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### STRENGTHENING INDUSTRIAL PLANNING AND PROGRAMMING IN SUPPORT OF THE GOVERNMENT'S INDUSTRIAL SECTOR ADJUSTMENT PROGRAMME DP/GHA/86/001 GHANA

# <u>Technical report: Operational Manual for</u> <u>Restructuring the Ministry of Industries, Science and Technology</u>\*

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

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## EXPLANATORY NOTES

# Value of the local currency-Cedi (♥)- in United States Dollars in April 1988 1 US\$ = 183 Cedi

## ABBREVIATIONS

CBS	Central Bureau of Statistics				
CPA	Central Planning Authority				
CPO	Central Planning Office				
CSO	Central Statistical Organization				
DMIS	Data Management Implementation System				
ERP	Economic Recovery Programme				
ISAC	Industrial Sector Adjustment Credit				
ISIC	International Standard Industrial Classification				
MIST	Ministry of Industries, Science and Technology				
MVA	Manufacturing Value Added				
AVA					
NBSSI	National Board for Small-Scale Industries				
osu	Operational Statistical Unit				
PARDIC	Public Administration Restructuring and Decentralization				
	Implementation Committee				
PNDC	Provisional National Defence Council				
PME	Public Manufacturing Enterprise Planning, Research and Policy Formulation				
PRP	Planning, Research and rolley rollariation				
R + D	Research and Development				
S + T	Science and Technology				
SIDO	Senior Industrial Development Officer				
SPO	Sectoral Planning Office				
spu	Sectoral Planning Unit				
WPIS	World Programme of Industrial Statistics				

#### SUMMARY

Following a careful and comprehensive assessment of the performance and potential of the economy of Ghana, the PNDC Government in 1983 launched ERP I; a 5-year action-oriented economic programme designed to achieve three main objectives: (1) stabilization of the economy through an immediate increase in the domestic supply of goods and services by freeing raw materials and other constraints to efficient domestic producers, expanding existing industrial capacities by improved foreign exchange facility and positive incentives for rehabilitation of selective manufacturing enterprises. This action programme key Was augmented with imported supplies of essential commodities achieved through a system of phased import deregulation, trade liberalization and positive monetary policy; (2) economic recovery through a programme of financial and technical support to cost-effective domestic producers, strengthening the structures, systems and management of key industrial and linkages industries, restructuring financial and service-oriented institutions, and positive encouragements to industry for their rehabilitation, modernization and expansion and by the removal of excessive bureaucracy and trade protection.; (3) stable economic growth through improved planning for better domestic resource allocation and utilization, by strengthening management, efficient and upgrading marginal producers, promoting and assisting small scale entrepreneurs for the development of service and small scale manufacturing activities, channelling technical and financial assistance to firms at or near international competitive levels of production, quality and cost, positive support to the local development and use of domestic materials, enhancing the flow and quantity of technical and industrial skills and improving the general climate for increased technical and financial participation by qualified nationals and non-nationals.

Notwithstanding the above efforts the economy of Ghana, like so many other developing countries, has been beset by the earlier success and vision of an overly ambitious industrial policy founded on cheap oil and the expanding world economy of the 60's. Through a combination of neglect, inadequate policy responses and misdirected resources the economy was left with a massive industrial infrastructure, impressive by all African standards one that was aged and severely paralyzed by under but utilization, obsolete technology and poor maintenance. Under such conditions, the economic stabilization, recovery and growth strategies had to be pursued parallel with the restructuring of industry, trade and financial systems. This required the introduction of general and specific curative measures to address the prevailing monetary, trade and protective sytems. Among the prime policy instruments used to effect these necessary changes were devaluation-cum-foreign exchange auction, tariff and taxation adjustments and import deregulation.

To the ERP the manufacturing sector was not just one of the programme's recovery targets. It was to be a prime mover in the agro-industrial revolution envisaged for sustained indigenous economic growth. Therefore, it was evident from early that the manufacturing sector not only had to be adequately financed and managed but properly planned and monitored to avoid the painful mistakes of the recent past. In this effort to strengthen and support the sector, Government committed in 1986 and 1987 under ISAC facility three special programmes, one aimed at examining the capacity, problems and prospects of the financial system, the second was the implementation of a comprehensive training scheme intended to influence the attitude and commercial bias of the banking system in favour of investment and industrial production and the third was a pilot fund to foster industrial rehabilitation. Further, in 1987 under joint collaboration of UNDP, UNIDO and the Norld Bank an all-embracing programme of technical assistance was initiated to strengthen, inter alia, the Ministry of Industries, Science and Technology for industry and to directly support enterprises in their planning restructuring and rehabilitation efforts.

Dispite the many attendant problems associated with structural adjustments the response of the manufacturing sector as a whole was quite encouraging although the returns were not entirely homogenous. In all three years of the ERP the sector registered positive recovery in MVA showing in 1985, 86 and 87 average growth of 8.8%, 10% and 13% respectively. Capacity utilization also showed positive movement in the resource-based industries, up to 55% in 1987 from average of 38% in 1986 and from 23% in 1986 in the import-reliant industries to 35% in 1987. Based on several policy impact tests carried out by the Ministry of Industries and independent consultants further significant success will depend heavily on the quality of the industrial policy that will be pursued over the next two-to-five years, the strategy of implementation and the capacity of the Ministry of Industry to plan, programme and stimulate industrial resource and investments into the most dynamic and cost-effective productive modes and on its ability to monitor agreed targets, performance levels and economic returns of the manufacturing sector. This report sets the framework for such an assignment and describes the essential processes necessary to assure policy harmony, industry compliance and programme success.

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### IMPLEMENTATION GUIDE FOR THE REORGANIZATION OF THE MINISTRY OF INDUSTRIES, SCIENCE AND TECHNOLOGY.

## 1.0 INTPODUCTION

As part of the joint UNDP/World Bank financed project to strengthen the capacity of the Ministry of Industries, Science and Technology (MIST) for industry planning programming and monitoring, UNIDO Advisers working individually and collectively assessed the structure, functionality, staffing, resource level and the support systems necessary to achieve the tasks indicated for MIST within a decentralized management and planning framework. The results of those studies were summarized in a previous report. (1) Necessitated by recent policy measures and new directives from Government a further study was commissioned by the PNDC Secretary and which is summarized by this report.

#### 1.1 The Methodology

The Methodology used in this study, though modified to respond to changed realities, is not significantly different from that used in the former report. This report however seeks to highlight two aspects of organization which are fundamental to development planning especially given the context of the National Development Planning Commission recently established under the direction of the Chairman of the Committee of Secretaries. To perform i's task the assumption is made firstly that MIST will be treated as the main institution for planning and monitoring industrial development in Ghana. Within this overall framework the associated responsibilities of industrial data collection, processing, analysis and publications will be delegated to MIST in order to ensure that one body deals with industry matters, that is, policy and strategy formulation, planning, resource programming and performance monitoring. Secondly, that organizationally and conceptually MIST does not itself get involved in the direct discharge or supervision of technical service such as import licensing etc (except where it impacts on small scale industries) but instead concentrate its efforts and limited resource to policy and strategy design, development, studies and reforms.

#### 1.2 The Industrial Restructuring Process

To begin with, it should be pointed out very clearly that the process of restructuring an existing Governmental organization such as MIST does produce some negative side effects since the exercise invariably involves the sensitive tasks of staff assessment, staff reallocation, reassignment, vertical and lateral transfers, recruitment and probable redeployment. Pursued within

<sup>(1)</sup> Study done by Earle Taylor and Arno Maneck "Restructuring the Ministry of Industry Science & Technology, UNIDO publication DP/ID/SER.A/865, 1987.

the environment of a defacto employment freeze and a commitment to improved public sector performance and efficiency the task of reorganization becomes even more difficult. Not withstanding the above tremendous care was taken at every stage to ensure maximum staff involvement in the assessment and transfer processes. Where doubts were evident benefit was given to the incumbent. Further, to assure success of the new structure and organizational arrangements a comprehensive back-up training and development programme was prepared to develop and strengthen skills in the techniques of industrial planning and statistical analysis. These are elaborated in the Training Plan (1) of the Ministry and it is complemented by a programme of fellowship and exposure/tour arrangements to be funded, inter alia, by the UNDP/ UNIDO/World Bank project.

#### 2.0 The Restructuring Exercise

The term restructuring has been used quite extensively in Ghana and sometimes its meaning is not very clear to its implementors. In economic reform and planning its meaning is specific. It is essential, also to understand the concept and its meaning in relation to industrial planning and especially to a composite organization like the Ministry of Industries, Science and Technology. Restructuring means changing the make-up, organizational arrangements and functions so that new goals, strategy and systems can be incorporated. Taken together, the adjustments to the organization should be able to induce structural change in the practice and patterns of industrial activities in Ghana.

The key elements and concerns in the restructuring task of MIST included:

- Improving efficiency of existing organization in terms of functional cutputs achieved through clearly defined chain of command, channels of communication and authority levels;
- Removal of bureaucratic delays caused through ambiguity in duties and responsibilities, undefined posts and redundant bodies and which tend to create or cause confusion/friction and intra organizational tensions;
- 3. Improving the capacity of MIST to assist and guide manufacturing industry toward costeffective and internationally competitive production, increased use of domestic materials, labourforce, industrial linkages, product range, quality and standards as well as in the rehabilitation and rationalization of troubled enterprises.

<sup>(1)</sup> Manpower Requirement Analysis and Training Plan in the Ministry of Industries, Science & Technology UNIDO Publication DP/ID/SER.A/958, January, 1988.

## 2.1 The Concept of Planning for Development

In the new structure two major changes have been effected: (1) the conversion of Principal Secretary Post to that of Chief Director and (2) Industrial Promotion Officers to Industrial Development Officers. The former is in line with new PARDIC Directives applying to all Government Ministries in Ghana and the latter is consistent with most Ministries of Industries in Africa, Latin America and Asia and also the organization of the United Nations Industrial Organization (UNIDO).

Essentially, all the departments with the exception of Science and Technology are headed by a director. The Science and Technology Division is headed by a technical director. Each Director is supported by a three or four-tier level of technical staff. The Divisions are: (a) Planning Research and Policy Analysis (b) Programming, Monitoring and Evaluation (c) Administration (d) Manufacturing Operation Support (e) Science and Technology. The structure is demonstrated in Fig. 2 and specific duties are detailed in appendix 2. The Department for Budgets, Administration has two divisions each headed by a director. One director is responsible for Personnel Administration, General staff Welfare, Training and Information and the second is in charge of Finance, Budgetting, Inventory and Public Manufacturing enterprise coordination.

## 3.0 The Organization Structure & Transition

The organization chart illustrated in Figures 1 and 2 show the functions to be covered by MIST in its new role. The functions vary significantly in content and format from those previously or currently assigned. Accordingly, staff will be assessed in relation to the new functions as described in Appendix 2. It is perceived that some initial difficulty may be encountered in filling a number of key posts in the new structure and therefore a transitional structure is suggested where suitable permanent staff are not in place. As industry regains its vitality (envisaged within the next two years) greater pressure will be placed on MIST for quality industrial data, competent analyses and detailed industrial plans and policies.

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# 3.1 Existing Structure

A review of the existing organization structure of Ministry of Industries, Science and Technology (MIST) revealed many inadequacies and which have been reflected in several Government, United Nations and World Bank documents and reports. Major weaknesses highlighted include: the highly skewed concentration of authority, the strong focus of the organization toward physical implementation of industry services such as programming import licences and quotes (now totally removed) a multiplicity of unrelated duties assigned to subsector officers, with resultant duplications, organizational tensions, inefficiencies and system ineffectiveness. Vastly visible gaps in both quantity and quality of manpower to handle the technical functions of the Ministry are also quite evident. The existing structure which is to be replaced is shown in Figure 1.

### Figure 1

## EXISTING OPGANIZATIONAL STRUCTURE

### MINISTRY OF INDUSTRIES, SCIENCE & TECHNOLOGY

\_\_\_\_\_ : PNDC SEC : -----;----: ! Statutory Boards :-----; ; ; ; -----;----; U/SEC : -----: ------I I I Int Auditor Legal Council : PRO 1 1 : : 1 ---------------C/Dir Ind Div C/Dir Gen Admin Tech Dir S/T Div : : : : :Deputy Dir : :Deputy Dir :-:Wood Prod : :Subsector ----; ----! : -----. 1 1 1 1-1 1 1 1 | |Prin Asst Sec :-:Budget and | |Purchasing -----1 :/----: : . ---------------: -: -: ; ;Deputy Dir ;-:Elect/Serv ; ;Subsector :::Accountant ;; ------;; -------------:\:Stores ----->: ; -----: -----: :Prin Indust : 1 : Asst Secrtry ------|-|Prom Offcrs :-:Traing/Devel Regional Offices | |Grades 1-4 : :& Spec Projs 1 -----: Western/Central -----1 \*\*\*\*\*\*\*\* Ashanti/Eastern Ind Prom Officers - Asst Secrtry Brong Ahafo | |Pers/Welfare Northern Region 1 ---------Volta Region 1 : -----:-:Mainthce Off Ass Offers --------------

### 3.2 The New Structure

Against the foregoing background the existing and previously recommended organization structures and arrangements had to be re-appraised. This lead to a new structure shown in Figures1 & 2 which seek, inter alia to correct the observed and assessed weaknesses. The new structure places great importance and responsibility on Directors and gives organizational and coordinating focus in one Chief Director (in place of several Chief Directors). The Chief Director is a techno-political post which provides the bridge between the political herachy and the technical structure.

## 4.0 Role of the Restructured Ministry

With the abandonment of the Import License System in Ghana the role of the Ministry is largely confined to policy and support actions. In the formulation, development and implementation of appropriate policies the Ministry has to liase with all relevant bodies concerned with Industry so as to reflect and coordinate the National Industrial Programme.

A major role of the Ministry is to ensure that specific industry policies or general macro-economic policies which impact industry are understood by the sector. This requires regular and constant dialogue with the various subsectors, enterprises directly, jointly or through their representative associations.

Policies will affect industry in several ways; some actions will have negative impacts on some subsectors and on some enterprises. The function of the Ministry will include monitoring the impacts of policies and to recommend reforms where and when necessary.

