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*for a sustainable future*

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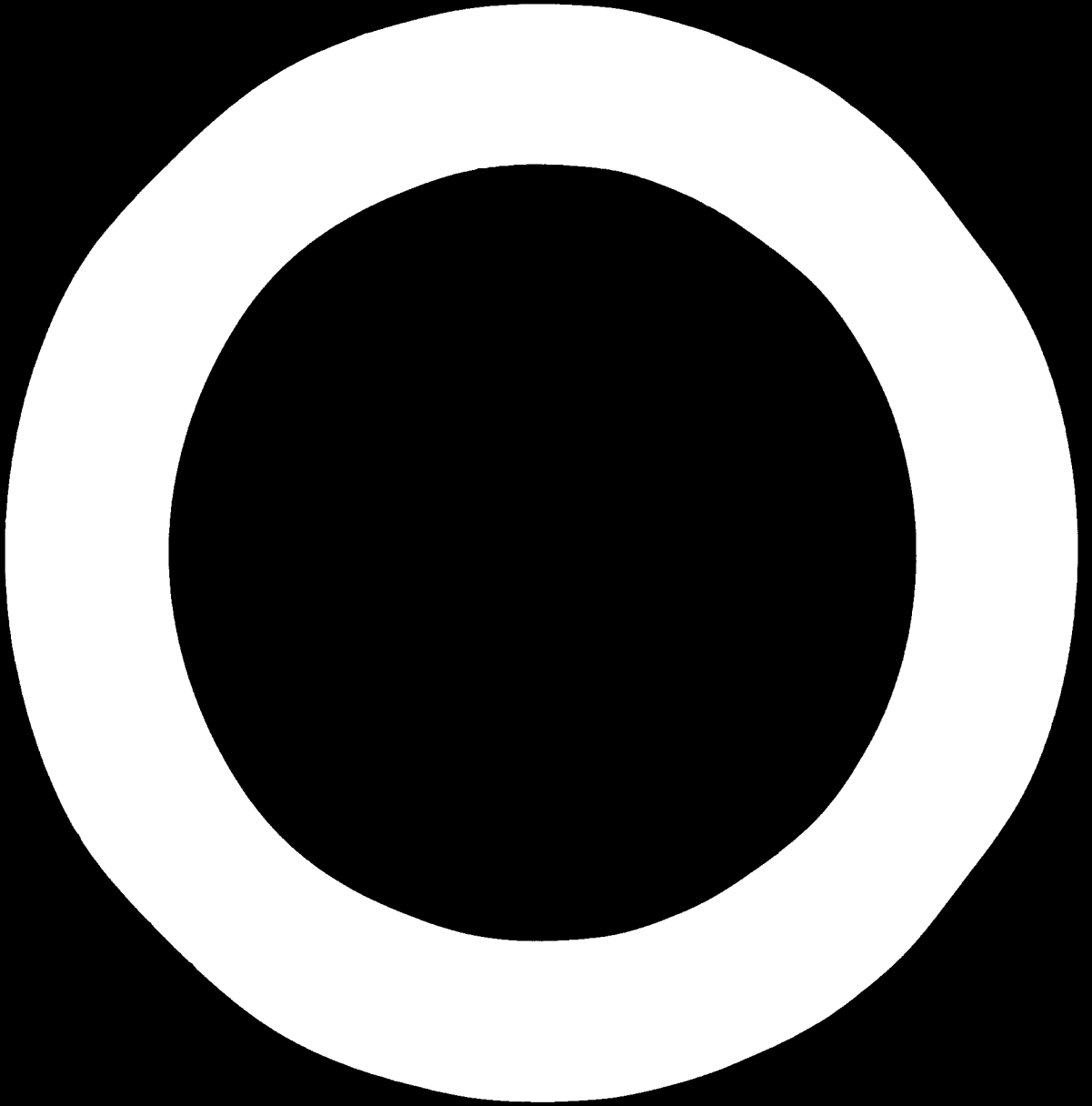
UNITED NATIONS  
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INDUSTRIAL DEVELOPMENT  
DEPARTMENT  
ENGLISH

REPORT  
ON THE UNITED NATIONS TRAINING WORKSHOP  
ON PROJECT EVALUATION AND EVALUATION

Geneva, April 1968

(1968) - July 1971





## Introduction

The Training Workshop on Preparation and Evaluation of Industrial Projects was held in Sanaa, Arab Republic of Yemen. It was originally planned for two weeks, but during the preparatory stage it was realized that it should be extended to three weeks.

