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STRENGTHENING INDUSTRIAL PLANNING AND PROGRAMMING IN SUPPORT OF THE GOVERNMENT'S INDUSTRIAL SECTOR ADJUSTMENT PROGRAMME

DP/GHA/86/001

GHANA

Technical report: Strengthening industrial planning and programming*

Prepared for the Government of Ghana by the United Nations Industrial Development Organization, acting as executing agency for the United Nations Development Programme

Based on the work of S. A. Ghani Kirmani, industrial statistics adviser

Backstopping officer: W. Eckert, Industrial Planning Branch

United Nations Industrial Development Organization

Vienna

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* This document has not been edited.

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Explanatory Notes

Value of the local currency - Cedi (\emptyset) - in United States Dollars - (US \$) - mid April 1989:

Bank rate1 US \$ = 250 \emptyset Forex rate1 US \$ = 350 \emptyset .

Abbreviations

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CBS	Central Bureau of Statistics	
СТА	Chief Technical Adviser	
ERP	Economic Recovery Programme	
GRATIS	Ghana Appropriate Technology Industrial Service	
GSS	Ghana Statistical Service	
IS	Industrial Statistics	
ISAC	Industrial Structural Adjustment Credit	
ISSER	Institut of Statistical, Social and Economic Research	
MIST	Ministry of Industries, Science and Technology	
NBSSI	National Board of Small-Scale Industries	
NSS	National Service Secretariat	
PERT	Programme Evaluation and Review Technique	
PNDC	Provisional National Defence Council	
тсс	Technology Consultancy Centre	
TOR	Terms of Reference	

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INTRODUCTION.

S. A. Ghani Kirmani, Industrial Statistics Adviser (IS Adviser) was a member of the UNDP/UNIDO/World Bank Project Team on Strengthening Industrial Planning and Programming 'DP/GHA/86/001) which was started in March, 1987. The primary objective of the project was to strengthen industrial planning and programming in support of the Ghana Government's Industrial Sector Adjustment Programme. The Project covered large, mediumscale and also small-scale industries (SSIs) in Ghana.

scale and also small-scale industries (SSIs) in Ghana. Dr. E.A.S. Taylor was the Chief Technical Adviser (CTA) who joined the project in March, 1987. Mr. S.E. Joseph, Small-Scale Industries Adviser (SSI Adviser) joined the Team in August, 1987 and terminated his assignment in May, 1989. The IS Adviser joined the Team on December 30, 1987. The one-year contract of the IS Adviser was later extended for a period of six months (i.e. up-to June 28, 1989), as designed in the project.

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SUMMARY OF PRINCIPAL RECOMMENDATIONS

- 1. A separate unit for industrial statistics or the Data Base Centre headed by a Director should have been formally established and at least partly staffed prior to the arrival of the Adviser. In the absence of this preconditions for the establishment of the data base centre in the MIST have been established by the Advisor. It is strongly recommended that the data base centre be staffed immediately with qualified and experienced statisticians.
- 2. Proposals designed to improve the utilization of statistical information in the development process of the industry sector should be introduced and implemented.
- 3. It is necessary to take suitable measures to promote greater inter-action between the 'producers' and 'users' of industrial statistics.
- 4. A close liaison with key manufacturers, industrialists and investors is necessary. A joint committee of directly related agencies may be formed and periodical meetings be arranged to watch progress and revise questionnaire, if necessary, to cover changes. The committee may consist of the following:-
 - Director, Data Base Centre, MIST
 - Director, Ghana Statistical Service
 - A representative of the industrialists
 - A representative of the Association of Manufacturers
 - A representative of the investors.
- 5. Data Base sub-centres should be established at regional levels. There are three major universities in Ghana. To begin with, it is proposed that the country may be divided into three industrial statistics zones and the zonal offices may be established in the areas where these universities are located so that, at the time of conducting surveys, the students may be engaged as field staff.
- 6. Emphasis may be given to increase the quantity, quality of data collection and timeliness in accordance with emerging priorities and the requirements of industrial development policies.
- 7. It is necessary to ensure periodic review of concepts, definitions and classifications in use among producers and users of statistical information. Their suggestions should be used to enhance international comparability and to improve statistical analysis.

- 8. Arrangements should be made for the training and upgrading of skills of statistical data collection, its access to computer technology and other statistical tools required for the performance of its expanding functions.
- 9. As there is no library in the Ministry of Industries, Science and Technology (MIST), it is essential that a library be established to store important documents, statistical and other reports, periodical reports of the concerned departments and organizations, international agencies etc.
- 10. Nation-wide small-scale industries survey is going on extremely well. All the hard work done should not go to waste. Services of at least two experts (one from UNIDO and one local) are necessary for analyzing the collected data statistically and preparing a final report.
- 11. The small-scale industry survey covers all the units in six regions of Ghana. However, due to financial and other constraints, only 40% of the reported units could be covered from the remaining four developed regions of Greater Accra, Ashanti, Eastern and Western. It is proposed that the remaining 60% of the small-scale industry units of the four regions be surveyed as soon as possible.
- 12. It is proposed that subsequent surveys be conducted periodically at least after every two years to help in updating the data and also in evaluating the impact of the policies and programmes, vis-a-vis their aims and objectives. The scope of the subsequent national SSI surveys could be expanded to cover cottage and informal industries including handicrafts and small service industries.

<u>CHAPIER</u> 2

IMPLEMENTATION

REPORT LAYOUT

1. The first part of the 'End-of Assignment Report' consists of 'Recommendations' and a brief 'Introduction'. This is followed by the Background and the Terms of Reference. The main body of the report then follows with detailed discussions on various outputs of IS Adviser.

BRIEFING AND ORIENTATION IN GHANA

2. The IS Adviser could not attend briefing session in UNIDO headquarters. He was directed to proceed directly to Accra. Upon arrival, the IS Adviser reported to the CTA.

3. Soon after arrival at the Duty Station, a four day briefing and orientation programme was arranged by the CTA. He accompanied the IS Adviser to pay courtesy calls on the PNDC Secretary, Ministry of Industries, Science and Technology (MIST) and the Executive Director, National Board for Small-Scale Industries (NBSSI). In addition, series of meetings were arranged by the CTA with the key officials of the MIST, Ghana Statistical Service (GSS) and the Legon University of Ghana. Among them were:

Mr. Martin Amidu -	PNDC Under Secretary, MIST
Mr. Dan Ayayee –	Acting Chief Director (Tech, MIST)
Ms. Victoria Oku -	Acting Chief Director (Admin. MIST)
	UNIDO Programme Coordinator, MIST
Ms. Allotey -	Executive, Ghana Statistical Service
Prof. Kojo Ewesi -	Director, Institute for Statistical
	Social and Economic Research,
	(ISSER), University of Ghana.

4. IS Adviser was also briefed by other Senior officials of the MIST on matters related to the project.

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BACKGROUND

In the decade following independence, the industrial sector played a dynamic role in the economic growth of Ghana. Between 1962 and 1970 the manufacturing output grew by 13% per annum in real terms and its share in the Gross Domestic Product (GDP) rose from 10% in 1960 (at 1968 constant prices) to a peak of about 14% in the early 1970s. This was the time when Ghana was regarded as the leading country in Africa possessing one of the largest and most diversified manufacturing sector.

2. During the 1970, availability of foreign exchange for industrial output worsened: Manufacturing output remained unchanged between 1970 and 1977 and started declining sharply between 1977 and 1983. A long-lasting drought deteriorated the economic situation in the country. Manufacturing became a lagging sector with increasingly under-utilized capacity.

3. With steady deterioration in the overall economy of Ghana since 1970, the Government of Ghana commenced fundamental reform measures to stabilize and rehabilitate the economy. An Economic Recovery Programme (ERP) was launched in 1983 to reverse the long period of economic decline. It was intended to provide an improved incentive framework for an increasingly productive and an efficient industrial sector.

4. One of the major objectives of the ERP was to lay the basis for renewed, vigorous and efficient growth in five major sectors of Agriculture, Energy, Industry, Education and Health. The long-term objective of the ERP was the development of a selfreliant and increasingly integrated economy for the people of .pa Ghana and to provide better living standards. One of the key aspects of the ERP was to strengthen the planning capabilities of the Ministries to enable them to implement effectively the ERP.

5. The Ministry of Industries, Science and Technology (MIST) is responsible for the formulation, implementation and monitoring of industrial policies, preparation of national development plans for the industrial sector, facilitate rehabilitation of existing plants, promotion of industrial projects in various sub-sectors all over the country.