#### 4.1 The Tasks

In a developing country like Ghana it is not unusual to have the principal planning authority located in or under the Ministry of Finance. In Ghana this authority is vested in the Ministry of Finance and Economic Planning (MFEP). Because of Government's commitment to a programme of decentralization which is being pursued within the context of trade and Investment liberalization,

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# Figure 2

## PROPOSED ORGANIZATION STRUCTURE

MINISTRY OF INDUSTRIES, SCIENCE & TECHNOLOGY

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51	4:	18	7: 16				
<b>i</b>	;	:	 				
Dir Prog/Mon/Eval	Dir Plan/Res/Pol	Dir Adm/Fin/Per	Dir Man Op Supprt				
;	:	:	; ;				
******							
: : :D/Director		: :D/Dir Admin	; ;				
	-:Sector	:-:Persn/Infor	: :-:Industry				
	: Planning	:::& Staff Dev	: : :Support				
		;;	: :				
;	: :	f i	::::				
:							
: :A/Dir	: :SIDO Sub-	:::Personnel	: : :SIDO Textile				
- Spec Proj	: sector Pln	!Officer	<pre>: : :SIDO Leather : : :SIDO Wood/P/Pr</pre>				
•	, :	:::Training &					
: :D/Dir	: :D/Dir Data	1110 & M Spec	: : :SIDO Agro Prod				
	I- Base/Resch		: :-:SIDO Chem/Plas				
	:::Study/Pubn	::	: : :SIDO Met/Assem				
;;	::	:::Super'dent	: : :SIDO Serv/SSI				
	:: :	Suppt Serv					
	:::A/Dir Stat	:-:D/Dir Finan	: : :A/Director : :-:Spec Projects				
	:::& Data Col ::	:::Budg/PE Cor ::					
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		Snr Budget					
	:::SIDO Study	:::Officer	Tech Dir S&T				
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		INIShr Account					
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## Figure 3

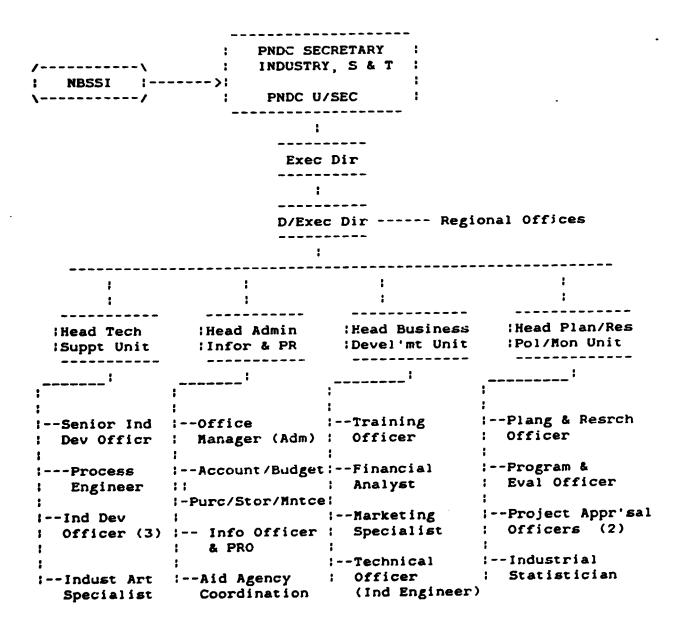
New Posts in re-organization, MIST

Post : New Posts Possible Internal Appointments Code : : -------3 ! Chief Director, MIST : To be Recruited/Appointed 4 PLANNING RESEARCH & POLICY FORMULATION 4.0 :Dir Plan, Resrch & Pol Form :\* 4.1 (D/Dir Planning (Sectoral) (\* 4.1.1:Asst Dir Plang (Subsectoral):\* 4.1.2:SIDO Subsector Planning :\* 4.1.3:IDO Subsector Planning :\* 4.1.4:AIDO Sector/Subsector Plan :\* 4.2 ID/Dir Stats & Data Process :\*\* 4.2.1:Asst Dir Surveys & Stats 1+ 4.2.2;SID0 1 4.2.3:IDO Survey & Data Collectn :\* 4.2.4 AIDO 4.3 D/Dir Studies & Publication :\*\* 4.3.1: 4.3.2:SIDO Studies & Publicns | **≭** 5 PROGRAMMING MONITORING & EVALUATION 5.0 :Dir Ind Progrm/Mon/Eval ; **\*** 5.1 (D/Dir Programming (Sector) :\*\* 5.1.2:SIDO Programming Subsector 1.8 5.1.3:ID0 1 5.1.4:AIDO Sector/Subsector Progr :\* 5.2 D/Dir Monitoring & Eval ;\* 5.2.1 Asst Director ; 5.2.2:SIDO Monitor & Eval (Sector):\* 5.2.3:IDO Mon & Eval (Subsector) :\* 5.2.4:AIDO 1 5.3.1:A/Dir Special Projects ; **+** 5.3.2:Project Analyst (SIDO) + ; + 5.3.3:Project Analyst (IDO) ;\* 5.3.4;AIDO 1 6 MANUFACTURING OPERATIONS SUPPORT 6.0 Director Man Oper Support 1.4 6.1 ID/Dir Man Support 6.2.2:SIDO Text/Garm/Leath/Footwr :\* 6.2.3; IDO 1 6.2.4:AIDO Textile/Garment 13 6.3.2:SIDO Leather/Footwear : \*

6.4.1:A/Dir, Food/Dairy/Sils/Feed :\*\* 6.4.2:SIDO Tobacco/Beverage :\* : 6.4.3;ID0 6.4.4;AIDC 6.5.2:SIDO Wood/Paper/Print/Packg :+ 6.5.3:ID0 6.5.4:AIDO Wood/Paper/Printing :\* 6.6.1:A/Dir Chem/Plas/Phar/Cos/Rubi\* 6.6.2:SIDO Chem/Plast/Rubber :\* 6.6.3:IDO Pharmaceutics/Cosmetics:\* 6.6.4:AIDO Mineral/Non-Metals \_\_\_\_\_ \_\_\_\_\_ IND OPER SUPPORT cont'd 6.7.1:A/Dir Netals/Elect/Assembly 1\* 6.7.2:SIDO Metal Fab/Machin/Applce:\* 6.8.3:IDO Elect/Light Eng Assembly:\* 6.8.4: AIDO Service/Small Scale Ind:\* 7 SCIENCE & TECHNOLOGY POLICY COORDINATION 7.0 :T/Dir S & Tech Policy Co-ord + 7.1 :D/Dir Tech Co-op & Progrm : : (Int'l/Regional/Bilateral) ; 7.1.1:Asst Dir Special Projects 7.1.2:SIDO Ind Res Project Co-ord !+ 7.1.3:IDO Tech Assessment/Monit : 7.1.4:AIDO GENERAL ADMINSTRATION & PHE COORDINATION 8 8.0 (Dir General Administration 1 + 2 1.\* 8.1 :D/Dir Admin and Personnel 8.1.2:Asst Dir 0 & M, Staff Dev :\* 3.1.3:Personnel Office/Staff Welf :\* 8.1.4; Public Relations/Info Officr:\* 8.1.5: Supdat Support Services :\* 8.1.6: Superv Secrt'riat/Typg Pool :\* Registry and Library 8.2 :D/Dir Fin/Budg & PME Co-ord :+ 8.2.1:Asst Director : 8.2.2:Snr Finance/Budget Officer :\* 8.2.3:Snr Accountant : \* 8.2.4:Budget/Account Officers ! \* 1.1 8.2.5:Purchasing Officer 8.3.2:SIDO PME Co-ordination 1+\* 8.3.3:IDO 8.3.4: Sup't Building & Property 14 : Property/Stores/Equipment : Unlabeled posts do not need to be filled immediately \* = Posts needed to be filled immediately +\* = Posts to be filled which may require reassignment/recruitment \*\* = Post that will most likely require external recruitment.

#### Figure 4

### Proposed Organization Chart National Board for Small Scale Industries



Regional Office will comprise at least one Industrial Development Officer (IDO) for the medium to large enterprises and at least one for the small scale sector with shared secretarial facilities. Day to day activitry will be monitored by District or Regional Offices.

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the main functions of the Ministry of Industries, Science & Technology have had to be redefined as follows:

- 1. Planning, Research and Policy Formulation (PRP)
- 2. Programming Monitoring (PMP) and Policy Analysis
- 3. Manufacturing Operation Support services (MOS)
- 4. Administration, Finance, Information and PME (ADMIN) Coordination
- 5. Science and Technology Coordination (S & T)

#### 4.2 How it will function

In respect of 1 and 2 above the duties and responsibilities are delegated by the National Planning Office to the Ministry. As such they share joint responsibility with the Central Planning Office and the Central Bureau of Statistics respectively. Figure 2 and 3 show the operational structures of the PRP Division including the statistics unit.

Essentially, this Division will operate within a matrix management structure in which operational responsibility rests with the MIST but technical coordination is maintained with the CPO/CBS respectively to preserve national integration and system efficacy. Data outputs and reports are to be coordinated to harmonize within the national objective. Apart from specific and specialized studies, agreement should be reached with both CPO and CBS for surveys, studies and publications of national dimensions. The matrix structure is shown on Figure 5. Main activities of the MIST are:

- The formulation and revision of annual plans, mediumterm and long-term plans affecting industries under the guidance of the CPO for approval of the Government.
- o The preparation of the annual or bi-annual operating programmes and strategies for implementing the mediumterm industrial plan.
- Management of the implementation phase of the plan as well as its follow-up activities to assure and motivate sector performance.

In addition, the sectoral office will be responsible to assess the practices and standards of production on regular basis, to monitor the inputs provided by or requested of government to sustain the industrial plan as well as to identify, assess and report all the operational contraints and bottlenecks.

# Figure 5 PROCEDURAL ARRANGEMENT FOR MONITORING, REVIEW AND EVALUATION EXERCISES

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Туре	Prime Responsibility	Purpose	Timeframe	Concentration	Who Collects Information	Function/ Objective
iting	Internal/External	Fiscal and/or procedural	Periodical and/or ad hoc	Inputs, activi- ties & procedures	Auditors	Administrative controls
di <b>es and</b> ort/ itoring	PME	Determing what is happening	3 monthly 6 monthly	Inputs activities and practices	PME/Divisional Directors	Management control (efficiency)
formance luation	PME	Determine why it is/or is not happening	Annual	Results, Activities, outputs and systems	PME/Directors	Project 1 menagement 19 1
depth luation	PME/Consultants	Confirm validity/ feasibility of project	As necessary	Outputs-project objective and achievements	PME/Consultants	Programme management
minal luation	PME/Project Sponsors	Review Results, and performance	One year after completion of project	Outputs, project objective	PME/Project Sponsors	Project management (effectiveness)
post luation	Government or Donor Agency	Determine impacts of project	1-2 years after completion	Linkage and benefits of project	Outside Consultants	Policy management (significance and impact)

## 4.3 PRIMARY FUNCTIONS

The main functions of the Ministry are summarized as:

- (a) Initiation and follow-up of all governmental activities for the promotion, regulation and review of industrial, scientific and technological development through:
  - (i) Planning, programming and budgeting of such activities and,
  - (ii) Monitoring and evaluating their implementation and progress,
- (b) Promotion and development of efficient industrial activities through the formulation of industry-wide sector policies as well as active participation in the formulation of macro-economic and other related sector plans and policies which affect or require inputs of industry, science and technology. In addition, it is charged with the responsibility to monitor performance and the impact of policies and to propose adjustments and reforms where necessary.
- (c) The promotion of efficient industrial activities through appropriate science and technology policy and research actions:
  - (i) Conducting or commissioning regular subsector studies, collecting data on enterprises performance and problems through factory inspection, surveys, and analysis;
  - (ii) collaborating with Ghana Investment Centre and others in identifying investment opportunities and in screening investment and technological transfer applications;
  - (iii) arranging meetings with manufacturers on general and specific issues, recommending appropriate sources of technical assistance for enterprises with identified problems, and liaising with other authorities to remove impediments to efficient development of the sector;

- (iv) ensuring optimal efficiency and equity in the allocation of investment and the administration of restructuring necessitated by current economic conditions;
  - (v) assisting the National Small Scale Industry Board in the formulation and implementation of special measures to promote industrial production;
- (vi) initiating and supervising special projects to promote technological development and adaption, and collaborating with the Council for Scientific and Industrial Research and other authorities in coordinating the work of research and development and training institutions;
- (vii) maintaining a sectoral information bank including a technical library and an enterprise directory, and publishing reviews of trends and issues in industry, science and technology.
- (d) The regulation of industrial operations through:
  - (i) collaboration with Ghana Investment Centre in screening investment applications;
  - (ii) controlling the issue of factory licences;
  - (iii) inspecting factories to ensure compliance with licence conditions and with industrial safety, health, equipment and environmental standards.

# 4.4 Divisional Functions

As previously noted the Ministry will comprise five functional divisions: three in the technical area relating to industry, one in general administration and one to coordinate science and technology policy and delivery. The general functions are defined below:

## 4.4.1 Planning. Research and Policy Formulation

This division will comprise three sections: (1) sector and subsector planning (including policy). (2) industrial statistics unit and database centre and (3) a studies and publication section.

The planning and policy section will be responsible for the drafting. supervision and revision of sector and subsector plans, and the associated policies and strategies necessary to guide and support plan implementation.

The industrial statistics section and database centre will be responsible for industrial surveys. collection, collation, coding, processing. interpretation. and publication of industrial statistics and related research and studies for the Ministry and prescribed outputs for the Central Planning Authorities, industrial institutions, enterprises and other relevant interest groups. It will be the focal point for the Ministry's data management system. The section will liase closely with the Ghana Statistical Services and statistical units in other ministries to avoid duplication and to assure data consistency.

The PRP division under the guidance of the planning section will be responsible for establishing realistic output levels and performance targets for enterprises. subsectors and the industrial sector. It will coordinate the sector plan within the National Plan framework and elaborate industrial policies and strategies.

The studies and publication section will be responsible for the interpretation. analyses. studies. publication and all logistics including printing. classification. distribution, etc of industry related information.

## 4.4.2 Programming, Monitoring and Evaluation

This division will comprise three sections: (1) industrial programming, (2) monitoring and evaluation and (3) policy analysis.

The programming section will be responsible for elaboration of industrial policy, sectoral and subsectoral objectives/targets and for the detailed preparation of the action programmes to implement policies, scheduling of outputs and inputs, recommends on budgeting and programme costing. The section will also coordinate external and technical assistance support, skills development training as well as assist or offer support in the supervision of the industrial development plan. In the immediate future, the section will be involved with programming for industrial rehabilitation and PME privatisation, infrastructure and other necessary development activities.

