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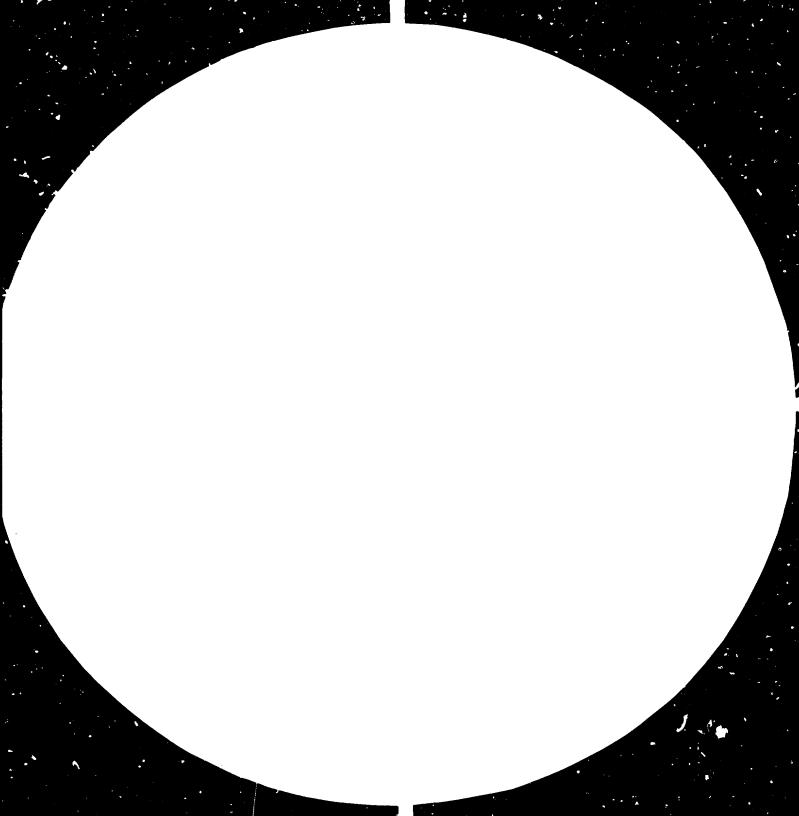
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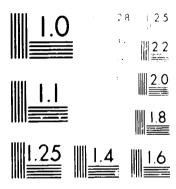
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ENGLISH

Expert Group Meeting on Industrial Planning

Vienna, Austria, 1-5 November 1982

CONCLUSIONS AND RECOMMENDATIONS \*

Meeting on Industrial planning.

prepared by

the Industrial Planning Section Division of Industrial Operations

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## OBJECTIVE

- 1. A meeting of Experts on Industrial Planning was organized from 1 to 5 November 1982 by the Industrial Planning Section of United Nations Industrial Development Organization. A list of the participants is attached as Annex I and the agenda as Annex II.
- 2. The meeting was aimed at reviewing the current status of and practices in industrial planning in the developing countries, identifying the priority areas in which UNIDO's technical assistance should concentrate and to recommend follow-up action on methods of exchange of experience in training programmes to upgrade and develop skills in industrial planning. It was also intended to lead to the production of Guidelines on Industrial Planning.
- 3. The meeting was an endeavour in the direction of the realization of the goals of the Lima and New Delhi Declarations and Plans of Action. It was noted that there has been near stagnation in the advance towards the basic objective of industrial development in the Third World. Perceptible deceleration had been witnessed in industrial growth in the 1970's as compared to the rate achieved in the 1960's. The rate of growth in industry in the LDCs since the Lima Declaration was lower than that of their GDP and brought down the level of satisfaction of the basic needs of the masses. It was appropriate, therefore, that a review were made by UNIDO with a view to improving the system of industrial planning in developing countries and towards that end to develop Guidelines as an aid to more effective and efficient organization of industrial planning.

