central Region Citrus and Pineapple Processing Industry

Name of trial program : Feasibility study on construction of a fruit processing factory

Target group : Local stakeholders interested in building the fruit processing factory

Implementation Area : The Central Region

Implementation period : August 2006~August 2007

| Narrative Summary | Objectively Verifiable Indicators | Means of Verification | Important Assumptions |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------|
| Overall Goal | | | - |
| Increase total production of local fruits industry | Production volume | • Statistics | |
| Project Purpose | | | |
| Increase potential investors for fruit processing factories | New investment of fruits processing in the region | • No. of investment | Fruits production does not decrease. |
| Outputs | | | |
| 1 Establish the local organization to implement F/S. | Organization members and activities | Organization chart | Domestic economy does not change |
| 2 Clarify domestic and local demands and sales distribution | Amount of demand and distribution channel | • Report | dramatically. 2. Exchange rate is |
| 3 Clarify sources of raw materials and these prices | • Amount of raw material available and price range | • Report | stable. |
| 4 Decide specifications of products, production capacity and a site proposed | Specifications, production capacity and plant site | Report | |
| 5 Clarify the equipments and plant plan | • List of equipments and layout of plant | Report | |
| 6 Clarify costs of construction and operation | Costs of construction and operation | Report | |
| 7 Reveal the result of financial analysis with the sales plan | Financial analysisSales plan | • Report | |
| 8 Realize the investment plan | Investment promotion plan Name of potential investors | • Report • List | |
| Activities | Inputs | | |
| (1)-1 Establish a feasibility study (F/S) execution committee (1)-2 Prepare an F/S execution plan (1)-3 Assign Institutions responsible for tasks in F/S (2)-1 Execute demand survey and marketing channel survey (2)-2 Execute test marketing if possible | JICA Study team • Japanese experts • Operating expense - Employment costs of Ghanaian st - Transportation and accommodation - Expenses of training, meetings, w | on costs | Any crucial problem to make the processing plant is not found. |
| (3)-1 Execute raw material survey (3)-2 Investigate farmer's associations about suppliability | - Expenses of training materials | Cilibriops | Pre-conditions |
| and intensions (4)-1 Determine a product(s) with specification to produce (4)-2 Determine a production capacity as a module factory (4)-3 Determine a factory site for the feasibility study (5)-1 Design an appropriate process and estimate machinery costs (5)-2 Design and estimate auxiliary and off-site facilities (6)-1 Estimate and summarize the total project cost (6)-2 Estimate and summarize the operating cost (7)-1 Make sales and revenue plan (7)-2 Project financial statements and analyze financial indicators and ratios (7)-3 Prepare a feasibility report (8)-1 Promote the envisaged project to potential investors (8)-2 Propose the organization for the new business (8)-3 Make decision on execution of the envisaged project | Ghanaian counterparts Counter personnel Office space, office equipment and Operating expense administrative and management c | Possibility of investment is very low. Market for processed fruits exists. | |

(5) Achievements of the trial program

- Major achievements and results:
 - Implementation of Local material survey (25 associations, 99 farmers in 5 districts) (4th to 5th field survey)
 - Implementation of demand survey for pure fruits juice (82 distributors, 34 restaurants & hotels, 22 schools) (4th to 5th field survey)
 - Setting the product specification and production capacity (4th to 5th field survey)
 - Determining production facilities and the factory layout (5th field survey)
 - Calculation of costs of construction and operation (5th to 6th field survey)
 - Execution of Financial feasibility study (6th field survey)
- Input of the team in the sixth field survey was reinforced (i.e., addition of team members) to allow the feasibility study to be completed according to the original schedule. Thus, outputs have also been produced according to the plan.
- The project purpose was set for promotion of investment in the citrus fruit processing industry by publishing the feasibility study report. As the program was materialized, it was able to attract DA's attention and several potential investors expressed interest.
- Nevertheless, it takes some more time to attract investment actually. It is therefore
 very difficult to expect investment decisions during the program period.

(6) Lessons learned from the trial program

- New investment is essential in development of local industries, but support for existing
 industries can be easily focused because issues are clearly identified.
- It takes considerable time and effort to obtain valid information. Information access should therefore be incorporated into a permanent mechanism to promote investment and industry development.
- Notably, it was very difficult to obtain information on machinery and equipment required for factory operation, as well as packaging materials. A few potential investors who want to start the juice plant are facing similar problems.

4.5 Northern: Problem Analysis and Summary of the Trial Program

(1) Problem analysis

At the workshop conducted on 3 June 2006, the core problem and their causes were identified. They were compiled into a problem tree shown in Figure 4-4.

During the participatory problem analysis, the core problem was set as "It is difficult to increase sales" and the direct causes identified by participants were classified into the following factors.

- 1) Processors do not have enough business management technique.
- 2) It is difficult to access buyers' information.
- 3) Shea nuts are not available in large quantities.
- 4) Shea butter quality is poor.
- 5) Product development is poor.

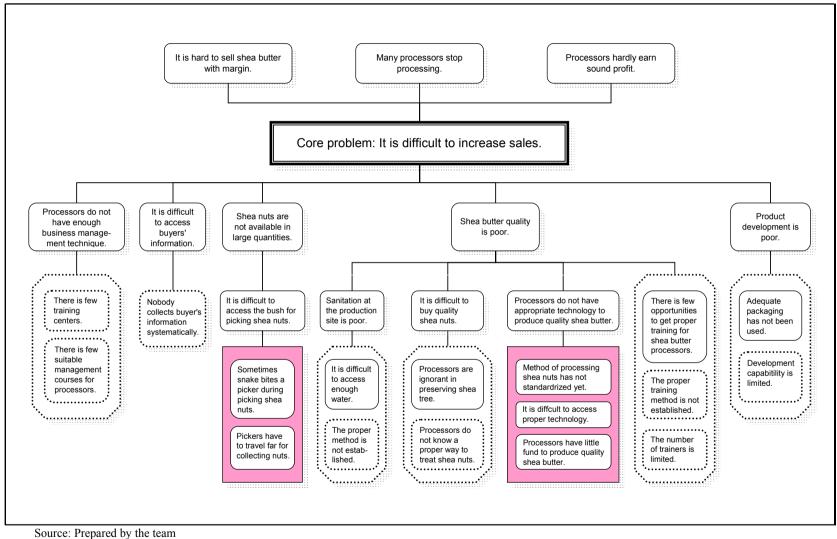


Figure 4-1 Problem Tree of Shea Butter Industry in the Northern Region

(2) SWOT Analysis

Based on problem analysis, literature survey and company visits, the team compiled the SWOT analysis shown in Table 4-7. The important factors for designing the TP are listed below.

Strength

- Stable demand of shea butter as eligible oil in northern Ghana
- Northern Ghana belongs to shea nuts belt
- Flexibility of conventional production

Weakness

- Stagnated domestic sale of shea butter
- Unstable product quality
- Unstable harvest

Opportunity

- Possibility of expanding domestic and foreign market
- Improvement of process and quality control may increase quality and quantity
- Room to increase cultivation of shea nuts

Thread

- Competition against other shea butter producing countries
- Sudden depletion of shea nuts

Table 4-7 SWOT Analysis: Shea Butter Processing In the Northern Region

| | Market | Production / technology | Raw material | Human resource | Development capability | Business environment |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| STRENGTHS | Stable demand of shea butter as eligible oil in northern Ghana. | Flexibility of conventional production | Northern Ghana belongs to shea nuts belt | Abundant work force. | | Foreign Donors and NGOs can assist shea butter processing. |
| WEAKNESSES | Usage of shea butter is limited in other regions. Stagnated domestic sale of shea butter. | Unstable product quality Lack of technical knowledge. | Shea tree plantation is difficult. Unstable harvest Risky and hard work of harvesting. | A little chances of training. Lack of skill and knowledge of shea butter processing | Lack of development capability. A few companies produce shea butter related products. | Lack of funds for mechanization and sales promotion. |
| OPPORTUNITIES | Possibility of expanding domestic and foreign market by improvement of package. Growing interests in developed countries. | Improvement of manufacturing method and quality control increase quality and quantity. | Room to increase cultivation of shea nuts (only half of available fruits are collected) | | Research efforts in University/research institute | Promotion of central and local government for shea butter development. |
| THREATS | Demand of local made shea butter grows at a sluggish pace. Competition against other shea butter producing countries may become intense. | Improvement is difficult due to adhering to conventional method. | Sudden depletion of shea nuts | Work of women's groups can be replaced by cheap and mechanized manufacturing. | Existing research institute shift the study focus to other products. | |

(3) Selection of the trial program

At the workshop (problem analysis) in June, the quality issue was raised by many participants. In particular, "poor quality of shea butter" was pointed out as a major cause for poor sales. Then, causes for poor quality were cited, including "lack of appropriate technology" and "lack of training." In fact, the team confirmed from vendors in the local markets that shea butter of good quality was sold well. Meanwhile, shea butter processors are not much aware of product quality. Those processors lost buyers' confidence because there are cases of mixing water or additive to increase product volume. On the other hand, "production volume and product quality can be upgraded by introducing proper production method and quality management" was pointed out in SWOT analysis. Taking these into consideration, the team decided to formulate codes of practice to improve the quality of the product.

Program: Standardization of shea butter processing

As shea butter is made in each community, if quality improvement leads to sales growth and then price rise, it will create positive impacts on beneficiaries. The need for quality improvement was also confirmed by buyers and experts. As a quality standard for shea butter products was already introduced, the team chose to establish a process standard in compliance with it with view to securing sustainability. However, as it became apparent that the implementation time constraint would make it very difficult, it was decided to select a best practice for production of shea butter with quality levels demanded by the market and disseminate it to each community.

(4) Outline of Trial Program

The outline of the trial program is summarized in Project Design Matrix (PDM) shown in Table 4-8. The purpose and outputs are as follows:

- 1) Purpose: Standardized process is promoted in the region
- 2) Expected Output
 - a) The qualities required by each market are clarified.
 - b) The standard operation (codes of practice) to produce the required quality shea butter is found.
 - c) The dissemination system of codes of practice and quality management method is prepared.

Table 4-8 Project Design Matrix — Northern Shea Butter Industry

Name of trial program : Standardization of Shea butter processing

Target group : processing groups Implementation Area : The Northern Region

Implementation period : August 2006~September 2007

| Narrative Summary | Objectively Verifiable Indicators | Means of Verification | Important Assumptions |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| Overall Goal | | | |
| Increase the sales amount | Sales expansion | Total sales volume | |
| Project Purpose Standard process is promoted in the region | The codes of practice is used widely. Improvement of shea butte quality in the region. | InquiryTest samples | Shea butter market does not change dramatically. |
| Outputs | | | |
| Clarify the quality required in the market Find out the codes of practice to produce the required standard product Disseminate codes of practice and quality management method | Specification required by buyers Items concerned by consumers The codes of practice Quality management method Method of dissemination Number of resource person participate Specifications and items in the report The codes of practice Management method Manuals Participant list | | Shea butter business does not change dramatically. |
| Activities | Inputs | | |
| (1)-1 Select a surveyor for marketing survey and decide the content (1)-2 Execute the market survey to determine product qualities by markets (1)-3 Determine the target quality specifications (2)-1 Assign an institute responsible for making codes of practice | JICA Study team Japanese experts Operating expense Employment costs of Ghanaian s Transportation and accommodat Expenses of training, meetings, Expenses of training materials | 1. The government does not change the policy for the garment industry. | |
| (2)-2 Research on participating processing groups to identify process and quality (2)-3 Find out the best practice among above groups and investigate better production conditions based on best practice (2)-4 Test the daft production condition with processing groups to prove the daft codes of practice (2)-5 Invite experts on shea butter to check the draft codes of practice (3)-1 Find out the production management method to follow the codes of practice (3)-2 Make a guide manual of codes of practice and management method to resource | Ghanaian counterparts Counter personnel Office space, office equipment an Operating expense administrative and management | | Pre-conditions 1. Quality of shea butter can be controlled by process |

(5) Achievements of the trial program

- Major achievements and results:
 - Survey on current shea butter processing method (42 women's groups) (4th field survey)
 - Analysis of 84 shea butter samples (5th field survey)
 - Survey on picking shea nuts and preservation (6th field survey)
 - Formulation of the draft codes of practice from picking raw materials to processing shea butter (6th to 7th field survey)
 - Making the video manual and the pictorial manual (7th field survey)
 - Training to disseminate the codes of practice (2 times total 50 women from 24 groups) (7th field survey)
 - Analysis and verification of shea butter quality processed on the codes of practice (7th field survey)
- Inputs by the team have been made according to the plan. On the other hand, inputs by the counterpart were led by coordinators and UDS, which served as contractor.
- Originally, participation of MOTI and NBSSI was expected, but their participation was fairly limited.
- The project purpose, "to promote work standardization," has been accomplished well
 for the target group, as training based on work standardization was conducted as part
 of the trial program.
- It was also confirmed that the overall goal improvement of shea butter quality in the entire region can be achieved by using the pictorial manuals, video manual, and the codes of practice that were produced as a result of the trial program.