6. To carry out the promotional function, it is necessary that data and information on the natural resources of the country, industrial capacities and its utilization, the scale and location of existing industrial establishments, availability and use of materials required for production etc. be known and evaluated to facilitate the work of the MIST to properly plan the development of the industrial sector in Ghana. 7. the Unit for industrial statistics or the Data Base Centre was proposed to be established within the Planning and Support Wing of the MIST primarily to assist all parts of the Ministry in planning, evaluation and development of industrial projects. another responsibility of the Data Base Centre was to assist directly related agencies in their development efforts by providing industry-related data. In other words, the Data Base Centre of the Planning and Support Wing of the MIST was intended to serve as the key centre responsible for the collection and dissemination of pertinent and reliable data on industrial development and to function as a 'Data Bank' on industrial projects.

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TERMS OF REFERENCE

1. The terms of reference for the IS Adviser were formulated as follows:

- i) The Adviser was assigned to work under the general supervision and guidance of the project Chief Technical Adviser and will report to the PNDC Secretary for Industry through the Chief Director, Technical, MIST.
- ii) He has to advise on and assist MIST to develop a unit for industrial statistics (IS) which should have been formally established and at least partly staffed prior to the adviser's arrival, to refine job descriptions and recruit further staff, to refine arrangements for reporting and coordination and to elaborate its 1987-89 programme of work.
- iii) In cooperation with the Director of the IS unit, identify statistical requirements additional to those met by the operations of the Central Bureau of Statistics (CBS), and design appropriate technical systems, methodologies and procedures for generating management information on industry, including statistical collection, compilation, analysis and reporting, to meet the internal and publication needs of the MIST.
- iv) Advise and assist in the preparation of manuals and provide or arrange staff training in the above- mentioned systems, methodologies and procedures, through on the job training, formal courses and/or overseas fellowships or study tours as appropriate.
 - v) Guide, in cooperation with the Director of the IS unit and participate technically in the 1987-88 activities of that unit, notably:
 - cooperation with the National Board for Small-Scale industries (NBSSI) and CBS in the determination of information requirements and means of collection, and in the conduct of a small-scale industries survey and an industrial census;
 - collection and compilation of comprehensive data on manufacturing value-added, output, employment, capacity utilization, utilization of materials and energy, imports, exports, etc. by location, .ownership and sub-sector; Computation and analysis of manufacturing growth, productivity, protection, inter-industry and inter-sectoral linkages, etc.

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- presentation of statistics for use of MIST management and other policy agencies and also for entrepreneurs, investors and economic research institutions.
- vi) Work in close cooperation with other experts and consultants who may be assigned from time to time.
- vii) Work in close cooperation with the national staff of the MIST and other institutions in the field of statistics.
- viii) Ensure, in cooperation with the Director of the IS unit, the availability of data and collaborate with the CTA in preparing an annual report on the industrial sector's performance under the provisions of the Industrial Sector Adjustment Credit (ISAC).

2. In the absence of a unit for industrial statistics and the required staff, no preliminary work had been done. Therefore, after consultations with the CTA and in the light of the Terms of Reference, a detailed Work Plan was prepared high-lighting various immediately needed project outputs with a view to accomplish major tasks of the IS Adviser. The major tasks to be carried out by the IS Adviser are summarized in the elaborated revised work plan shown in Annex I.

3. Owing to the inadequacy of the staff and repeated delays of the restructuring exercise MIST was not able to provide assistance in carrying out these tasks. However, the progress made by the IS Adviser in carrying out these and other tasks is briefly reviewed in the sections to follow.

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ESTABLISHMENT OF A DATA BASE CENTRE IN THE MIST

1. According to the job description of the IS Adviser, a unit for industrial statistics should have been formally established prior to his arrival. It says "----Advise on and assist MIST to develop a Unit for Industrial Statistics (IS) which should have been formally established and at least partly staffed prior to the adviser's arrival ----."

However, no such arrangement had been made. Not even a single qualified and experienced statistician was assigned to work as local counterpart throughout the assignment of IS Adviser.

Role of Statistics:

2. Statistics plays a vital role in every stage of development activity. In the present day world, they form an important basis of planning and evaluation. In fact, no planning agency can function without basic facts, facts about the natural resources for the purpose of preparing development schemes, facts about the manpower for the purpose of determining availability of a building force, facts on industrial capacity of the nation, the scale and location of industries and other production units, consumption and use of material etc. Information on such facts should be known and evaluated. Establishment of a Data Base Centre responsible for collecting such facts is an essential requirement of the MIST.

Data Base Centre

3. To facilitate the process of establishing a Unit for Industrial Statistics or the Data Base Centre in the MIST, the IS Adviser prepared a preliminary paper entitled "Establishment of an industrial Data Base Centre in the Planning Wing of the Ministry of Industries, Science and Technology (MIST)". This paper was mainly based on a thorough review of available reports, publications, preliminary discussions with the senior officials of the MIST to assess their views on the need for such centre and brief discussions with some officials of the Ghana Statistical Service (GSS), a key organization dealing with all matters related to the statistical operations in the country.

4. The primary objective of this paper was to high-light major statistical issues related to the establishment of a Data Base Centre in the MIST. This paper was circulated among senior officials of the MIST for general use and comments. All the MIST officials appreciated the paper and realized the need for establishing a Data Base Centre.

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The functions of the Data Base Centre were elaborated and summarized as follows:

5. <u>Functions of Data Base Centre</u>

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- 1) To identify statistical requirements and design appropriate technical systems, methodologies and procedures for generating management information on industry.
- Collect, compile, analyze and report statistical data to meet the internal and publication needs of the MIST.
- 3) Develop a frame for conducting industrial surveys.
- 4) Arrange training programmes in methodologies and procedures of data collection for MIST staff.
- 5) Collection and compilation of comprehensive data on manufacturing output, employment, capacity utilization, consumption of materials and energy, international trade etc. classified by location, type of ownership and major industry sectors.
- 6) Presentation of statistical data and information in the form of statistical bulletins, research reports, charts, diagrams, etc.
- 7) Provide a 'Data Bank' for the use of other policy agencies, entrepreneurs, investors and economic research institutions.

6. An Organization Chart of the Data Base Centre with minimum establishment was prepared and is shown in Annex 2.

7. Job descriptions of the required number of statisticians were also prepared and are shown in Annex 3.

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INDUSTRIAL STATISTICS AT A GLANCE

1. Growth of industrial activities in a country has always been accompanied by demand for statistical data on the structure of these activities and changes that have taken place in them, as well as the nature of their current status.

2. One of the major tasks of the MIST is to promote industries in various sub-sectors and all over the country. To carry out this promotional function, it is necessary that information on the resources of the country, the industrial capacity of the nation, the scale and location of existing industries, use of materials etc be known and evaluated to facilitate the implementation of the major tasks of the MIST. Such data and information would assist the MIST to properly plan the establishment of the industries in the country. A critical constraint to efficient planning in Ghana is an inadequate data system. For planning purposes quantitative data have to be collected, analyzed and interpreted.

3. The main source of data used by the MIST is the "official" statistics which is incidental to the process of management and administration and is continuously recorded in various files. Since the data and information is not recorded and stored systematically, retrieval of data becomes difficult and time consuming.

4. There is neither a library in the MIST nor other arrangements for a systematic storage of necessary data, documents of importance, technical reports, statistical information on the status of each sub-sector, periodical reports of the sub-sectors, departments etc. It is not possible to obtain various publications and reports issued by various Ministries and organizations. International publications are also difficult to find.

5. In the absence of any coordinated industrial statistics, the IS Adviser prepared for the first time, from primary and secondary sources, a booklet entitled "Industrial Statistics At a Glance".

To accomplish this task, the IS Adviser had to visit various Ministries and other institutions and accumulated data/information personally. Some of the major sources from which necessary data was gathered are:

- 1) Ghana Statistical Service
- 2) Ministry of Finance and Economic Planning
- 3) Population Census Organization
- 4) Bank of Ghana

- 5) Ghana Export Promotion Council
- 6) World Bank reports
- 7) Industrial Development Review Series on Ghana, UNIDO
- 8) Economic Recovery Programme for Ghana.

This exercise provided IS Advisor an opportunity to establish contact and develop cooperation with other institutions in the field of statistics.

6. The booklet contains pertinent data and information on Population, National Economy, Agriculture, Industries, External Trade etc. The data presented in the booklet are intended to assist all users of industrial statistics particularly those engaged in reviewing past and current trends. This would also assist those engaged in the formulation of national industrial policies, planning strategies and priorities for the future. It is also hoped that this booklet would serve as a useful companion to all those concerned with planning, development and evaluation of policies and programmes and also their administration.