The Workshop was sponsored jointly by UNIDO and the Industrial Development Centre for Arab States (IDCAS). It was financed by the General Trust Fund of UNIDO (\$1,000) and by IDCAS. The preparation and implementation of the Workshop was assigned to the Industrial Programming Section, Industrial Policies and Programming Division of UNIDO, and the Economic Division of IDCAS. The preparatory work began in January 1973 and the Workshop was held between 15 June and 5 July 1973.

The Workshop was originally planned for participants from both the Arab Republic of Yemen and the People's Democratic Republic of Yemen. The number of participants was expected to be 20 (ten from each country). Due to reasons beyond the control of the two organizing agencies, the participants from the People's Democratic Republic of Yemen were unable to go to Sanaa. From the Arab Republic of Yemen 14 participants regularly attended all sessions of the Workshop. A list of the participants is included in Appendix I.

### 1. Objective of the Workshop

The main objective of the Workshop was to provide theoretical and practical training on project preparation and evaluation techniques to participants from government, banking and other institutions in the Arab Republic of Yemen in order to create a nucleus of specialists in this field.

Taking into account the limited theoretical and practical background of the participants, the methods of lecturing and presenting case studies and exercises were adjusted accordingly. Priority was given to the most essential techniques of project preparation and evaluation, which are quite sufficient for the conditions prevailing in the country.

As a result of the solid preparation for the Workshop, the hard work of the team of lecturers, the high discipline, punctuality and diligence of the participants as well as the very good conference and other facilities supplied by the Government of the Arab Republic of Yemen, the above objective was successfully achieved. One may even say that the outcome of the Workshop surpassed our expectations.

## 2. Procedure of the Workshop

The Workshop was officially convened on the morning of Saturday, 16 June, in the Officers Club, in which a spacious lecture hall and other facilities were provided. Several opening statements were made on behalf of the Government and the two organizing agencies. On behalf of the Government, the Deputy Prime Minister for Economic Affairs and the Minister of Economy welcomed the lecturers and participants and expressed the Government's appreciation of the activities of UNIDO and IDCAS in the field of industrial development and of their co-operation in organizing the Workshop and looked forward to co-operation in other projects which could assist the economic development of the Arab Republic of Yemen.

The sessions were held every day, except Friday, from 8.30 to 14.00 with two breaks. Most of the lecturing was done in Arabic because many participants did not possess good working knowledge of English. The lecturers of Messrs. Walser and Angelo and their statements during the discussions were translated into Arabic. There was no equipment for simultaneous interpretation.

The Workshop was chaired by Mr. M. Said Ali from IDCAS. The punctuality of the lecturers and participants was very good. The UNIDO Senior Industrial Development Field Adviser, Mr. A. Abdelwahab, attended the Workshop until 26 June and contributed much to its smooth implementation.

## 3. Participants in the Workshop

The 14 participants, nominated by the Government of the A.R.Y. were from the Ministry of Economy, the Central Planning Organisation, the Central Bank of Yemen, the Yemen Bank for Reconstruction and Development, the Institute of Public Administration and other Government-

owned and private companies. Twelve of the 14 participants are university graduates. Almost all of them lack systematic theoretical knowledge of techniques of project preparation and evaluation and possess very limited practical experience in this field.

With practically no exception, the participants demonstrated great interest in the training course, attended regularly the sessions, were extremely punctual, asked questions and raised many pertinent points for discussion. This was due to the wish, clearly expressed by the participants, to be better acquainted with the subject as well as to the particular attention with regard to the Workshop shown by very senior Government officials, including the Deputy Prime Minister, who attended both the opening and closing sessions and gave a dinner for the lecturers and participants.

#### 4. Outline of the Workshop

The Workshop comprised presentation in a very simplified way of the most essential techniques for preparation and evaluation of industrial projects in a developing country. The presentation of these techniques took approximately 50 hours of lectures and 15 hours of discussion related to the lectures. Approximately 30 hours were devoted to the presentation and discussion of a case study on a cement plant, presentation of two exercises (orange juice factory and perfumed soap factory) and their solution to the participants with the assistance of the experts. About 80% of the participants independently solved the latter exercise, which was considered to be a very good result.

