



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

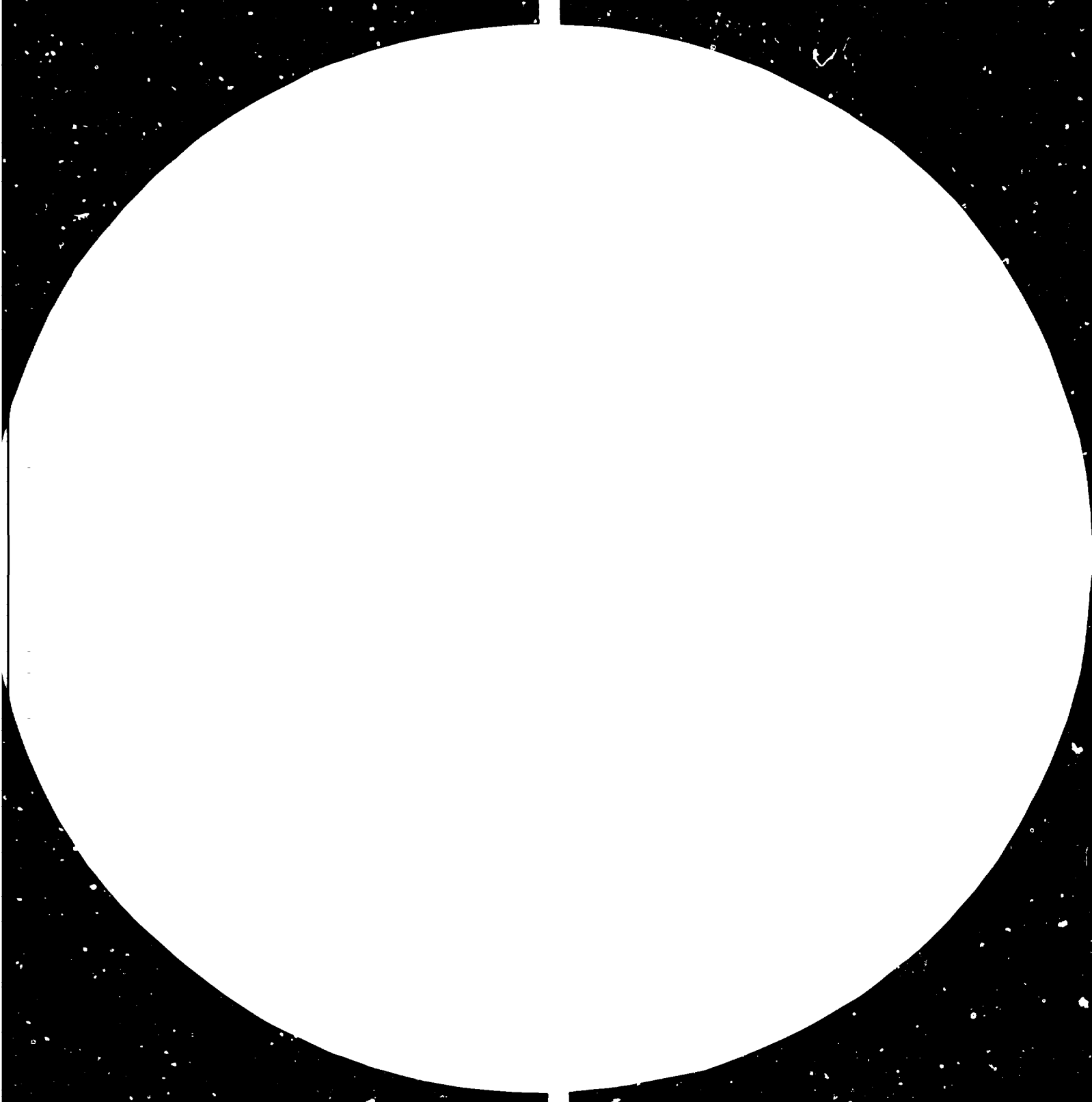
FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





2.8 2.5





Distr.
LIMITED

ID/WG.343/1
15 July 1981

ENGLISH

United Nations Industrial Development Organization

Expert Group Meeting on the Changing Role
and Function of the Public Industrial
Sector in Development

Vienna, Austria, 5 - 9 October 1981

PUBLIC INDUSTRIAL ENTERPRISES IN
DEVELOPING COUNTRIES

An Issues Paper*

Preliminary Version**

by

Praxy Fernandes***

* The views expressed in this paper are those of the author and do not necessarily reflect the views of the International Center for Public Enterprises in Developing Countries or of the secretariat of UNIDO. This document has been reproduced without formal editing.

** Final version to be issued September 1981.

*** Chief UN Adviser and Team Leader to the International Center for Public Enterprises in Developing Countries, Ljubljana, Yugoslavia.

TABLE OF CONTENTS

A WORD OF EXPLANATION	p. 1
THE BACKDROP	p. 2
I THE CONCEPTUAL BASIS OF PUBLIC INDUSTRIAL ENTERPRISES	p. 6
II INDUSTRIAL GOALS AND POLICIES OF DEVELOPING COUNTRIES AND THEIR IMPACT ON PUBLIC INDUSTRIAL ENTERPRISES	p.13
III THE COMPARATIVE ROLES OF PUBLIC AND PRIVATE INDUSTRIAL ENTERPRISES	p.17
IV ORGANIZATIONAL PATTERNS AND LEGAL STRUCTURES OF PUBLIC INDUSTRIAL ENTERPRISES	p.22
V PLANNING IN PUBLIC INDUSTRIAL ENTERPRISES	p.26
VI INTERLINKAGES	p.32
VII POLICIES, PRACTICES AND BEHAVIOUR PATTERNS OF PUBLIC AND PRIVATE INDUSTRIAL ENTERPRISES - A COMPARATIVE ANALYSIS	p.36
VIII EVALUATING THE PERFORMANCE OF PUBLIC INDUSTRIAL ENTERPRISES	p.42
CONCLUSION	p.47

A WORD OF EXPLANATION

This paper has a limited though very specific objective. It has been commissioned by the UNIDO Division for Industrial Studies to serve as a framework for an expert group meeting to be held in October 1981 on the subject of "The Changing Role and Function of the Public Industrial Sector in Development". The approach adopted consequently is to present an interlinked matrix of significant issues relevant to the rather complex theme which the expert group is expected to tackle. This paper has no pretensions to be a comprehensive analysis of the involvement of public industrial enterprises in development. Such an analysis will be the task of the expert group. All that I seek to achieve is the setting out, in an explicit manner, of the major issues which need to be explored. This paper will not attempt to provide answers; it will only pose questions.

The expert group has been - I understand - very carefully selected so as to bring together round an international table the concepts and experiences of different parts of the world, of different ideological and strategic approaches, of different environmental atmospheres, and of different disciplines. The experts will not only come from different countries but will reflect the thought processes at policy making and governmental levels, at managerial levels, and from the conceptual world of academia. Hopefully, this composite group viewing the problem from variegated angles will help to throw sharper light on a matter of considerable concern to the developing countries.

THE BACKDROP

It seems abundantly clear that any meaningful examination of the role of public industrial enterprises must seek as its point of departure an overview of the international and national scenes. The public industrial enterprises, which are today expanding both in numbers as well as in the extent of coverage of economic activities, do not function as isolated islands. They work within the specific environments of individual countries and the countries in turn exist within an international framework of relationships. It is therefore impracticable to study the changing role of public industrial enterprises on a purely conceptual or theoretical basis. A far more relevant approach would be to base the analysis on an empirical foundation.