7. A number of copies were issued to all concerned agencies within the MIST. The demand for more copies from local and international agencies was increasing. From the increased demand it becomes clear that the booklet is serving the purpose for which it was intended. An attempt has been made to update this booklet covering information up to the end of 1988.

8. After a number of meetings and discussions with the subsector heads of the MIST, the IS Adviser designed a short and pertinent questionnaire for gathering relevant data and information related to the yearly performance of each sub-sector. Separate chapters have been added to the second issue of the "Industrial Statistics at a Glance" to cover each sub-sector separately.

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SURVEY OF MEDIUM AND LARGE MANUFACTURING INDUSTRIES

Availability of certain basic statistical data and information relating to the medium and large industries is an essential prerequisite for the formulation of policies and programmes for their development as well as for assessing their impact vis-avis, the aims and objectives of the policies and programmes. It is in this context that the Survey of Medium and Large Manufacturing Industries forms an important part of the joint UNDP-UNIDO-World Bank project for Ghana now under implementation, w hich is designed for strengthening the industrial planning capabilities of the MIST.

Under the Economic Recovery Programme (ERP), the Government 2. of Ghana is implementing a number of policy measures in the industrial sector. In addition, an import programme supported by funds from various sources has also been undertaken. Since adequate and up-to-date statistical data and information relating to the Medium and Large industries are not available, to monitor the impact of policy measures and annual import programmes and for preparing a detailed plan for their development, the MIST has initiated a yearly survey of industrial establishments, to collect and collate pertinent data and information directly from the manufacturing industries. The primary objective of the survey is to record the responses or the reactions of the industrialists to such policy measures including requests for foreign exchange allocations.

3. In consultation with the officials of the Ghana Statistical Service (GSS) and various sub-sector heads of the MIST, the IS Adviser revised the questionnaire intended for use on the Survey of Medium and Large Manufacturing Industries. Instructions for filling in the questionnaire were finalized and included in the questionnaire. This survey forms the 1986 and 1987 economic results of the manufacturing industries.

The questionnaire has been so designed that substantial studies on the industrial structure, output and structure of production, capacity utilization, employment, use of material, productivity and investment can be meaningfully carried out.

4. The questionnaires were sent to the manufacturing establishments for completion. Some of the questionnaires were sent by mail and the others were personally delivered, wherever possible.

5. The objectives of the survey were explained to the manufacturers and particularly, it was assured that the information to be supplied will be kept strictly confidential, that it will be used by the MIST mainly for planning purposes and that it will not be released to any tax collecting agency.

6. In accordance with Section 2 of the Manufacturing Industries Regulations 1972 and Section 10 of the Manufacturing Industries Act 1971 (Act 356) all Manufacturing and Service Industries are expected to submit "Completed Returns" in respect of their operations to the MIST.

7. In continuation of the 1985 survey, the revised questionnaire for the year 1986 was issued to about 500 Manufacturing establishments. In spite of the importance of statistics for evaluation and planning purposes and the existence of Act 356 which directs all manufacturers to submit completed returns, the response had been poor. Even though reminders were issued, the response was not encouraging.

8. <u>Follow-up visits (June 16-30, 1988)</u>

Together with two industrial promotion officers of the MIST, the IS Adviser undertook a follow-up exercise to expedite collection of completed returns for the year 1986. The main objectives of the follow-up visits were:

- To explain to the industrialists the purpose of the survey;
- b) To assure the respondents that the information to be supplied will be used by the MIST mainly for planning purposes, that it will be kept strictly confidential and will not be released to any tax collecting agency;
- c) To provide additional copies of the questionnaire, if required and to request them to complete and return the questionnaire as soon as possible;
- d) To explain/interpret the questions, if necessary;
- e) To distribute the questionnaire for the year 1987;
- f) To get to know the industrialists and develop confidence.

9. <u>Reasons for Non-Response</u>

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Some of the reasons for the delay in submitting completed returns were:

- a) Some industrialists pretended to have lost/misplaced the questionnaire, additional copies were supplied;
- b) Lack of understanding of the true purpose for which the survey was being conducted;
- c) In-efficient mailing system;
- d) Lack of knowledge or of suitable staff to complete the questionnaire;
- e) Dissatisfactory due to current industrial environment.

10. Even though the primary purpose of the follow-up visit was to expedite collection of completed returns, it was observed that the industrialists indicated at some problems, which consisted mainly in following:

- a) Non-availability of raw materials needed for production
- b) Inadequate finances
- c) Difficulties in obtaining loans from banks
- d) High interests rates on loans
- e) High import duty on raw materials
- f) Inadequate availability of foreign loans

A brief report on the follow-up visits was submitted to the MIST for information.

A List of manufacturing industries that were covered in the follow-up visits is given in Annex 4.

11. Prior to the arrival of the IS Adviser, MIST had signed a contract with the Institute of Statistical, Social and Economic Research (ISSER) for the purpose of carrying out a detailed study, to monitor the impact of the policy changes on the industrial sector. The data had been furnished by the MIST in the form of completed questionnaires recording the responses or reactions of the industrialists to such policy measures. Under the agreement, the functions of the ISSER had included verification of the completed returns, compilation and detailed analysis of data and presentation of reports which clearly showed the impact of the policy changes and import programmes on the industrial sector and its sub-sectors as a whole.

About 200 questionnaires had been issued to the manufacturing establishments for the year 1985. The response had been extremely poor. Only 80 completed returns had been submitted by the industrialists. The completed returns for the year 1985 were supplied after review to the ISSER by the MIST. The IS Adviser had several discussions with ISSER regarding the questionnaires and the processing of survey data.

12. Survey of Manufacturing Industries 1986

Over 500 revised questionnaire were supplied to the manufacturing establishments for the Survey of Manufacturing Industries 1986. In spite of sending reminders and follow-up visits, the industrialists had taken a lukewarm attitude to the submission of completed returns for the year 1986. They were reminded of the Manufacturing industries Act 356 and penalties on the defaulters. Situation did not improve.

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The IS Adviser proposed the following to the MIST for expediting collection of returns:

- a) Sub-sector heads and schedule officers of the MIST, during their routine visits to the establishments, should impress upon the industrialists to assist the MIST by submitting their returns since the data to be collected from the questionnaire are needed for the evaluation of the performance of industries and for effective planning. They may also assure the respondents that the results of the survey would assist them in improving their operations.
- b) The Regional Officers of the MIST should be directed to assist in the distribution, follow-up and the collection of returns.
- c) The Association of Manufacturing Industries may be approached to impress upon the industrialists the importance of the survey and urge them to supply the completed returns.
- d) Publicity through radio, T.V. and the district level announcements to educate the industrialists highlighting the importance of the survey may be undertaken.

In spite of the abova measures, the response had been poor. About 110 completed questionnaire have been received for the year 1986 which were reviewed and submitted to the ISSER for compilation and analysis.

13. Survey of Manufacturing Industries, 1987

Over 600 questionnaires were supplied to the manufacturing industries. About 95 completed returns have been received as of April 30, 1989. Reminders have been issued, follow-up visits were undertaken, sub-sector heads and their schedule officers are making use of their influence to encourage the industrialists to complete the returns and submit them to MIST. It is hoped that by the end of May, 1989, the total number of completed returns would increase to about 200.

14. Simultaneously, questionnaires for the year 1988 are being issued to the manufacturing establishments. It is unfortunate that in spite of reminders, personal follow-up and other measures, the industrialists are taking least interest in submitting completed returns. They continue to take a non-cooperative attitude.

15. <u>Suggestions</u>

a) For timely completion of returns and to im, rove the quality of data, MIST may involve training institutions in the data collection exercise to upgrade the skills of the personnel of the manufacturing industries responsible for the completion of returns.

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b) MIST may set up an Industrial Promotion Centre on a pilot basis, for providing relevant techno-economic information, advise and guidance to all potential industrialists. The centre should be adequately staffed with technically qualified, trained and experienced personnel to assist entrepreneurs in preparing plans for the expansion and development of their industries, to assist them in preparing feasibility reports and plans for the development of new industries and to support the accelerated completion of statistical information and questionnaires. This would promote mutual understanding and cooperation.

c) To help and guide medium and large industrialists, an Industry Bulletin may be prepared and issued periodically. It should contain information on the future plans of the MIST, assistance and facilities offered by the Government, credit and other institutions for the promotion of new industries.

d) Infrastructure facilities being used by the manufacturing industrialists need to be strengthened and made operationally effective. For this purpose sub-sector heads of the MIST may initiate necessary steps for effective utilization in consultation with some selected industrialists.