4. It was recalled that the Lima and New Delhi Declarations and Plans of Actions sought the establishment of an integrated industrialization process covering basic industries, integral industries (which laid the technology base), consumer industries - to satisfy the basic needs of the people, the principal aim of all development programmes.

#### BASIC ISSUES

- 5. The Group reaffirmed that industrial planning is an urgent need of the developing countries as the main instrument of development since the market forces alone cannot ensure the desired transformation of their economies.
- 6. The Group recognized that difficulties in the industrial planning process had emerged in all four areas: the concept of industrial planning, the contents, the preparation and elaboration of industrial plans and their implementation. The basic objectives of industrial planning cannot be limited to an overall growth rate or the share in the global manufacturing value added. Industrialization is a structural phenomenon and the performance of industrial planning system should be evaluated in terms of basic needs of the people, economic independence and the capacity of self-sustaining development of the developing countries, in accordance with the comprehensive economic goals of industrialization laid down in the Lima and New Delhi Declarations.
- 7. The role of pricing as a tool and stimulant of industrial planning and for appraising performance was examined. Since world market prices were distorted not only by controls, protective tariffs and operating policies of transnationals but also by the production structure of the industrialized countries, the consensus of the Group was that it was necessary for developing countries to unlink themselves from international price structure and not follow in all cases world market prices for evaluating their industrial programmes. Several industries

needed support in the infant stages and the instrument of pricing should be used according to the needs of the people, the composition of which is different in different countries.

- 8. The problems encountered by LDCs and land-locked and island isolated countries and those which have adopted development planning system only very recently needed special attention. These countries have marked deficiencies of industrial planners, programme management expertise, readily available markets, technological inputs and maintenance facilities for sophisticated equipment. However, they did represent potential for industrialization consistently with their needs.
- 9. It was emphasized by the Group that the countries which were too small to be able to permit a growing self-sustaining industrial economy had no option but to promote regional co-operation if substantial progress in industrial development was the desired goal, while cooperation among developing countries on both regional and inter-regional bases was considered essential for all countries.
- 10. The Group was of the opinion that inadequate and inefficient management of industrial plans and projects leads to non-fulfillment of industrial targets no less than incoherent plan structure and strategy.
- 11. A review of the industrial planning programmes led the Group to identify poor implementation of industrial development plans as a very weak link in the development process of the Third World. Rationally designed planning systems could be distorted beyond recognition by low performance co-efficients and make the development considerably more expensive, economically and socially. The Group recommended that the world community focus more concentrated attention on this aspect and devise methods by which plan performance, in conformity with respective goals of each country, could be upgraded.

- 12. The problem of using modern technology and the objective of creating more employment opportunities was analyzed by the Group to appraise if the two presented a contradiction. It was concluded that it was necessary to strike a rational balance between the objectives of creation of employment opportunities and attaining high rates of productivity. While the use of advanced technology and methods of production was needed, it was to be ensured that the industrial plants were not over-loaded with unnecessary manpower.
- 13. It was the view of the Group that a critical constraint to industrial planning process has been unavailabilty of necessary manpower for industrial planning including project planning and evaluation and industrial management. This aspect of industrial planning called for special attention both at the country and international levels.
- 14. A major constraint on efficient industrial planning was found to be inadequate information system, an essential pre-requisite of any social and economic planning process. Some of the smaller and least developed countries did not possess even the basic statistical information required as primary input for planning and management of industry. In the opinion of the Group it was also a priority area for attention.
- 15. The Group examined various issues connected with technology transfer, obsolescence of technologies which were fast growing, the institutional devices to guide import of technologies, the transfer of the most relevant technologies especially when imported from transnationals, and indigenization and adaptation of technologies. The Group concluded that technology planning was a core component of the industrial planning process. The sophistication of technologies needed to be geared not merely to the stages of development but also to the requirements of each specific industry and factor endowment of the developing country.

