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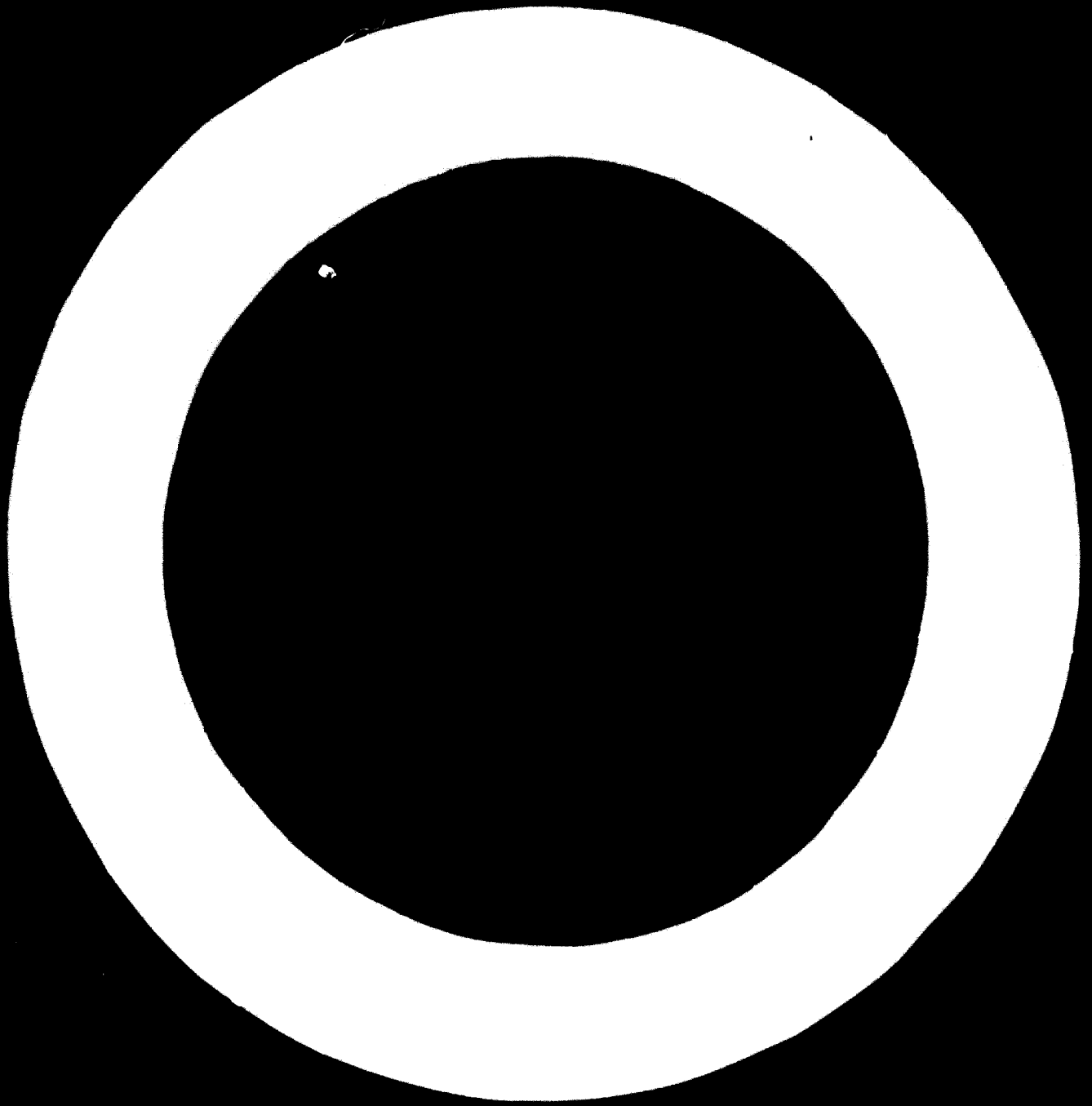
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TRAINING OF ECONOMIC ADMINISTRATORS  
OF THE DEVELOPING COUNTRIES  
IN INDUSTRIAL DEVELOPMENT