As we approach the closing years of the twentieth century, and indeed the year 2000 is not so far away, one can only view with dismay the appalling state of affairs in the world of today. Apart from the threats to international security, the frightful dangers of nuclear war, political unrest and other distressing pictures in the international scenario, the world community is faced with the situation of gross economic and social disparity which exists in the world community. A few nations of the world, the so called industrialised nations concentrated mainly in the northern hemisphere, seem to have a virtual monopoly of technology, productive capacity, high levels of human skills, reflected consequently in high levels of prosperity, incredibly high per capita incomes, and standards of affluence which could not be dreamt of a few decades ago. These developed countries have of course problems of their own but the nature of these problems such as inflation, social unrest, environmental pollution, and demands for social equity, are problems emerging out of superabundance and excessive prosperity. Contrasted to this picture is the world of developing countries which accounts for 75 per cent of humanity and which presents a canvas of malnutrition, illiteracy,

abysmally low standards of living, intolerable differences between rich and poor, great imbalances between agriculture and industry - (in short, a picture of poverty. Although the developing countries have gained political independence and are sovereign countries with membership of the United Nations, they have not achieved economic independence and their citizens live in conditions of terrifying deprivation.

What can be done to rectify such a position? It is possible to view the question from the angle of the world community or from the more specific national angle. Looking at the problem internationally, there is - to begin with - a recognition that the great gulf between the rich and poor nations of the world cannot provide a viable framework for a peaceful world. It contains the seeds of international tension and conflict and indeed, it is also recognised that the continued prosperity of the industrialised countries cannot be maintained for long on the backs of an impoverished majority. This world-wide recognition of the nature of the problem has given rise to specific and organised efforts to remedy the situation. These include the attempts, so far not so successful, of developing a North-South dialogue, the contributions which UN and international agencies like UNCTAD, UNESCO, FAO and UNIDO are constructively providing, and above all, the adoption of the concept of a New International Economic Order.

Whatever the value of these international initiatives may or may not be, the developing countries are now deeply conscious of the fact that the salvation of their countries lies in their own hands. Consequently, irrespective of ideologies and environmental differences, all developing countries are consciously pursuing strategies, plans and programmes to raise living standards in their countries and hopefully to bring about a measure of social and economic justice. The adoption of such national plans involves a complex set of inputs including conceptualization of strategic approaches, mobilization of investment resources, transfer and development of

technology, building professional, administrative and technical cadres and raising the general level of human skills. An essential ingredient in these planning strategies is the idea of industrialization.

It is generally recognised that the problems of developing countries stem from their imbalanced overdependence on agriculture and primary products, on the absence of an industrialised infrastructure, on low technological levels, and on the consequent inability of these economies to keep pace or even to survive in a fast moving world. While it would be simplistic to believe that a total faith in industrialization would be an answer to the question of development, it can certainly be said that the induction of an industrialization process can provide a spur to national advancement. All national plans therefore tend to rely very heavily on the instrument of industrialization.

Assuming this to be the approach, the developing countries are then faced with the issue of choosing the operating instruments for the industrialization process. These instruments can be largely categorised into three possibilities:

- the direct activity of the state through the traditional governmental apparatus
- the stimulation of private effort
- the creation of public industrial enterprises.

Very clearly a purposeful analysis of processes of industrialization would need to examine all these three instruments. Indeed, both the public and the private industrial enterprises have to work within the strategic framework of the state, the laws, the regulations, and the policies of government, and in turn public and private enterprises have close and sensitive interrelationships. While noting this very obvious proposition, the concentration in this paper and I believe in the expert group meeting will be on the public industrial

enterprises and their past, present and future roles.

To obtain a true picture of what public industrial enterprises are, what they are expected to do, and what they in fact actually contribute, it would be necessary to reflect on a series of major areas of consideration:

- the conceptual basis of public industrial enterprises
- industrial goals and policies of developing countries and their impact on public industrial enterprises
- the comparative roles of public and private industrial sectors
- organizational patterns and legal structures of public industrial enterprises
- planning in public industrial enterprises
- the question of interlinkages
- a comparative review of policies of public and private industrial enterprises and their impact on development
- the evaluation of the performance of public industrial enterprises.

I THE CONCEPTUAL BASIS OF PUBLIC INDUSTRIAL ENTERPRISES

A fuller understanding of the conceptual basis of public industrial enterprises calls for an examination of the total concept of public enterprises. The industrial enterprises within the public sector (the term 'industrial' is used within the jurisdictional frame of UNIDO, namely it covers industries which are directly involved in the manufacturing process and excludes the broader category of industrial effort arising out of the infrastructural sector, public utilities and the mining and extractive industries) are only a part of a wider family of enterprises in the public sector. The full range of public enterprises which is ever-widening in scope and intensity includes, inter alia:

- enterprises providing public utilities such as electricity, water supply, gas, and public transportation
- infrastructural industrial enterprises particularly those in the 'heavy sector' such as oil exploration, mining, metallurgy, steel production, petrochemicals,
- manufacturing industries, part of which are within the heavy infrastructural area and part of which cover the production of intermediate and finished goods
- consumer based industries
- service industries
- banking and financial institutions.

While we may seek to assess specifically the conceptual basis of the so called 'public industrial enterprises', it must be appreciated that in terms of national 'philosophies', national strategic approaches, and the business intervention of governments, the concept as such would be equally valid for the entire range of public sector business operations. The public industrial enterprises therefore must be viewed as a component element in a wider exercise. Indeed, it is not even possible to comprehend the strategic or conceptual approach to the establishment of public industrial enterprises without viewing them as an integral part of a broader perspective of

public sector business enterprises and in turn of viewing the family of public enterprises as an integral part of the wider perspectives of the national developmental strategy.

Subject to the above caveat, one could pose some basic questions:

- What are public industrial enterprises?
- Why indeed are they set up?
- What is the particular rationale for choosing sectors of the national economy for the business intervention of public industrial enterprises?
- Are these enterprises viewed as business concerns or are they viewed as instruments of national policy, or perhaps both?
- How does one reconcile the characteristics of business enterprise with the characteristics of instrumentalities of national endeavour?
- How does one reconcile the intrinsic entrepreneurial nature of industrial enterprises with the more political and social approach of development strategy?

Questions such as these may sound rather naive and it would be natural to assume that the answers to these questions are indeed known, although they might perhaps differ from country to country. There is reason to have some misgivings about the absolute clarity underlying the conceptual basis of public industrial enterprises. Indeed, the state of current literature on the subject of public enterprises has largely been concentrated on themes arising out of these presumably simple questions and it would be overoptimistic to assume that scholars or policy makers have found all the answers.

In a most provocative and stimulating paper prepared by Mr. Javed Ansari, Special Consultant to the UNIDO Division for Industrial Studies, which is one of the resource papers for the expert group, the thrust of the approach lies in the search

for the originating impulse of public industrial enterprises and indeed for the basic motivation for its very creation. Mr. Ansari views the current existence of public industrial enterprises as arising out of two separate streams of thought. The first of these is the neoclassical school. This approach in a sense views public enterprises as a "necessary evil". The fundamental structure of the state and the approach to national management is based on classical Ricardian principles. The setting up of public industrial enterprises then is motivated towards the correction of market imperfections and the establishment of Pareto-type optimality. This school of thought would consequently rationalise the state's intervention into direct business activities in a range of situations such as:

- the takeover of natural monopolies
- entry into areas of strategic concern
- entry into long gestation, low profitability sectors which do not attract the private sector
- providing a competitive element to private enterprise
- taking over sick units of private enterprise.

The neoclassical school is well represented in the industrialised countries where there has been a substantial growth of public industrial enterprises. It is also to be found in a number of developing countries practising what is described as 'mixed economies'.