<u>CHAPTER</u> 8

SURVEY OF SMALL SCALE INDUSTRIES IN GHANA

BACKGROUND

1. One of the major outputs of the IS Adviser was the launching of a Nation-wide Survey of Small Scale Industries in Ghana. Surveys and censuses are regarded as the key functions of statisticians. Every aspect of the SSI Survey including the preparation and finalization of the scheme, questionnaire, manual and other survey material is based on the constant and continued collaboration with the officials of the Ghana Statistical Service (GSS) as well as of the MIST and NBSSI.

2. Development of small-scale industries, (SSIs) constitutes the basis of sound and solid industrilization. It contributes towards overall production of much needed goods withoutrequiring the organization of large new enterprises or the use of much foreign exchange. Levelopment of SSIs provides opportunities for employment in rural and urban centres. It can perform an important function in promoting growth, providing small scale training ground for management and labour. It functions as a source of spreading industrial knowledge over wide areas and contributes towards overall economic development.

3. SSIs are less capital intensive and more labour intensive. The real advantage of SSIs is that they can be set up in a high degree at locations near to raw material sources and available labour. Because of these inherent advantages, the small scale industries have continued to exist alongside the modern industries in i dustrialized countries. They are an integral part of modern industrialization supporting the large scale industries. SSIs have not only a large potential for generation of employment, they also produce a relatively higher sevel of industrial skills and experience.

4. SSIs of Ghana have not been surveyed for several years. Therefore, complete, reliable and up-to-date statistical data required for planning purposes, are not available. One of the major objectives of the project is to assist the NBSSI

One of the major objectives of the project is to assist the NBSSI to initiate activities for the development of the sector on the basis of a profound economic analysis of these industries. Reliable data and information are necessary in order to formulate and execute short and long term development programmes for accelerating the growth of small-scale industries in Ghana.

5. ORGANIZING A STATISTICAL SURVEY

Valuable information in respect of SSIs can be collected through the well organized statistical survey. In organizing a survey for the collection of industrial data, one has to spell out clearly, the objectives of the survey and data coverage. The

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guiding principle in planning and executing a survey of this nature, should be the 'Utility' and the 'Usability' of the data collected. Utility or usefulness of the data will depend on the objectives of the survey and usability will depend on the reliability and timeliness of the data and its presentation.

6. Concepts and definitions need to be explained clearly, so that the statistical data collected are consistent with the objectives of the survey.

There is generally a tendency among the statisticians to overload the survey by allowing a number of insignificant questions. Care should be taken to see that the questionnaire consists of relevant questions only.

7. OBJECTIVES OF THE FUNCTIONAL SURVEY SCHEME

One of the main objectives of the UNDP/UNIDO/World Bank project is to assist the NBSSI to initiate activities for the development of SSIs on the basis of a survey of these industries. The principal objective of the SSI Survey was to collect basic statistical data and information about the size of the sector and individual unit, the types of industries, their locations, number of persons employed, capital investment in them, their production and problems etc. These statistics and information are a prerequisite for formulation of policies and programmes for their short and long term development.

8. Second major objective of the SSI survey was to train concerned officers of the MIST and the NBSSI and some of the affiliated agencies to organize and conduct further national surveys of small-scale establishments.

9. COVERAGE OF SSI SURVEY

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Taking into account the financial and other constraints including the time-frame envisaged under the project, the coverage of the SSI survey has been limited to 3,000 small-scale establishments only. These are:

- a. units which are registered with the MIST and NBSSI
- b. units whose investment in machinery, equipment and tools is estimated to be between 2-10 million Cedis (excluding the investment in land, building and vehicles) and or employ not more than nine (9) persons.

10. ESSENTIALS OF STATISTICAL SURVEYS

Prerequisites for conducting a statistical survey are:

- a. Preparation of a survey scheme
- b. Design of a suitable questionnaire, pretesting and

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finalization of the questionnaire

- c. Preparation of a training manual for the field staff
- d. Selection of suitable field staff
- e. Training of survey officers, enumerators and supervisors
- f. Pilot survey
- g. Selection and sampling of establishments
- h. Zoning and mapping of the selected establishments
- i. Publicity
- j. Launching of survey
- k. Survey monitoring
- 1. Collection, review of completed returns analysis and report writing.

11. SURVEY SCHEME

A survey scheme entitled "Functional Training Scheme for a National Survey and Processing of Data and Information relating to Small-Scale industries in Ghana" was prepared and submitted to MIST, NBSSI, UNDP and UNIDO. It covers details on concepts, definitions, objectives, coverage, budget etc.

12. DESIGN OF QUESTIONNAIRE

A questionnaire was prepared in consultation with NBSSI incorporating their basic requirements. It was later reviewed with GSS officials to identify their statistical requirements in addition to those proposed by the NBSSI. In this connection, series of meetings were held with GSS and it was mainly on the basis of these discussions that the questionnaire for the survey was finalized. Utility and Usability was the guiding principle behind designing and finalizing the questionnaire.

13. PRETEST OF QUESTIONNAIRE

Before finalization, about thirty small-scale establishments were visited to assess the reactions and responses of the entrepreneurs to various questions so as to consider the need for any modifications/deletions of the questions. It was also intended to train the HIST and NBSSI staff in the field, to collect reliable answers from the respondents. A report on the findings was submitted to the MIST and NBSSI.

14. SURVEY MANUAL FOR TRAINING

Preparation and finalization of the Manual for the survey was based on a series of discussions with GSS officials. It contains details on every aspect of the statistical survey. Detailed instructions for completing the questions are also included. It is meant for the use of enumerators, supervisors and the survey officers as a guide for use in the field. This is a very valuable document prepared for the first time in Ghana for the surveys of small-scale industries. Copies of the Manual have been submitted to MIST, NBSSI, UNDP and UNIDO.

15. <u>SELECTION OF FIELD STAFF</u>

As per local requirements, the National Service Secretariat (NSS) was approached to make available, suitable candidates for interview and final selection. Survey officers of the NBSSI and Advisers interviewed the candidates and finally selected about 140 enumerators and 20 supervisors to serve in different regions. It was necessary to ensure that the candidates selected to serve in specific regions were conversant with the local languages of the regions where they are required to serve.

16. TRAINING OF SURVEY OFFICERS

Six officials from NBSSI and MIST were assigned to work on the nation-wide survey of SSIs. A three week extensive training session was taken by the IS-Adviser to train the survey officers, explaining in detail all aspects of the SSI survey. Topics covered for the training of the survey officers are given in Annex 5.

17. TRAINING OF ENUMERATORS AND SUPERVISORS

Before launching the survey, the finally selected enumerators (140) and supervisors (20) were trained thoroughly. Training sessions were held at two centres, Accra and Kumasi. At Accra centre, 80 enumerators and 12 supervisors were trained whereas 60 enumerators and 8 supervisors were trained at the Kumasi centre. The IS Adviser organized the training sessions. He was solely responsible for the training of field staff at Kumasi centre.

GSS officials trained the field staff at Accra centre under the supervision of the CTA and the SSI Adviser.

The Training programme of the selected field staff is given in Annex 6.

Before the training, a formal oath taking ceremony was held at both centres. Some officials from the Ghana Judiciary took the oath from the field staff. Copy of the Oath of Secrecy is given in Annex 7.

18. PILOT SURVEY

The pilot survey was started immediately after completion of the training of field staff. The exercise was carried out in 3 selected zones in Accra and one zone in Ashanti Pegion with 18

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enumerators and 15 supervisors covering a total of 167 units. It was ensured that the zones selected for the Pilot comprise of both urban as well as rural areas so as to test the questionnaire in both areas. Primary object of the pilot survey was to train the field staff before they start work in the field, test questionnaire, assess reactions of the respondents so as to consider the need for modifications of the questions if necessary. Based on a general consensus of the views of the field staff, the questionnaire and the Manual did not require any amendments. A preliminary report on the 'Pilot Survey' was prepared and submitted to MIST, NBSSI, UNDP and UNIDO.

19. <u>SAMPLING OF SSI UNITS</u>

According to a recent census carried out by the GSS, there are about 6,213 small-scale establishments spread over ten regions of Ghana. For enumeration purposes, GSS has divided the entire country into 214 zones. For sampling purposes, the universe of small-scale establishments consists of 6,213 units spread over 214 zones. The data reported by GSS showed two distinct clusters in the universe, namely:

- i. the four regions of Greater Accra, Ashanti, Eastern and Western having higher concentration of SSI units (5,439) with an average concentration of 1,360 units per region.
- i. the remaining six regions of Ghana have relatively a smaller number of SSI units (774) with an average concentration of 129 units per region.