(6) Lessons learned from the TP

- It is necessary to carry on additional research to improve quality further.
- In addition to outside support, self-help efforts of producer (women) groups and local communities are called for.
- MOFA (AEA) should provide assistance for dissemination of the codes of practice throughout the region.

5. Business Support Systems for Target Industries

5. Business Support Systems for Target Industries

Before implementation of trial programs (TPs), the team executed the basic study on the target industries. The results of the basic study were summarized in Chapter 4. In addition, the team conducted the participatory problem analysis and formulated the problem tree which summarized stakeholders' opinions. Each TP was planned and implemented in order to solve major issues which were abstracted from the analysis. However, in the course of TPs, these major issues turned out not to be necessarily based on the reality. In this chapter, modified strategies based on facts and opinions gathered during the TPs are presented and explained. In this chapter, 1) explanation of strategic approach, 2) priority of programs and 3) implementation organizations, for the Business Support System to develop each target industry are presented.

5.1 The Business Support System for the Garment Industry in the Greater Accra Region

5.1.1 Strategic Approach

The garment industry is a typical labor intensive industry as well as export/import oriented industry. Penetration of the export market and competition with import products were revealed as the important issues in the problem analysis. Among others, especially local companies have lower productivity in comparison to the international standard and it is the main cause of lack of competitiveness. In fact, the price of the imported product is less than the manufacturing cost of the domestic equivalence. Unless this situation changes, it is quite difficult for a garment company to expand the market share in Ghana or to penetrate new international markets.

Most micro and small companies can be likened to a tailor who makes a piece of cloth from the beginning to the end. This type of manufacturing process turns out to be unproductive in the long run. On the other hand, thanks to AGOA, middle sized companies which adopt division of labor were able to expand exports even though they still need productivity upgrade.

During the TPs, production management skills were transferred to owners or mangers of local companies. Follow-up study on these companies proved that even micro and small companies were able to introduce 5S to make extra space in their work place so they could change the layout of the machines. As a result of changing the layout, productivity increased. There was a case when an operator's suggestion for change in the way work was structured

resulted in doubling productivity. These are just small "kaizen" activities, however, it indicates a possibility of increasing productivity further in the future.

The vision for this Business Support System is set to "increase the size of the garment industry" and its objective indicates to "expand the market for the garment SMEs." As shown in the industry's current state, the garment industry is the largest in the manufacturing sector in the numbers of establishments and employees, while its output is relatively small. Although statistical data are not available, industry sources and MOTI/PSD/PSI believe that the number of companies engaged in garment production is on the decline. Under these circumstances, the expansion of the garment industry by exploring both domestic and foreign markets is highly desirable to stimulate growth in the country's economy. The four strategies to achieve the objective correspond to the major issues identified in the problem analysis (Figure 4-1). Each of the four strategies consists of programs that serve as a vehicle to overcome the identified issues.

Figure 5-1 shows a general framework of the Business Support System, and Table 5-1 presents a program outline.

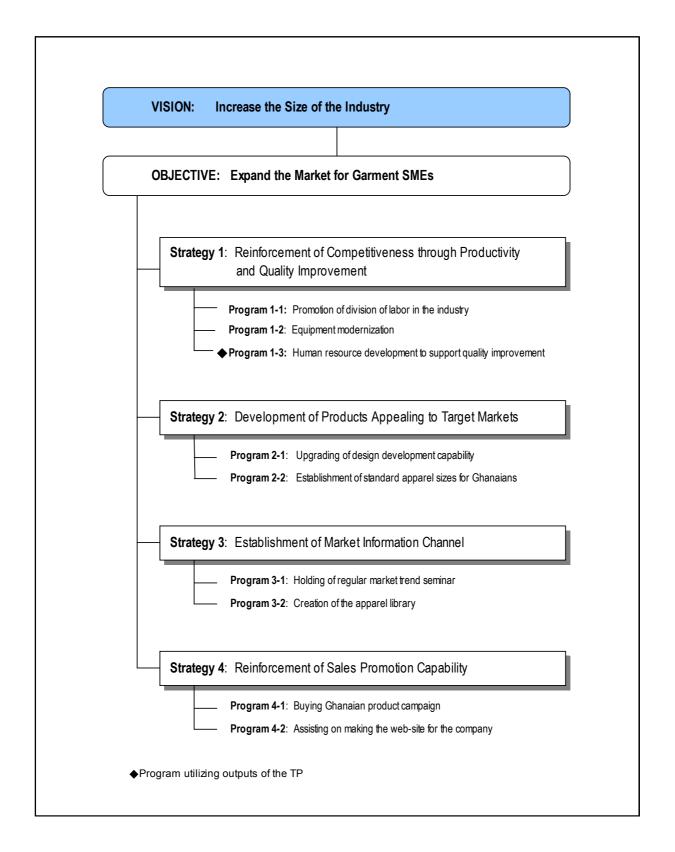


Figure 5-1 Framework of the Business Support System for the Garment Industry in the Greater Accra Region

Table 5-1 Program Outlines of the Business Support System for the Garment Industry in the Greater Accra Region

Program 1-1: Promotion of division of labor in the industry

Strategy 1: Reinforcement of Competitiveness through Productivity and Quality Improvement

Purpose: To disseminate the production sharing (division of labor) system.

Outputs and activities

- 1. Information relating to division of labor (e.g., success stories) is spread through the trade organization.
- 2. Dissemination of production management technology and knowledge for division of labor is carried out.
- 3. Sub-contract business between exporters and small firms are promoted.

Implementation organization: PSI training centre, Polytechnic, Industry group/asso. MOTI/PSD/PSI

Program 1-2: Equipment modernization

Strategy 1: Reinforcement of Competitiveness through Productivity and Quality Improvement

Purpose: To promote assurance of sewing quality and equipment modernization.

Outputs and activities

- 1. Common facilities of modern equipments (led by the trade association) are shared.
- 2. Quality inspection (acceptance/rejection) criteria are widely recognized.
- 3. Attachments are promoted and widely used.

Implementation organization: PSI training centre, Polytechnic, Industry group/asso. MOTI/PSD/PSI

Program 1-3: Human resource development to support productivity and quality improvement

Strategy 1: Reinforcement of Competitiveness through Productivity and Quality Improvement

Purpose: To develop human resources that support quality improvement

Outputs and activities

- 1. Industrial pattern techniques are introduced and disseminated.
- 2. Production management technology seminars are held.
- 3. Quality control seminars are held.
- 4. Sewing machine maintenance workshops are held.

Implementation organization: TGTC, Polytechnic, Industry group/asso. MOTI/PSD/PSI

Program 2-1: Upgrading of design development capability

Strategy 2: Development of Products Appealing to Target Markets

Purpose: To improve the design creativity for niche market

Outputs and activities

- 1. The common target market is identified by the industry group.
- 2. The design information of the market is collected through Embassies and the internet.
- 3. The design development program for designers in the industry is set up.
- 4. The selling mission to the target market is sent.

Implementation organization: Industrial group/asso., GEPC, Polytechnic and foreign design consultant

Program 2-2: Establishment of standard apparel sizes for Ghanaians

Strategy 2: Development of Products Appealing to Target Markets

Purpose: To gain more domestic market of Ghanaian wear.

Outputs and activities

- 1. Awareness of the importance of Ghanaian standard size is raised.
- 2. Ghanaian size survey is executed.
- 3. Standard Ghanaian size is set and published.
- 4. Standard Ghanaian size is promoted and used for Friday wear.

Implementation organization: GSB, Polytechnic and MOTI/PSD/PSI

Program 3-1: Holding of regular market trend seminars

Strategy 3: Establishment of Market Information Channel

Purpose: To expand analytical capability of designers on fashion trend

Outputs and activities

- 1. Content and system of the seminar is decided.
- 2. The sponsor for the seminar is found.
- 3. The experts on the field are found and invited for the seminar.

Implementation organization: Polytechnic, Industry group/asso., GEPC

Program 3-2: Creation of the apparel library

Strategy 3: Establishment of Market Information Channel

Purpose: To provide reference materials and other presentations to designers

Outputs and activities

- 1. The place for the library is secured.
- 2. The system to collect reference materials is set up.
- 3. Collected materials are installed in the library and maintained.

Implementation organization: Industry group/asso, Polytechnic, GEPC

Program 4-1: Buying Ghanaian product campaign

Strategy 4: Reinforcement of Sales Promotion Capability

Purpose: To expand Ghanaian wear

Outputs and activities

- 1. A campaign for Ghanaian wear is started.
- 2. A comprehensive catalog for Ghanaian wear is published.
- 3. An exhibition for sale is held in regions.

Implementation organization: Industry group/asso, MOTI/PSD/PSI

Program 4-2: Support for creation of corporate websites

Strategy 4: Reinforcement of Sales Promotion Capability

Purpose: To strengthen the sale capability

Outputs and activities

- 1. Web-sites are created with assistance.
- 2. The number of visitors and sales from web-sites are monitored.

Implementation organization: Industry group/asso, MOTI/PSD/PSI

5.1.2 Priority Setting for Strategy and Implementation Schedule

Without AGOA, strengthening the productivity of the local companies to lower their costs is the only way to increase exports and the domestic market share of the garment industry. If the industry reaches the international standard in terms of quality and cost, other programs can increase the impact of design development and sales promotion.

Improvement of design capability and establishment of Ghanaian standard sizes should be done prior to sales promotion for the domestic market. The new design and standard sizes can be disseminated along with sales promotion. Since the establishment of galleries and country wide expansion of National Friday Wear are planned as a part of TSSP "Promotion of Made in Ghana Goods", sales promotion should be implemented hand in hand with TSSP.

- (1) Programs that require urgent startup for implementation
 - Human resource development to support quality improvement (production management, industrial pattern, maintenance)
 - Equipment modernization
- (2) Programs that require a specific preparation period and a staged improvement approach
 - Promotion of division of labor
 - Upgrading of design development capability
 - Holding of regular market trend seminars (or any information gathering effort)
 - Establishment of standard apparel sizes for the Ghanaians
- (3) Programs to be planned and started according to actual industrial development or on the basis of the results of other programs (2 5 years)
 - Creation of the apparel library
 - Sales promotion measures for Ghanaian products (two programs)

5.1.3 Implementation Organizations

These programs should basically be carried out under the initiative of the trade organization. As for human resource development, vocational training institutes such as Accra Polytechnic and Textile Garment Training Centre (TGTC) should serve as the implementation bodies, while the initiative may be taken by the trade organization. DA may cooperate in the provision of activity sites (for instance, for ad-hoc events). Furthermore, since the strategies go over

district boundaries and the garment industry is a priority sector under the PSI system, the MOTI/PSD/PSI's support (institutional and financial aspects) will play a central part. Since GEPC opened Ghana Export Information Centre where people could collect trade information and hold seminars, it is possible to utilize this centre for training human resources and gathering export market information.

5.2 The Business Support System for the Palm Oil Industry in the Ashanti Region

5.2.1 Strategic Approach

Palm oil processing is one of the priority industries promoted by the Ghanaian government and the domestic as well as the external market is large, with the market still growing. Ashanti is the largest producer of palm fruits in the country and contains a large number of small palm oil processors. As a crop which has been cultivated for a long period in the country, the industry continues to rely on traditional production methods with little regard for productivity and quality.