The second broad school of thought flows from the marxist or socialist tradition which Mr. Ansari describes as the neo-Kaleckian school (after a very distinguished Polish economist). The approach here is fundamentally different. The very theory of the state presupposes that the means of production will be in public hands. The public industrial enterprises therefore are viewed as instruments of social transformation. Their role is not confined to the narrow parameters of classical business operations but is designed to seek a complete

change in society. Given such a view, the question of allocating areas for public industrial enterprise does not indeed arise. They occupy virtually all sectors of the economy. This appears to be the picture in the Soviet Union, the People's Republic of China, the Eastern European socialist countries, and some developing countries such as Iraq, Algeria and Tanzania.

Mr. Ansari himself concedes that the bifurcation into the two schools of thought is "a simplistic, arbitrary and somewhat unsatisfactory classification". This is indeed so because in the course of the last few decades there have been qualitative changes in approach on both sides of the fence. The concept of social responsibility and social obligations is now increasingly accepted in the organization and management of public industrial enterprises in the so called "neoclassical zones". Correspondingly, there is a strong move towards market orientation in the socialist countries and the acceptance of concepts like capital, interest, profitability and consumer demand, which prima facie were unfamiliar to the pure marxist tradition.

Pursuant to these two secular trends, it would appear that in practical terms the concept of the public industrial enterprise, as judged from its actual behaviour, may not in fact be as fundamentally different as the academicians might like to believe.

A recent attempt to examine the critical question of the concept, definition and classification of public enterprises was initiated by the International Center for Public Enterprises in Developing Countries, an institution of an intergovernmental character consciously set up by the developing countries themselves to examine the organizational and management problems of public enterprises. The findings of the Tangiers workshop have been placed before the expert group. The Tangiers group looked at public enterprises through the very words constitut-

ing its nomenclature. The word 'public' implies a public dimension which includes public ownership, management and control as well as the more complex idea of 'public interest'. It is the nature of this public dimension which tends to differentiate a public enterprise from a private enterprise. On the other hand, the word 'enterprise' positively connotes a business dimension which includes classical concepts like production of goods and services, marketing of such goods and services at a price, returns on capital employed, and commercial accounting systems such as balance sheets and profit and loss accounts. Clearly, the enterprise dimension distinguishes the organizations described as public enterprises from other activities of the state or public institutions which did not have a business character.

The Tangiers group felt that the conceptual basis of public enterprises (and this would apply in equal measure to the narrower confines of public industrial enterprises) necessitates a distinctive combination of these two dimensions, public and enterprise. The absence or weakening of anyone of the dimensions would tend to destroy the basic character of public enterprises. Thus, a total neglect of business aspects in the light of public interest considerations would convert the organization into a department of government or a non-commercial public institution. Alternatively, an overemphasis on business operations with no regard for public or social considerations would convert the organizations into 'private' companies publicly owned.

The other significant proposition made by the Tangiers group is that a true understanding of the conceptual basis of public enterprises could not be arrived at in general terms. The nature and thrust of various public enterprises depends considerably on the particular framework of their activity. Consequently, the appreciation of the concept and the nuances would only emerge through an examination of public enterprises on a taxonomical basis. The elements of taxonomy

suggested by the Tangiers group included:

- primary intents and purposes
- legal status
- organizational structure
- socio-political background
- genesis and origin
- market situation
- technological base
- financing pattern
- economic sector
- decision making system.

While analysing these different classificatory positions in which public enterprises could find themselves, the Tangiers group was of the view that the very concept and approach of the public enterprise would itself be subjected to modifications depending upon the package of situations in which it was specifically placed.

Mr. Ansari's resource paper and the findings of the Tangiers group provide base material on which it is possible to evaluate and analyse some of the important issues underlying the conceptual basis of public industrial enterprises. Amongst them:

- Is it a practical proposition to view the concept of public industrial enterprises as emerging from two fundamentally and philosophically different schools of thought?
- Is the practice and behaviour pattern of public industrial enterprises tending to show common features irrespective of the original philosophical impulse?
- Is the idea of a public industrial enterprise prima facie a contradiction in terms attempting as it does to combine in one organization the goals of national and social policy and the objectives of business operations?
- Is it possible to reconcile the public and the enterprise dimensions of public industrial enterprises?

- What impact have taxonomical questions on the conceptual basis, strategy and behaviour of public industrial enterprises?

II INDUSTRIAL GOALS AND POLICIES OF DEVELOPING COUNTRIES AND THEIR IMPACT ON PUBLIC INDUSTRIAL ENTERPRISES

Having examined the theoretical and conceptual basis of public industrial enterprises, it is now necessary to turn to the more pragmatic matter of the interrelationship between the formulation and implementation of national policies and strategies of development and the corporate policy and management of public industrial enterprises. Clearly, there is a sensitive and intimate nexus between the perspective and direction of the national strategy on the one hand and the goals, objectives, operations, and behaviour of the public industrial enterprises on the other. One has to view the enterprises as a component element in a wider and more significant national exercise.

It will be noted that amongst the taxonomical components suggested by the Tangiers group elements such as the socio-political background, the decision making systems, the genesis and origins and the primary intents and purposes were enumerated. While undoubtedly the fundamental goals of development planning are relatively common to developing countries and include some generally stated aspirations such as the removal of poverty, the raising of national income levels, the search for social and economic justice, the building up of local skills, regional development and industrialization, pathways and strategies adopted for achieving these goals show wide divergencies. The strategic developmental approaches of socialist oriented countries would tend to be qualitatively different from those of mixed economies or free enterprise systems.

When we speak of development strategy which forms the basis of national planning, we are looking at the total national perspective of advancement in a variety of areas including agriculture, industry, the infrastructure, services, education, health, and so forth. Here again a strategy of indus-

trialization can only be viewed as a component element integrated within the overall developmental approach. While it would be impossible in a paper of this type to indicate all the parameters of national planning (and indeed this would take us beyond the terms of reference of the expert group), it is - I believe - necessary to identify some of the major components for the specific purpose of understanding the impact which they have on public industrial enterprises. Illustratively one could raise the following questions:

- What is the philosophical and political orientation of the national system? Is it aiming at a socialist pattern of society, a mixed economy or essentially a free enterprise economy?
- What is the current level of development (These levels indeed differ very widely in the developing world)?
- What are the basic strengths of the country in the shape of natural resources, raw materials, finances, technology, human skills?
- What are the growth targets aimed at?
- What is the relative position of agriculture to industry?
- Is the national strategy agro-based, industry-based or a combination of both?
- Is the country aiming at productive capability and advancement of the pool of human skills or is it aiming at productive capacity and the increase in the availability of goods and services?
- What is the system of national planning? Is it comprehensive or indicative?
- Who makes national plans? Is it a centralised function or a participative process?
- What is the range of policy measures, regulations and incentives devised for promoting the national strategy?
- What is the comparative role of direct government action, private endeavour and public enterprise?
- Is the role and function of public industrial enterprises conceptualised and articulated in terms of clarity?

These issues and questions are all susceptible of different answers creating automatically very different patterns of national organization and management. One thing however appears to be abundantly clear - the system itself must provide a reasonable relationship between the goals and objectives of national planning and the corporate goals and objectives of public industrial enterprises. The most fundamental issue therefore is to examine how this interconnection is established. Are the corporate strategies and goals of public industrial enterprises, their investments, their management practices, and their policies, directly derived out of specific elements in the national plan? Or is it possible that the national plan itself is conditioned and influenced by the corporate plans and strategies of public industrial enterprises?