The main subjects taught at the Workshop were the following:

- Project selection and its relation to socio-economic development
- Interrelationship between sectoral and project planning
- Stages in project planning
- Importance and nature of market and demand analysis
- Methods of demand forecasting
- Basic concepts related to technical aspects of project preparation
- Production, technology, manpower, training and management

- Infrastructure
- Plant location; site selection.
- Project design.
- Overall technical soundness of the project
- Basic concepts and framework of financial analysis
- Investment requirement analysis
- financing of investment
- Operating cost analysis
- Cash flow analysis
- Organizational aspects
- Basic principles in project evaluation. Connexion between project preparation and evaluation
- Commercial versus national profitability
- Commercial profitability analysis
- National profitability analysis - consumption effect, foreign exchange effect, employment and distribution effect

The training programme also included a visit (29 June) to a cement plant, soft drinks factory and cigarette factory near Hodeidah on the Red Sea (approximately 230 km from Sanaa). Transportation, accommodation and other facilities were provided by the Government of the A.R.Y. This was an excellent opportunity to illustrate much of what was being taught at the Workshop.

#### 5. Participating Experts

The lecturing at the Workshop was done by the following experts:

- Mr. Hassan Hosny, Central Auditing Organization, Cairo, recruited by IDCAS
- Mr. Yousry Khidr, Professor, University of Cairo, recruited by IDCAS
- Mr. Kamel Maksoud, Director General, Metallurgical Projects, General Organization for Industrialisation, Cairo, recruited by IDCAS
- Mr. Peter Walser, Swiss Federal Institute of Technology, Zurich, recruited by UNIDO
- Mr. Ivan Angelov, Industrial Policies and Programming Division, UNIDO



It was not an easy job for the lecturers. They had to select the most essential of the techniques for project preparation and evaluation and present them in a very simplified way. It should be kept in mind that some of these essential techniques are not that simple and easy to understand. To our satisfaction, all experts in most of their lectures did it successfully. The lectures were theoretically well-founded and at the same time presented in a simple way for easier understanding and assimilation by the participants. The utilization of a number of simple illustrative numerical examples and charts on the blackboard, the presentation of relatively simple case study and exercises taken from the region, the very informal and business-like atmosphere between lecturers and participants, the meetings held with the managers of the three factories mentioned above, distribution among the participants one month prior to and during the Workshop of a number of reference material (most of it translated by IDCAS into Arabic) all contributed to the success of the Workshop. A list of the reference material is attached as Appendix II.

#### 6. Appraisal of the Workshop

The last session was devoted to the evaluation of the Workshop by the participants. They made statements and expressed their appreciation of the Workshop. Furthermore, all participants were invited to complete a questionnaire without indicating their names. The questionnaires are still with IDCAS for summarizing the answers and their analysis. Within a few weeks they will be transmitted to UNIDO for the same purpose. A copy of the questionnaire is enclosed as Appendix III.

#### 7. Recommendations of the Workshop

At the closing session of the Workshop, the participants put forward a number of pertinent recommendations addressed to UNIDO and IDCAS. The most important of these are as follows:

- a) UNIDO and IDCAS should participate more actively in the examination of future industrial projects in the Arab Republic of Yemen, combining this with training of local specialists;

- b) Yemeni specialists should be invited to attend regional training workshops on project preparation and evaluation held in the Arab region in order to exchange experience with participants from other countries;
- c) UNIDO and IDCAS should organize in the Arab Republic of Yemen as a continuation of this Workshop a training course on project implementation;
- d) When holding future training or other meetings, more attention should be given to manufacturing industries based on agricultural raw materials because of the important role of agriculture based industries in developing countries;
- e) UNIDO and IDCAS should pay particular attention in the future to the promotion of regional (multi-national) industrial projects by preparing respective reference material and holding training courses;
- f) The two organizations (UNIDO and IDCAS) should offer fellowships on project preparation and evaluation to the Arab Republic of Yemen or assist in obtaining them from other international organizations;
- g) The two organizations should supply to the A.R.Y. available publications and other reference material on this subject, as well as reference material to be distributed to future training workshops;
- h) The two organizations should try to organize similar training courses on project preparation and evaluation in a selected western country and in a selected socialist country for the benefit of participants from developing countries. A comparison of their methodologies to be made and published;
- i) When holding such training workshops it is indispensable to organize visits to respective factories since this facilitates very much the understanding of what is being taught in the lectures;
- j) The two organizations should organize training courses and/or publish reference material on industrial costing;
- k) The two organizations should include in their work programmes for the following years the elaboration of a manual and the holding of training or other meetings on post investment evaluation of industrial projects and not only pre-investment evaluation as it is so far.