The monitoring and evaluation section will be responsible for measuring, monitoring and reporting on the performance of various policies, programmes, enterprise and subsector plans and targets relevant to the manufacturing sector. These plans include, but are not limited to import content, value added, and resource content, export content, industrial productivity and capacity utilization. In addition, it will carry out periodic assessments of policy and strategy and in the process identify consistency, which is inherent in/or arising from policy introduced specifications of the manufacturing sector or generally in the macro economy. On the basis of findings, the section will recommend appropriate reforms and corrective actions.

### 4.4.3 Manufacturing Operations Support

This division will comprise nine units representing the subsectors according to the divisions of the ISIC. Each unit will contribute with subsectoral expertise pertinent to the unit's function and will maintain regular liaison with large and medium enterprises in the subsector to interprete policies, determine specific assistance and identify production limitations, bottlenecks and constraints. Together with other divisions and units assist in or facilitate the collection of information, monitoring of targets and the preparation of plans, policies and strategies for the subsectors' stable development.

## 4.4.4 Administration. Finance & PME Coordination

This division will be responsible for the general administration including the internal functions of finance and budgeting, accounting and all support services to the Ministry. Its functions will include approval of budgets for Scientific Institutes and public enterprises under the control of the Ministry. In addition it will be required to monitor management and financial control systems in PMEs and Institutions under MIST to ensure efficiency. integrity and sound development.

## 4.4.5 Science & Technology Coordination

This division will be responsible for coordinating science and technology policy. the development and monitoring of S&T national plan, policy, strategies and fund. as well as spearheading the continuous evaluation of technology in Ghana. It will provide an essential first link between scientific and research institutions and industrial enterprises. The S&T division will coordinate all external aid programmes intended for delivery into or participation by R&D institutions, and approve/recommend courses and development programmes for S&T personnel.

# 4 5 Staffing

The new structure in the Ministry requires for its full functioning a minimum number of 60 technical staff; twelve for the Planning Statistics and Policy Formulation Division: twelve for the Programming Monitoring and Policy Analysis Division: Sixteen for the Industry Support Division; three for the Science and Technology Division: twelve for the Division for Budget., Administration, Information and Personnel and nine for regional offices. At the initiation stage it is possible to operate with 50 staff with some officers carrying additional duties.

Of the above sixty posts fifty may be filled initially through internal assignments. As the ministry gets committed to its full programme of work the situation will have to be assessed and ten new staff recruited. Immediately. a total of seven senior technical officers (identified on figure 2) will be needed to cooperate with consultants fielded under the UNDP/UNIDO Technical assistance project due to be completed in July 1989.

## 4.6 Policy Framework for Manufacturing

The policy framework (1) established by Government for the manufacturing sector including state enterprise focuses on:

- trade and exchange rate policy aimed at encouraging the efficient production of manufactures in which Ghana has a distinct comparative advantage and discouraging the continued existence of inefficient enterprises.
- increasing capacity utilization of manufacturing industries on the basis of more realistic inputs (imported and domestic).
- ••••
  - (1) Report prepared by the Government of Ghana for the Third Meeting of the Consultative Group for Ghana. Paris. November 1985.

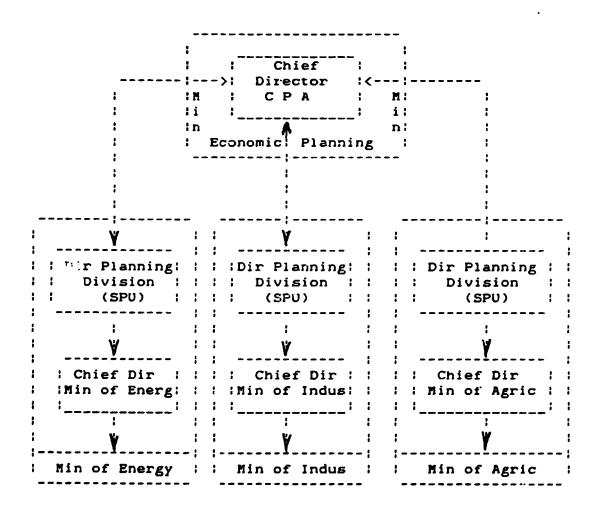
- iii) medium-term restructuring of the industrial sector as the new policy measures take effect.
  - iv) special access to working capital funds for industrial firms to ensure that credit needs for imported inputs can be adequately met.
  - engaging in a programme of rehabilitating industrial support institutions.
  - vi) state enterprise reformation including:
    - i. institutional restructuring
    - ii. reform and phased rehabilitation of selected state owned enterprises
    - iii. a phased program of joint ventures in selected sectors, on case by case basis

### 5.0 THE SYSTEMS

In order to complete the strengthening exercise of MIST three main systems will be introduced in the Ministry:

- (a) a planning system comprising all the Divisional heads and link officer for CPO who will meet under the chairmanship of the Chief Director and the Director for Planning to consider relevant industrial policies and to prepare the medium-term and short term sector/subsector plans. The appendix 2 gives the proposed plan outline and activity assignments.
- (b) a data management system will comprise a task force of all subsector heads (SIDO) and the link officer attached to the CSO. The chairman of the taskforce will be the Chief Director or the Deputy Director for Statistics. The system will meet regularly to discuss, design and develop necessary user information inputs and outputs including their delivery. The operational system is shown in fig 5 and the data management information system in fig 9.

NATIONAL PLANNING SYSTEM FOR DECENTRALIZED AND INTEGRATED DEVELOPMENT



(c) a monitoring and evaluation system comprising all divisional heads or directors under the chairmanship of the Chief Director or the Director for Programming, Monitoring and Policy Analysis. This system will meet regularly to consider pre-agreed subsector targets, performance, levels, variations as well as policy impacts.

## 5.1 The Planning System

Industrial planning system has a methodology of its own. Its implementation requires the employment of very specialized skills to establish realistic target levels and to formulate appropriate policies and strategies that can accomplish the assorted economic goals set by the government. This procedure is demonstrated graphically in figure 7. It should be noted that statistics, its acquisition processing and results are only means and inputs for targets, plans and policies. The mistake is often made by statistical units to keep data and reports to themselves as if the data is the final output of the planning system.

The diagram above shows three phases in the planning cycle (a) the preplanning phase, (First Phase), (b) the planning phase (Second Phase) and the Third Phase (c) the implementative phase. The first phase has two major components: (i) industry survey and (b) data analysis i.e. the information gathering, data base establishment and the processing of data. The Second Phase or the indicative planning phase encompasses (a) subsector targetting (b) policy formulation, (c) strategy development. The Third Phase describes the implementation process which is to support the attainment of the targets. It comprises (a) programming, monitoring and Evaluation in which inputs resources, including funding, technical assistance, marketing, material are identified. The monitoring of performance, constraints and policy impacts are also important considerations in this phase. Sometimes it is convenient to do post-evaluation of the programmes. These may include sector overall performance, subsector or enterprise performance. It also may include policy analysis and reform, although it is current practice not to wait until completion of the programme for impact assessment or reforms but to pursue this concurrently with programming.

## Industrial Planning Process

Industrial planning has to be a continuous process. Its implementation requires the employment of specialized skills to establish realistic target levels, to formulate appropriate policies and strategies that can accomplish the assorted economic goals set by governments. This procedure is best demonstrated graphically as in figure below.

#### Figure 7 The Industrial Planning Chart

<----Pre-planning phase----> <----Planning phase---

<--industry survey--> <-data analysis--> <---sector planning---</pre>

<pre>:informa-⊢ :tion &amp; :</pre>	>:database;	<pre>     data     ta     ta</pre>	→¦& in-      terpret	Targets	: :Develop : :->:Subsector: : :& sector : : :plans :
2	3	4	5	6	7
Review : current : policy :	⇔¦Existing				>
1 pol	14 icy analysi	5			
; 13	12	11	10	9	вү
			-		e:<:Formulate: / : :policies :

<--eval--> <---monitoring----> <--progr--> <---sector planning----</pre>

<----Plan implementation phase----> <----planning phase--</pre>

### 5.2 Data Management System

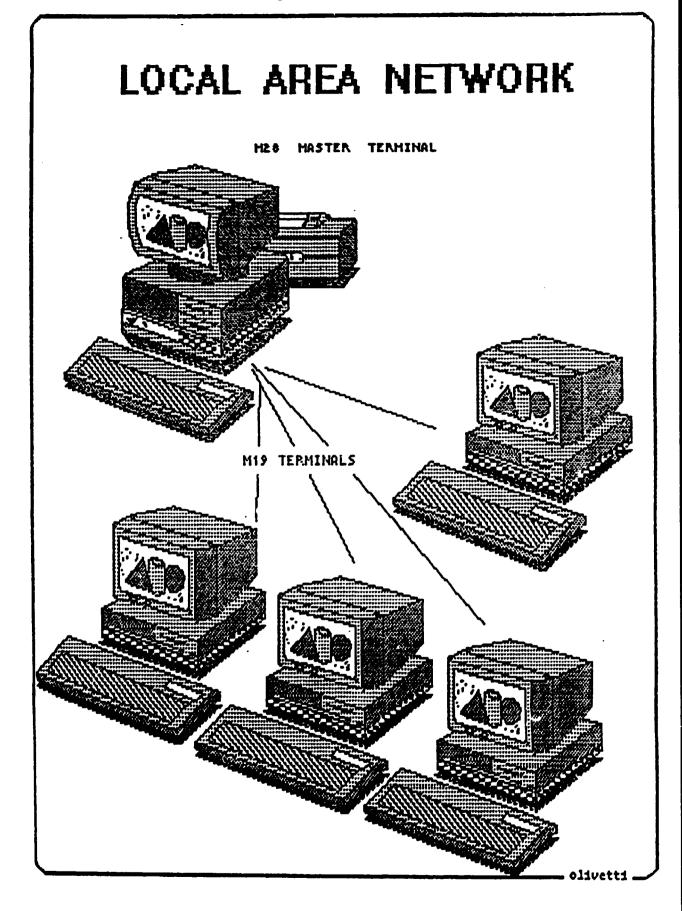
Data base centre will be implemented systematically in various stages. (1) Surveys will be carried out periodically to assemble data on the large and medium size manufacturing industries for the industrial data base. A questionaire will be supplied shortly to all the registered establishments and thereafter annually for conveying annual enterprise returns. Answers to survey questionaire as far as possible will be collected through mail. A strict watch however will have to be kept on the establishments responding to questionaire to avoid delays and reduce non-responses. Collection of completed returns should be expedited by mailing reminders and sometimes by personal visits. The statistic unit should ensure that answers to all the questiona ire are received by the target date.

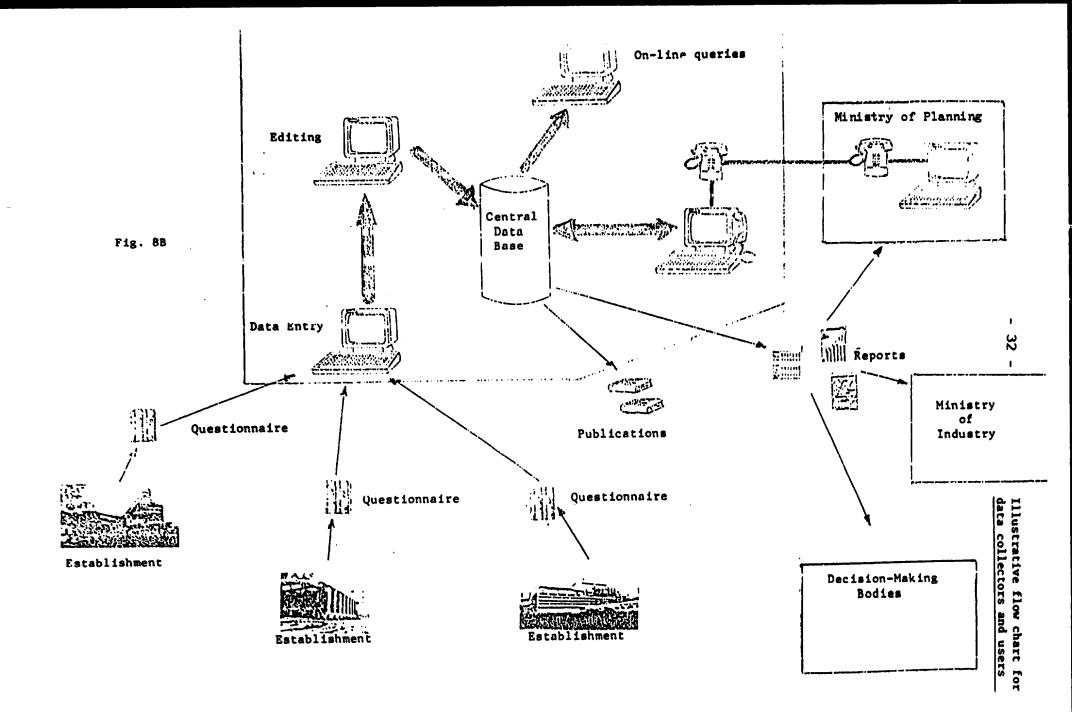
The system for processing the data abstracted from the survey on data terminal marked questionaires is designed to start with the entry of data. Access to data terminal will however be gained only through positive responses to a series of questions. To facilitate the procedure for data entry, a suitable pattern will be designed that matches the questionaire layout. The raw data is to be entered on the data entry terminal by the data entry operator or the sector officer. After all the data has been entered, it should be stored in the temporary storage disc so designated. The system is described graphically on fig. 7. (activities 2-5).

(1) Starting the data base centre from scratch requires a number of resources not just limited to computer processing facilities and cross-section data. It requires very highly skilled staff in statistics, economics, computer and data management systems. This requires continuous training of staff. Similarly the development of an industrial database presupposes the acquisition of consistent time series data. These take time and means that the full system will have to be implemented in stages.

- 30 -







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It should be noted that statistics. its acquisition processing and results are only means and inputs for targets, plans and policies. The mistake is often made by statistical units to keep data and reports to themselves as if the data is the final output of the planning system.