The issues arising out of the relationship between enterprises and the government are of a crucial nature. It is perhaps the misinterpretation of the nature of this relationship that is the root cause of some of the intractable problems of public industrial enterprises. Here are some relevant issues for examination:

- In evolving a national planning strategy, are the goals and objectives of public industrial enterprises clearly defined as a family of institutions?
- Are the specific goals and objectives of individual public industrial enterprises meaningfully defined?
- What impact have the national goals and strategies on the corporate plans of the enterprises?
- What impact do they have on management policies and practices?
- What conditioning effect do they have on attitudes and behaviours of managers and workers in public industrial enterprises?
- Are the financial and commercial goals of the public enterprises decided upon by the public authorities?
- Are the social obligations and particularly those responsibilities which promote industrialization in the country specifically allocated to the enterprises?

- How are the exercises in relative priorities of objectives conducted?
- What is the mechanism of investment decision making and the basis of investment criteria?
- How are resources allocated to different industrial sectors and to different public industrial enterprises?
- What is the financing pattern and the debt / equity ratio of the public industrial enterprises?

III THE COMPARATIVE POLES OF PUBLIC AND PRIVATE INDUSTRIAL ENTERPRISES

Having examined the conceptual basis for public industrial enterprises and having reviewed the interconnections between national planning strategies and the organization and management of the enterprises, we may now turn attention to another crucial factor which seriously affects the viability and the efficacy of a comprehensive policy of industrialization. I refer to the relationship between public and private industrial enterprises. The importance of this phenomenon arises because, irrespective of political and ideological systems, in virtually all countries, both instruments are at work. Political theorists attempt to classify countries as those which are socialist and those which are capitalist. This sort of classification is purely a text book approach. In point of fact, there is in existence no 'pure' socialist state in the sense of a state which has no element of private enterprise not can one find a pure capitalist state in the sense that there is no public enterprise. Even the most capitalist of capitalist societies has a substantial element of public enterprise and the most socialist of socialist countries has varying percentages and elements of private enterprise. Clearly therefore, all countries - and certainly this can be said of the developing countries - are in fact mixed economies containing varying proportions of public and private endeavour.

The UNIDO Division for Industrial Studies has provided some excellent documentation on the comparative position of public and private industrial enterprises in the various developing countries. This has been made possible through the issue of a comprehensive questionnaire to the developing countries and through the very positive response which was received. The questionnaire survey provides very substantive statistical data on the actualities of public and private investment in the industrial sector and indicates the comparative share of the two sectors in each country. While certainly this factual data

is of considerable relevance to the consideration of the changing role of public industrial enterprises and while it will also serve as useful material to academics and research workers in this field, I am of the view that we would have to read between the lines to interpret the data and the implications thereof.

Firstly, it would be necessary to analyse the actual relationship between the adoption of particular ideological and strategic systems to the volume and quantum of investment in the public industrial sector. This would enable us to ascertain whether or not the declared intentions of a strategic approach are in actuality reflected in the share of the industrial sector which is held by the public industrial enterprises. It is noticeable and is a rather curious phenomenon that countries with very divergent ideologies and philosophies appear to have very similar percentages of public industrial investments. This is a phenomenon which calls for some plausible explanation.

Secondly, a more correct picture of the public industrial enterprise situation can only emerge through an examination of inter-temporal trends. This would mean that statistical figures of investments in the public industrial sector and its share of the national economy can only be understood if they are viewed within a timeframe. The statistics should therefore cover a period of years at least a decade in order to understand the dynamics of the growth or otherwise of public industrial enterprises. Does the graph show a continuously upward curve? Has it stabilised at an equilibrium level? Does it per chance show a declining curve?

Thirdly, there would be a better understanding through studies of data on a sectoral basis. It is not so much the total quantum of investments in the public industrial sector which matters as the manner in which these investments are made and their particular sectoral composition. Do the figures

reveal any defined pattern or common tendencies among the developing countries? Do they show that the public investments are largely in infrastructural activities, in the heavy engineering areas, in long gestation and low profitability sectors? Do they as a counterpart show the preponderance of private investments in intermediate and consumer goods? In short, does the pattern which emerges indicate that the activities of the public industrial sector are concentrated at the earlier stages of production and the investments of the private sector at the later and more finished stages of production? Alternatively, does it show investments of both sectors at each stage in the spectrum of economic activity? What are the implications of these various alternative positions?

Fourthly, it would be of interest to examine whether any regional trends can be seen from these comparative figures. Is there a reasonable uniformity in the pattern of investment throughout the developing world or are there sharp variations from the Latin American situation to the West African situation or from South Asia to South East Asia? Is there a recognisable interlinking between the social and public policies to be found in these various regions to the quantum of public investments?

Fifthly, and indeed this is the most critical issue for consideration - is it adequate to examine only the quantitative figures or is it of greater significance to look at the qualitative aspects of the situation? No doubt, the quantitative dimensions of public versus private investments in the industrial sector do tend or at least should tend to reveal the focus and direction of the public policies. But what is of equal importance is the nature of the interlinkage which is perceived by the public authorities between the two sectors. This interrelationship could take various alternative patterns reflecting alternative strategic options. Illustratively,

here are some alternative scenarios:

- a structured legal situation where the areas of public enterprise investment, private enterprise investment and common areas are defined and prescribed by state regulation (as in the case of the Industrial Policy Resolutions of the Government of India)
- a situation where the dividing lines are not so rigidly drawn and where the comparative growth of the two sectors has risen because of entrepreneurial activity in either camp
- a situation where public enterprises are viewed as providing the "backbone" of the economy, the "commanding heights", the infrastructure, and the strategic areas whereas private enterprises are viewed as business companies operating in downstream activities
- a situation of monopoly marketing conditions for public enterprises and competitive marketing conditions for private enterprises or monopoly conditions for both in different sectors of the economy or competitive conditions for both in all sectors of the economy
- a situation where private enterprises are viewed as subsidiaries and ancillaries to major public enterprises who assume, so to speak, a "godfather role" or a situation where there is parity of relationship and an atmosphere of equal participation.

My brief point is that issues of this nature which in fact are truly reflective of national policy may not necessarily emerge with clarity from quantitative statistical data. A true interpretation of the changing role and functions of the public industrial enterprises would necessitate such an examination.

Keeping in mind this background, the following broad issues need to be considered:

- How does the pattern of investments in public industrial

enterprise reflect national ideologies and strategic approaches?

- Is there any visible trend over the years which indicates the growth or otherwise of the public industrial sector?
- Does any pattern emerge of sectoral shareout between the public and private sectors, and if so, which are the preferred areas of public investment?
- Does any regional pattern of growth of public industrial sector emerge from statistical data?
- How are the qualitative relationships between the public and private sector determined and what is the nature of this relationship?

IV ORGANIZATIONAL PATTERNS AND LEGAL STRUCTURES OF
PUBLIC INDUSTRIAL ENTERPRISES

One of the important propositions made by the Tangiers group was that the behaviour patterns, policies and practices of public enterprises would be to a very great extent conditioned and influenced by the nature of their activity and by other taxonomical factors. Among these taxonomical situations, the Tangiers group had invited attention to the implications arising out of the legal forms and structures of public enterprises and the manner in which they were structured organizationally. The resource paper prepared by Dr. Muzzafer Ahmad has examined with considerable intensity and clarity the ramifications of these legal forms, structures and patterns on the role and function of public industrial enterprises.

While public industrial enterprises are designated by a variety of nomenclatures such as parastatals, state enterprises, public enterprises, public undertakings, public companies, statutory authorities, and so forth, structurally and legally all these categories of public industrial enterprises fall within three broad classes:

- 1 departmental undertakings
- 2 statutory corporations
- 3 registered companies

The departmental undertakings are to all intents and purposes public enterprises. They produce goods or services, they market such goods and services, and they maintain commercial accounts which are capable of indicating whether the operations are at a profit, at break even, or at a loss. However, legally they are not established as autonomous institutions but are operated directly by the government through the traditional mechanisms of ministries or departments. It is generally noticed that the legal form of departmental undertakings tends to be used in infrastructural and service areas such as roads, housing, irrigation, electric power, railways, and road

transportation. Manufacturing activities are not generally placed within government departments with the significant exception of strategic and defence industries.