Against this background, the team conducted a problem analysis and identified the inability to secure the market as the major challenge facing the industry. Regardless of market expansion, both domestic and overseas, small palm oil mills (classified as microenterprises and small enterprises) are unable to sell their oil as much as they produce. Our analysis found that major causes for the inability to explore the market were inadequate quality, pricing, market access and/or logistics. In view of the results of the analysis, the team planned and implemented a palm oil yield rate improvement (Kaizen) program as a TP, to reduce production costs. By introducing proposed improvement measurers, the TP succeeded in raising the yield rate from less than 10% to over 17% and thus boosting production volume without upgrading or replacing the present production equipments. In addition to the increase in production, the process improvement resulted in higher product quality, which led to better reputation in local markets and helped mills to boost sales.

This plan aims to use the lessons learnt in the TP as the first step for promoting the palm oil industry. Its strategy is to drive bottom-up improvement of the palm oil industry by disseminating the improvements and methods identified in the TP to the entire industry, thereby to promoting the sales of products of higher quality at a higher price. The team sets "Secure Sustainable Market of Palm Oil" as the objective of the Business Support System, and the palm oil industry becomes "Leading local Industry in Ghana" as the vision. Four strategies to

accomplish the objective correspond to the major challenges identified in the problem analysis (see Figure 4-2).

The frame work of the Business Support System is shown in Figure 5-2 and see Table 5-2 for the outlines of programs.

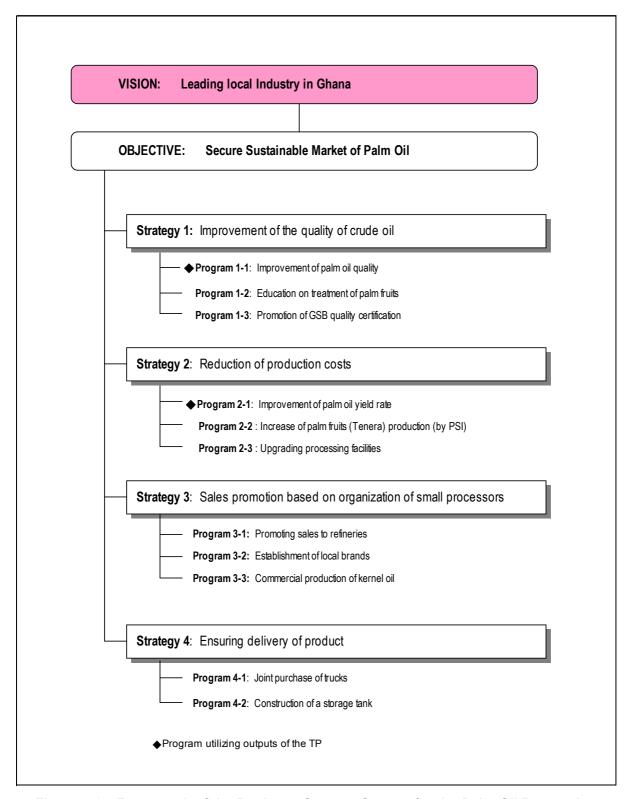


Figure 5-2 Framework of the Business Support System for the Palm Oil Processing Industry in the Ashanti Region

Table 5-2 Program Outlines of the Business Support System for the Palm Oil Processing Industry in the Ashanti Region

Program 1-1: Improvement of palm oil quality

Strategy 1: Improvement of the quality of crude oil

Purpose: To increase quality of crude oil by adopting JICA technical manuals

Outputs and activities

- 1. JICA technical manuals are provided to beneficiaries.
- 2. The technical workshop for improvement is held.
- 3. Consulting services are provided for those who need advice from experts.
- 4. A study session is held among mills who improve their activities.

Implementation organization: Industrial group/asso. BAC, consultants

Program 1-2: Education on treatment of palm fruits

Strategy 1: Improvement of the quality of crude oil

Purpose: To secure good quality palm fruits

Outputs and activities

- 1. The standard palm fruits quality management method is established.
- 2. Processors understand the importance of palm fruits quality management.
- 3. Oil palm farmers and processors execute palm fruits quality management method.
- 4. Quality of palm fruits is checked periodically.

Implementation organization: KNUST, industrial groups, farmer groups

Program 1-3: Promotion of GSB quality certification

Strategy 1: Improvement of the quality of crude oil

Purpose: To maintain and prove the quality of crude oil

Outputs and activities

- 1. A group of processors who are interested in getting GSB quality certificate is formed.
- 2. The procedure of getting GSB certificate is explained to the interest group.
- 3. All necessary activities are done to be ready to get the certificate.

Implementation organization: GSB, interest group, consultant

Program 2-1: Improvement of palm oil yield rate (same as Program 1-1)

Program 2-2: Increase of palm fruits (Tenera) production

Strategy 2: Reduction of production costs

Purpose: To increase outputs of high yield palm fruits

Outputs and activities to support PSI activity of Tenera plantation promotion

- 1. Awareness of Tenera variety to processors is raised.
- 2. Tenera plantation is recognized by processors to purchase high yield palm fruits.

Implementation organization: PSI, MOFA

Program 2-3: Upgrading processing facilities and advisory service

Strategy 2: Reduction of production costs

Purpose: To improve the facilities to have better productivity.

Outputs and activities

- 1. The advice for facility is given by the consultant
- 2. The bottleneck facility is found.
- 3. Loan application to invest in the bottleneck facility .is ready with assistance of BAC.

Implementation organization: Processor, consultant, BAC

Program 3-1: Promoting sales to refineries

Strategy 3: Sales promotion based on organization of small processors

Purpose: To secure stable and volume buyer

Outputs and activities

- 1. A group for selling crude oil to a refinery is formed.
- 2. The quality and quantity management system is established.
- 3. The quality and quantity of crude oil is secured to sell to the refinery.
- 4. Agreement between the group of crude oil mills and the refinery is made.

Implementation organization: A group of crude oil producer, refinery, consultant

Program 3-2: Establishment of local brands

Strategy 3: Sales promotion based on organization of small processors

Purpose: To differentiate the product from other palm oil

Outputs and activities

- 1. A group of GSB certified mills are formed.
- 2. Regional brand for palm oil is made and common label and package are prepared.
- 3. Sales promotion is planned and executed with the regional brand.

Implementation organization: Group/asso. MOTI/PSD/PSI

Program 3-3: Commercial production of kernel oil

Strategy 3: Sales promotion based on organization of small processors

Purpose: To increase sales of palm kernel oil

Outputs and activities

- 1. Enough quantity of palm kernel is secured.
- 2. Market of kernel oil is found and F/S of building kernel oil plant is done.
- 3. The fund is raised to invest in building kernel oil plant.

Implementation organization: Group, bank, consultant.

Program 4-1: Joint purchase of trucks

Strategy 4: Ensuring delivery of product

Purpose: To get the means of transport

Outputs and activities

- 1. Agreement among processors is made to buy the truck for transportation of palm oil/palm fruits.
- 2. Usage and fee of truck transportation are decided.
- 3. Fund for the truck is raised.

Implementation organization: Processors, Bank

Program 4-2: Construction of a storage tank

Strategy 4: Ensuring delivery of product

Purpose: To have better access to buyers

Outputs and activities

- 1. Agreement among processors is made to use the collection tank.
- 2. Rules of using the collection tank are established.
- 3. Fund for the tank is raised.

Implementation organization: Processors and/or BDS provider, Bank

5.2.2 Priority Setting for Strategy and Implementation Schedule

The highest priority should be given to the dissemination of results of the TP to improve production and quality without which the next stage will be difficult to implement. Also, some programs assume organization and networking of micro and small companies as a prerequisite. Organizing small mills is primarily designed to secure a certain level of production that facilitates sales, but it will also be used as the basis of establishing and operating joint facilities, such as a palm kernel processing facility and a storage tank, if necessary conditions are met.

- (1) Programs to be prepared urgently for implementation
 - Improvement activities to disseminate the results of the TP (Kaizen methods)
 - Education on raw material treatment of palm fruit
- (2) Programs that require a preparation period and a phased improvement approach
 - Promoting sales to refineries
 - Promotion of GSB quality certification
 - Establishment of local brands
 - Joint purchase of trucks
 - Upgrading processing facilities

- (3) Programs to be planned and launched in consideration of the industry's development process or the results of other programs (2 5 years)
 - Commercial production of palm kernel oil
 - Construction of a storage tank

5.2.3 Implementation Organizations

As for dissemination of the kaizen methods, the consultant involved in the TP and KNUST are considered to be suitable. Also, cooperation of DA and BAC may be obtained in distribution of the "kaizen manual" prepared during the study. DA and BAC will also be able to conduct seminars on the kaizen methods. As for the improvement of the raw material quality, technical assistance and advice for palm fruit farmers will be required under the cooperation of PSI and MOFA that are currently providing extension service. In the field of financing, BAC support will be needed in the preparation of a business plan.

As for quality certification, branding, and sales promotion, support of GSB, MOTI/PSD/PSI, and NBSSI will be required. It is desirable to mobilize these organizations as a single program, rather than their doing separate programs, and to provide direct support by experts. Experts who cannot be found in the country may have to be sent by donor organizations.

As for the continued improvement of the production system, further research will be required and can be led by KNUST that served as the implementation organization of the TP.

5.3 The Business Support System for the Citrus Processing Industry in the Central Region

5.3.1 Strategic Approach

Like other regions, a problem analysis was performed for the Central Region and based on the results a general framework for the Business Support System was developed. Unlike the other three industries, there were few fruit processors so the team came up with a strategy to promote the construction of processing plants. The objective and strategies established for the Business Support System on the basis of the results of problem analysis are summarized as follows.

Objective: To increase the number of fruit processing plants.

Strategy 1: To acquire fruit processing technology.

Strategy 2: To disseminate knowledge and information relating to the fruit processing

industry.

Strategy 3: To improve entrepreneur's access to initial capital.

Strategy 4: To reduce investment risks relating to the industry.

The feasibility study, which was conducted as the TP, revealed that there were about 30 fruit juice plants in and around Accra, mainly processing pineapples, suggesting the availability of fruit process technology at some level. Similarly, availability of information seems to be fairly sufficient, although it is generally concentrated in Accra. Strategy 3 addresses a major problem relating to business startup, which is actually seen widely among SMEs in the country as a whole, and not limited to the fruit processing industry alone. Finally, Strategy 4 is based on a good prospect for the construction and operation of a viable small-scale plant with relatively small risks, which has been confirmed through the TP.

While the primary objective of the TP was to develop a commercialization plan, it must lead to an actual investment project if it is proven to be meaningful. Also, the construction of one or two processing plants does not mean the promotion to a full-fledged industry. Thus, this Business Support System has the primary objective of "establishing the fruit and pineapple processing industry" as well as "Citrus and Fruits: the thrust for industrialization" as vision. Those programs consisting of each strategy are described below.

The frame work of the Business Support System is shown in Figure 5-3 and see Table 5-3 for the outlines of programs.

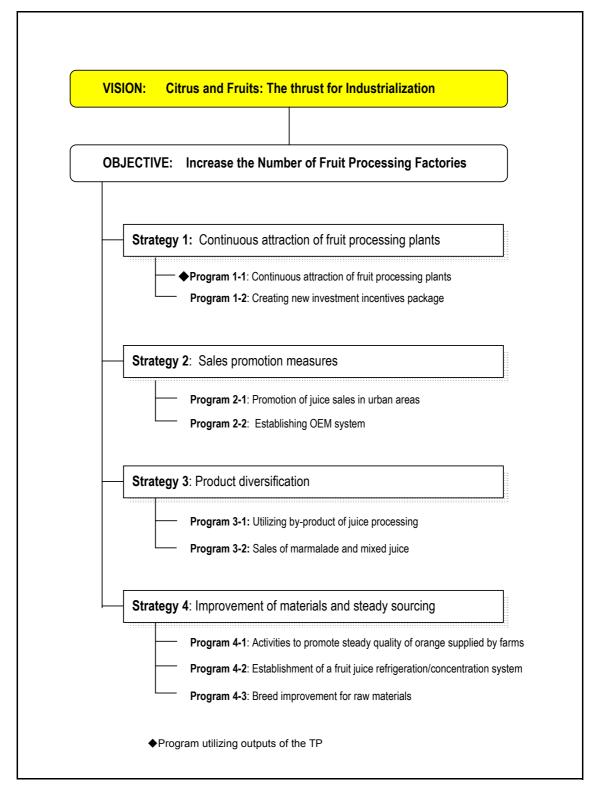


Figure 5-3 Framework of the Business Support System for the Citrus Processing Industry in the Central Region

Table 5-3 Program Outlines of the Business Support System for the Citrus Processing Industry in the Central Region

Program 1-1: Continuous attraction of fruit processing plants

Strategy 1: Continuous attraction of fruit processing plants

Purpose: To attract investment in citrus processing

Outputs and activities

- 1. Investment attraction plan and target are set.
- 2. Contact person is nominated and broachers of investment information are provided to potential investors.
- 3. Necessary services such as trainings for employees are provided for investors.