The universe is divided into two distinct clusters consisting of "four developed regions" with a total of 5,439 units and an average concentration of 1,360 units per region. The other cluster consist of "six less developed regions" with 774 SSI units and an average concentration of 129 units per region. For the purpose of the survey, it was proposed to cover all the SSI units in the six regions of Ghana with lesser concentration of SSI units because:

- a. the reported units are small in number
- b. it allows greater area (167,655 sq. km) of Ghana for coverage, about 70 percent of total area of Ghana.
- c. Government places greater emphasis on the development of SSI units in areas with lesser concentration.

After having decided on the coverage of 774 units in six regions, the balance of 2,226 units were selected randomly from the remaining four regions having a total of 5,439 SSI units. It was proposed to distribute the 2,226 units proportionally among the remaining four regions. Distribution of units by Survey Centres, zones, area, population etc. is shown in Annexes 8 and 9.

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20. ZONING AND MAPPING

For effective survey monitoring, separate lists were prepared showing the names of SSI establishments, physical location and the zone in which they are located. Regional maps were used to show the location of the SSI units, marking respective zones, important districts etc. These maps were used to explain to the field staff about the exact locations of the SSI units. These were very helpful to the field staff in going around the units. These maps were also used to monitor the progress of the field survey.

21. PUBLICITY

Publicity plays an important role in conducting a survey. Small Scale Industrialists should know the purpose and the agency responsible for conducting the surveys. Newspapers, radio and T.V. are the best media. Announcements in the local newspapers were made before the launching of the survey and also when the survey had already started for few days.

22. LAUNCHING OF THE SSI SURVEY

The nation-wide survey of small-scale industries in Ghana was officially launched on Tuesday March 28, 1989 simultaneously at both centres of Greater Accra and Kumasi. The closing session of the launching ceremony was addressed by Dr. Francis Acquah, PNDC Secretary for Ministry of Industries, Science and Technology, Ms. Anne Forrester, Resident Representative UNDP, Accra and Dr. E.A.S. Taylor, CTA, UNIDO, Accra.

23. SURVEY MONITORING

For surveying about 3,000 SSI units with a total of about 160 field staff, the survey universe was divided into three Monitoring Centres. Two survey officers of the MIST/NBSSI were made responsible for each centre, to supervise the work of the field staff. Distribution of enumeration zones and SSI units by survey centres is given in Annex 8. Based on reports from the field, it is observed that:

- i. Enumerators and Supervisors are cooperative, hard working and taking interest in the field work.
- ii. District Secretaries of the regions are happy that a long awaited survey of SSI units has been launched and that they are taking keen interest in the survey by providing necessary facilities such as, accommodation, transport, food etc to the field staff in rural areas. In some places, they have deputed their officials to accompany the field staff to go to the SSI units. This encourages good response from the entrepreneurs.

iii. The regional officers of the MIST/NBSSI are also providing necessary assistance to the field staff. A PERT chart of survey centres has been prepared to watch progress in the field.

24. COLLECTION, REVIEW OF RETURNS, ANALYSIS AND REPORT WRITING

A receiving unit has been set up in the NBSSI where all the completed returns are being received. Survey officers will arrange the returns by districts, zones, regions etc. for their respective centres. Every completed return will be thoroughly reviewed by the survey officers and corrected if necessary. The reviewed and finally checked returns will be analyzed by the consultants to be appointed and a final report on the findings of the survey will be prepared.

25. COLLABORATION WITH SSI ADVISER

One of the responsibilities of the SSI Adviser was to advise and guide NBSSI in the preparation of a five year development programme based on the SSI survey results. The IS Adviser had established good working relationship with him at every stage of the survey operations incorporating his views and requirements. He assisted the IS Adviser in editing the survey material.

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DIRECTORY OF INDUSTRIAL ESTABLISHMENTS

1. The last directory of industrial establishments in Ghana was prepared in 1979. During the last ten years, a number of changes have taken place in the economic field of the country. The present Government had launched a major IMF backed Economic Recovery Programme (ERP) in 1983, to reverse the long period of economic decline. One of the major objectives of the ERP was to provide an improved incentive framework for an increasingly productive and efficient industrial sector. It was intended to lay a basis for renewed, vigorous and efficient growth in the industry sector.

2. With the launching of the ERP, after several years of marked decline, the economy has been steadily growing and the contribution of the industry sector was increasing with time. Efforts were made to develop new industries in both foreign and domestic ownership under a new investment code published in 1985. The manufacturing industry sector has been one of the main beneficiaries of the foreign exchange reforms introduced in 1986. A major drive was launched for industrialization.

3. A directory of industrial establishments plays an important role in the development of industry sector. It helps the entrepreneurs and investors in establishing new industries. A number of agencies have been approaching the MIST for an updated issue of the directory. One of the functions of the Data Base Centre of the MIST is to collect and collate certain basic statistical data and information pertaining to the industries in Ghana for the use of planners, investors, administrators, entrepreneurs and others engaged in the implementation and monitoring of industrial policies, programmes and growth. In pursuance of these functions, issue of a Directory of Industrial Establishments was included as a main task in the Work Plan of the IS Adviser. Preparation of the directory was based on review of a number of old files of the MIST. The names of approved industri-

4. Since the records were not maintained systematically, and some of the old record was missing, it was necessary to visit a number of industrial establishments to make certain corrections. Therefore the compilation was also based on visits to a number of manufacturing establishments, Ghana Statistical Service and other potential sources primarily to:

al establishments were recorded and corrected.

- a) update the records on approved industrial establishments,
- b) determine existing distribution of establishments by location and by sub-sector

 c) identify approved enterprises that have not been commissioned.

This compilation exercise actually took the form of a survey. The list of establishments have been compiled separately by each sub-sector.

5. A draft directory of industrial establishments has been prepared. It was not intended to be exhaustive. It consists of two sections. Section one covers the 'Preface', a brief description of the policy guidelines related to the industry sector of the MIST under the following sub-headings:

Policy Guidelines of the MIST

- a) Historical background
- b) Main functions
- c) Policy on establishment of new industries and expansion of existing establishments
- d) Definitions
- e) Instructions on the issue of manufacturing licenses

Section two consists of the following information in respect of the industrial establishments.

Main Directory

- a) Name of industry
- b) Ownership
- c) Location and address
- d) Principal items of production
- e) License number

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f) Date of issue of license number

A 'Draft Directory' of the industrial establishments has been submitted to the Sub-Sector Heads of the MIST for correction/comments/suggestions so that the directory may be finalized. Comments are still awaited.

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COOPERATION AND COLLABORATION

1. COOPERATION WITH EXPERTS

Under the UNDP/UNIDO/World Bank Project on 'Strengthening Industrial Planning and Programming', short term consultants/experts were employed to carry out analytical studies of sub-sectors of the manufacturing sector in support of the preparation of subsector development plans. The IS Adviser had established good working relationship with the short term experts and assisted them from time to time by providing statistical data and information relating to the sub-sectors. The booklet on 'Industrial Statistics at a Glance' and the 'Directory of Industrial Establishments' (draft) prepared by the IS Adviser were of great help to them.

2. In addition, experts/consultants from various international agencies like the African Development Bank, ILO, World Bank, UNDP, UNIDO etc had been visiting the IS Adviser to collect data and information on industrial sector.

3. COOPERATION WITH MIST STAFF AND OTHER INSTITUTIONS

Good understanding and cooperation were developed with various producers of statistics such as Ghana Statistical Service, Ministry of Finance and Economic Planning, Ministry of Trade, Ghana Investment Centre, Bank of Ghana, Ghana Export Promotion Council and other potential institutions dealing with the collection of statistical data and information in the country. Good cooperation and working relationships were maintained with the MIST/NBSSI officials such as sub-sector heads, schedule officers, industrial promotion officers, coordinators etc.

4. COLLABORATION AND COOPERATION WITH CTA

The major outputs of the IS Adviser as outlined briefly earlier are based on the valuable guidance and assistance provided by the CTA from time to time. The IS Adviser established good working relationship with the CTA and assisted him in the preparation of several project documents. In addition, the IS Adviser attended to other tasks given by the CTA.