(Based on the Report of the Meeting of the  
United Nations Inter-Regional Working Party on  
Training of Economic Administrators in Industrial Development)  
Paris, 2 - 10 September 1965

FOR: Regional Symposia on Industrial Development 1965 and 1966  
BY: Centre for Industrial Development, United Nations



Part One

INTRODUCTION

The United Nations Centre for Industrial Development wishes to draw the attention of the representatives of the governments participating in the Industrial Development Symposium to the report and recommendations made by the United Nations Inter-regional Working Party on Training of Economic Administrators in Industrial Development. The Working Party was organized by the United Nations in cooperation with C.E.C.D. and met at Paris on 2-10 September 1965. It was attended by representatives of 25 governments and several expert consultants.

The Working Party was concerned with the tasks of clarifying the role of economic administrators in expediting the tasks involved in planning and implementation of industrial development programmes. It was also concerned with suggesting a programme of action to be implemented at national and international level.

The report and in particular the recommendations of the Working Party merit serious attention of the governments. The discussion of recommendations in the light of the problems of the countries themselves and further recommendations on a regional level will be considered useful.

Part Two

REPORT OF THE INTER-REGIONAL WORKING PARTY ON TRAINING OF  
ECONOMIC ADMINISTRATORS

1. During the last two decades, almost every developing country has undertaken programmes of economic and industrial development. In this task, the role of the Government has assumed special significance. Its tasks of preparing plans for development, formulating policies to foster growth, establishing an adequate institutional base to promote and support industrial development and direct participation in manufacturing production, have created special responsibilities for the government officials. They are required to be economic and industrial planners and public sector entrepreneurs in varying degrees at different stages of their careers in the Government. Various tasks involved in the process of industrial development require a combination of skills such as economics, accountancy, statistics, law, public administration, engineering, etc. It is conceivable that the economic and industrial administrator has a background in one of them, but on the other hand, he is required to handle questions that involve a better appreciation of other disciplines.

2. The Working Party at the outset realized that it was confronted with a difficult task. It was required in the first instance to understand and appreciate a process of industrialization which takes various forms. Secondly, it had to examine the form of organization which a country undertakes to foster industrial growth. Thirdly, it was necessary to identify the functions

and levels of personnel working within the organizational structure. Finally, the Working Party was faced with the task of suggesting a concrete programme of action that, by means of training, would contribute to improve the capability and efficiency of industrial economic administrators.

3. The Working Party was fully conscious of its inability to go thoroughly into all the aspects so as to do full justice to the entire problem. The time available to it to undertake this was rather limited. Even assuming that there was time, it would require tremendous effort and a vast amount of data and a large number of specialized people to deal with such a question. Nevertheless, it was felt that an approach to this subject was possible at this meeting, which should be considered as only a first meeting dealing with problems of training in industrial development for public officials and economic administrators. The Working Party urges the United Nations and the O.E.C.D. Development Centre to transmit its recommendations to all interested national and regional bodies with a view to their implementation with due regard to the local environment.

4. In making these recommendations the working Party was conscious of the experience, responsibilities and courage displayed by the civil servants and public officials who are often working in difficult environments. Most of them acquire valuable experience on the job itself and appreciate the problems involved in undertaking tasks of promoting industrial development in their countries. Suggestions for further training for such officials are based on the general estimation of the magnitude of the prob-

lems involved, background of the officials and the time element required for pushing as rapidly as possible the implementation of the industrial development programmes.

5. An effort is made therefore to present primarily and to the best of ability of those participating in the Working Party, some salient features of these problems. The following sections present certain aspects of the process of industrial development both as one sees it as it is and as it exists. Secondly, an attempt will be made to indicate broadly the various levels and functions of the so-called economic administrator. Finally, some guide lines are offered to indicate the direction in which the training programmes could be formulated.

#### I. THE PROCESS OF INDUSTRIALIZATION

6. It is widely agreed that the need for, and the nature of training programmes in industrial development has its roots in the process of industrialization itself, which involves a rather complex chain of activities. Hence the Working Party considered it useful to review a wide range of activities required for the formulation and execution of industrial development programmes and projects as well as the skills and methods required for the adequate performance of such activities.