The diagram in fig. 7 shows five phases in the planning cycle: (a) the preplanning phase which encompasses the information gathering. the data base itself and the processed outputs; (b) the indicative planning phase which encompasses the subsector targets, the assessed policies and strategies to support the attainment of the targets; (c) the programming and monitoring phase in which input resources, including funding. technical assistance, marketing, material support and the monitoring of performance, constraints and negative policy impacts affecting the targets and indicative goals; (d) the evaluation of the programme; (e) included in the evaluation is the programme for policy reforms, although it is current practice not to wait until completion of the programme for reform but to pursue it concurrently with the programme. The data in the temporary storage is to be examined thoroughly and tested for errors, omissions and inconsistencies. Data found inconsistant is to be corrected by re-checking with respective establishments. The final edited data is to be transferred to the data base for record, coding for tabulation and data security.

The tabulated data will be analysed making use of suitable statistical techniques to derive underlying trends and provide necessary projections and extrapolations. Output reports will be prepared for the use of planners (to monitor industrial progress and develop future plans) and for other users in formats to be agreed.

Data on industrial enterprises is primarily intended to meet the planning needs of the Ministry of Industries, Science and Technology and to support other units of Government.

### 5.3 Information Management System

As in managing any other form of information, the approach that will be used for industry information will consider two basic formations:

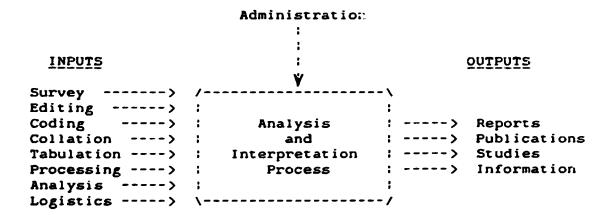
### 5.3.1 The Organizational Unit

The first stage in the data management implementation system (DMIS) is the establishment of an appropriate organizational structure. This includes the units that will be responsible for collection, processing, analysis, publication and the dissemination of acquired information. This structure may include several organizations and ministries depending upon the manpower resource available within MIST or the SPO for Industry. Many developing countries introducing this system for the first time find it useful and necessary to have the SPOs work alongside or in tandem with the central statistical organization (CSO) until sufficient skills and experience are gained by the SPO.

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## DATA MANAGEMENT SYSTEM



Functionally, the structure of the SPO should be very much like that of the main statistical agency except that the divisional partitions may be much tighter. The typical arrangement of the SPO in MIST comprise:

(a) A Field Operation Section whose responsibility includes preparation and supervision of census and industrial directory;

(b) Data Preparation Section whose function includes clerical and manual support such as preliminary editing for inconsistencies and abnormalities in supplied information, coding and decoding of questionnaires and returns, worksheet posting, physical storage, studies and publication;

(c) Support Services including the planning for space, supplies. spares, maintenance, equipment, modification and systems development including communication, transportation;

(d) Administration section whose functions include budgetting. accounting, finance, staffing and staff development and welfare, record-keeping and library;

(e) Studies and Publication Section whose functions include editing, form designing, copying and document duplication, printing document distribution as well as supervision and/or preparation of standard and special industrial publications.

It should be emphasized firstly, that while the above functions are all essential in the implementation of the information system, in practice the format which emerges depend to a large extent on the physical size of the database, the structure and geographic spread of the information network and on the financial resources placed at the command of the organization. Secondly, it will be necessary from the onset to establish a census planning committee composed of key personnel and institutions to map strategy and policies to guide the implementation programme. Issues such as the launching. project duration, budget, survey content, enumeration monitoring and control procedures, organizational responsibilities, legislative support and actions and publication plans and deadlines are important considerations for this committee.

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### 5.3.2 The Statistical Unit

The selection of the statistical unit (the unit from which the bits of identified information are to be gathered) is a critical consideration for the development of the database. In reality, such a decision has to be carefully made and often it requires a balance between the required data, the acquisition cost of that data (consciousness of the state of recordkeeping practices is important) and an assessment of industry's general willingness to comply/co-operate with the organization's requirements (1)

The choice of the statistical unit is important for many reasons since it determines:

- (a) the degree of detail to which the data can be compiled and published;
- (b) the extent to which the results of one survey can relate to other surveys past and future;
- (c) the speed with which the data can be collected and used;
- (d) the consistency and reliability implicit in the data.

With this as one of the many considerations the International Standard Industrial Classification (ISIC) and the 1983 World Programme of Industrial Statistics (WPIS) agreed to permit a measure of flexibility in the interpretation of the statistical unit. With this facility the statistical unit is based on operational criteria instead of the usual rigid single-unit, single product concept. Thus, the operational statistical unit (OSU) incorporates single and multi-product production processes at one or more locations whose output are in the main homogenous (i.e., the principal output falls in one main industrial category).

<sup>(1)</sup> Necessary legislation in the form of the Manufacturing Act 1980 has taken care of this. However, increased data acquisition activities will require further strengthening of the act.

### 6.0 TRAINING AN\_ SKILLS DEVELOPMENT

Implicit in the new organization structure being introduced at the Ministry of Industries is the installation of an integrative system for the planning and the programmed development of industrial activities in Ghana. The systems have been described briefly in chapter 4. To implement and support these three systems a comprehensive Training Plan (1) is developed.

A detailed study of the tasks to be accomplished by the Ministry and an assessment of the qualification and performance of existing staff provided the basis for the in-service and on-going training programme, external training, exposure support programme as well as the external recruitment programme to be funded by the UNDP/WB project.

#### 7.0 FINANCIAL IMPLICATIONS

Given the Governments preoccupation with efficiency in the public service the restructuring exercise has to be seen as improving Governments capacity and effectiveness to implement and monitor national industrial policy. This requires national focus and not just concentrated efforts in the major cities in Ghana. This means strengthening the institutional capacity of the Ministry as well as Regional offices to improve effectiveness of the Ministry, and its ability to guide through imitation of appropriate policies and measures the type and direction of industrial investments that are encouraged and attracted in Ghana. This capacity requires clear government commitment and support, in terms of additional skills and manpower, computer equipment and supplies, transportation and other supportive amenities.

The estimate of the additional recurring and non-recurring expenditures are shown in figure 8.

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<sup>(1)</sup> Manpower Requirement Analysis and Training Plan in the Ministry of Industries, Science and Technology, UNIDO Publication DP/ID/SER.A 958. January, 1988.

# Fig. 10ESTIMATED ADDITIONAL EXPENDITURE TO SUPPORT<br/>NEW STRUCTURE FOR MIST (in ¢)

		Per Annum	1	1
	Non-recurring	Recurring	Total	Remarks
Manpower			-	
8 Senior officers		2,500,000		
<b>4</b> Regional officers		600,000		
12 Support staff		200,000	3,300,000	
Equipment and Supplies				
2 Personal Computers	2.400.000			
2 Photo copying machines	1,400,000			
5 Type writers	1,200,000			
2 Printers	400,000			
Supplies		2,000,000		
			7,400,000	
Commercial equipment				
4 - HD vehicle	11,200,000			
4 - LD vehicle	8,000,000			
Telephones	1	600,000		
Maintenance & petrol		2,200,000		
			22,000,000	
Office Space				
10 offices				
1 library				
- Total	24,600,000	8,100,000	32,700,000	<u> </u>

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# Appendix 1

### DRAFT OUTLINE FOR SAMPLE GHANA 5-YEAR INDUSTRIAL DEVELOPMENT PLAN (AND SUBCOMPONENT SUPERVISORY OFFICER)

#### NATIONAL PLAN

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Chapier		OFFICER IC
1.	Introduction - Background and Industrial history	DA
2.	National objectives	n
3.	Sectoral objectives	SA
4.	Resources, constraints, long term potential and strategies	"
Macro	peconomic plan	VO
5.	Overseas trade and balance of payments	AAA/DH
6.	National income growth and distribution	VO
7.	Money, savings and investment capital	AAA
δ.	Public finance and capital requirements	AAA/SB
9.	Population and skills distribution	SA
10.	Manpower and training requirements	RA
	oral plans trial subsectors	SA
11.	Food. Beverage and Tobacco	ID/AF
12.	Chemical Pharmaceuticals, Plastics and Rubber	AKA
13.	Wood products, paper and printing	HW
14.	Non metal. minerals and building materials	SB
15.	Textile, garment, footwear and leather	KAM
16.	Base metal, Fabricated metal and Machinery	RD
17.	Electrical, Electronics and Engineering Assembly	AA
18.	Service and linkage sectors	
19.	Small Scale Sector	JA
Infrastructure		JKA
20.	Transport - Air, sea, road, rail	JKA
21.	Communications - mail, telecommunications, print, press	AF
22.	Energy - Domestic and import	JA

23.	Water supply, sanitation and environment	
24.	Institutional – Banking, Insurance, Educational, Research	SB
Gove	rnment services	AN
-25.	Planning procedures, budgeting, information base	AN
26.	Central Government administration	
27.	Local and municipal government	vo
28.	Plan Implementation	AN
VOLU	ME II - REGIONAL PLANS	DA

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#### APPENDIX 1A: SAMPLE INDUSTRIAL DEVELOPMENT PLAN -DEVELOPMENT STRATEGY QUESTIONNAIRE

#### INTRODUCTION

The draft sample questionnaire in the "Industrial Sector is attached and should be discussed with the Central Planning Office (CPO) and the Central Statistical Office (CSO).

#### FORMAT

The overall structure of what the Ministry of Industries, Science and Technology is required to perform. as:

#### Section

Contents

#### A. DEVELOPMENT STRATEGY

- A1. Sectoral (or Ministry of Industries
- A2. Long-term Development Potential in the Sector
- A3. Problems, Issues and Constraint
- A4. New Opportunities for Development (if appropriate)
- A5. Strategies Relative emphasis, timing, objectives and targets of programmes and policy initiatives, by type and by Region.

#### B. PROJECTS AND PROGRAMMES

- B1. Plans for on-going Projects and Activities and their Consolidation (organised by Programme)
- B2. Plans for new Projects and activities (organised by Programme)
- B3. Specification of Projects, Activities and Programmes requiring Expenditure for the 5-year period.

#### C. ORGANIZATION AND MANPOWER

- C1. Existing and Proposed Organizational Structure
- C2. Additional manpower Requirements
- C3. Training programme

- D. FINANCIAL RESOURCE REQUIREMENTS
  - D1. Financial, Aid, and Technical Assistance requirements required to support plans.

### E. MONITORING

E1. Programme/Activity Database including performance indicators (statistics) for monitoring progress during the Plan Period on Programmes and Activities. APPENDIX 1B: NOTES AND FURTHER INSTRUCTIONS ON THE ABOVE SECTIONS

#### A. DEVELOPMENT STRATEGY

Part A should outline what the sector is trying to achieve and how it will go about doing this.

#### A1. Sectoral objectives

These should be formulated in the context of the overall National Objectives. Among other things, the Sectoral Objectives should reflect the Sector's intended contribution to the achievement of the National Objectives. We suggest that Departments start by reviewing what was stated as their Sectoral Objectives (if this is a first plan or a plan after a gap, the wording may be modified as "what are considered to be the sectoral objectives") in the current National Development Plan, and how these should be modified. In some cases, the objectives may remain the same, in others, there may be a need for updating or reformulating.

The draft National Objectives for the Sample National Development Plan are summarized tentatively as follows:

- 1. Development of the Nation's human resource potential
- 2. Increased natural resource utilization
- 3. Balanced regional and rural growth
- 4. Encourage private sector contribution to national objectives
- 5. Economic self-reliance based on natural and human resource development
- 6. Preservation of cultural and environmental heritage
- 7. Self supportive and cost effective industrial development.

Some departmental activities may be geared to providing a more efficient administration or greater security and stability. For this we would tentatively add an eigth National Objective:

8. Maintain and improve efficiency, stability and security in the pursuit of everyday activities at home and at work.

If in the course of formulating your Sectoral, Programme, and Project Objectives you feel that there are other Objectives which should be stated at the National level, please feel free to make such suggestions. A2. Long-term Development Potential

Given the natural resource potential of the Nation, and prospects for development of infrastructure and human resources in the future. what contribution can be expected from this sector in the long term.

A3. Problems, Issues and Constraints

A4. New Opportunities for Development

In some Sectors there may be new opportunities for development which were not identified before or for which development programmes have not yet started. In other words, some development programmes and strategies will be oriented to overcoming existing problems and constraints. Others will look ahead to new opportunities.

#### A5. Strategies

Strategies should link Sectoral Objectives with Programmes and Policies. Programmes and Policies would be identified for overcoming the problems and constraints outlined in A3, and for taking advantage of the new opportunities in A4. Part of Strategy is a proposed time frame and consistent targets for all Sectoral Programmes, some of which may be interdependent or depend on shared manpower and other inputs. While section B will concentrate on individual programmes, A5 should indicate how these programmes all fit together in the context of the Sector as a whole. The Strategies should include Regional dimension, with various programmes having different emphases according to the needs of the various regions.

### B. PROJECTS AND PROGRAMMES

These sections will specify in some detail the individual sector/ subsectoral Programmes, their Objectives (Programme Objectives) and what projects and activities they consist of.

While Projects should generally be of limited time duration, and designed to achieve specific targets or outputs, Activities are thought of as continuing or ongoing. Programmes will generally consist of both activities and projects, some of which will be associated with each other.

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In some cases the objective of a project may be to develop a new ongoing activity, or improve the effectiveness of an existing activity.

B1. Ongoing Projects and Activities organised by Programme It is hoped that Planning Departments of Ministries will take some care in grouping their existing activities and projects into programmes which have some specific development objective, if this has not already been done. This is particularly important since it will form the basis for future budgeting and organizational planning.

B2. New Projects and Activities organized by Programme

Having organized existing activities into Programmes with specific objectives gaps may be identified leading to the identification of new projects and activities within existing Programmes, or the identification of new Programmes altogether.

B3. Specification of Projects, Activities and Programmes

All new projects and new activities must be submitted through the normal channels. To ease the burden of processing project proposals, to improve the information provided, and ultimately to provide better information for decisionmakers, standard forms will be discussed in workshops with all departments for comments by workshop participants.

### C. ORGANIZATION AND MANPOWER

Implementation of the Development Plan and continuing provision of essential Government services will require carefully planned departmental organizational development. It is hoped that the functions of each Department and its role in National development will be clarified in the process of doing A5 and B1 above, and that this will lead to a clearer definition of what is needed organizationally and manpowerwise.