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SPECIAL TASKS FOR FUTURE

A. <u>DIRECTORY</u> OF <u>SMALL-SCALE</u> <u>INDUSTRIES</u>

Pre'iminary work on the preparation of the directory of Small-Scale Industries in Ghana has been completed. The List of SSI establishments registered with MIST and NBSSI, their location address etc has been prepared by the IS Adviser. A list of 6,213 SSI units supplied by GSS has been classified and arranged in final order. The field staff of the current survey have been instructed to record the name, address, etc of the unlisted units if they come across such units in the field. After the completion of the survey, it would be possible to edit and complete the directory of SSI units which would prove to be of immense use to the planners and for future surveys.

B. <u>PERTINENT STATISTICS ON EXPORTS AND EXPORTERS</u> OF INDUSTRIAL PRODUCTS

Exports play an important role in the modern world. They promote efficient use of resources available in a country. They contribute towards economic progress. Foreign exchange earned from more exports can be utilized for increased production. A comprehensive directory of exports and exporters of industrial products has always been useful in promoting exports. It is proposed that a directory of the exports and exporters of industrial products be prepared as per brief details given below:

DIRECTORY OF EXPORTS AND EXPORTERS

The directory may be divided into three major sections:

- Section 1 <u>Directory of Exports by Commodities</u>
 - a) Primary commodities
 - b) Semi-manufactured products
 - c) Manufactured products
- Section 2 Directory of Establishments
 - a) Exporting manufactured goods
 - b) Exporting semi-manufactured goods
- Section 3 <u>Directory of Exporters</u>

a, Primary commodities

b) Semi-manufactured goods

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c) Manufactured goods.

Data may be collected as per details below:

Section 1 - Directory of Exports by Commodities

- 1. Name of product
- 2. Quantity
- 3. Value
- 4. Year

Section 2 - Directory of Establishments

- 1. Name of establishment
- 2. Physical location

Postal address Telephone No. Cable Telex

- 3. Production capacity (estimated)
- 4. Production (principal products)

Quantity Value

5. Products exported

Quantity Value

6. Other products suitable for export

Quantity Value Section 3 - Directory of Exporters

- 1. Name of exporter
- 2. License number (if any)
- 3. Location address

Postal address Telephone No. Cable Telex

4. Products exported

Quantity Value

C. INDUSTRY PROFILES OF KEY SECTORS

There are seven major industrial sub-sectors in Ghana. These are:

- 1. Food, Beverages and Tobacco
- 2. Textiles
- 3. Wood Processing
- 4. Metal
- 5. Chemicals
- 6. Pharmaceuticals
- 7. Non-Metallic Products

A small statistical bulletin on 5 - 10 leading industries of each sub-sector may be prepared. Historical data and information on such industries would be of great use to planners to watch progress. Information may be collected on the following details:

- 1. Name of industry
- 2. When incorporated
- 3. Brief history on progress
- 4. Object of establishment
- 5. Major outputs
- 6. Capacity utilization

- 7. Marketing channels
- 8. Trade (internal & external)
- 9. Intermediate inputs
- 10. Employment and wages
- 11. Import requirements etc.

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FACTORS AFFECTING ACTIVITIES AND OUTPUT

The main factors which affected the activities and output of the IS Adviser are briefly referred to below:

- i) A separate unit for industria! statistics or the Data Base Centre headed by a Director, as planned prior to the arrival of the IS Adviser should have been formally established and at least partly staffed.
- ii) No counterpart statisticians were assigned throughout the period of service. Six officers were assigned to work on a full time basis few weeks before the commencement of the training for the SSI survey.
- iii) There is no 'Data Bank' or 'Information Centre' in the MIST capable of providing at one place the statistical data and information required by the planners, research workers etc.
 - iv) There is neither a library in the MIST nor any arrangements for the storage of pertinent statistical data related to the industry sector, storage of important documents, periodicals, reports etc.

ANNEX 1

ELABORATED WORK PLAN

INDUSTRIAL STATISTICS ADVISER

PROJECT : DP/GHA/86/001

Project Activities/Tasks/Events

ESTABLISH INDUSTRIAL DATA BASE AND SYSTEMS

- Briefing and orientation
- Prepare work plan
- Prepare preliminary paper on data base development

INDUSTRIAL STATISTICS AT A GLANCE

- Prepare format/tables (tabulation plan)
- Review of MIST files
- Visits to GSS, Government agencies and other potential sources
- Data compilation, tabulation
- Publication

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EXECUTE ISAC CURRENT SURVEY

- Review, appraisal and finalization of questionnaire
- Supply questionnaire to manufacturing industries
- Factory visits to expedite responses and collect returns
- Review of returns and analysis by ISSER

EXECUTE SMALL SCALE INDUSTRIES SURVEY

- Preparation of survey scheme and budget
- Design, review, pretest and finalization of questionnaire
 Preparation of instructions for enumerators
- Preparation of instructions for supervisors
- Staff recruitment and training
- Sampling plan
- Preparation of a tabulation plan
- Training of field staff
- Launch SSI nation-wide survey
- Survey monitoring
- Compilation, classification and tabulation
- Data analysis and report

DIRECTORY OF INDUSTRIAL ESTABLISHMENTS

- Review of MIST files
- Visits to the Ghana Statistical Service and other institutions/potential sources
- Finalization and printing of the Directory of Industrial Establishments.

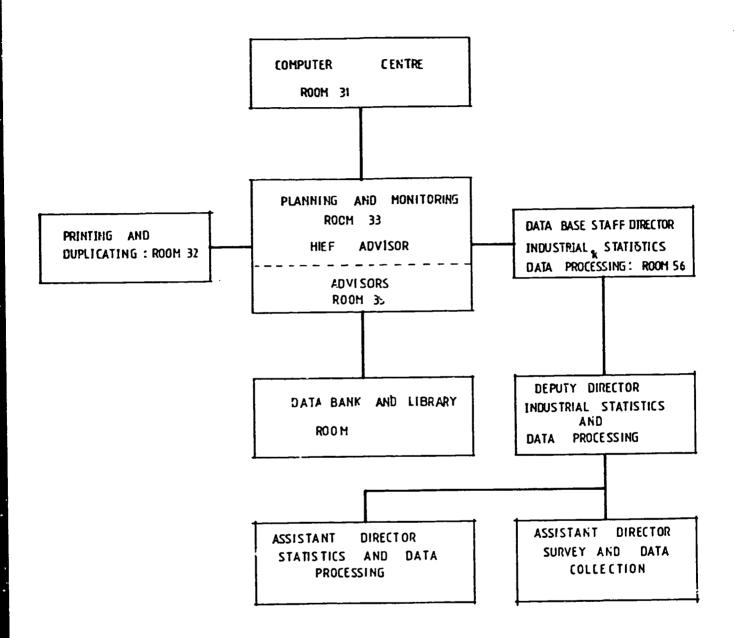
TRAINING

- Prepare internal training programme
- Prepare external training programme
- Candidate selection and recommendation
- Execute training programme
- Review and finalization of Manual on Systems and Procedures with CTA
- Other tasks in collaboration with CTA
- Preparation of final report.

ORGANIZATION CHART

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OF THE DATA BASE CENTRE



JOB DESCRIPTIONS FOR

MINIMUM STAFF REQUIRED FOR DATA BASE CENTRE

JOB DESCRIPTION 1

<u>Position Title:</u>

Director, Industrial Planning, Research and Statistics

Immediate Supervisor:

Chief Director, Industry

Immediate Subordinates:

- Deputy Director, Industrial Statistics and Data Processing
- ii) Assistant Director, Surveys and Data Collection
- iii) Assistant Director, Statistics and Data Processing

<u>Associates:</u>

- i) Ghana Statistical Service
- All Directors of Research and Statistics of other Ministries
- iii) All Directors at the Ministry

OBJECTIVE OF POSITION

- a) To be the main organ for co-ordinating and undertaking the collection, compilation and analysis of industrial and other statistics required as an information pase for policies, programming, management, monitoring and promotion of efficient industrial development in Ghana.
- b) Apart from the statistics themselves, to be the focal centre for the Ministry's data management and information system.
- c) To service the Chief Director of Science and Technology.

RESPONSIBILITIES

- Establish a monthly reporting system of Ghana Industries a) about:
 - raw material supply; **i**)

 - ii) items under production;
 iii) quantity of production;
 iv) quantity of sales, locally and exports;
 - v) personnel under contract;
 - vi) reasons for unused capacities, if any;
 - vii) observe any necessary legal follow-up.
- Prepare selected statistical information for periodic b) publication.
- Collect, compile and analyze the statistical data c) received under the monthly system and any other statistical data, obtained from other sources.
- Be the source of information on statistica! data in the d) field of industry available from other countries, specifically countries, where Ghana has economic interests.
- Be the main source for industrial data to the Ghana e) Statistical Service.
- Prepare budgetary estimates for the Data Base Centre. f)

ACTIVITIES

- Receives and analyses monthly reports from Ghana Industries. a)
- Receives and analyses statistical industrial data from other b) sources.
- Organizes support services for various units of the MIST. c)
- Reports to the management of the Ministry about any remarkable d) events or trends in industry.
- Issues control and secures correct statistics through e) Regional Offices, eventually factory visits.