7. The process of industrialization forms an integral part of the overall process of development and all problems related to it have therefore to be considered and solved within the frame-



work of an action having a wider perspective. Keeping this in mind is a prerequisite if any results are to be obtained in industrial development planning and plan implementation, and if one wants to avoid sharpening conflicts and already existing disequilibria between the various sectors of the national economy. This fact should constantly be kept in mind, not only by policy makers and planners, but also by all concerned with the setting up and running of programmes which are particularly geared towards training present and future economic administrators in charge of industrial development planning and implementation.

8. It is equally important to remember that industrialization is a continuous chain movement, and that the strength of the chain will be equal to that of its weakest link. Although it may be worthwhile concentrating, temporarily, attention to some extent on strengthening the weakest element of the chain, this should not turn into some form of excessive concentration of effort but rather into a balance of effort - with continuous attention on the weakest link - which alone can lead to satisfactory end results. In undertaking such an effort, it should constantly be remembered that, as in a chain, each element must be related to those which come before and after. In order to ensure that the process of industrialization as well as the overall development process runs as smoothly as possible, it is most important to continuously collect information on what has been going on in order to be able to make, through the so-called system of feedback, the necessary adjustments in the course of the implementation.

9. It is generally recognized that overall, as well as industrial, development can be greatly facilitated by well-organized planning. It should, however, be kept in mind that such planning should not be considered as a static intellectual exercise, but as a dynamic process covering both the preparatory planning and the implementation stages. Action should not be postponed until the overall, sectoral and project plans are fully established, without, however, neglecting the impact of such actions on the overall economy. Such an attitude would unduly delay the developmental process of any developing country. Moreover, the planner should realize that the value of a plan lies in its possibilities of execution. This implies that the planner should not isolate himself from those in charge of the plan execution, nor from those who decide at the political level. This essential requirement should be impressed upon participants in any advanced and special training programme related to economic or industrial development.

10. So as to ensure the establishment of understanding between the various persons or groups involved in the total planning process, it is indispensable to supply them with some common language. This alone will make it possible to arrive at a really joint development effort in which the planner, the policy-maker (either on a national, regional or local level) and those in charge of execution down to the level of the running of a specific private or public enterprise will play their own role with the knowledge and understanding of the role played by the others. This means that any training effort towards a more efficient industrial development should orient itself to the various levels (policy-makers, planners and executives). The programmes offered

to these various groups must certainly be different according to their present and future responsibilities in the society. What counts is that these various programmes or courses have something in common so as to contribute to a better understanding between these various groups.

## II. THE ROLE OF INDUSTRIAL ECONOMIC ADMINISTRATORS IN PLANNING AND IMPLEMENTATION OF INDUSTRIAL DEVELOPMENT

11. The problem of clarifying the meaning of the economic administrator was complicated by a number of factors. The diversities in the functions that range over the entire process of industrial development at all levels made it difficult to identify the role and function of the economic administrator. There was, in addition, the diversity of the administrative systems which were employed by the developing countries to tackle problems of economic and industrial development. Finally, there was the diversity in the usage of words to describe such persons. They were referred to as civil servants, planners, managers, technicians, etc. In effect, it was all these that the Working Party had to comprehend in order to arrive at an identifiable classification. Its conclusion was that an industrial economic administrator is every person who has a responsibility for, or participates in, devising and/or implementing policies directed towards industrial development.

12. Emphasis was put on the distinction which needs to be made between the functions themselves, namely the formulation of a plan and its implementation. This, it was felt, would provide

a broad framework whereby it would be possible to identify functions as well as levels of persons undertaking these functions. In pointing out this classification, it was recognized that these two functions in effect are part of a single cycle. Another approach was the distinction between the general administrator and the technical administrator. Here also, it is evident that these two classes could not be divided into water-tight compartments and in particular the technical administrator may well be called upon to pass to the role of the general economic administrator if, apart from his technical qualifications, he also possesses the necessary human qualities.