C1. Existing and Proposed Organizational Structure

At this stage of the planning process we would ask Departments to quantify manpower constraints and identify what organization and manpower would be needed to carry out the functions of their Sector outlined in parts A and B right now (existing gap) and

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what will be needed over the 5 year period as new Programmes and Projects reach the implementation stage. How quickly it will be possible to implement this organizational plan will depend, among other things. on the priority attached to the various Sectoral Programmes. The rate at which priority programmes overall will be implemented will depend on the overall resources available. To some extent, however, the Resources available will depend on the Government's ability to formulate a well thought out and consistent five year plan, with comprehensive documentation on projects and programmes to be submitted for external funding.

### C2. and C3. Manpower and Training

In most cases the planned Organizational Structure in C1 will have manpower gaps. Taking into consideration the jobs that need to be done, please indicate in this section whether manpower is likely to be available, and if so, when. If a priority task will require overseas recruitment, we should be assured that at the same time there is a realistic and detailed plan for the pre-service, in-service, and on-the-job training of a local counterpart. Whether this will take 6 months or 5 years or longer will depend on the type of job and the availability of persons with the right aptitude, skills, and education. If getting a suitably qualified counterpart for a particular post seems to be a chronic, long-term problem, we would ask you to give some thought to alternative ways of doing things, geared as much as possible to the likely availability of local personnel at various skill levels. At the same time those expatriate personnel who are essential should be most intensively used to do only those tasks for which we do not presently have local personnel and at the same time to train or arrange training for prospective counterparts.

### D. FINANCIAL RESOURCE REQUIREMENTS

After completing sections B and C, you should be in a position to estimate or and forecast requirements for Government finance, grant aid, and technical assistance.

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#### E. MONITORING

With reference to Part B, please give some thought to any quantifiable indicators which could be used for gauging progress in various programmes and activities. Where data is currently available, please provide tables showing past performance as well as forecasts of the future growth. Where future growth is uncertain, please give optimistic, pessimistic, and likely forecasts, along with the assumptions underlying them. Please compile tables giving as comprehensive and detailed statistics and costings as are available at present. Tables should show both output indicators and associated inputs. Where statistics are not available. please try to design blank or partially filled table formats showing what you think should eventually be made available for proper monitoring of activities, and comment on how such data could be collected economically in the future. We consider that data for monitoring is a most important part of development planning, and where it does not exist, some priority in the Development Plan period should be given to the activity of compiling and analysing relevant sectoral data.

We would suggest that an efficient way of undertaking this Part would be to compile a list of all relevant tables presented in the First National Development Plan and the Mid-term Review, and then analyse this set as to its completeness. Do these tables give a clear picture of performance? Do they also include indicators of <u>inputs</u>, so that it can clearly seen that where an output was not forthcoming it was due to the shortage of some input or other? If the answer to either of these questions is "NO". please suggest what is needed.

Source:

Taylor, E.A.S Planning for Development; Prospects and Problems for Developing Market Economics. Camden Press. N.J. 1983.

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### JOB DESCRIPTIONS

# (only those prepared up to 5 May 1988)

No.	4	Director Planning/Research/Policy Formulation	51
No.	4.1.	Deputy Director, Sector Planning	54
	4.1.1	Assistant Director, Sector Planning Analysis	55
	4.2	Deputy Director, Industrial Statistics	57
	4.2.1	Assistant Director, Statistics and Data Processing	59
	4.2.3	Industrial Development Officer, Surveys	60
	4.3	Deputy Director, Studies and Publication	61
	4.3.1	Assistant Director, Studies and Publications	62
No.	5	Director Programming, Monitoring and Evaluation	63
	5.1	Deputy Director, Sector Programing	66
No.	5.2	Deputy Director, Monitoring and Evaluation	67
No.	5.3.2	Senior Industrial Development Officer	59
No.	6	Director Manufacturing Operations Support	71
	6.1	Deputy Director, Industry Support	73
		2/6.4.2/6.5.2/6.6.2/6.7.2 SIDO's, Industry Support	75
No.	6.4.1/6.6.	1/6.7.1 Assistant Directors, Industry Support	77
	6.9.1	Assistant Director, Special Projects	79
No.	7	Director Science and Technology	82
	7.1.2	Senior Industrial Development Officer S+T	85
No.	8.1	Deputy Director, Personnel/Information media	88
	8.1.3	Senior Officer Organization, Management and Training	91
	8.2	Deputy Director Finance, Budget and PE Coordination	93
	8.2.2	Senior Budget Officer	96
	8.3.2	Senior Industrial Development Officer, PE Coordination	98
	8.4.4	Superintendent, Property, Inventory, Equipment	100

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#### JOB DESCRIPTION

No. 4

#### 1. STRUCTURE

- 1.1 Position Title: Director, Planning, Research and Policy Analysis
- 1.2 Immediate Supervisor: Chief Director
- 1.3 Immediate Subordinates:

   Deputy Director, Sector Planning
   Deputy Director, Statistics & Data Processing Planning
   Deputy Director, Studies, Research and Publications
- 1.4 Associates:
  - All Directors at Ministry of Industries, Science and Technology.
- 1.5 Coordination
  - i. Bank of Chana
  - ii. National Investment Bank, National Investment Centre
  - iii. National Board for Small Scale Industries.

#### 2. OBJECTIVE OF POSITION

- 2.1 To be responsible to oversee the preparation of subsector plans and for problem and impact analysis through research and conduct of subsector, policy and other studies.
- 2.2 To formulate proposals for macro-economic and other policy reform and broad parameters of subsector development programmes, specifically those relating to protection and other policy considerations, intersectoral linkages and infrastructural changes in state ownership of industrial enterprises.
  - 2.3 To prepare reviews and other material for publication on trends and developments in industry.

#### 3. **RESPONSIBILITIES**

3.1 Analyses and elaborates on industrial policy issues originating from the PNDC, the PNDC Secretary for Industries, Science and Technology, the Ministerial Advisory Board or any other Government level or private source.

- 3.2 Develops systems and methods suitable and applicable to Ghana to formulate subsector plans and appropriate industrial policy.
- 3.3 Applies problem and impact analysis through the conduct of subsector, policy and other studies.
- 3.4 On the basis of the aforementioned studies the Director will formulate proposals for subsector development programmes.
- 3.5 Will elaborate and formulate macro-economic and other industrial policy reform and other policy considerations, intersectoral linkages and infrastructure requirements.
- 3.6 Will identify, elaborate and propose special development policy.
- 3.7 Will study structural changes in state ownership of industries, and will recommend policy consequences to the Chief Director of the Division of Administration and Information and the Director, Special Projects respectively.
- 3.8 Prepares and reviews other material for publication on trends and development in sectors or subsectors of Industry.
- 3.9 Will prepare budgetary estimates for his programme.

#### 4. ACTIVITIES

- 4.1 Receives and collects policy information on industry from various sources for analysis and processing.
- 4.2 Cooperates closely with academic institutions.
- 4.3 Participates to the possible extent in industrial policy meetings, workshops etc. in Ghana and abroad.
- 4.4 Assists the execution of particular subsector and other studies on an ad hoc basis and initiates and helps develop staff research skills.

#### 5. AUTHORITY

- 5.1 Directs and supervises three Assistant Directors.
- 5.2 Requests basic and clarifying information on industrial policy from related Ministries, industry and any other source.
- 5.3 Appraises at least annually his immediate subordinates in accordance with laid down policies and regulations.
- 5.4 Comments on any personnel action of his unit.

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### 6. QUALIFICATIONS

₹.

First University Degree in economics, with special experience in industrial analysis, policy planning, financial analysis, international trade, marketing etc. Academic degree preferred. A minimum of ten years of practical experience is required.

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#### No. 4.1

#### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Sector Flanning
- Director, Planning, Research and Immediate Supervisor: 1.2

#### Policy Analysis

1.3 Immediate Subordinates: Assistant Director, Sector Planning Senior Industrial Development Officer

- 1.4 Associates:
  - All Deputy Directors of the Ministry i.

Deputy Director at Central Bureau of Statistics ii.

#### OBJECTIVE OF POSITION 2.

- To prepare under the supervision of the director draft 2.1 indicative five-year development plans for each industry sub-sector.
- To elaborate sub-sector plans into one-year operational 2.2 plans for implementation.
- To define and translate sector and industry production 2.3 targets into production quantities.
- To define and/or el: orate performance indicators for 2.4 periodic monitoring and evaluation.

#### RESPONSIBILITIES 3.

- Conducts sub-sector studies. 3.1
- Prepares and periodically up-dates the five-year development 3.2 plans for each industrial sub-sector.
- Elaborates annual and bi-annual operational plans. 3.3
- Defines targets and performance levels for each sub-sector. 3.4
- 3.5 Coordinates with macro-economic planning the preparation of the industrial sector plan.

#### QUALIFICATION 4.

University degree in economics management or engineering with at least four years in planning or industrial management.

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#### JOB DESCRIPTION

No. 4.1.1

#### 1. STRUCTURE

- 1.1 Fosition Title: Assistant Director, Sector Planning Analysis
- 1.2 Immediate Supervisor: Deputy Director, Planning, Research, and Policy Analysis
- 1.3 Immediate Subordinates: Senior Industrial Development Officer Assistant Industrial Development Officer.

#### 1.4 Associates:

- All Assistant Director of Divisions of Industry and Science and Technology.
   Central Planning Office
- iii. Staff of the Central Bureau of Statistics

### 2. OBJECTIVE OF POSITION

- 2.1 To be the main source for the elaboration and preparation of the industrial part of the Five Year Development Plan.
- 2.2 To extract from the Sector Flan facts and data for annual and bi-annual operational plans for implementation.
- 2.3 To estimate financial and technical implications for the implementation of annual, bi-annual and the Five Year Plan.
- 2.4 To produce performance indicators for monitoring and evaluation the industrial sector.
- 2.5 To coordinate in cooperation with the Central Planning Office periodic reports as in-puts for the National Economic Plan.

#### 3. RESPONSIBILITIES

- 3.1 Prepares for the Five Year Development Plan the contribution of the manufacturing sector.
- 3.2 Elaborates and proposes for the Five Year Development Plan operational sub-plans for implementation.
- 3.3 Estimates financial and technical implications for the implementation of annual, bi-annual and the Five Year Development Plan.
- 3.4 Defines and elaborates performance indicators for monitoring and evaluation of the industrial sector and subsectors.

3.5 Cocrdinates in cooperation with the Central Planning Office periodic reports required for the National Economic Plan.

### . 4. QUALIFICATION

University degree in economics with Statistics and at least three years experience in economics or Industrial Planning.

No. 4.2

#### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Industrial Statistics and Data Processing
- 1.2 Immediate Supervisor: Director Planning, Research and Statistics
- 1.3 Immediate Subordinates:
  - i. Assistant Director, Statistics and Data Processing
  - ii. Industrial Development Officer, Survey and Data Collection

#### 1.4 Associates:

- i. All Deputy Directors at the Ministry
- ii. All Deputy Directors of Research and Statistics
- of other Ministries
- iii. All Deputy Directors Central Bureau of Statistics

#### 2. OBJECTIVE OF POSITION

- 2.1 To be the main organ for 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.
- 2.2 Apart from the statistics themselves, to be the focal centre for the Ministry's data management and information system.
- 2.3 To service the Chief Director of Science and Technology.

#### 3. **RESPONSIBILITIES**

- 3.1 Prepare a decree for the PNDC-Secretary under the authority of Art. 9 of the Manufacturing Industries Act of 1971, to be promulgated as soon as possible, for a monthly reporting system of Ghana Industries about:
  - 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. other items, still to be decided.
    viii. observe any necessary legal follow-up.
- 3.2 Prepares selected statistical information for periodic publication.

- 3.3 Collects and compiles and analyses the statistical data received under the monthly system and any other statistical data, obtained from other sources.
- 3.4 Be the source of information on statistical data in the field of industry, available from other countries, specifically countries where Ghana has political or market interests.
- 3.5 Be the main source for industrial data to the Central Bureau of Statistics.
- 3.6 Prepares budgetary estimates for his programme.

#### 4. ACTIVITIES

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

#### 5. AUTHORITY

- 5.1 Requests clarifying and additional information from industry.
- 5.2 Comments on all requisitions on expenditure.
- 5.3 Appraises annually his immediate subordinates in accordance with laid down policies and regulations.
- 5.4 Comments on all personnel actions regarding his area.

### 6. QUALIFICATIONS

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

#### Nc. 4.2.1

#### 1. STRUCTURE

- 1.1 Position Title: Assistant Director, Statistics and Data Processing
- 1.2 Immediate Supervisor: Deputy Director, Statistics and Data Processing
- 1.3 Immediate Subordinates:
- 1.4 Associates: All Assistant Directors of MIST

#### 2. OBJECTIVE OF POSITION

- 2.1 To receive data from the Industry Monthly Reporting System.
- 2.2 To receive data from the Director, Policy and Planning and the Assistant Directors, Studies & Publications and Survey and Data Control.
- 2.3 To receive any other relevant data regarding industry from other sources of the Ministry and from outside.
- 2.4 To operate the computer and process data in specific format established by the Director, Industrial Statistics and Data Processing.

#### 3. **RESPONSIBILITIES**

- 3.1 Will be the focal point for all data processing activities.
- 3.2 Codes and classifies data for subsequent data processing.
- 3.3 Enters data in the computer.
- 3.4 Advises the Director and the Assistant Directors of Industrial Statistics and Data Processing on deficiencies for corrective measures.
- 3.5 Initiates and compiles monthly statistical reports for the Directors of Planning, Programming, Monitoring and Evaluation.
- 3.6 Extracts and compiles data for industrial studies.
- 3.7 Any other function assigned by the Director.

#### 4. QUALIFICATION

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

#### No. 4.2.3

#### 1. STRUCTURE

- 1.1 Position Title: Industrial Development Officer, (Surveys and Data Collection)
- 1.2 Immediate Supervisor: Deputy Director, Statistics and Data Processing
- 1.3 Immediate Subordinates: Nil
- 1.4 Associates: Industrial Development Officers

#### 2. OBJECTIVE OF POSITION

- 2.1 To initiate and prepare surveys on statistical information originating from the Central Statistical Office and the Ministry.
- 2.2 To coordinate and cooperate on surveys of other agencies which have impact on industry.
- 2.3 To ensure the timely collection of relevant statistical information from industry for data processing.
- 2.4 To coordinate data processing and follow-up distribution.