The statutory corporations are autonomous commercial institutions publicly owned which are established either under an act of parliament or through a presidential decree. A special law provides the legal framework for the organization. In many developing countries this is employed as the preferred option, particularly for larger public enterprises which have major national responsibilities.

Increasingly however the trend is towards the establishment of public enterprises within the normal ambit of the Company Law. Enactments of this sort provide the guidelines, the rules and procedural regulations for companies in the private sector. It has been found expeditious and convenient for state authorities to set up companies under the normal law with the usual Memorandum and Articles of Association. For legal purposes public and private enterprises operating as registered companies under the national Company Law are on an equal footing.

Apart from these basic legal forms, there are a variety of alternative organizational structures which could arise under anyone of the legal forms. They include:

- single unit / single product companies
- multi unit / single product enterprises
- multi unit / multi product enterprises
- holding companies and subsidiaries
- unified companies operating on a divisionalised and decentralised basis.

The growth of entrepreneurship in the public industrial sector could also reflect itself in changing organizational structures. For example, through the process of mergers, divestments,

and horizontal and vertical integration.

Another very important development linked to the question of legal forms is the growth of joint ventures and mixed enterprises with participative shareholding of the state and private enterprise, in many cases the private shareholding being held by foreign transnationals. The structure of such companies - although ostensibly following the traditional legal form of registered companies - has in-built decision making problem areas and even more, in-built strategic tensions.

One can of course list these various legal forms and organizational structures and one could perhaps also attempt a managerial analysis about their comparative effectiveness. The main issues however which do require assessment and consideration are:

- Does the experience of developing countries indicate any particular qualitative difference in the effectiveness of public enterprises depending upon their legal personality?
- Do organizational structures and decision making systems play any significant role in the efficiency of the enterprises?
- Does the collective experience indicate any preferred options either in the shape of legal forms or organizational structures?
- What is the relationship between legal forms and structures to the specific economic sector in which the investments are made?
- Is there any relationship between legal forms and market situations such as monopolies, oligopolies and competitive situations?
- What significance have these legal forms and structures to the question of establishing effective interlinkages within the family of public enterprises and between public enterprises and private enterprises?

- Is there any organic connection between the adoption of a particular legal form or organizational structure to the relationship which the enterprise has with the public authorities?
- What impact have legal forms on the question of the business autonomy of the enterprises?
- What relevance do they have to the discharge of social responsibilities?
- How do these legal forms affect the question of the accountability of the public industrial enterprises?

V PLANNING IN PUBLIC INDUSTRIAL ENTERPRISES

The idea of planning which was originally initiated and practised in the Soviet Union after the revolution of October 1917, was at first viewed with suspicion in countries operating on a laissez-faire philosophy. Planning was feared to be an instrument of authoritarianism and state guidance. The wheel has now turned full circle and the most enthusiastic of planners are the mighty transnational corporations. The art and practice of corporate planning is now universally accepted as the soundest basis for prudent and entrepreneurial management. Industrial enterprises today are planned operations and the larger and more sophisticated these enterprises are, the more complex and the more sophisticated is the planning input.

Before turning to public industrial enterprises, it would be relevant to take a look at what large scale private enterprises mean by the concept of corporate planning. The idea embraces a variety of component concepts:

- the search for corporate identity which often gives rise to the classic question "What business are we in?"
- viewing the affairs of the enterprise in a long term perspective and avoiding fire brigade approaches. This implies that the enterprises are not only seeking profitability but also survival and growth
- an attempt to forecast or rather to interpret the future. This again implies a point of view which feels that the future should not dictate to the enterprise, but the enterprise should condition the future. The tools of risk analysis and sensitivity analysis come in very handy
- an acceptance of a new relationship between the enterprise as a corporate personality and its external environment. The enterprise seeks to examine its interlinkages with all the external factors which affect its survival, growth and profitability such as the government,

- the trade unions, consumers, suppliers, and markets - domestic and external
- a growing realization that even private enterprises whose principal motivation is profits are now called upon for their very survival to accept the new concept of "social responsibilities"
 - a planned and purposeful induction of long term planning processes within the operating disciplines. Thus production management becomes production planning, marketing management turns to market planning, materials management to materials planning, and so forth
 - the attempt to synthesise the plans of individual departments in order to reconcile conflict and to promote an optimised operation
 - an in-built system of performance evaluation with performance criteria understood at all levels of management

There is now ample evidence to show that private industrial enterprises which have consciously followed strategies of corporate planning based on the above stated principles have tended to grow and to blossom in the economic battlefields. The issue which faces us is whether these ideas of corporate planning are valid for the running of public industrial enterprises. It would seem, *prima facie*, axiomatic that the practice of planning should be virtually a religion in public enterprises. If countries as a whole have adopted national planning and consider that planning is a valid strategy of good national management, what doubt is there that a similar approach would be found within the corridors of the enterprises. Curiously enough, this does not appear to be the case. The sophisticated planning mechanisms at national levels are rarely replicated in the boardrooms of the enterprises. One is almost tempted to believe that the existence of strong planning at the government level acts as a disincentive to planning at the enterprise level!

This rather provocative statement requires a word of explanation. It is noticeable that the overcentralization of planning and decision making implied in a system of comprehensive national planning tends to withdraw from the top management of the enterprises the necessary initiatives and decision making authority which they must have if they are to be planners in their own right. They then tend to develop into implementors of plans drawn up at the national level. They become "hewers of wood and drawers of water". Indeed, they are finally judged by the manner in which they carry out the directions of national planning.

The most critical issue to be considered by the expert group and in turn by the planners in developing countries is whether such a situation is desirable and productive or whether it would be far more effective to build into the enterprises the necessary entrepreneurial personality implied in corporate planning. The relevance of corporate planning in public industrial enterprises can be verified by an application of some of the underlying principles enumerated earlier. The question, for example, of "corporate identity" would stimulate a thought process within the enterprises to define and redefine their goals and objectives, their prospects and potentials. The need for long term perspective thinking arises for a very evident economic reason. National plans are usually conceived within a relatively short timeframe, such as five years. As against this, the setting up of a steel industry or a petrochemical complex, the implications of such investments, the future market prospects, and the trends in technology would call for a much longer timeframe of thinking extending to perhaps 15 or

20 years. The question of interrelationships and interlinkages is as valid if not even more relevant to public industrial enterprises as it is to private companies. The conversion of regular management disciplines into planning strategies perhaps holds the key to the effective running of public industrial enterprises. Certainly, the need to synthesise operations and further, to build evaluation systems is being desperately felt.

The second major issue which arises is whether the practice of corporate planning as presently understood in management literature and in transnational corporations is valid in entirety to the case of public industrial enterprises. There is certainly a school of thought which believes that it is so. They argue that a steel plant is a steel plant, a fertilizer unit is a fertilizer unit, and the systems of planning and management can not be different because of the ownership pattern. The only difference, according to them, is that the profits and losses go in one case to the public exchequer and in the other into private pockets. I do not share this view. While I do accept that the technicality of management and planning might be the same, the parameters within which public industrial enterprises operate are indeed very different. Clearly therefore, there is a case for restructuring the strategy of corporate planning to make it meaningful and applicable to public industrial enterprises, taking into account factors such as the multidimensional goals, the strong linkages to national planning, the funding mechanisms and other relevant issues. In this context one should warmly welcome the project undertaken by the ICPE on "Corporate Planning for Public Enterprises" which proposes to tackle precisely this issue.