Implementation organization: DA, GIPC, BAC

Program 1-2: Creating new investment incentives package

Strategy 1: Continuous attraction of fruit processing plants

Purpose: To attract investment in the district

Outputs and activities

- 1. The gap btw the present condition and investor's requirement is understood.
- 2. The package of incentives is prepared.
- 3. The procedure of investment is streamlined to provide better service to investors.

Implementation organization: DA, GIPC

Program 2-1: Promotion of juice sales in urban areas

Strategy 2: Sales promotion measures

Purpose: To expand sales channel in large cities

Outputs and activities

- 1. The distribution channel is found.
- 2. The sales promotion activities are carried out.

Implementation organization: Processor, MOTI/PSD/PSI

Program 2-2: Establishing OEM system

Strategy 2: Sales promotion measures

Purpose: To increase sales volume

Outputs and activities

- 1. Possibility of OEM is studied.
- 2. Matching btw a processor and a buyer is carried out.
- 3. The agreement upon condition of OEM is made.

Implementation organization: Processor, consultant, BAC

Program 3-1 & 3-2: Utilizing by-product of juice processing and the sales of marmalade and mixed juice

Strategy 3: Product diversification

Purpose: To increase sales amount

Outputs and activities

- 1 A buyer of orange peel is found. Providing peel to buyers is started.
- 2. Market research on jam is carried out.
- 3. Possibility of selling mix juice is considered.

Implementation organization: Processors, consultant,

Program 4-1: Activities to promote steady quality of orange supplied by farms

Strategy 4: Improvement of materials and steady sourcing

Purpose: To secure quality raw materials

Outputs and activities

- 1. Suitable quality of fruits for processing juice is determined.
- 2. Measures to keep suitable quality of raw material are established.
- 3. Measures are disseminated among farmers.

Implementation organization: Processors, farmers organization, MOFA

Program 4-2: Establishment of a fruit juice refrigeration/concentration system

Strategy 4: Improvement of materials and steady sourcing

Purpose: To have stable supply of products

Outputs and activities

- 1. Available facility to make frozen concentrate juice is found
- 2. Condition to consignment production of frozen concentrate juice in the peak season is settled.
- 3. Juice from concentrate is produced at off season.

Implementation organization: Processor

Program 4-3: Breed improvement for raw materials

Strategy 4: Improvement of materials and steady sourcing

Purpose: To have better quality raw material

Outputs and activities

- 1. Suitable variety of the raw material is selected.
- 2. Cultivating suitable variety is promoted.
- 3. Suitable variety is introduced to producers.

Implementation organization: Processor, DA, MOFA

5.3.2 Priority Setting for Strategy and Implementation Schedule

Above all, it is important to attract investment and build plants. Once a plant is built, adequate follow-up and support activities such as management assistance and sales promotion should be carried out to back up its operational success. The plant's business success is expected to induce more investors. Meanwhile, market expansion through sales promotion is required to nurture the fruit and pineapple processing industry.

- (1) Programs that should be urgently launched for implementation
 - Continuous attraction of fruit processing plants
 - Creating new investment incentives package
- (2) Programs that require a preparation period and a stepwise improvement approach
 - Promotion of juice sales in urban areas
 - Activities to promote steady quality of oranges supplied by farms
 - Utilizing by-products of juice processing
 - Sales of marmalade and mixed juice (after the establishment of a brand)
- (3) Programs that will be planned and initiated according to the industry's development stage or on the basis of the result of other programs (2-5 years)
 - Establishment of a fruit juice refrigeration/concentration system
 - Breed improvement for raw materials

5.3.3 Implementation Organizations

Investment promotion activity will be led by a project team represented by relevant ministries at the regional level and each DA. Then, an actual investment activity should be led by each company, but government support may be required at the initial stage. In particular, support by MOTI/PSD/PSI and NBSSI is possible in securing sales channels, e.g., serving intermediary for establishing linkage with other companies. Also, GEPC can provide support in the export field and MOFA in relation to the improvement of products at farms.

5.4 The Business Support System for the Shea Butter Industry in the Northern Region

5.4.1 Strategic Approach

This strategy intends to target pickers of shea nuts from shea fruits and producers of shea butter, who process the butter from shea nuts. Most producers are women and few of them earn enough income from shea butter production. The scope of their activities are varied, ranging from individuals and groups engaged in picking and primary processing of shea fruits to shea nuts, to those specialized in the processing of shea nuts bought at the market. Also, some producers take care of the entire process from the picking of shea fruits to production of shea butter.

On the other hand, buyers are roughly divided into two types, i.e., those who purchase shea nuts in large quantities to export them to processors in Europe, and those buying and exporting shea butter to foreign cosmetics companies. While the former type holds dominant share in the volume of trade, this strategy promotes the production and sales shea butter from the viewpoint of increasing value added.

At present, three factors are impeding the full-fledged development of the shea butter processing industry. First of all, as shea butter has long been produced primarily for home consumption or for sale in the surrounding local market, it does not meet the requirements demanded by the export market in terms of quality, quantity, and delivery schedule. Secondly, the industry is dominated by individual producers, mainly village women, and it is very difficult to organize them as a business enterprise because most of them lack business skills (such as literacy and negotiation skills). Thirdly, local exporters are not many and operate individually. They cannot be relied on as the provider of proper training for village women or finding foreign buyers with good marketing channels.

In order to increase the sales volume, it is necessary for producers to meet the demand in foreign markets in terms of quality and quantity. In particular, it sets key strategies so that Ghana can be a leading country in supply of shea butter in Africa: namely to improve the overall quality of shea butter; to increase supply of high-quality shea nuts; to improve access to domestic and export markets; and to increase the value added in the entire industry.

"Increase the Sales Amount of Producer Groups" is set as the objective of the Business Support System and "Increase Family Income" as vision since the level of income in Northern regions is low and the living environment is severe. Four strategies to accomplish the objective are corresponding to the major problems in the problem analysis (see Figure 4-4).

The framework of the Business Support System was shown in Figure 5-4 and outlines of programs are in Table 5-4.

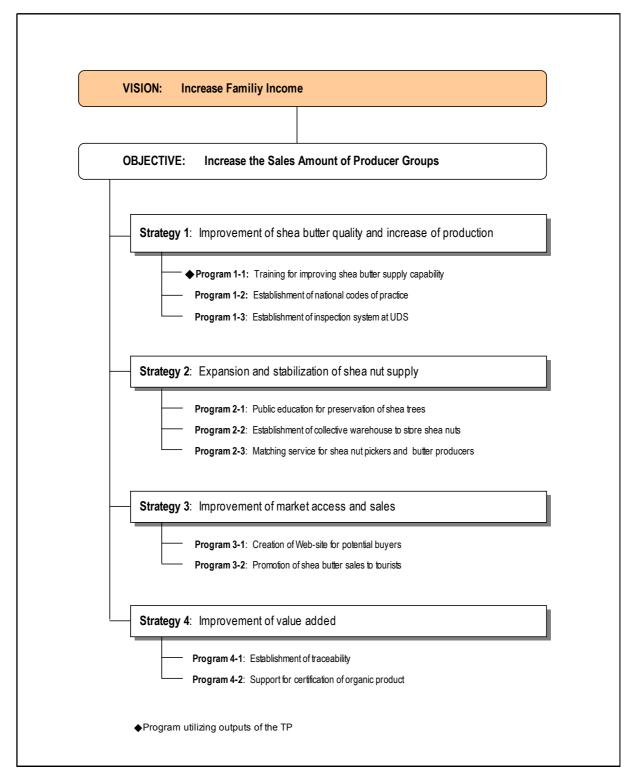


Figure 5-4 Framework of the Business Support System for the Shea Butter Industry in the Northern Region

Table 5-4 Program Outlines of the Business Support System for the Shea Butter Industry in the Northern Region

Program 1-1: Training for improving shea butter supply capability

Strategy 1: Improvement of shea butter quality and increase of production

Purpose: To secure sufficient amount of quality shea butter

Outputs and activities

- 4. Resource persons to teach production group are trained.
- 5. (Draft) code of practice is disseminated into shea butter production groups.
- 6. Quality of shea butter produced is managed and monitored by third person.

Implementation organization: UDS, NGO(AF2K), MOFA

Program 1-2: Establishment of national codes of practice

Strategy 1: Improvement of shea butter quality and increase of production

Purpose: To disseminate code of practice

Outputs and activities

- 4. Code of practice is reviewed.
- 5. Code of practice is formalized and published.

Implementation organization: GSB

Program 1-3: Establishment of inspection system at UDS

Strategy 1: Improvement of shea butter quality and increase of production

Purpose: To have better access to the testing facility

Outputs and activities

- 6. Persons for testing are trained and necessary testing devices are equipped in UDS.
- 7. Testing services are carried out.

Implementation organization: UDS, Donor agency

Program 2-1: Public education for preservation of shea trees

Strategy 2: Expansion and stabilization of shea nut supply

Purpose: To secure production of shea nuts

Outputs and activities

- 1. All shea producing DAs are convinced to protect shea trees.
- 2. Awareness campaign to protect shea trees in villages is carried out.
- 3. The result of campaign is verified.

Implementation organization: MOTI/PSD/PSI, MOFA, DA

Program 2-2: Establishment of collective warehouse to store shea nuts

Strategy 2: Expansion and stabilization of shea nut supply

Purpose: To have stable supply of shea nuts

Outputs and activities

- 1 The necessity of warehouse is recognized by shea butter processors and nuts pickers.
- 2. Specification of warehouse based on demand of shea nuts is determined.
- 3. Fund for building warehouse is raised.

Implementation organization: Shea butter processor and pickers, NGO, donor agency

Program 2-3: Matching service for shea nut pickers and butter producers

Strategy 2: Expansion and stabilization of shea nut supply

Purpose: To secure quality raw materials

Outputs and activities

- 1. Availability of shea nuts is studied.
- 2. Condition of direct sales from pickers to processor groups is determined.
- 3. Direct business of shea nuts is promoted.

Implementation organization: UDS, DA, MOFA

Program 3-1: Creation of Web-site for potential buyers

Strategy 3: Improvement of market access and sales

Purpose: To increase the access from buyers

Outputs and activities

- 1. Information of shea butter is collected.
- 2. Information of shea butter buyers is surveyed.
- 3. Web-site is designed to promote export of shea butter.

Implementation organization: NGO, GEPC, Shea butter exporter

Program 3-2: Promotion of shea butter sales to tourists

Strategy 3: Improvement of market access and sales

Purpose: To promote shea butter to end users.

Outputs and activities

- 1. Sales promotion activities for tourists are set.
- 2. Shea butter products are introduced to hotels airports and shops.
- 3. Sales of shea butter for tourists are monitored.

Implementation organization: GEPC, Exporters, Shea butter producers

Program 4-1: Establishment of traceability

Strategy 4: Improvement of value added

Purpose: To gain confidence from buyers

Outputs and activities

1. The system to trace from shea tree to shea butter is set.

2. The traceability system of shea butter production is publicized to attract foreign buyers.

Implementation organization: GEPC, MOFA, Shea butter producers

Program 4-2: Support for certification of organic product

Strategy 4: Improvement of value added

Purpose: To have value added products

Outputs and activities

- 1. Information such as procedure of certification, certification body for organic products and successful cases are collected
- 2. Guidance of getting organic product certification is provided.

Implementation organization: GEPC, MOFA

5.4.2 Priority Setting for Strategy and Implementation Schedule

In spite of stable demand for shea butter, the industry has lost sales opportunity because it is unable to satisfy the market requirements in terms of quality and quantity. The action plan is therefore designed to provide training for improving shea butter supply capability in both quality and quantity. Another urgent task is to secure the supply of raw materials. After the quality and quantity of shea butter reach a sufficient level, activity priority may shift to sales promotion.