#### 3. RESPONSIBILITIES

- 3.1 Conducts specialized surveys on statistical information from the Central Bureau of Statistics and the Ministry as well as the Regional Offices.
- 3.2 To coordinate statistical data, cooperate and assist surveys prepared by other agencies in the field of industry.
- 3.3 Supervises the timely receipt of requested statistical data from industry for processing.
- 3.4 Coordinates data processing and follow-up their distribution to the agencies concerned.
- 3.5 Will undertake any other task assigned to him by the Director.

#### 4. QUALIFICATION

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

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#### No. 4.3

#### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Studies and Publications
- 1.2 Immediate Supervisor: Director, Planning, Research and Statistics
- 1.3 Immediate Subordinates: Assistant Director, Studies and Publications
- 1.4 Associates: i. Deputy Directors, Surveys and Data Collection and
  - Data Processing; ii. All Assistant Directors at the Ministry.

### 2. OBJECTIVE OF THE POSITION

- 2.1 To generate industrial studies and publications resulting from statistics.
- 2.2 To supplement statistical information to studies and publications.
- 2.3 To prepare statistical publications on trends and developments in industry.
- 2.4 To review statistical data of studies and publications undertaken by other agencies.

#### 3. RESPONSIBILITIES

- 3.1 Initiates and prepares industrial studies and publications.
- 3.2 On request screens and reviews other industrial studies and publications regarding statistical data.
- 3.3 Supplements by statistical information studies of the Ministry and the Ministry of Finance and Economic Planning.
- 3.4 Supplements by industrial statistical data any study of any other agency.
- 3.5 On request screens and reviews statistical data of studies of any other agency.
- 3.6 Is the focal point of cooperation with the Central Bureau of Statistics.

3.7 Will undertake any other task assigned to him by the Director.

#### 4. QUALIFICATION

Bachelor degree in Economics, Business Administration or equivalent, with at least three years experience in related field.

#### No. 4.3.1

#### 1. STRUCTURE

- 1.1 Position Title: Assistant Director, Studies and Publications
- 1.2 Immediate Supervisor: Director, Statistics and Data Processing
- 1.3 Immediate Subordinates: Nil
- 1.4 Associates:
  - i. Assistant Directors, Surveys and Data Collection and Data Processing;
  - ii. All Assistant Directors at the Ministry.

### 2. OBJECTIVE OF THE POSITION

- 2.1 To generate industrial studies and publications resulting from statistics.
- 2.2 To supplement statistical information to studies and publications.
- 2.3 To prepare statistical publications on trends and developments in industry.
- 2.4 To review statistical data of studies and publications undertaken by other agencies.

#### 3. RESPONSIBILITIES

- 3.1 Initiates and prepares industrial studies and publications.
- 3.2 On request screens and reviews other industrial studies and publications regarding statistical data.
- 3.3 Supplements by statistical information studies of the Ministry and the Ministry of Finance and Economic Planning.
- 3.4 Supplements by industrial statistical data any study of any other agency.
- 3.5 On request screens and reviews statistical data of studies of any other agency.
- 3.6 Is the focal point of cooperation with the Central Bureau of Statistics.
- 3.7 Will undertake any other task assigned to him by the Director. .

#### 4. QUALIFICATION

Bachelor degree in Economics, Business Administration or equivalent, with at least three years experience in related field.

#### No. 5

#### 1. STRUCTURE

- 1.1 Position Title: Director, Programming, Monitoring and Evaluation
- 1.2 Immediate Supervisor: Chief Director,
- 1.3 Immediate Subordinates: i. Deputy Director, Sector Programming
  - ii. Deputy Director, Monitoring and Evaluation
- 1.4 Associates:
- i. Director, Planning, Research and Policy Analysis ii. Director, Manufacturing Operations and Support
- 1.5 <u>Coordination</u>
  - i. National Board for Small Scale Industries
  - ii. Ghana Standards Board
  - iii. Ghana Investment Centre
  - iv. Bank of Ghara
    - v. National Investment Bank

#### 2. OBJECTIVE OF POSITION

- 2.1 To be primarily responsible for detailed preparation, as well as management support, monitoring and evaluation of subsector and other industrial development programmes.
- 2.2 To perform at regular intervals impact assessment studies of policies and programmes applicable to Industry.
- 2.3 To study, elaborate and recommend for subsectors and individual industries funding requirements (in cooperation with the Eank of Ghana or other Banks investing in Industry) for rehabilitation, industrial restructuring, specifically in conjunction with the Industrial Sector Adjustment Credit (ISAC).
- 2.4 To monitor, appraise and evaluate performance of industrial subsectors and individual industries.
- 2.5 To be the centre of coordination of external aid and liaison with UNIDO.

### 3. <u>RESPONSIBILITIES</u>

- 3.1 Starting from the perceptions of Planning, Research and Policy Analysis the Director will develop short-term, medium - and long-term programmes for orderly industrialization in Ghana.
- 3.2 Monitors and recommends incentive measures so as to maintain the momentum of increased domestic production and exports.
- 3.3 Following macroeconomic goals, the Director will develop plans to shift the leading edge of policy reform from macroeconomic to sectoral concerns, and to lay the basis for renewed, vigorous and efficient growth in the industrial key sectors for processing local raw materials, product development for domestic and export markets.
- 3.4 Monitor the supply and utilization of imported raw material and equipment in co-operation with the import licencing agencies.
- 3.5 Provides Technical support for the rehabilitation of industries which would be unable otherwise to operate efficiently (local or external consultants, training etc).
- 3.6 Will be the focal instrument for the implementation of the ISAC Credit.
- 3.7 Co-ordinates external assistance and liaises with UNIDO/UNDP/WB.
- 3.8 Prepares budgetary estimates for his programme.

### 4. <u>ACTIVITIES</u>

- 4.1 Macro and microeconomic programming
- 4.2 Receives copies of monthly reports from industry from the Director of Industrial Statistics and Data Processing Unit and monitors the development of the industrial sectors.
- 4.3 Organizes support services for the industrial sector and subsector and individual enterprises.
- 4.4 Plans and implements group and individual training on subsector of Industries and plant level.

### 5. AUTHORITY

- 5.1 Has direct access to industry.
- 5.2 Calls on the support of all Regional Offices.
- 5.3 Comments on all requisitions on expenditure within his responsibilities.
- 5.4 Appraise at least annually his immediate subordinates in accordance with laid down policies and regulations.
- 5.5 Comments on all personnel actions regarding his area.

### 6. QUALIFICATIONS

First University degree in economics/engineering with postgraduate training in industrial programming and management, or equivalent. Minimum of four years in similar positions is required.

#### No. 5.1

#### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Sector Programming
- 1.2 Immediate Supervisor: Director, Programming, Monitoring Evaluation
- 1.3 Immediate Subordinates: Senior Industrial Development Officer, Industrial Development Officer.
- 1.4 Associates:
  - i. All Deputy Directors of Divisions of Industry and Science and Technology and similar.
  - ii. Staff of the Central Bureau of Statistics

#### 2. OBJECTIVE OF POSITION

- 2.1 To provide detached programme of resources and support for industrial development.
- 2.2 To establish development programmes for industrial rehabilitation of industry.
- 2.3 To propose and monitor the privitization and restructuring of State Owned Enterprises.

#### 3. **RESPONSIBILITIES**

- 3.1 Studies, elaborates and provides detailed programme of resources and support services for industrial development.
- 3.2 Prepares and proposes development programmes for the rehabilitation of industry, including a time-table for implementation.
- 3.3 Studies and recommends financial resources required.
- 3.4 Programmes and monitors in cooperation with the Assistant Director of State Owned Enterprises coordination privatization, closure or restructuring of such industries.

#### 4. QUALIFICATION

Degree in economics or business administration with at least three years of experience in industry programming or management.

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#### JCE DESCRIPTION

#### No. 5.2

#### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Monitoring and Evaluation
- 1.2 Immediate Supervisor: Director, Programming, Monitoring and Evaluation
- 1.3 Immediate Subordinates: Senior Industrial Development Officer
- 1.4 <u>Associates</u>: All Deputy Directors of Divisions of Industry and Science and Technology

#### 2. OBJECTIVE OF POSITION

- 2.1 To elaborate and apply systems for monitoring industrial development at macroeconomic level and at subsectors.
- 2.2 To study and elaborate programmes for evaluation of the industrial sector and its subsectors.
- 2.3 To study development progress and to report on achievements and failures.
- 2.4 To perform subsectoral industrial studies for evaluation of progress.

#### 3. **RESPONSIBILITIES**

- 3.1 Develops detailed systems for monitoring of the manufacturing industry at the macroeconomic and at the subsector level.
- 3.2 Develops programmes for evaluation of the performance of each industrial subsector as well as the manufacturing sector as a whole.
- 3.3 Reports on industrial development progress, achievements and failures.
- 3.4 Performs subsectorial studies for evaluation of industrial progress.
- 3.5 Analyses in detail industrial cases where results indicate major deviations from targets.
- 3.6 Conducts surveys for assessing impacts of trade and economic policies on Industry.

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## 4. QUALIFICATION

Degree in economics or business administration with at least three years experience in industry.

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#### No. 5.3.2

#### 1. STRUCTURE

- 1.1 Position Title: Senior Industrial Development Officer.
- 1.2 Immediate Supervisor: Director, Programming, Monitoring and Policy Analysis
- 1.3 Immediate Subordinates: Nil
- 1.4 Associates: All Senior Industrial Development Officers of MIST.

### 2. <u>OBJECTIVES</u>

- 2.1 To conduct subsector studies to assess trends, intersectoral and infrastructural requirements and constraints.
- 2.2 To review sector plans, studies and draft industrial policies and policy reform.
- 2.3 To prepare drafts of legislation resulting from policy recommendations.
- 2.4 To analyse past and present policy to determine impacts and corrective actions.
- 2.5 To review industrial prospects and proposals reaching the Ministry and advise on economic impact.

#### 3. **RESPONSIBILITIES**

- 3.1 Prepares and conducts studies on subsectors for the assessment of trends, intersectoral and infrastructural requirements and constraints and deficiencies.
- 3.2 Studies and reviews industrial sector plans and drafts industrial policies and policy reform.
- 3.3 Drafts in cooperation with the legal counsel legislation originating from policy recommendations.
- 3.4 Analyses industrial policies to review impact on the economy of the country and recommends corrective measures.
- 3.5 Analysis industrial prospects and proposals reaching the Ministry with the aim to advise on economic consequences.

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### 4. QUALIFICATION

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University Degree in economics or business administration with at least two years of industrial experience.

#### No. 6

#### 1. STRUCTURE

- 1.1 Position Title: Director, Manufacturing Support Services
- 1.2 Immediate Supervisor: Chief Director
- 1.3 Immediate Subordinates: All Assistant Directors of his Unit

#### 2. OBJECTIVE OF POSITION

- 2.1 To study and appraise industrial development schemes and industrial enterprises to design and screen rehabilitation programmes from the technical and managerial view point.
- 2.2 To study and organize infrastructure development activities.
- 2.3 To manage and monitor special programmes for policy measures of privatization, closure or restructuring of state owned industrial enterprises in cooperation with the Chief Director of Administration.
- 2.4 To monitor sector's performance including trends in growth of value-added, manufactured products for domestic and export markets, upstream resources development, industrial manpower, training and demand.
- 2.5 To study, screen and direct technical assistance in cooperation with the Director for Programming, Monitoring and Evaluation.

#### 3. **RESPONSIBILITIES**

- 3.1 Will be the managerial, technical and financial instrument of the Ministry on subsector and plant level.
- 3.2 The Director will deliver the technical inputs, will study problems of subsectors and industries, proposes improvement and assists in remedial measures.
- 3.3 Prepares and implements technical training at subsector and plant level.
- 3.4 Will draft job descriptions or terms of reference for technical assistance projects.

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- 3.5 Will assign counterpart staff to technical assistance projects and supervise implementation.
- 3.6 Licencing of the extension of existing factories and new projects.
- 3.7 Will execute the Ministry's regulatory responsibilities with respect to industrial standards, safety, health and pollution control.
- 3.8 Will prepare the budgetory estimates for his programme.

# 4. ACTIVITIES

- 4.1 Will appraise the managerial and technical competence of industry on plant level by regular and ad hoc factory visits.
- 4.2 Receives copies from Statistics and Data Processing of Monthly Industry Statistics for Identification of bottlenecks or other managerial or technical problems.
- 4.3 Appraises individual enterprises on regulation and instruction of the PNDC-Secretary, the Under-Secretary or the Chief Director, Industry.
- 4.4 Should organize and conduct group training courses, workshop and other support activities as needs are identified.

# 5. AUTHORITY

- 5.1 The Director as well as his professional staff may enter the ground of any private industry and inspect raw material, machinery, operations and quality of products.
- 5.2 Approves travel plan of professional staff.
- 5.3 Requests and receives, within his functions, information from Regional Offices.
- 5.4 Comments on all requisitions of expenditures.
- 5.5 Appraises at least annually his immediate subordinates in accordance with laid down policies and regulations.
- 5.6 Comments on all personnel actions regarding his Branch.

#### 6. QUALIFICATION

First University degree in a branch of engineering with postgraduate training in management and operation of manufacturing industries. At least six years practical experience on plant level are essential, preferable in different enterprises.

### No. 6.1

# 1. STRUCTURE

1.1	Position Title: Deputy Director, Industry Support
1.2	Immediate Supervisor: Director, Manufacturing Operations, and Support Services
1.3	Immediate Subordinates: Assistant Directors, Senior Industrial Development Officers
1.4	Associates: All Deputy Directors of Division of Industry

### 2. OBJECTIVE OF POSITION

- 2.1 To assist in studying and appraisal of development schemes and industrial enterprises in order to design and assist in industrial rehabilitation programmes.
- 2.2 To assist in studies leading to implementation/improvement in industrial infrastructure and other development activities.
- 2.3 To give advice, monitor and manage special programmes for privatization, closure or restructuring especially State Owned Industrial Enterprises.
- 2.4 To assist in studying, screening and directing technical assistance to industry.
- 2.5 To assist in the promotion of industrial investment for existing and new industries.
- 2.6 To provide inputs for the continuing appraisal, control and regulation of existing industries.
- 2.7 To assist in the formulation and implementation of industrial policy and programmes for Industry.

# 3. **RESPONSIBILITIES**

- 3.1 Collects the factual material for studies and appraisal of development schemes and industrial enterprises for design of rehabilitation programmes from technical and managerial viewpoints.
- 3.2 Collects factual information on infrastructure development and prepares studies and recommendations.