13. At the planning and policy making level, the economic administrator was meant to be a senior official utilizing the knowledge of experts, in order to provide economic and coherent arguments to be used as a basis for adoption of key decisions concerning the structural changes of the national economy. In the field of implementation the economic administrator was identified as a person who gave shape and substance to policies adopted for fostering industrialization. He was required to translate targets into projects and to make sub-programmes within the targets operational. Both categories, however, should possess a knowledge of the country and a feeling of the people and their attitudes.

14. Although appreciating the separation of functions between planning and implementation of industrial development plans, viewpoints were expressed in the meeting concerning the role of civil servants as the nearest explanation of the economic administrator. He was not expected to be a specialist, but to have the capacity to

to organize his own work and that of others. He was expected to take decisions on the basis of arguments presented to him and discuss intelligently problems with the experts. Because of the various functions fulfilled in the course of his career, he would possess enough general knowledge and owing to selection based on intelligence tests he would also be able to put a problem in its proper perspective.

15. Reference was made and emphasis given to the role of the middle level personnel working in the various Ministries and organizations. They play an essential part in preparing the material, processing it and presenting it for policy elaboration and decision-making. Training is most important for this category as there is a deficiency in both quality and numbers available. More comprehensive training programmes can be devised as these administrators can devote longer periods of time for training than top levels. Their training should be oriented towards increasing efficiency in their present function and preparing them to assume greater responsibilities.

16. The Working Party realized that, moreover, there are specialized functions which need to be given particular attention, e.g. project preparation and evaluation, legislation to promote industrial development, financing of industry. Training in these areas becomes not so much a matter of seniority as of responsibility.

17. The profile of this administrator can best be indicated by describing the qualifications he should possess. He should first

of all have the ability to administer, i.e. to organize his own work and that of others in such a way as to ascertain the highest possible degree of efficiency. This requires not only professional knowledge but also, and not least, the human qualities which make it possible for him to communicate with all those concerned with the process of industrial development. He should have a good knowledge of economic factors in order to be able to pass judgement on the economic feasibility of the plan or project, on its effects on the economic consequences for the country's economy, and on how to evaluate the impact of policy decisions. Finally, such an administrator should be imaginative and dynamic.

18. As regards the classification of the industrial economic administrators, it seems preferable to adopt not the classic classification along the lines of hierarchy, but rather a functional classification which would lead to a distinction between the general administrator and the technical administrator. It is evident that these two classes could not be divided into watertight compartments, and in particular the technical administrator may well be called upon to pass to the role of the general economic administrator if, apart from his technical qualifications, he also possesses the necessary human qualities.

### III. NATURE AND CONTENT OF TRAINING PROGRAMMES

19. When speaking about the meaning of the word "training" of economic administrators, it should first of all be made clear that questions discussed hereafter do not concern "education" through technical schools or normal university programmes. Edu-

education is concerned with the development of the qualifications of the individual, while training is concerned with the development and improvement of the organization by enabling an individual to perform better. The Working Party, while emphasizing training aspects, were conscious of the need to improve educational standards generally. Both education and training are inter-related and the effectiveness of a person in a given job is dependent on the level of education and intensity of training.

20. The Working Party felt that the benefits of training are self-evident, but the problem was to make it practical and acceptable so as to serve a given need. There were problems of length of training which were linked to the question as to how long persons could stay away from the job. There were problems of designing suitable programmes so as to meet a given need. Moreover, the availability of relevant teaching material on various aspects of industrial development and the teaching personnel to make use of such material were considered as serious handicaps.

21. Training programmes should be organized to the greatest extent possible in the environment of the developing countries, i.e., either in a specific country or on a regional basis. The role of the institutes located in the developed countries should be more and more geared towards special subjects which are not included in training programmes which are provided for in developing countries. Moreover, they should assist training and research institutes in the developing countries to build up and improve their activities. The institutes in developed countries should

constantly keep in mind the conditions under which participants in such programmes will have to use their newly acquired knowledge, and such programmes should include practical work in the economic administration or in a given industrial sector of the developed countries.