The third question is a qualitative one of attitude and approach to planning which in a sense is derived out of the perception of what public enterprises are or should be. Let me illustrate this by some specific examples. The approach to technological planning in private enterprises is primarily based on considerations of immediate technical viability and on strict considerations of profitability. This obviously can not be the attitude of public industrial enterprises. They are expected to promote self-reliance in technology, to upgrade local skills, and to make the fullest use of domestic raw materials. They may even have to take conscious decisions of accepting what might appear to be a less profitable option from the strictly commercial point of view because of social profitability considerations. A classical example is the

choice between turnkey projects and the unpackaging of technology. It could very well be that the turnkey arrangement is more commercially profitable but certainly the unpackaging is socially more relevant. Similar considerations apply to the case of locating public industrial enterprises. The standard concept of the "economic location" may give place to broader strategies of regional development. The approach to market planning might also be appreciably different. While a private enterprise may seek to meet market demands and charge what the market can bear, a public enterprise may plan to create market demand particularly in neglected areas and to follow a policy of price stabilization.

The fourth and perhaps most difficult issue arises in the eventuality of a conflict of interests between corporate plans of public industrial enterprises and national plans. The first answer which springs to the mind is that if such a conflict does in fact arise, the considerations of national planning would be paramount. Perhaps this needs further investigation. Firstly, a situation may progressively arise, and there are indications that in many developing countries this is precisely what is happening, that the long term corporate plans of the industrial enterprises in the public sector are themselves determining the composition and direction of national plans. The reason for this has been mentioned earlier, namely that the time frame of investment and corporate thinking in public enterprises is often longer than those of national plans. Secondly, there is a managerial possibility of reconciling the conflict by achieving both the national objectives as well as the enterprise objectives which may seemingly be contradictory. For instance, the considerations of corporate policy may necessitate investments in optimum sized plants whose production is larger than the demand within the country. The national planners may take the view that this would be wasteful and that plant sizes should be adjusted to domestic capacity. The solution evidently lies in seeking markets abroad and thus making the project viable. Another example is the case of

allocation of funds. In terms of national priorities a given quantum of financial resources may be allocated to a public industrial enterprise. The demand of the enterprise arising out of its corporate plans may be substantially more. The possibility exists that the balance of the funding is secured by the enterprise itself either through borrowings in the domestic or external markets.

The gestion of corporate planning for public enterprises is a matter of pivotal concern. The major issues which arise in this context are:

- Is the practice of corporate planning relevant and desirable for public enterprises?
- Does the practice of national planning constrain the entrepreneurial aptitudes necessitated by corporate planning?
- What are the adjustments and modifications to standard corporate planning techniques which need to be made in applying them to public industrial enterprises?
- What are the special attitudes and approaches which the managements of public industrial enterprises require to build up in designing corporate strategies?
- How does one resolve any potential conflict which may arise between the focus and direction of national planning and the initiatives of corporate planning?

VI INTERLINKAGES

In considering the conceptual basis of public industrial enterprises and in reviewing their relationships with national planning systems, we have from time to time been compelled to note the sensitive interlinkages which individual public industrial enterprises have with other factors in the national scene. We have already considered in some depth the interlinkages which exist between the enterprise and the government, the enterprise and the private sector, and the corporate plans of the enterprises with the national plans. It will now be necessary to devote some attention to the system of interlinkages within the family of public enterprises.

It is very clear that the effectiveness, profitability and good performance of public industrial enterprises to a large extent depend upon the efficiency of their internal managements. However, it is equally clear that these efficiency levels are conditioned and influenced by other public enterprises. In most developing countries with the extension of the range of public enterprise activity it is found that a network of interconnections begins to arise between the enterprises. The outputs of one enterprise become the inputs of another. The suppliers of an enterprise are generally other enterprises and similarly, its customers can often be sister public enterprises. This throws a very different light on the nature of the total operations and certainly when considering the overall situation of industrialization and economic development, the nature of these interlinkages, their effectiveness, and the implications they have on the fortunes of individual enterprises need to be investigated.

The interlinkage phenomenon commences at the investment stage itself. The whole system of national planning would require to be masterminded in order to secure a balanced portfolio of investments. For instance, investments in public industrial enterprises in manufacturing industries are dependent upon the

build up of infrastructural support. They require counterpart investments in roads, water supply, and above all, electric power. One is often confronted with the sad story of large scale investments in public manufacturing enterprises lying idle because they are starved for power. Similarly, many manufacturing industries are totally dependent upon counterpart investments for the production of their input supplies. A steel plant requires counterpart investments in coking coal. An aluminium smelter is dependent on balanced investments in bauxite mining. In turn, the success of shipbuilding yards is dependent upon the adequate supply of steel plates. The sensitivity of these interlinkages surely places a very substantial burden on policy makers to ensure that adequate balances are struck in the industrial investment portfolio to provide for a harmonised set of investments.

Assuming that investments are duly and properly interlinked, the actual state of production of the individual enterprises would continue to be an interlinking factor. Thus we move from investment interlinkages to production interlinkages. The low capacity utilizations in one enterprise may be caused by low utilization in others. There is often a great deal of mutual recrimination between public industrial enterprises who blame each other for their respective failures.

The story does not end here. The investment and production interlinkages give rise to pricing interlinkages. Clearly, the cost of production in a public industrial enterprise would tend to be determined in varying degrees by the cost of the supplies and inputs. Since the movement of goods and services between the enterprises is in a horizontal or vertical chain, what in fact tends to emerge is a system of transfer pricing.

A lesser researched area is the human resource interlinkage. Here again individual enterprises are not entirely free to determine the terms and conditions of their own employees - wages and incentives. There are immediate repercussions on

sister public undertakings. Both the trade unions as well as the government are inclined to perceive the managers and workers in the public industrial enterprises as belonging to one family group of public sector employees. Thus irrespective of the capacity of individual enterprises to pay and their current profitability or otherwise, the national view moves towards the rationalization of the wage structure in the total system. This could have dampening effects on the more successful enterprises who are precluded from buying talent which they can afford to pay for and equally places unbearable strains on the weaker enterprises who can not afford to pay. Another related feature of the human interlinkages is the existence or otherwise of mobility of personnel between the enterprises.

Lastly, one needs to scrutinise the nature of organizational interlinkages. Some of the earlier mentioned interlinkage problems are capable of solution through organizational measures such as mergers of interrelated activities, holding company and subsidiaries pattern, joint ventures between two interested public enterprises, long term contractual arrangements, and profit sharing devices. What is of considerable importance in examining these organizational possibilities is the need to inject into the system the impetus of entrepreneurial thinking and incentives for better performance.

Another important aspect of the interlinkage situation is the relationship which the public industrial enterprises build up with various "interest groups". These include trade unions representing the interests of workers, suppliers in the public or private sector, consumers, the environment, and local communities. Each of these interest groups places considerable pressure on the enterprises and make separate sets of demands, not always harmonious to each other. Workers demand better terms and conditions and a share in management, consumers ask for better quality, better deliveries and lower prices, the environment protests against disturbance to its peace and tranquility and to the evils of pollution; local

communities expect the enterprises to give them a helping hand in regional development, in generation of local employment, in stimulation of local industries, and in raising the local standards of living.

It is not easy to disentangle these demands coming from pressure groups from the accepted standards of social responsibility which the enterprises are expected to maintain within the national framework. Furthermore, in the very process of undertaking corporate plans, the interlinkages with interest groups as well as the other sets of interlinkages which have been enumerated earlier, constitute an intrinsic part of the exercise.