- (1) Programs to be prepared urgently for implementation
 - Training for improving shea butter supply capability in quality and quantity
 - Establishment of a national code of practice relating to shea butter production
 - Public education on the need for preservation of shea trees
 - Matching service for shea nut producers and shea butter producers
- (2) Programs that require a preparation period and a phased improvement approach
 - Creation of a Web site for potential buyers
 - Establishment of an official inspection system at UDS

- (3) Programs to be planned and launched in consideration of the industry's development process or the results of other programs (2 5 years)
 - Promotion of shea butter sales to tourists
 - Establishment and management of a collective warehouse to store shea nuts
 - Technical support for the establishment of product traceability and certification as organic product

5.4.3 Implementation Organizations

Of all the above programs proposed above, some will be partially implemented as UNDP project. In this connection, the Ghanaian government is expected to provide comprehensive support on a continuous basis as the UNDP project is limited to selected areas and recipients. By providing active support for the UNDP project, the government can expect the transfer of knowledge and expertise to local producers. While DA should play a primary role in formal recognition and fostering of the shea butter industry as a key local industrial sector, the central government – particularly MOTI/PSD/PSI and MOFA – should also take effective leadership in program implementation by recognizing and treating shea butter as a strategic product. In this connection, it is important to utilize available resources in an effective manner, such as the manuals and the video program produced under the TP¹. Also, GEPC and GSB can conduct promotion and technical support for the efforts to raise the world recognition of Ghana as producer of high quality shea butter. Similarly, UDS is expected to play a key role in training and inspection for the shea butter industry by using its knowledge of quality and production process, which was acquired from the implementation of the TP, together with experience in conducting related training. Finally, national efforts to promote research and experts relating to shea trees and products can lead to the long-term improvement of competitiveness.

They will be used by UNDP projects.

6. Master Plan and Action Plan for the Nationwide Business Support System

6. Master Plan and Action Plan for the Nationwide Business Support System

As discussed in Chapter 3, the Ghanaian government is currently implementing a variety of industrial support programs, including Trade Sector Support Program (TSSP) that covers industrial export promotion and industrial development, and the Presidential Special Initiative (PSI) that aims at promoting specific industries. In addition, the government plans to formulate a new industrial policy and to select strategic sectors. Local industry development is closely associated with these policies and is thus positioned as an industrial development policy that can produce high synergetic effects. Taking into account these factors, this chapter proposes a master plan for the Nationwide Business Support System.

6.1 Master Plan for the Nationwide Business Support System

This chapter proposes a master plan for the nationwide Business Support System based on the basic surveys described in Chapters 2 and 3, lessons learned from the trial programs implemented for the target industries, as summarized in Chapter 4 and the Business Support Systems for target industries in Chapter 5.

6.1.1 Development Goals, Strategies and Programs for the Business Support System

Generally, a development master plan consists of development visions, goals, strategies, and projects / programs, in order of abstraction. Among them, only projects / programs can be put into practice. In other words, the first three elements – development visions, goals, and strategies – represent what the master plan aims, but not necessarily an implementation plan. In this study, elements down to programs are called the master plan, while a program implementation plan is referred to as an action plan.

Based on the discussions made in the previous section, the team has established the following development framework.

Vision: Local people become well-off

Development goal: Local industries acquire the ability to develop on their own.

Strategy 1: Development of individual projects by leveraging local characteristics

Strategy 2: Effective utilization of resources and capabilities of training institutes, universities, research institutes, and existing schemes

Strategy 3: The government business support for local industry development

Strategy 4: Capacity building of support organizations that are directly engaged

in development of local industries

Strategy 5: Development of the investment attraction system in local areas

Note that the vision is stated as "local people become well-off" in consideration of the policy goal of poverty reduction. In other words, the master plan aims not to only increase income but also to ensure that local people work with pride and become well-off

Strategy 1 is to implement District Industry Promotion Initiative (DIPI)¹ to meet local needs. This aims to solve some problems relating to the development of local industries. Also, implementing the DIPI is expected to pave the way for solving other problems. For instance, a TP has attracted the attention of buyers, resulting in an increasing number of inquiries (palm oil). This has also served as a starting point for the organization of producers' association (shea butter).

To implement the DIPI at local levels, DA and organizations under MOTI/PSD/PSI alone are not sufficient. This became clear when the implementation system for the TPs was built up. In other words, mobilizing support from other various organizations as the need arises would help enhance the effectiveness of programs. Also, continuing ongoing projects can assure the effectiveness more surely than starting one from scratch. For this reason, <u>Strategy 2</u> is proposed.

To meet diverse needs of local industries, a government's support system with a clear focus on local industries needs to be established. In this context, support for local industry development should not be limited to individual companies, but the government should approach from the perspectives of promoting industries, industrial agglomerations, and clusters. Furthermore, the support system should be strengthened to increase effectiveness. Strategies 3 and 4 are proposed from this viewpoint.

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Here, projects intended for local industries are provisionally referred to as "district industry promotion initiative (DIPI)."

The last important factor is investment. Inflow of human resources, technology, and funds from outside vitalizes local industries and helps them to grow. Investment can address many issues that are discussed in 5.1.2. <u>Strategy 5</u> is proposed for this reason.

The following sections explain the purposes of each strategy together with names of the programs for accomplishing them.

6.1.1.1 Strategy 1: Development of individual projects by leveraging local characteristics

Development of local industries never becomes reality when the government or a donor organization develops and proposes only a vision or a policy objective. The development process starts only when a support organization implements a specific support service or a concrete project/program. In this connection, formulating a project/program is of primary importance.

It is difficult for the central government to design certain types of programs which meet the specific needs of local industries. At the same time, DA alone cannot provide adequate support in terms of finance and expertise. Therefore, the team decided to propose the following two programs to allow DA to formulate promotional programs for individual industries under the support of MOTI/PSD/PSI.

Program 1.1 Formulation and implementation of development plans at the district level

Program 1.2 Formation of support measures for local industries in districts

6.1.1.2 Strategy 2: Effective utilization of resources and capabilities of training institutes, universities, research institutes, and existing schemes

Success of a single company can make only a limited contribution to local industries as a whole. Development of local industries needs the joint efforts of local companies, the central and local governments, universities, research institutes, training institutes, and private consultants. A local development program must therefore be driven by local resources.

The present TPs were implemented under the leadership of consultants and three universities (KNUST, UCC, and UDS) and the team served as a facilitator responsible for the

overall management and monitoring. Under this arrangement, the TPs were able to use human resources and networks of the participating universities and consultants.

After the completion of the TPs, the local consultants and universities continue to cooperate in the dissemination of achievements and results. In some cases they even take a leadership role in expanding support activities for the development of the selected industries. Palm oil is a good example of this. They tried bridge local industries and local refineries or foreign buyers who make business inquiries. It is desirable to continue such activities without interruption.

Under this strategy, the following two programs are proposed. One is to promote sustainable development of the garment, palm oil processing, and shea butter industries under the partnership between the private sector, universities and training institutes. Another program aims to disseminate 5S. Its effectiveness was verified under the TPs, and local organizations are ready to support it.

Program 2.1 Self-supported enhancement/expansion of Trial Program

Program 2.2 Dissemination of 5S to improve industry-wide productivity

6.1.1.3 Strategy 3: The government business support for local industry development

While development of local industries should be led by voluntary efforts of the private sector, the government support is necessary in many developing countries where the private sector lacks strong momentum. Public support needs to cover a whole range of activities, from promotion of entrepreneurship, incubation of new industries, to technical assistance in a factory operation, market development, and financial support. In Ghana, NBSSI under MOTI/PSD/PSI is responsible for management consultation, incubation, and financial access support, GRATIS technical support, GSB standardization, and GEPC export promotion. In reality, however, these organizations are not capable of providing sufficient support due to budget constraints, shortage of human resources, and the lack of skills and knowledge. It is therefore important to devise ways to strengthen the existing resources and capacities so that they can effectively support the development of local industries.

The following table lists basic business supports that can contribute to the development of local industries. At the district level, BAC and DA provide some of these services. Note

that all services are not provided by public organizations and some are delivered by resource persons in the private sector (BDS providers) via BAC. On the other hand, most services on the right-hand column are delivered or planned under TSSP and MSME projects. A major issue here is how to ensure effective use of these business supports.

Note that they can solve many problems if they are implemented properly in industries selected for promotion. To maximize effectiveness of the available services, however, they need to be adapted to specific industries and their needs by establishing a proper implementation system and method.

Table 6-1 Major Business Supports

| | District level Support | MOTI/PSD/PSI level support |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) Strengthening of management capability | - Advisory service - Basic management training - Support activities by resource persons | - Collection of good practice - Development of training tools |
| 2) Upgrading of production technology | - Technical assistance and training - Equipment up grading and repair support | Database development for technology and equipment information Standardization of products and jobs Retooling for the production system |
| 3) Market development | - M arketing training - Vitalization of local markets - Priority purchase by public organizations - Introduction of local products | - Introduction of other districts or distributors - Product gallery - M ade in Ghana campaign - Package development and design - Promotion of subcontracting |
| 4) Finance | - Microcredit - Provision of financial information - Support for business plan development | - Enhancement of financial service - Training for financial institutions |
| 5) Human resource development | - Training for resource persons | - Education and training for SME support staff of local government - Education and training for staff members of technical support organizations |
| 6) Development of the favorable business environment | Investment incentive Construction of access roads Support for organization of trade association Support for joint purchase | - Construction of industrial estates - Investment incentive - Testing and inspection service |

Note: Most support services are already implemented, or at least planned.

Source: the team

A program is proposed to support local companies for their efforts to expand sales by developing a target market. This corresponds to 3) "Market development." Also, a program is proposed to redefine BAC's role in the local industry development process. It

addresses the needs for 1) "Strengthening of management capability," 4) Financial support, and 6) "Development of the favorable business environment." Finally, a program proposes a realistic approach to financial issues raised by local industries as most important and urgent.

Program 3.1 Support for sales promotion to sell local products in a wider market

Program 3.2 Strengthening BAC to support local industries

Program 3.3 Provision of service to facilitate commercial loans

6.1.1.4 Strategy 4: Capacity building of support organizations that are directly engaged in development of local industries

Support for local industries involves a variety of organizations. In practice, however, many support organizations are concentrated in Accra, and BAC is considered to be the major support organization that can be directly engaged in the development of local industries. In addition to this, GRATIS has nine regional centers and 18 rural technology facilities to provide technical support for SMEs.

To ensure that BAC fulfills its role, in particular the implementation of Programs 3.2 and 3.3, it is imperative to strengthen BAC's capability. As reorganizing NBSSI/BAC is being planned (as of November 2007), a proposal is made to strengthen its capability in relation to the development of local industries.

It is equally important for GRATIS to provide effective technical services for local industries to supplement BAC's service that has serious deficiencies in technical fields. To enhance technical support, a program to add an advisory function to GRATIS's technical service has been proposed. This particular program is intended to address problems relating to old equipments and maintenance.

Program 4.1 Strengthening of BAC staff's capacity

Program 4.2 Strengthening of GRATIS advisory service

6.1.1.5 Strategy 5: Development of the investment attraction system in local areas

In Ghana, many seeds for local industries exist in the processing of agricultural products. To develop such processing industry, investment in facilities and equipment is required. Naturally, private investment should play a central role, while the role of public funds is inevitably marginal. There are three key conditions for successful attraction of private investment, namely a reliable planning capability (based on feasibility study), public support in terms of tax incentives and financial assistance, and basic infrastructure such as water supply, electricity, and transportation. In addition, investment promoters such as DA and GIPC should conduct activities to attract investors.

MOTI/PSD/PSI and GIPC recognize problems relating to incentives and infrastructure well enough. They plan to build industrial estates in various regions in order to address infrastructure problems, but they have limited experience in planning and marketing of industrial estates and thus wish to learn from experience and obtain support from Japan and other Asian countries. Particularly requested is technical assistance of how to promote industrial estates in rural regions and how to plan common facilities. As DA does not have much capability in the area of investment promotion, it requires support from GIPC. In response, GIPC intends to hire additional staff and assign them to the regions concerned. The partnership between GIPC and DA is expected to enable more realistic investment promotion activities.

Under this strategy, two programs are proposed. One is to build up a district level investment promotion system so as to divert investment currently concentrated in Accra or Tema to other regions. Another program is to promote a module system as a processing facility of minimum economic size.