QUALIFICATIONS AND EXPERIENCE

First University degree in economics/engineering with post graduate training in statistics, econometrics and computer operations, or equivalent. Minimum of ten years in similar positions.

JOB DESCRIPTION 2

<u>Position Title:</u>

Deputy Director, Industrial Statistics and Data Processing <u>Immediate</u> <u>Supervisor:</u>

Director Planning, Research and Statistics

Immediate Subordinates:

- i. Assistant Director, Statistics and Data Processing
- ii. Assistant Director, Surveys and Data Collection

<u>Associates</u>

- i. All Deputy Directors at the Ministry
- ii. All Deputy Directors on Research and Statistics of other Ministries
- iii. Ghana Statistical Service

OBJECTIVE OF POSITION

Co-ordinating and undertaking the collection, compilation and analysis of industrial and other statistics required as an information base for policies, programming, management, monitoring and promotion of efficient industrial development in Ghana. Apart from the statistics themselves, to be the focal centre for the Ministry's data management and information system.

To assist the Chief Director of Science and Technology in carrying out his responsibilities.

RESPONSIBILITIES

Establish a monthly reporting system of Ghana Industries about:

- a. i) raw material supply;
 - ii) items under production;
 - iii) quantity of production;
 - iv) quantity of sales, locally and exports;

- v) personnel under contract;
- vi) reasons for unused capacities, if any;
- vii) observe any necessary legal follow-up.
- b. Prepare selected statistical information for periodic publication.
- c. Collect and compile and analyze the statistical data received under the monthly system and any other statistical data, obtained from other sources.

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- d. Be the source of information on statistical data in the field of industry, available from other countries, specifically countries where Ghana has economic interests.
- e. Be the main source for industrial data to the Ghana Statist, sal Service.
- f. Prepare budgetary estimates for Industrial Statistics and Data Processing.

ACTIVITIES

- a. Receives and analyses monthly reports from Ghana industries.
- b. Receives and analyses industrial statistical data from other sources.
- Organizes support services for various units of the Ministry.
- d. Reports to the management of the Ministry about any remarkable events or trends in industry.
- e. Issues control and secures correct statistics through Regional Offices, eventually factory visits.

QUALIFICATIONS AND EXPERIENCE

First University degree in economics/engineering with post graduate training in statistics, econometrics and computer operations, or equivalent. Minimum of five years in similar position.

JOB DESCRIPTION 3

Position Title:

Assistant Director, Statistics and Data Processing

Immediate Supervisor:

Deputy Director, Statistics and Data Processing

Immediate Subordinates:

Supporting Staff

Associates:

All Assistant Directors of MIST

OBJECTIVE OF POSITION

- a. To receive data from the Industry Monthly Reporting System.
- b. To receive data from the Director, Policy and Planning and the Assistant Directors, Studies & Publications and Survey and Data Collection.
- c. To receive any other relevant data regarding industry from other sources of the Ministry and from outside.
- d. To manage computer work and process data in specific format established by the Director, Industrial Statistics and Data Processing.

RESPONSIBILITIES

- a. Will be the focal point for all data processing activities.
- b. Codes and classifies data for subsequent data processing.
- c. Enters data in the computer.
- d. Advises the Director Industrial Planning, Research and Statistics and the Deputy Director of Industrial Statistics and Data Processing on deficiencies for corrective measures.
- e. Initiates and compiles monthly statistical reports for the Directors of Planning, Programming, Monitoring and Evaluation.
- f. Extracts and compiles data for industrial studies.

QUALIFICATION AND EXPERIENCE

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Bachelor of Economics/Statistics/Business Administration or equivalent with at least three years experience in statistics department or computer operations.

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JOB DESCRIPTION 4

Position Title:

Assistant Director, Surveys and Data Collection

<u>Immediate</u> <u>Supervisor:</u>

Deputy Director, Industrial Statistics and Data Processing

Immediate Subordinates:

Supporting Staff

<u>Associates:</u>

All Assistant Directors at the MIST

OBJECTIVE OF POSITION

- a. To initiate and prepare surveys on statistical information originating from the Ghana Statistical Service.
- b. To coordinate and cooperate on surveys of other agencies which have impact on industry.
- c. To ensure the timely collection of relevant statistical information from industry for data processing.
- d. To coordinate data processing and follow-up distribution.

RESPONSIBILITIES

- a. Conducts specialized surveys on statistical information from the Ghana Statistical Service and the Ministry as well as the Regional Offices.
- b. To coordinate statistical data, cooperate and assist surveys prepared by other agencies in the field of industry.
- c. Supervises the timely receipt of requested statistical data from industry for processing.
- d. Coordinates data processing and follow-up their distribution to the agencies concerned.

QUALIFICATION

Bachelor of Economics/Statistics, or equivalent with at least three years experience in statistical work.

ISAC ASSESSMENT STUDY - FOLLOW-UP SURVEY

LIST OF INDUSTRIES VISITED

SECTOR	<u>NAM</u>	E OF INDUSTRY LOCA	TION
Food, Beverages/Tobacco	1.	International Tobacco (Gh) Ltd.	Accra
	2.	Fan Milk	Accra
	3.	Tema Food Complex	Tema
	4.	Cocoa Processing Co. Ltd.	Tema
	5.	National Tobacco Rehandling Co. Ltd.	Tema
	6.	Dehydrated Food Products '_td.	Tema
	7.	Meat Processing	Tema
Textile	1.	Ghana Blanket Factory	Accra
	2.	Tema Thread Company	Tema
	3.	Volta Nylon Ind. Ltd.	Accra
	4.	Chanrai (Gh) Ltd.	Accra
	5.	Volcan Manufacturing Co.	Accra
	6.	Seraphim Surgicals Ltd.	Accra
	7.	Terrycott Net Industry	Accra
	8.	Tema Textile Ltd.	Tema
	9.	Ghana Textile Printing	Tema
	10.	Nylontex	Tema
	11.	Millet Textile Co.	Accra
	12.	Ghana Textile Mfg. Co. Ltd.	Tema

	13.	Tema Nylon/Netting Industries	Tema
	14.	Freedom Textile Ind.	Accra
	15.	NICOM	Accra
	16.	Tejtex Industries Ltd.	Accra
	17.	West Coast Spinning	Accra
	18.	West Coast Dyeing	Accra
	19.	National Industrial Co. Ltd.	Accra
	20.	Zakour Textiles Ltd.	Accra
Garments	1.	Nitra Industries Ltd.	Accra
	2.	Glamour Garment Factory	Accra
	3.	Universal Industries	Accra
	4.	Utams Manufacturing Co.	Accra
Leather	1.	Ashanti Packaging and Shoe Industries	Accra
	2.	Leather & Tanneries	Kumasi
Timber	1.	Saoud Brothers & Sons Ltd.	Kumasi
Chemicals	1.	Tuyee Manufacturing Co. Ltd.	Tema
	2.	Azar Chemicals Industries Ltd.	Accra
	3.	B.B.C. Industrial Co. (Gh) Ltd.	Tema
	4.	Lever Brothers (Gh) Ltd.	Tema
	5.	Tema Chemicals	Tema
	6.	Freedom Chemicals Industries Ltd.	Accra

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	7. City Paint Supply	Tema
	8. South Ghana Cement & Lime Co. Ltd.	Tema
Plastics	1. Expandable Polystyrene Products	Accra
	2. Kame-Em Ind. Ltd.	Accra
	3. Duroplast Ltd.	Accra
	4. Greenplastic	Accra
	5. Pens and Plastics	Accra
	6. Metalloplastica	Accra
	7. Bright Era Ind. Ltd.	Accra
	8. Gokals Ind. (Gh) Ltd.	Accra
	9. Pharmoplast	Accra
	10. Eveready Plastics	Tema
Rubber	1. Ashanti Foam Factory Ltd.	Accra
	2. Ghana Rubber Products Ltd.	Accra
	3. Freedom Chemicals	Accra
Pharmaceuticals	1. Sterling Products (Gh) Ltd.	Accra
	2. Major & Co. Mfg. Ltd.	Tema
	3. J. L. Morrison	Accra
	4. Associated Industries Ltd.	Tema
Cosmetics	1. Danafco Manufacturing Co.	Accra
	2. Sparta Manufacturing Ltd.	Tema