In the context of interlinkages the following major issues require detailed consideration:

- Do developing countries perceive the nature and implications of the interlinkage phenomenon?
- Are national mechanisms set up to deal with interlinkages in a meaningful and optimised manner?
- What is the specific set of interlinkages between the public industrial enterprises and the public authorities who control them?
- What is the nature and content of the interlinkages between public industrial enterprises and the private sector?
- How does the system of interlinkage operate within the family of public enterprises in the matter of investments, production, pricing and organization?
- How sensitive are the public industrial enterprises to their interlinkages with interest groups such as workers, consumers, suppliers, the environment and local communities?

VII POLICIES, PRACTICES AND BEHAVIOUR PATTERNS OF
PUBLIC AND PRIVATE INDUSTRIAL ENTERPRISES -
A COMPARATIVE ANALYSIS

Given the desire of developing countries to initiate and promote a process of industrialization within the framework of national development plans and given further the simultaneous use of the instruments of public enterprise and private enterprise for this purpose, an important and indeed vital consideration which needs thorough investigation is the question of the impact which the policies and practices and behaviour of the two sets of enterprises have on industrial growth and development. In examining this question, we would not like to get diverted to the more traditional controversy about the comparative efficiency of public enterprise versus private enterprise. This controversy has now to a great extent lost its edge. Evidence would indicate that there are high efficiency levels in both sectors and equally failures on both sides. Furthermore, the motivation originally for this debate was directed towards the choice of instrument. We have now passed this stage and for a variety of reasons various combinations of public and private effort actually do exist in the developing countries and they come into being for a variety of reasons.

The focus of our investigation will be towards a better understanding of the nature of the policies actually adopted by public and private enterprises, the operating practices to be found in the two sectors, the attitudinal and behavioural aspects of policy and practice, and the implications which these policies and behaviours have on economic advancement and industrial growth.

To begin with, we have to recognise that both public and private industrial enterprises are not entirely free agents. We do not have a situation where either of them can develop policies, practices and behaviour entirely out of their own volition. Both sectors work within the ambit of national policy,

national goals and the framework of governing laws and regulations. For example, the policy, practice and attitude towards the working classes is largely determined by the national approaches as reflected in industrial legislation, laws governing trade unions, laws for the protection against exploitation, and enactments governing minimum wages and payments of bonus. Another example concerns the policy and attitude towards the environment which again would be strongly determined by national laws of antipollution and environmental protection. To this extent therefore public and private industrial enterprises work within the same set of rules and are therefore required to adjust their policies accordingly. One could therefore draw a fair conclusion that the influence which national regulations and laws have on the industrialization process is one which can be actively controlled by those who are in public authority and this can not be determined by the enterprises, be they in the public or private sector.

Secondly, considerations of interlinkages which we have examined earlier from the angle of public industrial enterprises apply in equal measure to the situation of private industrial enterprises. They are also faced with problems of markets, supplies, and other external variables determining their performance. Here, however, it is possible to distinguish the two sectors. Hopefully, the solution of the interlinkage problems among public enterprises is a "family matter" and can be resolved either through mutual negotiation or through the intervention of the shareholder which is the government itself. In a sense, one can view the position of government as a shareholder and proprietor in the status of a holding company with a large number of subsidiaries whose individual affairs it monitors and whose interconnections it influences. In the case of the private sector, these family mechanisms are not available and the solution of the interlinkage problems have perforce to fall back on traditional marketing arrangements. This important difference would have naturally some major consequences on policy, practice and behaviour.

Thirdly, if we have postulated that the policies, practices and behaviour patterns of public industrial enterprises are to some extent shaped by the demands of interest groups, it would be simplistic to believe that there is not an equal pressure on the private sector. Consumers, workers, the environment and local communities make similar sets of demands on private enterprises. Perhaps the degree and intensity of these demands is greater in the case of public enterprises for the simple reason that they are perceived to be the property of the members of the public and are thus expected to respond to their needs.

Thus far we have seen a common platform on which both the sectors operate and to the extent that laws and regulations, interlinkages and interest groups exist, the manner in which they determine policy and behaviour would not be appreciably different between the two sectors and in consequence would have the same resultant consequences on the industrialization process. But here we come to the crossroads where the paths tend to diverge.

This divergence is fundamental to the character of public and private enterprises. Whatever talk there may be about "progressive" private enterprises and their acceptance of the wider dimensions of social responsibility, the fact remains that the driving motivation of private enterprise is commercial profitability. Indeed, they cannot exist without returns on the capital employed. Thus their attitudes towards social responsibilities is not dishonest but is accepted by them as a precondition for their survival. It would follow therefore that in formulating their internal policies and managerial practices, the industrial enterprises in the private sector would quite naturally adjudicate each decision with reference to its contribution to profitability. This would influence the direction of investments, the location of plants, systems of recruitment, wage and remuneration of managers, inventory policies, pricing policies, building of

surpluses and distribution of dividends. The adoption of these policies while aimed at securing the prosperity of the enterprise, may or may not necessarily be conducive to social profitability and the industrialization concept. A clear example of this is the question of direction of investments. The project reports of the private sector would seek investments in profitable areas whether or not the end products were socially desirable or relevant for the purpose of industrialization. This is shown very clearly in the heavy concentration of investments in consumer durables, elitist items based on urban marketing and a reluctance to move into long gestation low profitability areas. The pricing policies also tend to take a relatively short term view. In some developing countries private enterprises, perhaps because of fears of instability or the possibility of nationalization, work on a payback period of three to four years!

What of the public industrial enterprises? At least conceptually, their very existence is because of the need to create business organizations which are oriented towards social profitability. The thrust of policy and managerial practice is to serve both as business organizations as well as instruments of national policy. One would therefore expect that the direction of their policies and practices would be qualitatively different from those of the private sector. They would not hesitate to promote investments in long gestation and low profitability areas, they would move into high technology and high risk sectors which scare the private sector, they would follow pricing policies aimed at price stabilization and control of inflation, and they would hopefully act as model employers. Whether or not they do so in actual practice, is quite another matter.

The question of behaviour patterns and attitudes of public enterprises and their managers and workers is a matter of some concern. It can not truly be said that the motivations which actuate the employees of the public sector are very different

from those of the private sector. Trade unions, for example, make very little differentiation between the two. They do not accept the argument that the management - labour confrontation is irrelevant in a public industrial enterprise. Since it is evident that the economic motives can not be the sole guide to the public enterprise policies and financial remuneration may not be the incentive given to its employees, what then is the replacement? Have the developing countries devised and promoted motivating impulses which can replace the classical motivators?

In an attempt to understand the flavour of the public enterprise situation and to appreciate the parametric differences between enterprises in the public sector from enterprises in the private sector, the ICPE in its consultancy service branch, has developed what is described as the PEPER concept. PEPER is an acronym for the salient public enterprise environmental factors as follows:

Pluralistic goals and multiple objectives
External management control
Propriety
Public opinion
Environmental influences
Relationships and interlinkages.

In the context of the question of policy, practices and behaviour of public and private industrial enterprises and keeping in view the PEPER elements, the following major issues need to be further examined:

- To what extent is there a commonality in the circumstances of public and private enterprises influencing their policy and practice?
- Do laws and regulations differentiate between public and private industrial enterprises?
- Is there any major difference in the interlinkage problems in the two sectors which affects their attitudes and policy?

- Do the interest groups view the two sectors differently and does this affect their policy and behaviour?
- Is it conceptually reasonable to differentiate the two sectors on the basis of profit orientation of the private sector and social orientation in the public enterprises?
- Is the actual policy, practice and behaviour of public enterprises consistent with the oft declared social profitability approach?
- What motivating influences can be introduced into the public sector to replace the profit motive?