- 3.3 Studies and advises an measures of privatization, closure or restructuring of State Owned Enterprizes.
- 3.4 Studies technical assistance needs and assists industries in drafting job descriptions or terms of reference for experts or consultants services.
- 3.5 Studies possibilities for industrial investment, drafts projects profiles and requests.
- 3.6 Studies necessities for training and proposes programmes.
- 3.7 Appraises industries, controls and reports about special events.
- 3.8 Comments on requests for expansion of licences of existing industries or issuence of new licences.
- 3.9 Any other task assigned to him by the Director within his professional competence.

Degree in engineering or Business Administration. A minimum of five years experience in industrial positions in Government or Industry is required.

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#### JCB DESCRIPTION

Nos 6.2.2/6.3.2/6.4.2/6.5.2/6.6.2/6.7.2

#### 1. STRUCTURE

- 1.1 Position Title: Senior Industrial Development Officers Industry Support.
- 1.2 Immediate Supervisor: Director, Manufacturing Support Services.
- 1.3 Immediate Subordinates: One or two Officers (Technicians) working on subsectors not covered by the Assistant Director.
- 1.4 Associates: All SIDOs at MIST

### 2. OBJECTIVE OF POSITION

- 2.1 To assist in studying and appraisal development schemes and industrial enterprises in order to design rehabilitation from the managerial and technical viewpoint.
- 2.2 To assist in studies of infrastructure development activities.
- 2.3 To give advice, monitor and manage special programmes for policy measures of privatization, closure or restructuring of State Gwned Industrial Enterprises in cooperation with the Assistant Director, State Owned Industrial Enterprises in cooperation with the Assistant Director, State Owned Enterprises Coordination.
- 2.4 To assist in studying, screening and direction technical assistance needs for industry.
- 2.5 To assist in the promotion of industrial investment for existing and new industries.
- 2.6 To assist in the appraisal, control and regulation of existing industries.
- 2.7 To assist in the formulation and implementation of industrial import programmes if requested.

#### 3. **RESPONSIBILITIES**

3.1 Collects the factual material for studies and appraisal of development schemes and industrial enterprises for design of rehabilitation programmes from technical and managerial viewpoints.

- 3.2 Collects factual information on infrastructure development and prepares studies and recommendations.
- 3.3 Studies and advises an measures of privatization, closure or restructuring of State Owned Enterprizes.
- 3.4 Studies technical assistance needs and assists industries in drafting job descriptions or terms of reference for experts or consultants services.
- 3.5 Studies possibilities for industrial investment, drafts projects profile and requests.
- 3.6 Studies necessities for training and proposes programmes.
- 3.7 Appraises industries, controls and reports about special events.
- 3.8 Comments on request for expansion of licences of existing industries or issuence of new licences.
- 3.9 Any other task assigned to him by the Director within his professional competence.

Degree in engineering or equivalent. A minimum of two years experience in industrial positions in Government or Industry.

Hos 5.4.1/6.6.1/6.7.1

#### 1. STRUCTURE

- 1.1 Position Title: Assistant Director, Industry Support
- 1.2 Immediate Supervisor: Director, Manufacturing Operations, and Support Services
- 1.3 Immediate Subordinates: One or two Officers (Technicians) working on subsectors not covered by the Assistant Director.
- 1.4 Associates: All Assistant Directors of Division of Industry

### 2. OBJECTIVE OF POSITION

- 2.1 To assist in studying and appraisal development schemes and industrial enterprises in order to design rehabilitation programmes from the managerial and technical viewpoint.
- 2.2 To assist in studies of infrastructure development activities.
- 2.3 To give advice, monitor and manage special programmes for policy measures of privatization, closure or restructuring of State Owned Industrial Enterprises in cooperation with the Assistant Director, State Owned Enterprises Coordination.
- 2.4 To assist in studying, screening and direction technical assistance needs for industry.
- 2.5 To assist in the promotion of industrial investment for existing and new industries.
- 2.6 To assist in the appraisal, control and regulation of existing industries.
- 2.7 To assist in the formulation and implementation of industrial import programmes if requested.

# 3. **RESPONSIBILITIES**

3.1 Collects the factual material for studies and appraisal of development schemes and industrial enterprises for design of rehabilitation programmes from technical and managerial viewpoints.

- 3.2 Collects factual information on infrastructure development and prepares studies and recommendations.
- 3.3 Studies and advisesand measures of privatization, closure or restructuring of State Owned Enterprizes.
- 3.4 Studies technical assistance needs and assists industries in drafting job descriptions or terms of reference for experts or consultants services.
- 3.5 Studies possibilities for industrial investment, drafts projects profiles and requests.
- 3.6 Studies necessities for training and proposes programmes.
- 3.7 Appraises industries, controls and reports about special events.
- 3.8 Comments on requests for expansion of licences of existing industries or issuence of new licences.
- 3.9 Any other task assigned to him by the Director within his professional competence.

Degree in engineering or equivalent. A minimum of two years experience in industrial positions in Government or Industry.

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### JOB DESCRIPTION

### No. 6.9.1

### 1. STRUCTURE

- 1.1 Position Title: Assistant Director, Special Projects
- 1.2 Immediate Supervisor: Director, Industry Support Services
- 1.3 Immediate Subordinates: Nil
- 1.4 Associates: All Assistant Directors of Industry Divisions

#### 1.5 Coordination:

- i. Science and Technology Division of Ministry
- ii. Ghana Industrial Holding Corporation through
  - Division of Administration and Information
- iii. Ghana Standards Board
- iv. Ghana Investment Centre
  - v. National Board for Small Scale Industries

### 2. OBJECTIVE OF POSITION

- 2.1 To act on subsector and special projects not covered by other Directors of the Industry Division.
- 2.2 To work mainly on plant level with the aim to upgrade efficiency of production by organization and management studies, market opportunities studies, economic and prefeasibility studies, group training and training on the job.
  - 2.3 To programme and initiate national maintenance and repair programmes and to identify industry constraints and assist in rehabilitation programmes for Industry in cooperation with the Director of the Manufacturing Operations and Support.
  - 2.4 To foster establishment of maintenance and repair workshops in certain areas to the benefit of smaller plants not able to afford such facilities on their own.
  - 2.5 To assist industries on marketing at plant level and advise on export opportunities, in cooperation with the Ministry of Trade.
  - 2.6 To conduct for private and public sector enterprises cost-benefit studies, product costing/pricing analysis and be responsive to tackle other business problems affecting industry.

- 2.7 In cooperation with other Directors of the Division of Industry, to liaise the Ministry on activities of the National Small Scale Industry Board.
- 2.8 To advise industry in conjunction with the Science and Technology Divsion, and the Director of Operations industrial Enterprises in the orderly improvement of production, design development of new products and establishment of quality control facilities.

## 3. **RESPONSIBILITIES**

- 3.1 Will analyse organizational and management problems of subsectors of industry as well as at plant level.
- 3.2 Will assist industrial enterprises in assessment and selection of personnel in management and technical jobs, including locating of top management and technical personnel.
- 3.3 Will conduct group training, individual training and workshops in organization and management.
- 3.4 In cooperation with the Director of Manufacturing Operations and Support, will study and prepare and initiate industrial maintenance and repair programmes.
- 3.5 Will issue maintenance manuals for overhaul and replacement of industrial equipment, including periodic inspections and servicing.
- 3.6 Will identify key areas for the establishment of workshops for maintenance and repair of machinery of smaller industries not being able to afford such facilities.
- 3.7 In cooperation with other relevant trade organizations, will assist industries in marketing of their goods for the domestic market and exports.
- 3.8 On request, will prepare cost/benefit studies, advise on financial analysis, cost accounting and other financial matters.
- 3.9 In cooperation with other Directors of the Division will develop an effective system for coordinating activities of the National Small Scale Industry Board.

- 3.5 Prepares maintenance and servicing manuals for overhaul and replacement of parts of industrial equipment, to be issued by the Ministry.
- 3.6 Assist industries in improving quality of production, establishment of quality control arrangements and techniques.
- 3.7 Assists in the development and design of new and more competitive products in making available literature, and catalogues to industries.
- 3.8 Any other task within his professional competence assigned by the Director.

Degree in industrial engineering with extensive experience on plant level of at least eight years.

- 1. STRUCTURE
  - 1.1 Position Title: Director, Science and Technology
  - 1.2 Immediate Supervisor: Chief Director
  - 1.3 Immediate Subordinates:
    - i. Assistant Director, Research and Development ii. SIDO, Special Projects
  - 1.4 Associates:
    - i. Chief Directors in the Ministry and other Ministries
    - ii. Heads of Institutes under the Council for Scientific and Industrial Research.
  - 1.5 Coordination:
    - Policy Committees of Agriculture, Fisheries and Forestries, Industry Technology, Health, Medicine, Social Science and Pure Science.
       DAPIT, ITTU, CSIR, NBSSI, GSB, International
    - ii. DAPIT, ITTU, CSIR, NBSSI, GSB, Internationa Foreign National Organizations, having a Programme in Ghana.

# 2. OBJECTIVE OF POSITION

- 2.1 To identify most appropriate means by which the Government may have beneficial influence on the application and development of Science and Technology.
- 2.2 To coordinate programmes and activities of Science and Technology with other policies and programmes of the Government.
- 2.3 To foster cooperative relationships in respect of Science and Technology between Government, industry and public and private organizations.
- 2.4 To identify programmes of research and development to improve scientific standards in Government and the private sector.
- 2.5 To oversee the budgetary process for scientific activities in the country.

#### 3. **RESPONSIBILITIES**

3.1 Coordinates Science and Technology Programmes in order to improve the effectiveness of this sector.

- 3.2 Studies technological problems at subsector and plant level and relate needs to appropriate R and D institutions.
- 3.3 Promotes the utilization of local technological supply by reinforcing the technological infrastructure and improve the linkage between the technological and industrial production systems.
- 3.4 Converts abstract scientific knowledge into appropriate technologies to the benefit of industry and other users.
- 3.5 Balances the inputs of foreign and local technologies in a way that in the interest of foreign payments local technologies will predominate.
- 3.6 Prepares a register of all institutional constituents of the scientific community.
- 3.7 Promotes the coordination of programmes and activities of Science and Technology with other policies and programmes of the Government.
- 3.8 As a special project, prepares a National Plan for promotion of Science and Technology in development.
- 3.9 Monitors and evaluates industrial performance and the national economy achievements in the application of Governments Science and Technology policy.
- 3.10 In cooperation with the Ministry of Education, proposes plans and programmes in order to improve scientific and technical education of pupils.
- 3.11 Assist industry by transfer of appropriate technologies, patent search, inventions and industrial innovations.
- 3.12 Keeps close contact with transfer of technology institutions of industrialized countries.
- 3.13 Plays the role of a clearing house for the import of foreign technologies with the aim to avoid acquisition of technical processes and equipment which is available in Ghana.
- 3.14 Prepares the budgetary estimates for his programme.

# 4. ACTIVITIES

- 4.1 Acts as the link between Science and Technology and industry.
- 4.2 Studies appropriate technologies suitable and required for industry.

- 4.3 Studies and prepares from the view-point of Science and Technology existing technologies in industry expertise with the aim of their improvement.
- 4.4 Initiates and guides in his field foreign aid expertise for industry.
- 4.5 Leads Science and Technology programmes to action oriented activities to the benefit of industry.

# 5. AUTHORITY

- 5.1 May enter at working hours any factory for inspection of their equipment and industrial processes.
- 5.2 Frepares for approval of PNDC Secretary and R and D Institutions.
- 5.3 Appraises performance of his staff at least annually.
- 5.4 Prepares comments on matters of technical nature affecting the Ministry's work or impacting industry.

### 6. QUALIFICATION

Postgraduate University Degree in Science and Technology. At least ten years of practical experience in the application of science and technology.

# No. 7.1.2

# 1. STRUCTURE

- 1.1 Position Title: Senicr Industrial Development Officer
- 1.2 Immediate Supervisor: Director. Science and Technology
- 1.3 Immediate Subordinates:
- 1.4 Associates:
- 1.5 Coordination:
  - i. Science and Technology Institutions
  - ii. Ghana Standards Board
  - iii. Transfer of Technology Institutionsiv. Appropriate Technology Institutions
  - iv. Appropriate reenhology institut

# 2. OBJECTIVE OF POSITION

- 2.1 To compile the results of monitoring international, regional and bi-lateral assistance to Science and Technology with the view to prompting Government intervention in issues relating to them.
- 2.2 To initiate and monitor special Science and Technology projects not routinely handled by other Science and Technology directors for purposes of filling gaps and ensuring the technological development of weak industries.
- 2.3 To house closely with the small scale industries sector to ensure the development and advancement of Science and Technology and Research and Development programmes for such industries. in cooperation and coordination with the National Board for Small Scale Industries.

#### 3. **RESPONSIBILITIES**

3.1 Assembling and analyse data on technical and financial assistance to Research and Development Institutions by international, regional and bi-lateral organizations.

- 3.2 Evaluate technical and financial assistance projects and to recommend corrective actions.
- 3.3 Assesses needs of local institutions in respect to international, regional and bi-lateral assistance and brings up such need for Ministerial attention.
- 3.4 Organizes and mobilizes as the need will arise Science and Technology support to industry for specific periods under special projects.
- 3.5 Identifies the Science and Technology needs of the Small Scale Industry sector and relates to other Directors of the Industry Division for coordinated technical assistance programmes.
- 3.6 Organizes for dissemination of technical information aimed at promoting technology transfer, acquisition of industrial information, popularization of Science and Technology through publications and other relevant medium.

### 4. ACTIVITIES

- 4.1 Keeps permanent and active contact with Science and Technology institution.
- 4.2 Follows-up Science and Technology developments in industrialized countries and to extract benefit for local industries.
- 4.3 Identifies ways and means to adjust Technologies to appropriate standards for use by local industries.
- 4.4 Keeps close contact with appropriate technology institutions in industrialized countries and studies such technologies for eventual transfer to domestic industries.
- 4.5 Acts as the focal point for all technical and financial assistance activities in the field of Science and Technology.

# 5. AUTHORITY

- 5.1 Organizes his work programme in accordance with objectives and functions of the Science and Technology sector of the Ministry.
- 5.2 Appraises the Assistant Directors and other staff at least annually as laid down in respective rules and regulations.
- 5.3 Comments on personnel action regarding his staff before implementation.