## 8. Conclusions

The Sanaa Workshop was one of the first national training workshops held in a least developed of the developing countries. For this reason it might be worth drawing some conclusions on the basis of this experience:

- a) Although we never doubted the necessity of holding such a training workshop in a least developed country to present to local specialists in a very simplified way the essentials of project preparation and evaluation techniques, after the Workshop we are even more convinced of it. It is not simply a slogan to say that for the poorest countries it is even more important to make the best use of their extremely limited resources and achieve higher efficiency. The introduction of scientific methods for project preparation and evaluation by training local people involved in this field is one of the ways to achieve this goal;
- b) It is advisable to combine the training on project preparation with that of project evaluation in one workshop because the two activities are indivisible in real life and because it proves easier for the participants to understand what they are being taught;
- c) It seems that a duration of three weeks is the most acceptable. Two weeks is too short for the participants, and four weeks causes problems in recruiting outside experts or sparing UNIDO staff members;
- d) It seems advisable to do everything possible to organize the teaching in the mother tongue of the participants, even when simultaneous interpretation is available as well as to recruit as many lecturers as possible from the same region as they are much better acquainted with the problems of the country (region) and can teach in the same language.

It would be needless to prove that the form and content of the lecturing and the reference material distributed among the participants should take into account the prevailing conditions in the respective country.

Finally, we would like to emphasize that the administrative arrangements made and the facilities provided by the Government authorities for the Workshop were very adequate and have contributed to the smooth running of the Workshop.

APPENDIX I

List of Participants

1. Mohamed Abubakr M. Almoalmi      Director General, Department of Industry, Ministry of Economics
2. Mohamed Said Bakhil              Counterpart of Financial Expert, Public Administration Institute
3. Mohamed N. A. Elrahman          Research Staff, Project Evaluation Department, CPO
4. Mohamed Abd u Saeed              Manager of H. S. Anam and Co. Branch Sanaa
5. Ali Abdulla El-Agbary              Head of Department of Cultivation Development, Tobacco and Matches Co.
6. Abdul Malik Dirhom                Counterpart of Financial Expert, Institute of Public Administration
7. Abdel Moghni F. Ali                Director of Industry, Ministry of Economics
8. Ahmed Hussein El Garadi          Assistant, General Manager, Yemen Bank for Reconstruction and Development
9. Mohamed-Ahmed El Kustuban       Assistant Manager, Yemen Bank for Reconstruction and Development
10. Akil Abdulla A. Al-Sakkef         Assistant General Manager, Yemen Bank for Reconstruction and Development
11. Abdulla Ali El Ghabiri            Assistant Manager, Yemen Bank for Reconstruction and Development
12. Abdulla Awed Baum                Research Staff, Planning Department, CPO
13. Ali Naser Saleh                    Research Staff, Research Department, Central Bank of Yemen
14. Abdel Tawab Ghaid Abdalla        Geological Research Department, Ministry of Economics

Appendix II

List of Reference Material

1. An Arabic Summary of Parts I and II of the Guidelines for Project Evaluation, prepared by Dr. E. Shafie
2. Stages of Industrial Project Development (Classification of Pre-Investment Studies), UNIDO/IPPD/35 (in Arabic)
3. "Essential Elements in the Preparation of Industrial Projects", an article from the UNIDO publication Evaluation of Industrial Projects (in Arabic)
4. Checklist of Project Information, ID/WG.22.4 (in Arabic)
5. Stages of Project Preparation (Introductory Study), ID/WG.55/1 (in Arabic)
6. Checklists for Individual Studies and Planning Stages used in Project Screening Operations, ID/WG.55/3 (in Arabic)
7. Extracts of Industrial Feasibility Studies (first 17 pages only), ID/WG.52/2 (in Arabic)
8. Basic Concepts in Project Evaluation, UNIDO/IPPD/9
9. "An Introduction to Industrial Planning", an article in Industrialization and Productivity Bulletin, No. 16 (in Arabic)
10. "Guidelines for Financial Feasibility Analysis", prepared by Mr. H. Hoany
11. Detailed Summary of Lectures on Technical Aspects of Project Preparation (in Arabic), prepared by Mr. K. Maksoud
12. Detailed Summary of Lectures on Marketing Aspects of Project Preparation (in Arabic), prepared by Mr. Y. Khidr
13. Detailed Summary of Lectures on Project Evaluation, prepared by Mr. P. Walser

APPENDIX II

List of Reference Material (cont.)