VIII EVALUATING THE PERFORMANCE OF PUBLIC
INDUSTRIAL ENTERPRISES

To round off an examination of the changing role and functions of public industrial enterprises in development, we come to the inevitable question of performance evaluation. It is one thing to create public industrial enterprises in the euphoria of political and social aspirations. It is quite another matter to run these enterprises efficiently. The term "efficiency" and the understanding of what it specifically means in relation to public industrial enterprises is the foundation of any meaningful system of performance evaluation. In the case of private industrial enterprises the yardsticks of performance, at least as adjudicated by the owners and shareholders, are fairly unambiguous. If the enterprise is able to generate financial surpluses, if it can declare regular dividends, if it can provide for growth, if it can periodically replace and upgrade its equipment and machinery, and ultimately if the market value of the shares go up, the enterprise is rated as successful and efficient.

In the case of public industrial enterprises the problem of evaluation becomes extremely complicated because of the very identity and character of public enterprises and the multiple goals they are expected to discharge. In the case of a single goal like financial profitability, the yardstick of returns on capital is adequate. In the case of multiple goals, a sophisticated system of evaluation is called for. At this stage, however, one must draw attention to the unfortunate tendency of setting up public industrial enterprises to discharge social and national goals and then ending up by judging them and their performance by classical yardsticks of profits. This tendency is all too frequently encountered in the developing countries. One often hears the comment that public enterprises are inefficient as evidenced by the huge losses they are making.

If performance evaluation is to become a meaningful exercise, it should be boiled down to a comparison of what was expected and what was actually done. Simple as this may sound, the key to the success of such an evaluative operation lies in stipulating very specifically what is expected of the public industrial enterprises. The basic weakness of performance evaluation systems arises at the starting point, of a weakness in the stipulation of objectives. Considering the dualistic character of public industrial enterprises and returning to the Tangiers concept of the public dimension and the enterprise dimension, it should be possible to construct a set of criteria aimed at assessing the organization's enterprise performance and its public performance. Let us start with the essentials of enterprise performance.

The first set of indicators are purely of a physical variety. What indeed is the productive efficiency of the enterprise in physical terms? Such physical indicators are neutral to the question of ownership and are applicable both to private and public enterprises and are also neutral to social purpose as they do not seek to examine anything but the factors of productivity. The physical indicators include classical tests such as the efficiency of machines judged by capacity utilization, percentage of downtime due to breakdowns, machine hours for particular outputs; the efficiency of human inputs judged by availability of labour force, losses due to absenteeism, manhours required for given units of output; materials efficiency which assesses the consumption coefficients and the quantum of raw materials consumed for given units of output.

One does not need to labour these points, they are classical text book performance tests of productivity. Clearly however, they have a colossal impact on the productive efficiency of the national system and determine the pace of industrialization. One views with considerable sadness the phenomena of large unutilised capacities, inflated inventories, low productivity of machines, men, money and materials and tragic waste in countries

which can not afford the luxury. Whatever sophistications may later be produced on evaluative indicators for public enterprises because of their complex social role, we must be prima facie satisfied that in terms of pure physical performance they are giving the country the required returns.

The second series of indicators also reflecting the business dimension of the enterprise are financial indicators including such classical parameters as return on capital investment, return on turnover, ratio of working capital to turnover, improvement, decline or stagnation in profitability over a period of time. There is a tendency to underrate the importance of financial profitability in public industrial enterprises. Indeed, in some developing countries enterprises which show high profits are viewed with suspicion as exploitative in policy. A recent international workshop organised by the ICPE on the subject of profits and losses in public enterprises (June 1981) has drawn pointed attention of the developing countries to the grave situation which is now arising due to the heavy losses of public enterprises, the strains which such losses are placing on public exchequers, and the implications which this situation has on the possibilities of growth, development and future industrialization. It has also been pointed out by the workshop that the discharge of social responsibilities by public enterprises would become much more realistic if they were financially strong enough to undertake wider obligations.

The third set of indicators are an amalgam of enterprise objectives and social objectives. This is the field of marketing indicators. The kind of questions which need to be asked in this context are:

- What percentage share of the market do the public industrial enterprises have?
- What is the proportion of their domestic to foreign sales?
- What is the unit value of their sales?
- What is the reasonableness of their prices?

- What are the quality standards of their goods and services?
- Are they contributing to the production of basic consumption needs?
- Are they contributing to the earning of foreign exchange?
- Are they promoting consumer satisfaction?

Our real problem area is the question of socio-economic indicators. Physical, financial and marketing indicators are fairly straightforward, because they are capable of conversion into quantitative terms. The achievement of social objectives requires a much more sophisticated assessment because of the qualitative dimensions involved. Attempts have been made to put figures to the social contributions of public enterprises. Certainly, at the investment stage techniques of social cost benefit analysis, of which UNIDO has been a pioneer, are moving in this direction. One can not, however, be overoptimistic about any mechanistic quantification of social contributions. To my mind the strategy of evaluation would necessitate the following parameters:

- a very clear statement of the social responsibilities falling on the particular enterprise
- a clear prioritization of these objectives vis a vis financial objectives
- a disaggregation of the social objectives to more meaningful and practical indicators of performance
- a mechanism of evaluation which will fairly judge such performance after the event.

These general comments on evaluative procedures are intended to cover the whole range of social objectives. Our immediate concern is with the social objective of "industrialization". Frankly, I would hesitate to classify industrialization as an objective. It is, after all, only a means of achieving the real end objective in the shape of increased employment, higher standards of living, increased availability of goods and

services and higher per capita incomes. Subject to this caveat, it should be possible to construct a set of indicators which would specifically show the contributions which public industrial enterprises make to the process of industrialization. The questions arising in this context include:

- What contributions have public industrial enterprises made to the growth of production?
- How efficiently have industrial investments been used in physical terms?
- What contributions have been made to the upgrading of technical and managerial skills in the country?
- What contributions have been made to technological development, the advancement of appropriate technologies and the effective transfer of imported technologies?
- Have the public industrial enterprises generated an industrial multiplier effect through the stimulation of auxiliaries and subsidiaries?
- Have the enterprises created a strong industrial infrastructure on which downstream activity can be activated?
- What is the credibility in international terms of the industrial products and services produced by the public industrial sector?

The major issues for the consideration of the expert group in the context of performance evaluation can be stated in simple terms

- What are the physical indicators of performance?
- What are the financial indicators of performance?
- What are the marketing indicators of performance?
- What are the socio-economic indicators of performance?
- What are the specific contributions which the public industrial sector has made to technological and industrial development?

CONCLUSION

Public industrial enterprises are without a doubt playing a crucial role in the strategies of industrialization of developing countries and in the wider exercise of national economic and social development. The perceptions of what public industrial enterprises are, what they are expected to do, and how their performance is to be evaluated, are subjects of vital importance to policy makers, administrators and managers of the economies of developing countries. A study of the changing role and functions of public industrial enterprises in development necessitates a frank and courageous examination of the conceptual basis of the public industrial sector, an examination of industrial goals and policies of developing countries and their impact on public industrial enterprises, a review of the comparative roles of the public and private sectors, an examination of organizational patterns and legal structures, a consideration of planning practices, an examination of the interlinkage phenomenon, a review of the relative policies, practices and attitudes of public and private industrial enterprises, and criteria and mechanisms for judging their performance.

This paper has attempted to set out the major issues arising under this set of interlinked themes. As stated at the very outset, it was not the intention of this paper to suggest any dogmatic answers. One has to recognise that the sheer variety of environmental situations in the developing world would tend to produce a variety of solutions and answers, applicable to local conditions. Hopefully, the expert group which will represent the flavour of these varying environments will find the appropriate answers and will suggest to the developing countries the ways and means of tackling what would appear to be a central question to the issue of industrialization.