- 16. The Group noted that there was temptation in developing countries to fix ambitious development goals which were not in conformity with the resource availability. When the programmes could not be implemented according to schedule, they drew priority lists. The end result was low plan performance and restricted resource availability in the future periods.
- 17. A factor leading to slow industrial development in several countries, the Group noted, was the gap between planning targets and economic policy in terms both of the design of the policy and its implementation.
- 18. In defining the role of the state, the Group was of the opinion that it should be clearly distinguished from the commitment of the state to industrial planning process. Commitment implies the economic policy in practice followed by the state for the implementation and follow-up of the plans. Such commitment could make a major contribution to better plan performance.
- 19. The Group came to the conclusion that a rational and positive policy on small-scale sector was one of the important components of industrial development. It need not be based on any pre-drawn classification or be limited to industrial segments using low-level technologies. In fact, some of the more successful small units were employing latest technologies in their respective areas, while most of them needed appropriate technologies.
- 20. It was the view expressed by the Group that despite the present economic global conditions and not highly encouraging industrial experience in the developing countries in the recent years, given ratical and integrated development strategies and international cooperation, industrial growth rates in the Third World could move towards the anticipated results. This would undoubtedly call for concerted and dedicated efforts on the part of the world community as a whole and not merely on the intensified cooperation among the developing countries.

21. The question of the relative efficiency of public and private sectors was considered. It was pointed out that in adjudging the efficiency of public enterprise, due adjustment should be made for the social services rendered, objectives fulfilled and the low prices generally fixed by Governments for goods and services produced by them. In this connection it was also pointed out that public enterprises in many countries followed special accounting practices. However, the Group was of the view that public enterprises ought to be subject to efficiency criteria common to all enterprises.

## APPROACH AND TECHNIQUES

- 22. The Group was of the firm view that long-term perspective planning provided an indispensable base for medium-term plans and annual operational plans. In the absence of the perspective, industrial development would be both misdirected and cost intensive.
- 23. Several contradictions had emerged in the industrial planning process in the Third World. There was a need, therefore, for coherence: with global planning objectives of the country, inter-sectoral relationships and external economic and social phenomena.
- 24. The Group emphasized the need for linking industrial project selection with the objectives and design of the inter- and intra- sector plans. The micro-level industrial projects and programmes must move in the direction of the sector goals.
- 25. The Group underscored the interdependence of agricultural and industrial development and concluded that one could not be separated from the other. In the course of discussion, similar inter-relationship of industry with other sectors of the economy, and in particular, mining and infrastructure, was brought into focus.
- 26. The Group considered that development of raw materials was of primary importance to the industrial sector plan. Similarly, development

and supply of energy was critical to effective performance of industrial development. Industry can and ought to contribute to the development and conservation of energy. This should be reflected in industrial plans and programmes of developing countries.

- 27. The Group noted that the integration of industrial planning goals and structures with the social development processes in any country was essential. Necessary precaution had to be exercised to ensure that industrial planning process lead to a better satisfaction of the basic needs of different groups of the population, which has not been the experience in several developing countries.
- 28. The Group recommended that new industrial projects should be linked as closely as possible to the existing plants and to the available indigenous know how and skills so as to enable them to take advantage not only of available material resources but also of local manpower.
- 29. The Group concluded that industrial planning systems could be variable in terms of stages of industrial development through which the subject country was passing at a given period of time.
- 30. The Group noted that industrial planning should not be limited to investment planning, which has been the case with several developing countries. It should be extended, to be effective, to production planning which covers planning for technology, material inputs, manpower, marketing, finance and social aspects.
- 31. It was pointed out that industrial planning is facilitated by the use of indicators. Indicators reflect main targets, the economic and social tasks outlined by the community, and make possible coordination of targets. These could be employed for elaboration of the planning system, stimulating performance and bringing about coherence among the various components of the system.