Program 5.1 Improvement of the investment climates at the district level

Program 5.2 Promotion of investment by promoting a module plant

The overall framework of the master plan is shown in Figure 6-1. When each of the programs achieves its objective to accomplish the respective strategy and all the strategies are accomplished, the development goal is achieved.

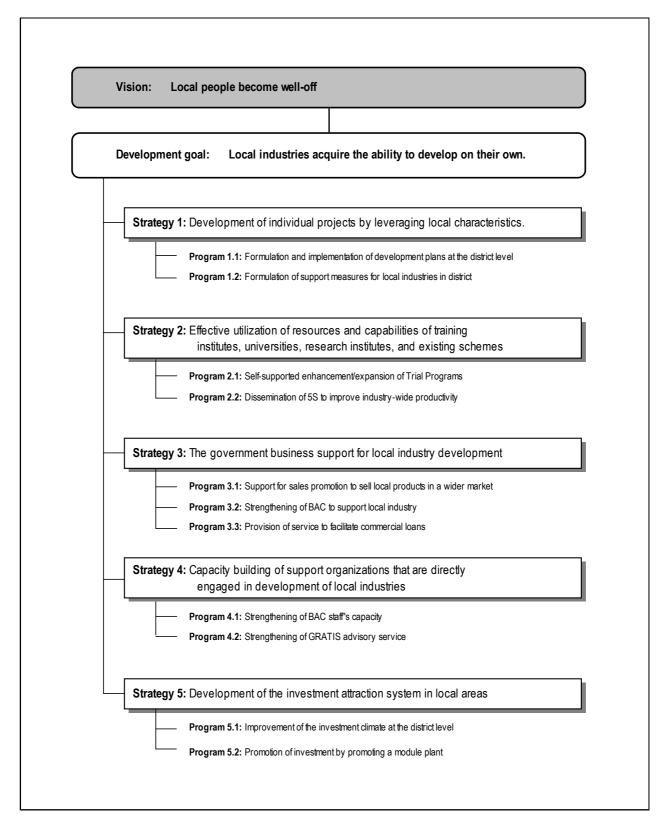


Figure 6-1 Overall Framework of the Master Plan for the Nationwide Business Support System

6.2 Action Plan for the Business Support System

6.2.1 Detailed Descriptions of Programs

Strategy 1: Development of individual projects by leveraging local characteristics

Program 1.1 Formulation and implementation of development plans at the district level

(1) General description

A local industry development plan that tries to address all issues generates measures of little efficacy only. To create effective measures, a selective approach should be taken to concentrate resources on a certain area or industry. Based on the resource map, a planning board led by representatives of a municipal / district assembly (hereinafter DA) and other related organizations should select one or more industries or products to be promoted at each district to formulate a development plan.

Local resources include agricultural products, fishery products, wood resources, tourism resources, and the technological base in industrial clusters. Examples are the garment industry in Accra and the machinery/metal and woodworking industries in Kumasi. The initiative (commitment) of local companies is a key resource for local industry development.

Instead of nurturing an industry from scratch, they should take advantage of available resources that are unused or underused and/or those can be used in an advanced manner (e.g. existing technological base). Through workshops held jointly by DA and BAC where representatives of local industries participate each district will make a map that plots the locations of resources that form the basis of local industry development. Then, they will select industries to be promoted from the resource map.

Selection criteria are as follows.

- Availability of raw materials and intermediate materials
- High value added
- Large employment opportunities
- Large potential market

- Existence of joint projects within a specific industry, which have formed social capital based on collaboration and trust
- Room for innovation, kaizen, and improvement
- Prospect for a commitment by beneficiaries in the planning and implementation stages

(2) Program outline

- 1) Overall goal
 - A local industry development plan (DIPI) is implemented in every district.
- 2) Program goal
 - To build up a local-based planning and program implementation system.
- 3) Expected results of activities up to the achievement of the program goal
 - I. Model districts are selected and preparation is made for plan formulation.
 - II. DIPI is formulated and activities are implemented accordingly.
 - III. A planning methodology for DIPI is established and disseminated nationwide.

Program 1.2 Formation of support measures for local industries in districts

(1) General description

The primary objective of this program is to develop measures to support target industries that contribute to local industry development.

From the experiences in the TPs implemented by the team, the following approaches and programs are assumed to be common support programs.

- Quality improvement method
- Yield increase method
- Employee productivity improvement program
- Modification of packaging
- Standardization and product certification

Target industries will be selected by using a questionnaire asking "an industry (processing industry) in a district that should be given of priority for development," or picked from those

identified as strategic sectors in the course of the new industrial policy formulation and also complying with the wishes of the district concerned.

(2) Program description

1) Overall goal

- Factors impeding growth of local industries are eliminated and local industries grow substantially.

2) Program goal

- To develop schemes and methods to solve problems facing local industries.

3) Expected results of activities up to the achievement of the program goal

- I. Problems of a specific industry, which needs to be solved by the program, are identified.
- II. Solutions for the problems are developed.
- III. The results of the solution development process are compiled into written manuals / videos.

Strategy 2: Effective utilization of resources and capabilities of training institutes, universities, research institutes, and existing schemes

Program 2.1 Self-supported enhancement/expansion of trial programs

As already discussed, the present study conducted trial programs for four industries, which have successfully produced results within a limited period of time. The team proposes to capitalize on these results and promote the enhancement/expansion of these programs. In fact, the team presented the Business Support Systems, each of which consists of several program proposals, for promoting the garment, palm oil, and shea butter industries. The trial programs carried out a part of the programs, which motivated many local industries and produced much-needed human resources. Expanding the programs with the external assistance from a public organization can achieve a higher level of effectiveness than implementing a new program. Further enhancement/expansion will also entail the start-up of other proposed programs. Note that the processing of citrus fruits is addressed in Strategy 5

"Development of the investment attraction system in local areas," even though it has not attracted investment yet. Each of the enhanced/expanded programs is described below.

- (1) Garment Industry: Promotion of division of labor and dissemination of production management technology
 - 1) Overall goal
 - To secure a certain share of domestic and foreign markets.
 - 2) Program goal²
 - To achieve a quality and production costs good and low enough to compete with foreign products.
 - 3) Expected outputs of activities up to the achievement of the program goal
 - I. To further the improvement in sewing quality and equipment modernization.
 - II. To disseminate the production sharing (division of labor) system throughout the apparel industry.
 - III. To develop human resources that support quality improvement.
- (2) Palm oil processing industry: Sales promotion of micro and small mills
 - 1) Overall goal
 - To increase palm oil production and sales
 - 2) Program goal
 - To secure steady sales of crude palm oil from small procedures to refineries.
 - 3) Expected outputs of activities up to the achievement of the program goal
 - I. To disseminate the improvement measures taken in the TP to small procedures for production increase and quality improvement.
 - II. To introduce a production management method that meets the current needs to establish a sales system targeting refineries.

Most of programs (or projects) need to have quantitative goal such as percentage of increase of production. However, this quantitative goal should be decided and agreed by all participants of the program.

- III. To increase production capacity for the further sales expansion to refineries.
- (3) Shea butter industry: Mass production of export grade shea butter
 - 1) Overall goal
 - To increase shea butter sales in the region.

2) Program goal

- To establish the annual production capability to supply amount of shea butter (with basically Grade 1 quality) that meets buyers' requirements.
- 3) Expected outputs of activities up to the achievement of the program goal
 - I. To create a NGO to be in charge of the establishment and operation of a training center under the agreement between buyers and butter producers.
 - II. To provide training for producers at the training center and help them to improve butter quality.
 - III. To expand the service area of the training center to disseminate the code of practice to the entire Northern regions.

Program 2.2 Dissemination of 5S to improve industry-wide productivity

(1) General Description

The purpose of this program is to increase productivity and competitiveness of local industries by introducing 5S to local industries as many as possible. 5S is particularly effective to typical local industries like the garment and wooden furniture industries.

The first step is to obtain the government's recognition on the effectiveness of 5S. For this purpose, MOTI/PSD/PSI or Ministry of Manpower, Youth and Employment (MOMYE) will implement 5S to learn what it can do to improve productivity. At the same time, it is better to publicize the cases in the apparel industry, which is pioneering the 5S initiative under the TP, to raise the level of recognition in the industrial sector. Further promotional campaigns will be conducted by means of instructor training programs and seminars for owners and managers. Finally, 5S conferences will be held to allow wider audience to learn from successful cases.

(2) Program outline

- 1) Overall goal
 - To disseminate the "basics of manufacturing" to the manufacturing sector.
- 2) Program goal
 - To introduce 5S to 1,000 manufacturers throughout the country.
- 3) Expected outputs of activities up to the achievement of the program goal
 - I. To disseminate 5S to selected industries in a model region.
 - II. To establish an organization that promotes nationwide implementation of 5S and train persons to be engaged in promotion activities.
 - III. To deploy 5S throughout the country and make it adopted as a permanent practice.

Strategy 3: The government business support system for local industry development

Program 3.1 Support for sales promotion to sell local products in a wider market

(1) General Description

The purpose of this program is to sell local industry products in other districts. This way, producers can learn the actual market needs and those who make efforts have an opportunity to expand sales.

It is difficult to find the type of assistance needed without finding what obstacles are. Local industries learn them after selling their products in the market. In this context, DA or MOTI/PSD/PSI should give local industries a chance to sell their products in large markets. Then, they work out countermeasures according to the results. Basically local industries should take measures to overcome their problems on their own and thus the government may assist them to do so.

(2) Program outline

1) Overall goal

To increase value added/gross sales of a selected industry.

2) Program goal

To increase sales of products outside the district.

3) Expected results of activities up to the achievement of the program goal

- I. Products for promotion are selected.
- II. Promotional activities are launched.
- III. Inter-district sales are successfully promoted and expanded.

Program 3.2 Strengthening BAC to support local industries

(1) General Description

The aim of this program is that BAC, which already plays an important role in assisting micro and small companies, establishes a business support system for local industry development.

On the other hand, NBSSI seems to move in the direction of being a BDS facilitator who plans a support scheme according to the needs of enterprises rather than a direct service provider. In this conjunction, it is building a database on BDS providers and resource persons in each region with the assistance of German Development Service (DED). Also, it provides opportunity for BACs in the same region to share knowledge, but it does not necessarily mean that a training program for BAC staff members is sufficiently organized. As the turnover rate is high, the organization needs to hire new employees constantly. It seems to require an efficient training program and an effective knowledge sharing system. Three direction of local industry development by BAC are indicated as follows.

1) Needs assessment and BDS facilitator

According to the interview with NBSSI staff, what BAC staff needs most is the needs assessment skill, because it is the prerequisite to design appropriate service of a BDS facilitator or field adviser. In addition, understanding the industry trend and the competitive environment to which they belong is essential to giving effective advice. At present, many of BAC staff members lack this important skill.

2) Making business plan and One-stop Center

At the same time, NBSSI/BAC is required to provide service that helps SMEs to use various loan schemes, such as PAMSCAD (application handled by NBSSI) and a newly started scheme, MASLOC (Micro Finance and Small Loans Centre), as well as commercial loans. Skills required for this type of service are basic knowledge on finance (accounting, taxation, financial planning, social insurance, etc.) and business planning. Also, BAC assumes the role of supporting entrepreneurs, which requires the above knowledge, especially that of business planning. Together with the development of a knowledge base grounded on resource persons having expert knowledge, BAC needs to set its medium- and long-term goal to becoming a One-stop Center to provide information on business startup and loans and to handle loan applications.

3) Coordination function for local industry development

To promote the development of local industries, efforts should go beyond the improvement of individual companies. It is imperative to identify problems relating to the local industry sector as a whole and make concerted efforts to create a favorable environment for the industry and its growth. For this purpose, BAC is expected to serve as a bridge between the private and government sectors and to assume an overall coordinating function to mobilize and drive collaborative efforts. In concrete terms, it is necessary for it to be a coordinator with DA, RCB and the central government (MOTI/PSD/PSI).

(2) Program outline

1) Overall goal

To increase the number of inauguration and decrease that of discontinuance of local companies to expand the local industry base (sales and the number of enterprises).

2) Program goal

To improve BAC services (counseling, business planning and training) for local companies.

3) Expected results of activities up to the achievement of the program goal

- I. BAC's needs assessment skill improves.
- II. BAC can provide effective advice on finance and startup for local companies.