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Non-Metallic	1.	Ghana Mirror Factory	Accra
	2.	Crocodile Matchets	Tema
	3.	Super Paper Products Co. Ltd.	Tema
Metals	1.	Nyame Metals Works Ltd.	Tema
	2.	Ghana Aluminium Products	Tema
	3.	Ghana Pioneer Aluminium Factory	Tema
	4.	Ferro Fabric Ltd.	Tema
	5.	Wire Weaving Industries Ltd.	Tema
	6.	Kable Metals	Tema
	7.	Alluworks	Tema
Electricals	1.	Ghana Sanyo	Tema
	2.	Eveready Battery	Tema
	3.	Lucas Battery	Tema

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ANNEX 5

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SURVEY OF SMALL-SCALE INDUSTRIES

TRAINING PROGRAMME OF MIST AND NBSSI STAFF

(OCTOBER 26-NOVEMBER 16, 1988)

TOPICS COVERED BY IS ADVISER

1.0 <u>INTRODUCTION</u>:

Background Justification

- 2.0 <u>PURPOSE</u>
- 2.1 <u>Major objectives</u>
- 3.0 ORGANIZATIO*
- 3.1 <u>Responsible agencies</u>
- 3.2 <u>MINISTRY OF INDUSTRIES, SCIENCE</u> AND <u>TECHNOLOGY</u> (MIST)

Regional Administrative Officers Regional Officers Sector Officers

3.3 <u>NATIONAL BOARD FOR SMALL-SCALE</u> <u>INDUSTRIES(NBSSI)</u>

> Executive Director Other Officials of NBSSI

- 3.4 <u>Ghana Appropriate Technology</u> <u>Industrial Service (GRATIS)</u>
- 3.5 <u>Technology Consultancy Centre (TCC)</u>
- 3.6 SURVEY STAFF

Chief Coordinator Surveys Deputy Chief Coordinator Surveys (Secretary) Survey Officer (Finances) Survey Officer (Protocol) Survey Officer (Management) Survey Officer (Travel etc.)

3.7 FIELD STAFF

Supervisors	-	bу	regions
Enumerators	-	by	regions

4.0 PLANNING FOR THE SURVEY

Need for advanced planning

- 5.0 <u>SCOPE & COVERAGE</u>
- 5.1 <u>Geographical</u> coverage

Regions Districts

5.2 Industrial coverage

Industrial establishments Statistical units Companies Factories

6.0 <u>CONCEPTS AND DEFINITIONS</u>

Definitions Types of industries to be covered Types of industries not to be covered

7.0 BUDGETARY REQUIREMENTS

Contribution by MIST Contribution by NBSSI Contribution by UNDP/UNIDO

- 8.0 <u>CONFIDENTIALITY</u>
- 9.0 LEGAL AUTHORITY
- 10.0 SURVEY PLAN (WORK PLAN)
- 11.0 <u>TIMING OF SURVEY</u>
- 12.0 RECRUITMENT AND TRAINING

Recruitment methodology Training Programme Training Material Supervision

13.0 SURVEY TOOLS

Enumerators Kit Supervisors Kit

- 14.0 INTERVIEW TECHNIQUES
- 14.1 Drop and Pick up

14.2 Direct Interview

Presentation of I.D. Card Presentation of Introductory Letter Presentation of questionnaire Appearance Reference to survey publicity Purpose of interview Interrupted interview First impression Building confidence and rapport Stress confidentiality Length of interview Impartiality in interview

15.0 COLLECTION OF RETURNS

Collection of completed returns by mail Collection of Completed Returns by Supervisors

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- 16.0 SURVEY DATA PROCESSING
- 17.0 SURVEY DATA ANALYSIS

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18.0 FINALIZATION AND PUBLICATION PLANS.

ANNEX 6

		<u> </u>
NATIONAL SU	RVEY OF CMA	LL SCALE INDUSTRIES
MATIONAL 00	MEL OF SMA	LL SCALE INDUSIRIES
TDATM	THE DROCDAM	ME TIME TABLE
ILVATIA	INC PROGRAM	ME LIME LABLE

DATE	: : TIME :	: ACTIVITY
28/3	: 3.30 p.m 6.00 p.m. :	ARRIVAL a) Enumerators identification and registration
	• • • •	b) Assignment to dormito- ries and classrooms
	•	: c) Distribution of train- : ing materials
	6.00 p.m 7.00 p.m.	SUPPER & BRIEFING
29/3 :	8.30 a.m 9.00 a.m	a) Roll call, welcome session, announcements announcements
	9.00 a.m 10.00 a.m.	 b) Introduction to survey objectives, programme and activities. (Chpt.1)
:	: 10.00 a.m 10.30 a.m.	C) BREAK
	10.30 a.m 12.30 a.m.	d) Introduction to survey objectives, programme and activities. (Chpt.1)
	12.30 p.m 2.00 p.m.	: e) LUNCH BREAK
	2.00 p.m 4.00 p.m.	: a) Role of enumerators (Chpt.2)
:	4.00 p.m - 4.30 p.m.	: b) B R E A K
	4.30 p.m 5.30 p.m. :	 c) Filling of question- naire (Chpt. 4 cover- age, technical terms etc.)
:	6.00 p.m 7.00 p.m.	: SUPPER
	7.00 p.m 9.00 p.m	: a) Reading of Manual : (Chpt. 1,2, & 4)

28 - 30 MARCH 1989

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		:
DATE	: TIME	: ACTIVI TY
30/3	. 7.30 a.m 8.30 a.m.	BREAKFAST
	: 8.30 a.m 9.00 a.m.	a) Roll call, questions
	9.00 a.m 10.00 a.m.	b) Filling of question- naire (Chpt.4 Q1 - Q3)
	: 10.00 a.m 10.30 a.m.	BREAK
	12.30 p.m 12.30 p.m.	c) Filling of question- naire (Chpt. 4 Q4 - Q6)
	: 12.30 p.m 2.00 p.m.	LUNCH
	2.00 p.m 3.00 p.m.	a) Filling of question- naire (Chpt. 4, Q7 - Q9)
	: 3.00 p.m 3.30 p.m.	BREAK
	4.00 p.m - 5.30 p.m.	b) Filling of question- naire (Chpt. 4, Q10 - Q12)
	. 6.00 p.m 7.00 p.m.	SUPPER
	: 7.00, p.m 9.00 p.m :	: Reading of manual, : selection of : Supervisors (Chpt.3,5,6)

SURVEY OF SMALL SCALE INDUSTRIES

OATH OF SECRECY

I, do solemnly swear that I will not directly or indirectly communicate or reveal to any person any matters which is brought in the discharge of my official duties related to the National Survey of Small Scale Industries except as may be specially permitted by the Provisional National Defence Council.

SIGNATURE:

Sworn and Subscribed this 31st day of March, 1989.

BEFORE ME

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SURVEY OF SMALL SCALE INDUSTRIES

	SUMMARY STATEMENT	BY SURVEY	CENTRES	
Survey Centres	Number of Zones		Number of Enumerators	
Accra Centre				
Greater Accra	29	816	35	5
Eastern	8	336	14	3
Western	8	237	11	2
Central	9	187	8	1
Volta	7	102	5	1
Total	61	1,678	73	12
<u>Kumasi Centre</u>				
Ashanti	18	837	36	5
Brong Ahafo	11		9	1
Total	29	1,052		6
<u>Tamale</u> <u>Centre</u>				
Northern	12	110	5	1
Upper East	5	133	6	1
Upper West	3	27	1	1
Total	20	270	12	3
	110	3,000	130	21

SURVEY OF SMALL SCALE INDUSTRIES

<u>COVERAGE</u>

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Region	: Population : 1987 : (000 Persons)	: (Sq. Km):	SSI Units Surveyed	Regional Area Surveyed (Percent)
Ashanti	2,276	24,389	837	: 40
Eastern	1,831	: 19,323	336	- - 40
Greater Accra	1,559	3,245	816	- - 40
Volta	: 1,320	20,570	102	: 100
Brong Ahafo	: 1,314	: 39,557 :	215	: 100
Northern	: 1,269	: 70,384	: 110	: 100
Western	: 1,260	: 23,921	237	: 40
Central	: 1,244	: 9,826	: 187	: 100
Upper East	: 841	: 8,842 :	: 133	: 100
Upper West	: 477	: 18,476	: 27	: 100
Total	: 13,391	:238,533	: 3,000	: 82

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