- 32. Another technique, very essential for effective industrial planning, is that of establishing balances. It is only by means of balances that coherence in industrial plans could be brought about.
- 33. The Group discussed the relevance of 'directive' targets and 'indicative' targets. It was recognised that the complexity of the economic structure of the developing countries demanded that both techniques were used, more so because of the existance of non-monetized or semi-monetized sectors in many developing countries. While the one could be applied to the public sector industry, more flexible approach was called for private industry. However, the economic systems of developing countries have been in a flux of change and, therefore, even where 'directive' targets were fixed, they had to be adjusted from time to time. In the short term planning process, however, the long term objectives should be kept in mind.
- 34. The Group affirmed that an in-depth and precise calculation of the economic and social effects, whether quantifiable or not in monetary terms, is necessary for the evaluation of projects for their integration with the overall industrial plan. However, special efforts in both areas of theory and practice were warranted to devise methods which would be applicable in the field and be adopted to the objectives of general economic development process.
- 35. The Group was of the opinion that for technological development it was essential to ensure corresponding social and institutional capabilities, which in turn called for appropriate human resource development. Transfer of technology involved transfer of social institutions and values.
- 36. The experience of 'innovating immitation' and 'sub-contracting of production' were commended by the Group and were considered of immense value in the planning of technologies in the Third World countries. However, one limitation on sub-contracting was noted: small enterprises based on old technologies were not easily amenable to be crought into the stream of modernized technical production.

## INCENTIVES AND PROMOTIONAL NEASURES

- 37. Incentives instituted by developing countries to promote industrial investment, the Group noted, were tending to become universal although the scope, coverage, intensity, nature and methodologies of application differed from country to country.
- 38. The Group recognized that incentives are intended not merely to accelerate the overall pace of development. These have been invoked to redirect industrial development activity to more preferred industry classifications, geographical areas and technological development.

  They have been used to assist the small—scale sector and to broadbase entrepreneurship. Backward and forward linkages and development of backward areas have been sought to be promoted by the incentives.

  The Group noted with concern that many developing countries have adopted these and have been multiplying them without empirical studies.

  Some of these have, therefore, been sterile in their impact; others have misdirected industrial development or created a considerable amount of bureaucratic confusion and corruption. It is not unlikely that some of the concessions have been negated by others. It has led often to misuse of the concessions.
- 39. The Group found that some of the incentives, and especially those related to the promotion of inflow of foreign capital, were not fully effective since most developing countries were competing among themselves and large companies took undue advantage of them. The economic and social costs of the stimulants should be evaluated especially in regard to flow of external capital.
- 40. It was the considered view of the Group that the developing countries ought to use the sharp instrument of incentives with utmost care after studying their respective implications and ramifications. Their application should be monitored with vigilance.

- 41. In the area of promotion through incentives, in the opinion of the Group, action could be initiated at both country and international levels. The international action can be organized in two directions:

  (a) Developing countries should hold consultations among themselves to see that the incentives were not being misused at the international level; (b) Empirical data on the effectiveness of selected incentives could be collected and disseminated among the developing countries.
- 42. It should, however, be recognized that the efficacy or inefficacy of certain measures might be due to certain objective conditions of a country and the experience could not, therefore, be transplanted without proper adjustment of the instruments. The package of incentives should be an integral part of a comprehensive development strategy. It must be fully recognized that incentives constitute guided transfer of resources of one activity to another and has multifarious implications not merely to the industrial sector, but to the entire economy its growth rate, structure of development, distribution pattern and social environment.
- 43. It was noted by the Group that industrial planning must achieve both equity and efficiency. It is only due to the intervention of exogenous interests and influences that one or both of these objectives were not achievable. In view of the Group, there was no contradiction between these two basic objectives if industrial planning is rationally conceived and designed and efficiently implemented.
- 44. The Group was conscious of the fact that industrial development would be fully effective only if the developing countries had at their disposal adequate capital resources which need to be augmented substantially by international flows.