III. BAC can take the leadership for the development of local industries.

Program 3.3 Provision of service to facilitate commercial loans

(1) General description

The purpose of the program is to give services to assist SMEs to access existing loan schemes.

For any industry sector in Ghana, the shortage of funds fetters growth. In particular, it presents a serious and persistent problem for micro and small companies. Meanwhile, financial institutions intend to increase SME loans and the government creates a variety of loan schemes.

The present study examines how SMEs can gain loan access more easily under the present framework, rather than considering a new loan scheme or structure. For this purpose, the following approaches should be considered.

- Efforts to help SMEs know the availability of loan schemes and understand basic loan requirements
- Technical assistance and advice to improve financial access for SMEs
- Follow-up on repayment, including schedule management

(2) Program outline

1) Overall goal

To invigorate local industries to expand their business operation.

2) Program goal

To increase the number of SME loans.

3) Expected results of activities up to the achievement of the program goal

- I. Available loan schemes (including their terms) are widely recognized by the public.
- II. More loan applications by SMEs are approved.
- III. Borrowers repay loans smoothly.

Strategy 4: Capacity building of support organizations that are directly engaged in development of local industries

Program 4.1 Strengthening of BAC staff's capacity

(1) General description

This program aims to promote the capacity building of BAC's staff who are stationed in districts throughout the country and to ensure that they are effectively utilized for the purpose of carrying on the local industry development at the district level.

This program proposal envisions two training programs. One program consists of compulsory subjects that all BAC staff members are required to take, while another program focuses on specialty subjects that are intended for selected staff. The latter is designed to provide consulting service for BAC's client companies and training other BAC staff and BDS providers. Training subjects including their outlines and required hours are summarized below.

Table 6-2 Training Subjects for BAC Staff

| No. | Subject | Category | General description | | | | | | | | | |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--|--|--|--|--|--|--|--|
| 1. | Needs assessment | Compulsory | To learn techniques to understand nature of the needs (problems) facing a client company, by using a checklist and through role playing. | | | | | | | | | |
| 2. | Business plan | Compulsory | To learn the ability and skills to teach business and the preparation of a business plan required for loan application, through lecture, exercise, and game. | | | | | | | | | |
| 3. | Bookkeeping | Compulsory | To learn accounting skills including slip bookkeeping, journal entry, compilation of P/L and B/S, tax return application, by means of lecture and case study. | | | | | | | | | |
| 4. | Introduction of 5S | Compulsory | To learn techniques to implement 5S at factory by means of lecture and field training. | | | | | | | | | |
| 5. | Facilitator skill | Compulsory | To learn the methods for group thinking, identification of problems and issues, and meeting management, by means of lecture and exercise. | | | | | | | | | |
| 6. | Coaching technique | Specialty | To learn the technique (by means of role playing) to help a client company, through discussion, to find a cause for a problem facing it and conceive a solution by its own efforts. | | | | | | | | | |
| 7. | Corporate foundation procedures | Specialty | To learn procedures for the foundation of a company (commercial registration, license, registration with the tax office, etc.) and preparation of necessary documents, by means of lecture and exercise. | | | | | | | | | |
| 8. | Management strategy | Specialty | To learn the technique to establish management strategies for manufacturing and retail industries by means of lecture and exercise. | | | | | | | | | |
| 9. | Market study | Specialty | To learn the market study method in the fields of manufacturing and retailing, primarily by means of case study. | | | | | | | | | |
| 10. | Marketing | Specialty | To learn practical knowledge on products, pricing, sales promotion, distribution channel, and packaging, by means of lecture and exercise. | | | | | | | | | |
| 11. | Finance | Specialty | To learn fund operation, cash flow management, financing, and financial analysis, by means of lecture and exercise. | | | | | | | | | |
| 12. | Labor management | Specialty | To learn the labor law, human resource development, and labor management, mainly through lecture. | | | | | | | | | |
| 13 | To learn QC tool techniques useful for problem solving (Pareto diagram, histogram, cause and effect diagram, scatter diagram, control chart, check sheet, and graph) through exercise. | | | | | | | | | | | |
| Note | : Required hour | rs are estimates | · · · · · · · · · · · · · · · · · · · | 60 hours | | | | | | | | |
| | | | Total Specialty | 90 hour | | | | | | | | |

Total Compulsor 60 hours Specialty 90 hours Total 150 hours

(2) Program outline

1) Overall goal

- Local companies can receive high quality business supports.

2) Program goal

- BAC staff's ability as facilitator improves.

3) Expected results of activities up to the achievement of the program goal

- I. NBSSI establishes a training implementation system.
- II. All of BAC staff members have professional knowledge as a facilitator.
- III. Within NBSSI, staff members with professional skills are trained.

Program 4.2 Strengthening of GRATIS advisory service

(1) General description

The primary objective of this program is to strengthen GRATIS' advisory service function to meet technical needs of local industries.

MOTI/PSD/PSI promotes equipment retooling for SMEs on a pilot basis, but detailed procedures for the full-scale implementation have still to be determined. If GRATIS can participate in the retooling process by colleting necessary information, it will have a significant support effect on local industries.

Also, GRATIS can benefit from visiting local companies that are potential clients. GRATIS sells production equipment but it does not sell well. By visiting local companies, GRATIS will be able to observe the equipment supplied by other manufacturers and to learn the customer's requirements in detail, which would be conducive to the modification of existing products or the development of new products. Adaptation of products would help GRATIS to have a competitive edge over imported machinery.

(2) Program outline

1) Overall goal

Local companies that are program beneficiaries learn maintenance technology and retool production equipment, and as a result, their product quality and productivity improve.

2) Program goal

Local companies that are program beneficiaries have knowledge on equipment maintenance and retool production equipment.

- 3) Expected results of activities up to the achievement of the program goal
 - I. The on-site consulting system is established.
 - II. On-site consulting service starts.
 - III. Retooling is carried out and equipment produced by GRATIS is upgraded.

Strategy 5: Development of the investment attraction system in local areas

Program 5.1 Improvement of the investment climates at the district level

(1) General description

The primary objective of this program is to shift DA's investment promotion from the present passive attitude to a strategic and active one. In addition, the cooperation of GIPC, MOTI/PSD/PSI, and RCC needs to be promoted to supplement DA's investment promotion efforts.

This program aims to improve preconditions for promotional activities to invite investors. It is the most beneficial to DAs in suburbs of large cities that meet investment requirements, including Accra, Kumasi, and Takoradi. When an industrial estate planned by GIPC is constructed, it will become the focus of promotion activities. As GIPC plans to increase its staff and assigns them to rural regions, GIPC and DA will conduct joint activities. For an investment project that seems to be too large for a single DA to handle, cooperating with other DAs under the coordination of RCC or MOTI/PSD/PSI may be a viable option.

(2) Program outline

- 1) Overall goal
 - Production of processed products in districts increases.
- 2) Program goal
 - Investment in local industries is carried out.
- 3) Expected results of activities up to the achievement of the program goal
 - I. A promotional organization is established and promotional activities are conducted.
 - II. Incentives to attract investment are established at the district level.

III. As a result of investment promotion activities, official support is provided for the operation of an established plant to exploit other potential investors.

Program 5.2 Promotion of investment by promoting a module plant

(1) General Description

The purpose of the module plant is to promote investment by showing a factory of economically viable size which a Ghanaian investor can handle. This program is also contributing to the program "Improvement of the investment climate at the district level".

Under the circumstances, short- and medium-term (1-5 years) promotion of investment in the processing industries is called for, and the construction of a module plant, as proposed here, is expected to serve the purpose as it is affordable and viable for many existing processors and starters.

The module plant should meet the following specifications.

- It should have the minimum size suitable for commercially viable operation in order to serve as a future model for small processors in the industry.
- The total amount of investment should be in the range from \$20,000 to \$100,000, which can be raised in the local community. It is sufficient to purchase and install production equipment and a process line that are easily expandable and can be maintained by the owner.
- The plant should be easily manageable and serve as the place to learn basic operation and management techniques prior to the advancement to a more complex system.
- The plant's construction should start with an elaborate feasibility study that can serve as an effective guide for other producers to make a business plan used for a loan application.

Operating the module plant successfully serves as a model case to encourage other processors in the industry to follow. As the government only needs to invest relatively small funds to start up the module plant, which would provide an example and a visible opportunity for small processors, this would become an effective and efficient approach to the promotion of local industries.

(2) Program outline

1) Overall goal

- To increase the number of manufactures in the food processing industries throughout the country.

2) Program goal

- To establish module plants throughout the country.
- 3) Expected outputs of activities up to the achievement of the program goal
 - I. To select industries for which module plants will be constructed.
 - II. To determine specifications of the module plants (machine, manpower, method and money elements).
 - III. To conduct activities to attract investment in the module plants.

<Assumptions>

Basic assumptions for the implementation of the master plan are summarized as follows.

- a. Active participation by local companies and business operators, and requests by company groups for market entry and sales expansion
- b. Intention of related government offices and support organizations to work jointly for local industry development
- c. Local industry development policy that is consistent with the government's industrial policy to be formulated in the future
- d. Arrangement by MOTI/PSD/PSI to ensure that the government budget is allocated to support the development of local industries, or the availability of technical/financial support from donor organizations

6.2.2 Program Priority

The highest priority should be given to the planning. Having a local industry development plan enables various activities to achieve the objective, followed by the monitoring of the results and modification. When an objective of the plan is specified, it is possible to decide on which issue to be addressed first. At the same time, the training of personnel required for local industry development should be given priority to. In the first stage, a program can be implemented quickly if cooperation of an outside expert (with experience) is secured. If not, the preparation for human resource development should start in an early stage. In particular, it

is imperative to provide education and training for DA's staff in charge of SME/local industries and to promote capacity building of BAC staff.

On the other hand, the implementation method for the TPs, together with the training method, has been developed, and the implementation bodies clearly recognize their roles, and are ready for disseminating them. As companies that are eligible for the TPs, other companies in neighborhoods, and DA show an interest, it is important to start the dissemination activity as early as possible.

Sales promotion and investment promotion should be carried out as a part of activities contained in a regional (local) development plan. In some cases, they may be implemented without any linkage or connection to the development plan. Sales promotion requires some preparations such as branding and standardization in many cases. These preparatory activities rely much on TSSP's program and should thus be tied to TSSP's actions as much as possible. As GIPC plans to assign its staff to rural regions and constructs an industrial estate, the development of the investment promotion system should wait their materialization to avoid wastage. Also, the strengthening of GRATIS's advisory function should be aligned with the SME retooling project that is carried out as a part of TSSP's SME support project.

Preparation should preferably be made for the formulation of local industry development measures and programs as early as possible. However, the formal selection of industry sectors and programs should wait until industries to be developed for each district is determined or MOTI/PSD/PSI's strategic sectors are selected.

It is recommended to urgently review the dissemination of BAC staff's capacity utilization program, investment program to promote the module system, and 5S, as the possible contents of TSSP's investment promotion/productivity improvement project.

Programs of which personnel training and preparation should be urgently started for implementation

- Program 1.1 Formulation and implementation of development plans at the district level
- Program 1.2 Formulation of support measures for local industries in district
- Program 2.1 Self-supported enhancement/expansion of Trial Program
- Program 3.2 Strengthening of BAC's capability and system to foster local industries
- Program 3.3 Provision of business support to facilitate commercial loans
- Program 4.1 Strengthening of BAC staff's capacity

Programs that should be started in consideration of TSSP's progress

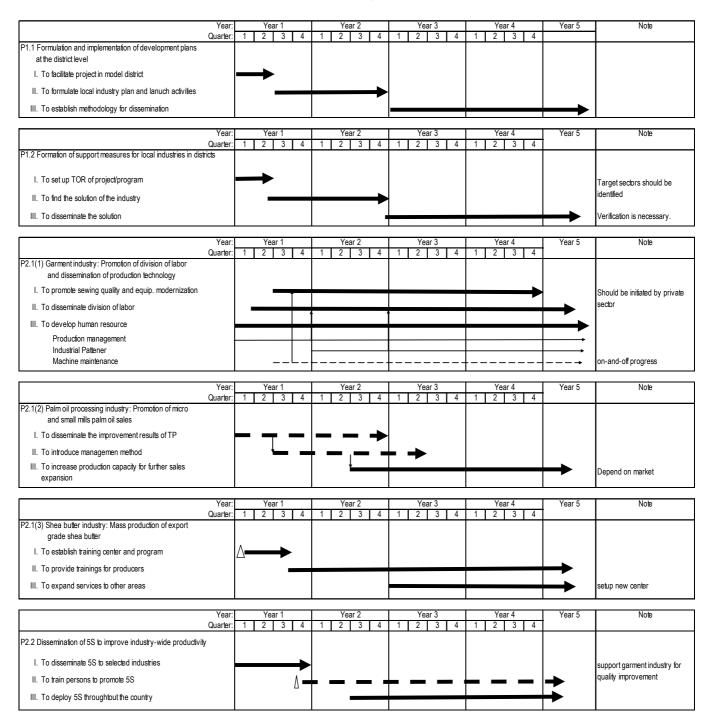
- Program 3.1 Support for sales promotion to sell local products in a wider market
- Program 4.2 Strengthening of GRATIS advisory service
- Program 5.1 Improvement of the investment climate at the district level

Programs which expect TSSP's initiatives

- Program 2.2 Dissemination of 5S to improve industry-wide productivity
- Program 4.1 Strengthening of BAC staff's capacity
- Program 5.2 Promotion of investment by promoting a module system

Next page describes each program schedule.