#### Training of Senior Level Industrial Economic Administrators

22. The Working Party considered that providing training to top industrial economic administrators was both a function of time and of organization, since 7-10 days was considered rather the maximum time such persons could be away from their jobs. Problems of selecting appropriate subjects, organizing entire material and making available to such programmes high level experts were considered as matters requiring attention. Such efforts on the other hand, are not uncommon in other areas. Refresher courses are held for top business executives regularly by the business management institutions. Moreover, the United Nations and other international organizations are engaged in organizing technical meetings of experts.

23. The Working Party noted with interest the initiative taken by the OECD Development Centre to organize, on request of Governments of developing countries, part-time seminars on the spot for high level administrators and policy makers. These seminars last 3 weeks and aim through a detailed discussion of problems related to development strategy and administration to create a common language and understanding of these problems.



24. The Working Party felt that consideration be given to organizing short refresher courses in selected subjects of industrial development. It should be possible through such meetings to identify both administrative and technical problems within the organizations to which participants belong and discuss measures, with the assistance of experts and reference to experiences of other countries.

25. The United Nations and other international organizations should initiate, assist and organize short refresher courses of this type in the developing countries. After organizing some of these it should be possible for national organizations to take over some of these responsibilities.

26. Subjects to be taken up for discussion could be problems with which the top administrators are currently faced. They could vary from industry project appraisal and procedures to expedite early implementation to financing of industrial development and foreign aid. The general idea, it was felt, was to give the senior economic administrator an opportunity to exchange views with his colleagues in other branches and appreciate problems involved in either planning for and implementation of industrial development programmes. Finally, the training programme would supply general administrators with a sufficient insight into the technical problems which will be submitted to them and on which they will have to give a final judgement.

Training of Middle Level Industrial Economic Administrators

27. The Working Party took note of the fact that economic development training institutes, whether intra-regional, regional or national, have only until recent years incorporated into their programmes courses designed for training in industrial development planning and implementation. As mentioned earlier, lack of teaching material has indeed been a bottle-neck in the smooth functioning of existing industrial development training programmes, as well as in the organization of new ones. But even more important are the difficulties encountered in the recruitment of qualified instructors in the field of industrialization planning and implementation. These difficulties are augmented by the fact that the industrialization process involves a wide range of subjects and specializations and it is difficult to find instructors who can cover all subjects.

28. Many, if not most, of the existing training institutes which offer courses in the field of industrial development are geared towards the training of middle level industrial economic administrators with several years of practical work experience.

29. Since the industrial development effort required an interdisciplinary approach in which various professions are involved, the view was expressed by the Working Party that for middle level industrial economic administrators emphasis should be placed on providing them with a common language. This would require economic background to technicians and technical background to economists. It would provide an idea of the process of industrial

development from the planning to implementation stage. In such a programme the accent should be on project level planning, study of technical and economic aspects of selected industries, policy measures to promote industrial development, and the industrial aspects of regional planning. The members of the Working Party felt that a training programme with a duration from 3 to 4 months would be adequate for industrial economic administrators at this level.

#### Training in Specific Subjects of Industrial Development

30. While it would be useful to develop well-rounded programmes to give an awareness of the process of industrialization to mid-career officials as indicated above, the Working Party also recognised the need for training programmes in specified areas of industrial development. They could be referred to, for convenience, as specialised training programme. Specialized courses on such subjects as market analysis, industrial project appraisal, financing of industrial development, planning of industrial complexes, regional industrial planning, industrial man-power requirements, industrial policies and programming, regional industrial integration, etc. could be mentioned. Many of these subjects, which in effect form an integral part of the planning and implementation have been given more attention in recent years. The United Nations and other international organizations have organized several meetings on some of these subjects resulting in considerable documentation, which should be made available to the largest possible extent. Such documentation could be used in the regional and national training programmes and consequently evolving further material on a national level.

31. Notwithstanding the efforts undertaken by some national and international institutes and training programmes, it is generally felt that particularly the training in project elaboration and project analysis is lagging far behind the needs of the developing countries. The implementation of any industrialization policy or programme is inconceivable without the elaboration of specific projects, and it is in this field that developing countries face the greatest difficulties. In order to facilitate training in project elaboration and project analysis, as well as the work of the technical administrators dealing with these problems, it would be most useful if some standardization could be achieved in the methods used for project formulation and evaluation, and investment criteria in general.