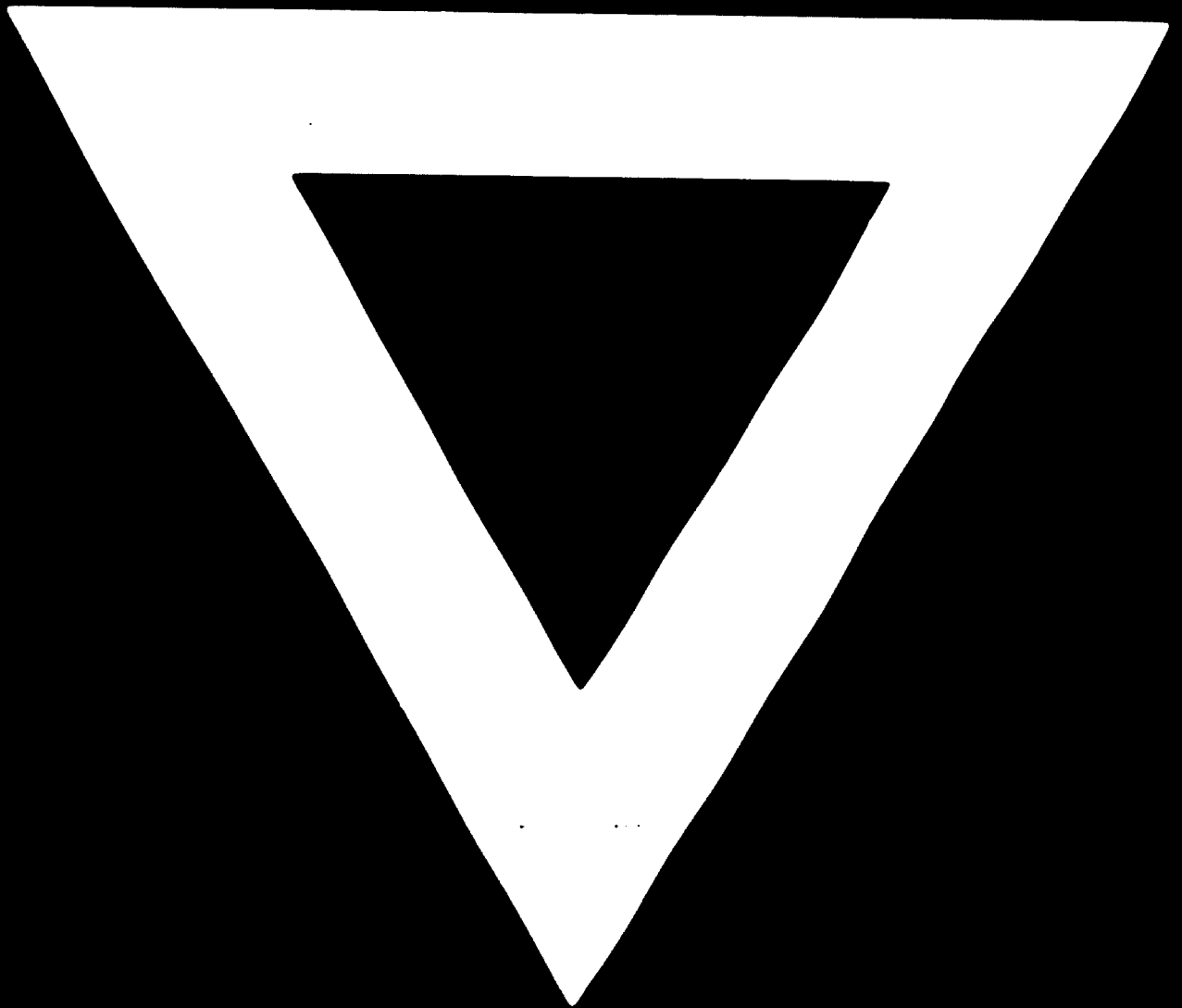
14. Interrelationship between Sectoral and Project Planning,  
prepared by Mr. I. Angelov
15. A Case Study on a Portland Cement Project
16. An Exercise on Orange Juice Factory
17. An Exercise on Perfumed Soap Factory.

APPENDIX III

QUESTIONNAIRE

1. What do you think about the duration of the Workshop?
2. How do you evaluate time allocated for lecturing on one side and for case study and exercises on the other side?
3. What is your opinion about the lectures?
4. What did you learn from this workshop?
5. Which documents did you study prior to the workshop?
6. Which documents did you study during the workshop?
7. What did you like the most about the workshop?
8. What did you not like about the workshop?
9. What are your views concerning the administrative arrangements for the workshop?
10. What are your recommendations to IDCAS and UNIDO in relation to their future work on project preparation and evaluation in the Yemen Arab Republic?





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