Table 6-3 (1) Program Schedule



Year 5 Note Year 4 1 2 3 4 Quarter P3.1 Support for sales promotion to sell local products in a wider market Product shoud be identified I. To select products for promotion II. To launch promotional activities III. To expand inter-district sales on-and-off progress Year: Note Year 1 Year 5 P3.2 Strengthening BAC to support local industry I. To improve BAC's needs assessment skill II. To provide services for finance III. To take the leadership for local industry development Note Year Year 5 Quarter: 1 2 3 4 P3.3 Provision of service to facilitate loan access I. To inform loan schemes on-and-off progress II. To assist SMEs to apply loans III. To monitor repayment of SME borrowers Year Year 5 Note Quarter P4.1 Strengthening of BAC staff's capacity I. To set up the implementation system for the training. First trial session is II. To provide necessity knowledge to all BAC staff included. III. To train selected BAC staff to be equipped with special knowledge Note Quarter P4.2 Strengthening of GRATIS advisory service I. To facilitate the advisory system First trial session is included. II. To train GRATIS staff to give advisory services III. To improve the machieries of SMEs Note Year Year 1 Year 2 Year 3 Year 4 Year 5 Quarter P5.1 Improvement of the investment climates at the district I. To set up promotional organization For one project II. To create incentives for investors III. Provision of necessary support for a factory Year 5 Note Year Quarter P5.2 Promotion of investment by promoting a module plan I. To select industries II. To determine specifications of module plants designed to assist DA's III. To conduct activities to attract investment nvestment attraction

Table 6-3 (2) Program Schedule

S6 - 27

on-and-off progress

Forming working group/committee

6.3 Policy Recommendations for Nationwide Local Industry Development

In 6.1 and 6.2, the team proposed the master plan and action plans for the nationwide revitalization of local industries, with emphasis on the upgrading/enhancement of the business support system. In this section, three policy recommendations are made to ensure an effective deployment of initiatives and activities to revitalize local industries on a nationwide basis.

6.3.1 Nationwide Deployment of Local Industry Revitalization Initiatives

The master plans/action plans propose eleven programs, which are designed to serve the purpose of promoting local industry development. It is ideal to implement them according to the proposed schedules. In reality, however, doing so is expected to face resource constraints. Given the assumption, an alternative approach is proposed to maintain the drive for program implementation, i.e., a project approach, under which a local industry revitalization project is initiated under the local leadership and the central government provides necessary support for each project.

Specifically, NBSSI, BAC or DA will initiate the project formation process by acting as a facilitator to inspire and motivate local industries and their leaders. Then, under the participation of other relevant parties, such as universities, technical support centers, and consultants, a formal project will be designed. In the formation process, a participatory workshop approach, which was taken to design and develop the trial programs under the present study, will be useful to develop the project under the consensus of local stakeholders.

The project design proposal, as developed through the above process, will then be submitted to the central government (MOTI/PSD/PSI) for examination and approval. Once approved, the central government will provide business supports. Alternatively, if a proposed project is found to be eligible for support by a program implemented by a donor organization, it may be referred to the donor organization.

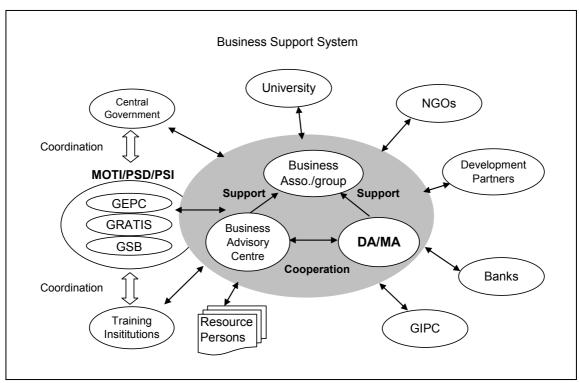
Major features (advantages) of this project approach are summarized as follows.

- 1) The more motivated a region is, the more priority it receives in budgetary allocations, which is efficient.
- 2) Increasing and reducing the number of projects to be approved enable the central government to set the budget flexibly.

- 3) The business support system can be installed and enhanced according to the actual needs of local industries in each region, which are confirmed with the formation and implementation of actual projects.
- 4) The project approach helps promote the revitalization or development of local industries on the basis of feasibility, compared with implementing a nationwide project with no consideration to the readiness and willingness of local stakeholders.

6.3.2 Local Industry Support System

The institutions to implement the strategies are divided into two groups. One group is locally based, which consists of local companies, DA and BAC. Another group is led by MOTI/PSD/PSI and is responsible for the formulation and implementation of common support programs (Figure 6-2). Naturally, some organizations are engaged in both groups. Basically, the local group consisting of local companies, DA and BAC has ownership to implement the DIPI.



Source: prepared by the team

Figure 6-2 The Business Support System

The following table shows the roles of key support organizations relating to development of local industries.

Table 6-4 Roles of Key Support Organizations

MOTI/PSD/PSI

- Guidance (industry selection and planning), evaluation and dissemination of local Development plan
- Securing of the necessary budget
- dissemination of information on local industry Development to districts
- Capacity building of DA staff
- Setting up Local Industry Working Group
- Implementation of TSSP projects (sub-contract, trade show, gallery, training,etc.)

Local Industry Development Working Group

- Application and coordination of TSSP project implemented over different areas or fields to DIPI

NBSSI(Central/Regional)

- Coordination of local industry support at regional level
- Development of the training system for BAC's capacity building (including the securing of the budget)
- Development and maintenance of the resource person database
- Collection of support cases

BAC

- Assessment of needs of companies and company groups
- Definition of content of support programs on the basis of the above needs assessment
- Access to necessary resource persons
- Collection and dissemination of information on local industries
- Interme

District Assembly / Municipal Assembly

- Collection and mapping of locally available resources
- Selection of priority industries and formulation of development plans
- Attraction of investment in local industries
- Sales promotion of local industry products
- Finance (microfinance)
- Facilitation of support organizations at district level (BAC, AEA and other BDS providers)

GRATIS

- Retooling of agricultural product processing equipment
- Training and dissemination of maintenance technology
- Collection and dissemination of technical information (machinery and technology)

KNUST

- Technological research and development
- Collection and dissemination of technical information using university networks
- Database on cases relating to innovation of existing technologies
- Database on technical resource persons (graduates)

MOFA

- Support relating to the processing of agricultural products and dissemination of support cases
- AEA's field guidance for farmers

MLGRDE

- Promotion of importance of industrial development to districts
- Communication and information dissemination to districts

GIPC

- Support for investment promotion for districts
- Dissemination of investment information on districts
- Human resource development in districts, in relation to investment promotion

Source: the team

6.3.3 Use of TSSP for Local Industry Development

Under TSSP, a variety of projects relating to local industry support are planned or implemented, including SME support, investment, infrastructure, and local products promotion. These projects are implemented by the departments of MOTI/PSD/PSI concerned. To maximize and use synergetic effects of these projects for the effective development of local industries, it is proposed to establish a new working group focusing on local industry development, in addition to the existing working group. The primary objective of the new working group is to plan ways to use the TSSP projects for district-level local industry support measures, while coordinating projects implemented by various organizations. Furthermore, it is expected to make suggestions on strategies relating to "spatial distribution, decentralization, and cluster development" – a thematic area of the new industrial policy – as well as sector strategy. The working group will be represented by NBSSI and GRATIS, in addition to MLGRDE and MOFA. Also, donor organizations involved in local industry development may be invited to the working group's meetings.

The following diagram shows the relationships between the programs proposed in the master plan and TSSP's projects. Note that "A" means that a proposed program can be a part of TSSP's project or its alternative. "S" means a strong association of a proposed program with TSSP to suggest that TSSP's project can be used for the development of local industries. Finally, "N" signifies some association, suggesting the complementary relationship.

Table 6-5 Relationships Between the Programs Proposed in the Master Plan and TSSP's Projects

| TSSP Project | P1.1 District Planning | P1.2 Support measures and programs | P2.1.1 Garment | P2.1.2 Palm Oil | P2.1.3 Shea butter | P2.2 Dissemination of 5S | P3.1 Product Promotion | P3.2 BAC for local industry support | P3.3 Loan access | P4.1 BAC Capacity Build | P4.2 GRATIS Advisory Service | P5.1Investment Promotion | P5.2 Promotion of Module System |
|---------------------------------------------------------|---------------------------|------------------------------------|----------------|-----------------|--------------------|--------------------------|---------------------------|-------------------------------------|------------------|----------------------------|---------------------------------|-----------------------------|------------------------------------|
| Investment Promotion | | | | | | | | | | | | | |
| Output 4 Main barriers to be removed | | | | | | | | | | | | S | Α |
| Output 6 Industrial land & Industrial Estates | | | | | | | | | | | | s | S |
| SME Support | | | | | | | | | | | | | |
| Output 1 NBSSI Reorganized and Strengthen | N | N | | | | N | | S | | Α | | | |
| Output 2 Business Support Institutions | S | | S | S | S | | | S | | | | | |
| Output 3 Specialized Technology Center | | | | | | | | | | | | | N |
| Output 4 SMEs Retool | | | N | N | N | | | | | | Α | | |
| Ouput 5 DIP | Α | Α | | | | | S | | S | N | | S | |
| Output 7 Outsourceing opportunity for SMEs | | | S | | | | | | | | | | |
| Output 8 Development of Business Association | N | | S | S | S | | N | N | | | | | |
| Ouput 9 Technology Innovation and Capital Goods | | N | | | | | | | | | | | N |
| Education-Industry Linkage | | | | | | | | | | | | | |
| Output 2 Curricula of Tertiary Institutes | | | S | | | N | | | | | | | |
| Output 3 Specialized Training Course | | | S | S | S | N | N | S | | | | | |
| Outpu 5 Effective linkage btw R&D inst. and Industry | | S | | S | S | | | | | | | | |
| Investment Finace | | | | | | | | | | | | | |
| Output 2 Increase access to long term finance | | | | | | | | S | S | S | | N | N |
| Output 3 Venture Capital | | | | | | | | | S | | | N | N |
| Output 5 Ghana Investment Fund | | | | | | | | | S | | | N | N |
| Export Trade Support Service | | | | | | | | | | | | | |
| Output 3 Up-to-date Trade Information | | | S | | S | | S | | | | | | |
| Output 6 Participation in export promotion events | | | N | | S | | S | | | | | | |
| Output 9 Product Development and R&D info. | | | N | | S | | | | | | | | |
| Output 10 Effective and utilization of Market access | | | N | | | | S | | | | | | |
| Productivity Improvement | | | | | | | | | | | | | |
| Output 2 QM training Prog. Establsihed. | | | S | S | | Α | | | | | | | |
| Promotion of Made In Ghana Goods | | | | | | | | | | | | | |
| Output 2 BDS provided to manufactures | | | S | S | S | S | | S | | S | S | | N |
| Output 4 Product Galleries Established and showcasing | | | N | | S | | S | | | | | | |

Note: A: Alternative or a part of TSSP project

S: Strong connection, need to apply TSSP project

N: Somewhat related Source: prepared by the team