32. Furthermore, when organizing training programmes, it is most desirable to bring together government officials and executives and leaders of enterprises and organizations, both private and public. As it is necessary to establish a common language between them it is consequently useful to have simultaneously people responsible for the general administration and those responsible for the preparation of projects, their execution and implementation within the framework of public and private enterprises participating together in the same training programme. The participation of executives and leaders of enterprises is all the more important since the absence or shortage of managerial talent often constitutes one of the most serious bottlenecks in industrial development.

Existing training facilities

33. There has been a rapid increase in the number of training institutes and programmes which are offered to people from developing countries, both in the developing countries as well as in the highly industrialized countries. Most of the programmes have concentrated on training in the field of macro-economics. There is a deficiency as regards training for industrialization in general, and more particularly with regard to specific sectors and at the level of the enterprise. This does not mean that one should necessarily increase the number of already existing institutes and programmes. There is rather a need to revise programmes in the light of the requirements for training felt by the developing countries if they want to succeed in elaborating and, still more, in implementing their industrial policies and programmes. Those responsible for such training programmes should constantly be pre-occupied by the need to evaluate their programmes in the light of existing requirements. It is realized that such evaluation is difficult to achieve. Some effort should be made, however, to try to establish some procedures which would help in getting a clearer idea of the efficiency of the programmes offered, and at the same time facilitate the efficacy of such programmes and their constant adaptation. Studies centered on critical evaluation of implementation processes of development projects in specific countries should be undertaken by national and regional development training and research institutes, as one of the methods to meet these needs.

34. As regards the services which could usefully be rendered to the existing training institutes and programmes, these are

indeed two-fold. First of all, there seems at present to be a general shortage of adequate teaching material and documentation. An important task could be fulfilled by a certain number of institutions and organizations in order to promote the elaboration as well as a wider circulation of such teaching material.

35. What is also important is the assistance that is needed for overcoming the shortage of qualified teaching staff for training programmes related to industrial development. Here again the institutes located in the highly industrialized countries have a role to play and aid-supplying agencies should see to it that these institutes can fulfil this task in the most efficient way. As a matter of fact, such assistance by the institutes of the industrialized countries would not only benefit those located in the developing countries or regions, but would also offer them an opportunity of increasing still more their knowledge of the concrete problems of the development process. Any such assistance in relation to industrial development should not overlook the fact that it is not enough to supply specialists in a given field or a specific industry or industrial sector, but that such specialists should also be aware of the ways and means of operating in the environment of a given developing country. The number of experts combining these two qualifications is still fairly scarce and although it may not be possible to solve all problems related to this question, some better organization and co-ordination between the various potential suppliers of such specialists might lead to some improvement in the present situation. These tasks require full cooperation

and co-ordination between the international organizations, regional and national training institutions, particularly in making documentation and staff available to each other. Joint training programmes could be undertaken to minimise costs and increase benefits.