## INTERNATIONAL TECHNICAL ASSISTANCE

- 45. Having examined the various issues, approaches and techniques and problems of industrial planning in the developing countries, the Group recommended the following measures for consideration by UNIDO:
- (1) Technical assistance to developing countries in the field of industrial planning should be guided by studies on the effects of relevant industrial planning functions and activities.
- (2) While recognizing that UNIDO has undertaken several programmes to create data bases in several countries, but realizing that gaps remain, UNIDO should declare an Industrial Census Year by 1985 or mount an international effort towards the collection of industrial data on a census basis in all developing countries, a pre-requisite of sound industrial planning system.
- (3) UNIDO should continue its efforts in the direction of industrial development surveys in developing countries for providing objective base for industrial planning processes including identification of industrial opportunities.
- (4) UNIDO should initiate action to carry out or promote research to evolve a technique establishing linkage between macro-level economic planning and micro-level project planning.
- (5) UNIDO should give special attention to LDCs, land-locked and island isolated and very small countries and those which have launched industrial planning system only recently.
- (6) Considering that LDCs, land-locked and island isolated countries and very small countries have found it difficult to promote many viable industrial opportunities, urgent attention should be given to the task of regional industrial surveys to identify joint ventures and programmes.
- (7) UNIDO should, from time to time, review the performance of activities in the developing countries covered by its assistance programme with a view to improving their design and implementation.

- (8) UNIDO should take the initiative in identifying technical assistance programmes in industrial planning in developing countries and not rely on ad-loc requests. For effective realization of the objectives of these programmes, there must be linkage between identification and implementation. The Industrial Planning Section should evolve appropriate modalities for this.
- (9) UNIDO should give greater attention to industrial manpower planning and development at all levels and skills.
- (10) Considering the expanding requirements of trained personnel in industrial planning and related activities, UNIDO should organize multiplier training programmes through training of trainers.
- (11) UNIDO should organize and promote longer term training programmes in industrial planning in selected specific areas to be identified after necessary consultation and studies.
- (12) UNIDO should organize or promote what may be termed 'Review Programmes' being seminars in which participants of earlier programmes could join, giving an opportunity to UNIDO to appraise the effectiveness and use made of its programmes.
- (13) UNIDO should conduct or promote studies on the effectiveness of incentive measures, in particular those concerning flow of international capital.
- (14) In view of overlapping and duplication of work in the area of technical assistance, measures should be examined which could lead to increased cooperation among bilateral, regional and international agencies and institutions.
- (15) To make international assistance more acceptable, relevant and effective, recruitment, briefing and evaluation of field experts should be made more rigorous.
- (16) UNIDO should further strengthen the efforts towards adaptation of technologies for use in developing countries.
- (17) The proposed Guidelines for Industrial Planning, which could be used as a practical instrument by the developing countries in their effort to achieve accelerated and balanced industrial development, deserves full professional and institutional support.

# EXPERT GROUP MEETING ON INDUSTRIAL PLANNING VIENNA, FROM 1-5 NOVEMBER 1982 AT THE VIENNA INTERNATIONAL CENTRE

### LIST OF PARTICIPANTS

Chairman : Mr. G.R. Latortue

Alternate Chairmen : Mr. S. Zampetti

Mr. R. Hammelton Mr. H.W. Tanaka Mr. W.H. Eckert Mr. L. Sangare

Co-Chairman : Mr. S.R. Mohnet

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Institute for Economy of Developing Countries,

University of Economic Science

"Bruno Leuschner"

Berlin, GDR

Mr. G.R.C. Destanne de Bernis - Professor at the Université des Sciences

Sociales de Grenoble, France

Mr. I. Inukai - Professor of Economics,

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Tokyo, Japan

Mr. G.K. Shirokov - Professor of Economics,

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Mr. K. Venchatachellum - Executive Director,

African Development Bank,

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Mr. V.S. Zerjavic - Senior Industrial Economist,

UNIDO Expert, Zagreb, Yugoslavia

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Mr. R. Hallett - Industrial Development Officer,

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Mr. J. Jansc - Industrial Development Officer,