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University Degree in Science and Technology. At least three years of practical experience in application of Science and Technology.

# No. 8.1

# 1. STRUCTURE

- 1.1 Position Title: Deputy Director. Personnel and Information Media. Personnel, Training and Library
- 1.2 Immediate Supervisor: Chief Director
- 1.3 Immediate Subordinates:
  - i. Assistant Director.
- 1.4 Associates: All Deputy Directors of the Ministry

# 2. OBJECTIVE OF POSITION

- 2.1 To ensure introduction and utilization of modern organization and management methods with the aim to improve the efficiency of the daily work of the Ministry.
- 2.2 To rationalize the flow of information and action within the Ministry.
- 2.3 To study and implement automation and mechanization for repetious work.
- 2.4 To identify bottlenecks or under or not-used human capacities.
- 2.5 To keep close contact with the media and to draft press releases and, on request, speeches, statements and addresses for the top management of the Ministry.
- 2.6 To carry responsibility for an orderly maintained library and records system.
- 2.7 To ensure that personnel policies in the Ministry related to employment, personnel records, training, wages and salaries are translated into effective management practices.
- 2.8 To ensure the interest of the Ministry in the availability of all services necessary to support the administrative and operational functions of the Ministry.
- 2.9 To develop and maintain efficient system for annoucement of vacancies and selection of new employment.
- 2.10 To ensure just treatment of staff regarding promotion.

# 3. **RESPONSIBILITIES**

- 3.1 The Deputy Director as a permanent duty will study the flow of work within the Ministry and will recommend organizational and management adaptions as are necessary.
- 3.2 He will identify bottlenecks and recommend remedies, including transfer of staff.
- 3.3 He will update when necessary the organizational chart of the Ministry.
- 3.4 He will test automation and mechanization equipment and will comment on their usefulness.
- 3.5 Will conduct manpower studies in order to secure a just distribution of work.
- 3.6 He will screen and approve job descriptions and will publish them for recruitment.
- 3.7 The Deputy Director will screen candidates and will submit them to the supervisor concerned for comments.
- 3.8 He will handle the appointment procedure.
- 3.9 He will establish at the beginning of the year an annual leave list.
- 3.10 Will propose training for new-comers and advanced courses as well as refresher courses for existing staff.

# 4. ACTIVITIES

- 4.1 To guide and control the staff of two Assistant Directors.
- 4.2 To improve the flow of information and work within the Ministry.
- 4.3 To test new office equipment before it may be procured.
- 4.4 To secure that all written. cral or visual important information regarding the work of the Ministry or Ghanaian industry come to the knowledge of the top management.
- 4.5 To issue press releases, cleared by his/her Director.
- 4.6 To complete the library with required literature.
- 4.7 To conduct interviews with candidates, to be laid down in interview reports.
- 4.8 To check curriculum vitae on their validity.
- 4.9 To maintain seniority list for promotion.

# 5. AUTHORITY

- 5.1 May request any information on staff and their workload from any office of the Ministry.
- 5.2 Has access to all correspondence of the Ministry.
- 5.3 Recommend for appointment, transfer or dismissal any staff below Assistant Director.
- 5.4 Appraises at least annually his immediate subordinates in accordance with laid down policies and regulations.

# 6. QUALIFICATION

First University degree in Business administration, Law or Social Science. Postgraduate courses in organization, Management and/or Fersonnel administration favoured. A minimum of ten years experience in Government positions or industry necessary.

# No. 8.1.3

### 1. STRUCTURE

- 1.1 Position Title: Senior Officer, Organization, Management and Training
- 1.2 Immediate Supervisor: Deputy Director, Personnel/ Information media
- 1.3 Immediate Subordinates: Nil
- 1.4 Associates: Secretaries of the Ministry.

### 2. OBJECTIVE OF POSITION

- 2.1 To ensure introduction of modern organization and proper management methods with the aim to improve the efficiency of Ministry.
- 2.2 To rationalize the flow of information and action.
- 2.3 To be responsible for recommendations on distribution of work.
- 2.4 To elaborate Job Descriptions and draft them.

### 3. RESPONSIBILITIES

- 3.1 Studies and monitors the work performance of all units of the Ministry.
- 3.2 Identifies bottlenecks.
- 3.3 Identifies unused or under-utilized human resources and leads them to better economic use.
- 3.4 Studies and recommends the use of mechanized or electronic office equipment and appropriate management methods in the interest of balanced use of personnel.
- 3.5 Updates when necessary the organizational chart of the Ministry while making suggestions for better distribution of work, functions and staff.
- 3.6 Conducts manpower surveys in order to secure a just distribution of workload among the staff.
- 3.7 In cooperation with Personnel Administration and the Chief Director and the person concerned, draft job descriptions before they will be channeled to recruitment.

- 3.8 Advises on their rationality before new management methods will be implemented or new office equipment will be procured.
- 3.9 Studies, initiates and implements productivity improvement schemes in the Ministry.
- 3.10 Secures appropriate treatment of confidential correspondence and other confidential matters.
- 3.11 Contributes organizational and management advice to studies and measures of the Directors for Research, Policy, Planning, Monitoring, Programming, and Operations of the Division of Industry.
- 3.12 On request conducts organizational and management studies in parastatal and private industries, if supported by the Division of Industry.
- 3.13 Studies and recommends system for filing and system for the Central Registry.

First Degree in Business Administration, Social Science or Law. Postgraduate training in Organization and Management necessary. A minimum of three years experience in Government positions in similar fields or equivalent in industry.

#### No. 3.2

### 1. STRUCTURE

- 1.1 Position Title: Deputy Director, Budget, Finance Public Enterprises Coordination
- 1.2 Immediate Supervisor: Director, Administration, Finance Information & PE Coordination
- 1.3 Immediate Subordinates:
  - i. Senior Budget Officer
  - ii. Senior Accountant

#### 2. OBJECTIVE OF POSITION

- 2.1 To initiate, receive and compile estimates of the budget for the following fiscal year.
- 2.2 To coordinate and consolidate budgetary proposals as to guidelines and established priorities.
- 2.3 To initiate submission of the proposed budget to the Ministry of Finance and Economic Planning.
- 2.4 To participate in the negotiations of the proposed budget with the Ministry of Finance and Economic Planning.
- 2.5 To implement the new budget.
- 2.6 To ensure the observance of financial policies and procedures for correct and economic utilization of approved funds.
- 2.7 To maintain adequate records to aid the preparation and submission of financial reports of the Ministry.
- 2.8 To ensure that revenues received are supported by certified source documents.
- 2.9 To ensure the elimination of waste, unearth irregularities and other malpractices on award of contracts.

#### 3. **RESPONSIBILITIES**

- 3.1 Receives from the Ministry of Finance and Economic Planning guidelines and priorities for the preparation of budget estimates for the coming fiscal year.
- 3.2 Invites from all units of the Ministry proposals for the new budget and sets deadlines.

- 3.3 Coordinates and negotiates proposals with the Deputy Directors concerned as to guidelines and priorities.
- 3.4 Consolidates the proposed budget for further processing by the Director, Administration Finance and Information.
- 3.5 Participates in negotiations with the Ministry of Finance and Economic Planning.
- 3.6 Allocates approved funds of the budget to the Directors concerned.
- 3.7 Ensures proper disbursements in accordance with established financial rules and regulations.
- 3.8 Ensures application of tenders in accordance with regulations.
- 3.9 Maintains system design to ensure that funds received are accompanied by certified source documents; and all expenditures incurred are supported by appropriate and duly authorized documents.
- 3.10 Avoids any possibility for fraud or other malpractices.
- 3.11 Will be available for any other task within his competence entrusted to him by the Director, General Administration. Finance, **PE Coordination**.

### 4\_ ACTIVITIES

- 4.1 Will be apart from his supervisors the sole Person for budgetary and financial operations.
- 4.2 Leads the financial resources of the Ministry to most economic and efficient utilization.
- 4.3 Will secure the channeling of all financial resources to the right person.
- 4.4 Prepares and submits financial reports to the Director, Administration, Finance, PE Coordination for further processing.

# 5. AUTHORITY

- 5.1 Is authorized to receive revenues for activities of the Ministry.
- 5.2 Is authorized to approve expenditures.
- 5.3 Appraises at least annually his immediate subordinates in accordance with laid down policies and regulations.
- 5.4 Comment on all action concerning his staff before implementation.

5.5 If authorized by the Director, he may delegate certain functions of financial management to the Assistant Director of Budget and Finance.

# 6. QUALIFICATION

University degree in Public Administration, Eusiness Administration or the equivalent with posgraduate experience in Accounting or Financial Management. At least six years experience in similar Government or Industry is required.

### No. 8.2.2

### 1. STRUCTURE

- 1.1 Position Title: Senior Budget Officer
- 1.2 Immediate Supervisor: Deputy Director, Budget, Finance and Public Enterprises

Coordination

- 1:3 Immediate Subordinates: Nil
- 1.4 Associates: All Senior Accountants

#### 2. OBJECTIVES

- 2.1 To assist the Director in preparation of Budgets.
- 2.2 To screen and compile proposed estimates for the Budget proposal.
- 2.3 As far as authorized by the Director, to act on his behalf on all financial matters.
- 2.4 To keep accounts in accordance with established procedures.

### 3. RESPONSIBILITIES

- 3.1 Drafts instruction for submission of budgetary estimates addressed to all Directors of Ministry of Industries, Science and Technology through the Director of Administration, Finance and PE Coordination for approval of Chief Director.
- 3.2 Examines estimates for conformity with guidelines and priorities of the the Ministry of Finance and Economic Planning as well as priorities of the Ministry.
- 3.3 Compiles all estimates as approved by the Chief Director, into one document to be submitted to the Ministry of Finance and Economic Planning for consideration.
- 3.4 Prepares financial and budgetary transactions of the Ministry for approval of the Director.
- 3.5 Assists preparation of budget estimates of Institutes under the portfolio of MIST.

# 4. QUALIFICATION

Degree/Diploma in accountancy. Minimum of three years experience in accountancy.

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### No. 8.3.2

#### 1. STRUCTURE

- 1.1 Position Title: Senior Industrial Development Officer, Public Enterprises Coordination.
- 1.2 Immediate Supervisor: Deputy Director, Budget, Finance and Coordination of State Owned Enterprises.
- 1.3 Immediate Subordinates: Nil

1.4 Associates: All Industrial Development Officers dealing with economic or technical aspects of industries.

### 2. OBJECTIVE OF POSITION

2.1 To monitor the performance of State Owned Enterprises.2.2 Prepare monthly report covering:

i.	raw material supply
ii.	items under production
iii.	quantity of production
iv.	sales locally and exports
v.	personnel movement
vi.	unused capacities, if any
vii.	reasons for unused capacities
viii.	any other specific problems

2.3 To accept and channel requests for technical assistance.2.4 To channel requests for economic or technical studies.

## 3. <u>RESPONSIBILITIES</u>

2

- 3.1 Monitors the performance of State Jwned Enterprises by reviewing quarterly and annual company reports.
- 3.2 Studies State Owned Enterprises performance and prepares monthly reports of factual nature to PNDC Secretary through the Director with appropriate comment and recommendations.
- 3.3 For technical assistance to State Owned Enterprises, drafts or screens job descriptions in cooperation with the factory staff and submits the request to the Director of Programming, Monitoring and Evaluation for action.

- 3.4 Reviews terms of reference for subcontracting arrangements and other major financial transactions of the companies.
- 3.5 Programmes technical assistance available to the Ministry of Industries, Science and Technology to benefit S.O.E.s in their rehabilitation and/or restructuring.
- 3.6 Accepts and screens requests for economic and technical studies for submission to the Chief Director, Industry.

Bachelor degree in economics or Law or Social Sciences. A minimum of five years experience in Government or industry.

#### No. 8.4.4

### 1. STRUCTURE

- 1.1 Position Title: Superintendent Property, Inventory and Equipment.
- 1.2 Immediate Supervisor: Deputy Director, Budget Finance and PE Coordination.
- 1.3 Immediate Subordinates: Technician
- 1.4 Associates: Similar Officers in Government Ministries.

# 2. OBJECTIVE

- 2.1 To plan, provide and secure all administrative services to the Ministry and its staff.
- 2.2 To secure the physical infrastructure of the Ministry's building, including access ways, parking lots, courtyard and lawn.
- 2.3 To secure a clean building.
- 2.4 To plan and assign office space with the approval of the Director of Finance, Administration, PE Coordination.
- 2.5 To furnish offices and secure proper treatment.
- 2.6 To assign office equipment to personnel having the necessary training for their proper utilization.
- 2.7 To establish a servicing programme for office equipment.
- 2.8 To establish a system for equipment control in order to avoid theft.
- 2.9 To initiate and conduct purchasing within established rules and regulations.
- 2.10 To secure safety.
- 2.11 To secure proper messenger services.
- 2.12 To operate the Central Registry.
- 2.13 To be responsible for registration of incoming and outgoing mail and to dispatch mail.
- 2.14 To maintain proper and secure storage.
- 2.15 To secure transporation.

# 3. **RESPONSIBILITIES**

- 3.1 Directs the flow of general services to all units of the Ministry.
- 3.2 Secures safety of the building, its records and personnel.
- 3.3 Allocates individual secretarial services and establishes, operates and controls typing pools.
- 3.4 In cooperation with the Director of Administration, Personnel, Training, Media and Library be responsible for the operation of the Central Registry.
- 3.5 Secures proper handling of incoming and outgoing mail.
- 3.6 Furnishes offices and secures careful utilization of furniture.
- 3.7 Introduces system to secure furniture and equipment against theft.
- 3.8 Conducts purchasing within the established budget and observes established rules and regulations on purchasing.
- 3.9 Secures storage.
- 3.10 Be responsible for transportation, control of drivers, their log books, servicing and maintenance and repair of vehicles.

### 4. ACTIVITIES

- 4.1 Will supervise, advise and direct all general administrative staff.
- 4.2 Will plan and take measures to improve the flow of information and material within the Ministry.

# 5. AUTHORITY

- 5.1 Will be the supervisor of all general services staff.
- 5.2 He will at least annually appraise his staff.

5.3 Will comment on any personnel action before implementation.

### 6. QUALIFICATION

Diploma/Certificate from Polytechnic or the Ghana Institute of Management and Public Administration or equivalent. A minimum of five years of practical experience in similar positions in Government.