IV. GENERAL RECOMMENDATIONS

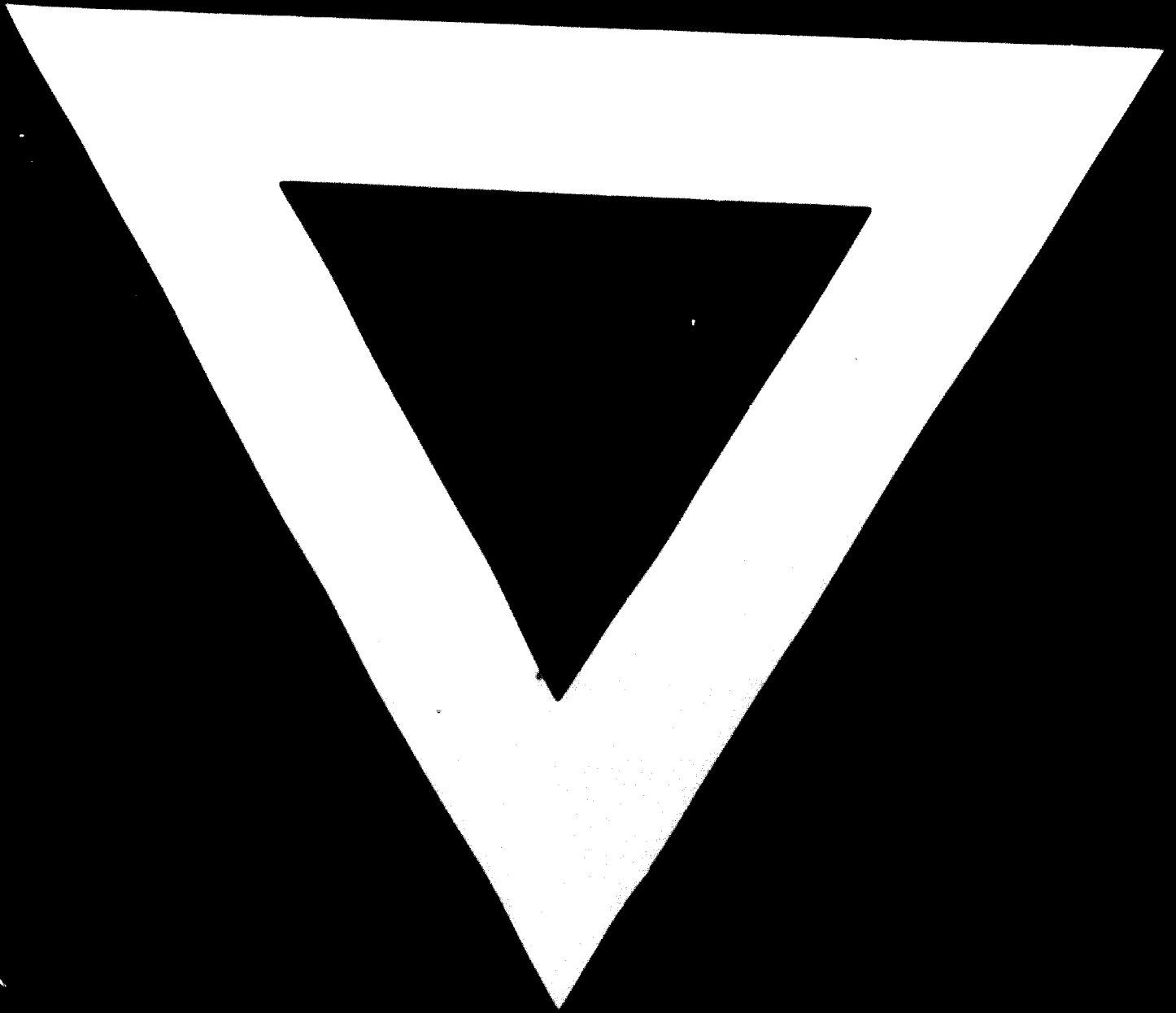
36. The Working Party recognizing the need to promote training programmes for the general administrators, as well as for the technical administrators dealing with industrialization in the developing countries, and with due regard to the efforts already made, recommends that the United Nations, the O.E.C.D. Development Centre and other international organizations:

- (a) should sponsor, at the most appropriate levels, short seminars or meetings for top-level administrators in the developing countries in development strategy and administration with due emphasis on problems of industrial development;
- (b) should promote and undertake training programmes for the mid-career general administrator on a national and regional basis;
- (c) should initiate and organize training programmes for technical administrators in specific or specialized subjects of industrialization, e.g. project preparation, evaluation, industrial financing;

- (d) should provide adequate financial support through their technical assistance and aid programmes, should make available to countries and institutes, for training purposes, expert assistance and documentation and teaching materials on industrialization. In particular the establishment of industry studies and a manual for the elaboration and evaluation of projects is considered an urgent matter;
- (e) should increase their efforts towards helping development training institutes in the less advanced countries;
- (f) should give special assistance to those development training institutes in the less advanced countries which can serve as intensive pilot efforts to test and develop training material and approaches.







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