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Mr. G.R. Latortue - Head

Ms. C. Bachmann - Programming Clerk

Ms. K. Bödecker - Secretary

Mr. W.H. Eckert - Senior Industrial Development Officer

Mr. R. Hammelton - Senior Industrial Development Officer

Mr. B. Kourotchenko - Industrial Development Officer

Mr. S. Moreira - Associate Industrial Development Officer

Mr. L. Sangaré - Senior Industrial Development Officer

Ms. J. Schoenfeld - Secretary to Head

Mr. A. Upadhya - Industrial Development Officer

Mr. S. Zampetti - Senior Industrial Development Officer

## EXPERT GROUP MEETING ON INDUSTRIAL PLANNING

## VIENNA, FROM 1-5 NOVEMBER 1982 AT THE VIENNA INTERNATIONAL CENTRE

## AGENDA

## Monday, 1 November 1982

9 a.m. Arrival and briefing of the experts Study of working papers

11 a.m.- OPENING

12 a.m. Welcome remarks by Mr. G.R. Latortue, Head, Industrial Planning Section, Division of Industrial Operations,

Address and Opening of the Meeting by Mr. L. biritz, Deputy Director. Division of Industrial Operations

2 p.m. - Obstacles and Constraints to Industrial Planning

5 p.m. in Developing Countries

Mr. Cérard Destanne de Bernis, Professor at the Université des Sciences Sociales de Grenoble, France

Some Difficulties of Industrial Planning and the Necessary Means to face up to it.

Di .cussion.

#### Tuesday, 2 November 1982

9 a.m. - Prospects and Modalities for More Effective Use of 12 a.m. the Industrial Planning Process

m. the industrial Planning Process

Mr. Martin Breetzmann, Professor of Economics, Institute for Economy of Developing Countries, University of Economic Science "Bruno Leuschner", Berlin, GDR

Some Problems and Possibilities for Improving Industrial Planning in Developing Countries.

Discussion

2 p.m.- Technology Planning as a Basic Component of

5 p.m. Industrial Planning

Mr. Ichiron Inukai, Professor of Economics, Graduate School of International Relations, Tokyo, Japan

Technology Planning in the Industrial Planning Process.

#### Wednesday, 3 November 1982

9 a.m. - The Role of the State in the Develorment and

12 a.m. Implementation of Industrial Plans

Mr. G.K. Shirokov, Professor of Economics, USSR Academy of Science, State Committee for Science and Technology, Moscow, USSR

The Role of the State in the Preparation and Implementation of Industrial Plans in Developing Countries.

Discussion

2 p.m. -

Industrial Promotion and Incentives in Industrial Planning

5 p.m.

Mr. Fuad M. Andic, Professor of Economics, University of Puerto Rico, Rio Piedras, Puerto Rico, USA

Economic Incentives in Industrial Planning.

Discussion

# Thursday, 4 November 1982

9 a.m. -12.30

Experience in the Development and Implementation of Industrial Plans in Selected Developing Countries

Address to the Meeting by

Mr. F. Carré, Deputy Executive Director of UNIDO

Mr. V.S. Zerjavic, Senior Industrial Economist,

UNIDO Expert, Zagreb, Yugoslavia,

'Problems of Industrial Planning and Research in Kenya'

Mr. K. Venchatachellum, Executive Director,

African Development Bank, Abidjan, Ivory Coast,

'Industrial Policy and Planning in Mauritius'

Experience in the Elaboration and Implementation of

Industrial Development Plans - Case Studies.

Discussion

2.30 p.m. -

5 p.m.

International Assistance and Industrial Co-operation

among Developing Countries (ICDC)

Exchange of Experience

- Technical Assistance
- Capital Transfers
- Co-operation in Trade
- Regional and International Co-operation.

#### Friday, 5 November 1982

2 p.m. -

Discussion and Approval of the Draft Report of the Meeting

5 p.m.

Conclusions and Recommendations

Closing remarks by

Mr. L. Biritz, Deputy Director, Division of Industrial Operations

Mr. G.R. Latortue, Head Industrial Planning Section. Division of Industrial Operations.

