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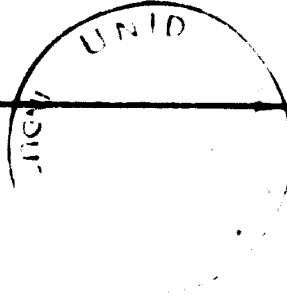
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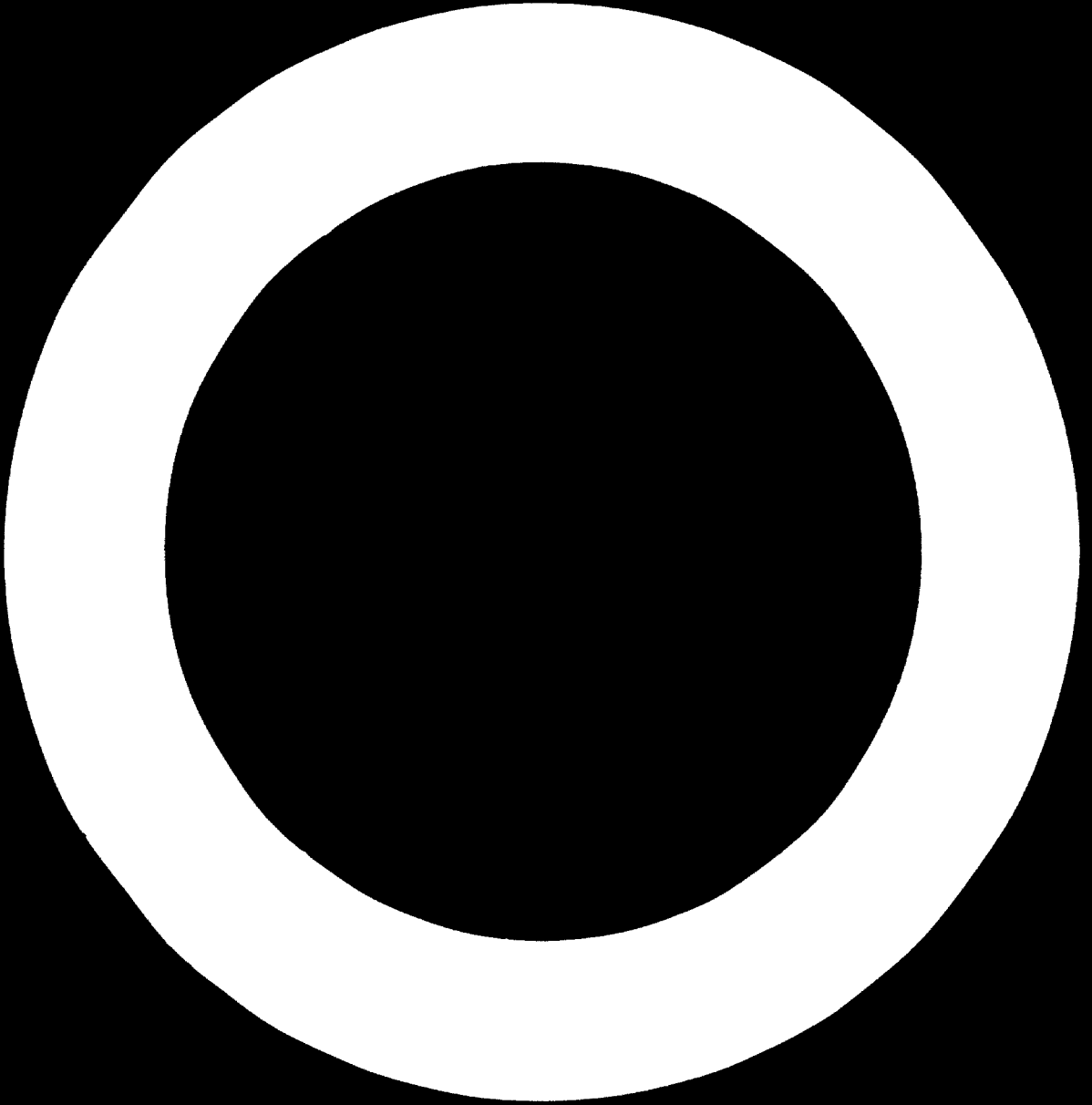


REPORT
ON THE UNIDO/IDCAS TRAINING WORKSHOP
ON PROJECT PREPARATION AND EVALUATION

Khartoum, Democratic Republic of Sudan
(26 August - 16 September 1974)

id. 74-6437

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards even though the best possible copy was used for preparing the master fiche



Introduction

The Training Workshop on Preparation and Evaluation of Industrial Projects was held in Khartoum, Democratic Republic of Sudan, and lasted 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 (\$6780) 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 1974, and the Workshop was held between 26 August and 16 September 1974.

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 different ministries, banking and other institutions in the Democratic Republic of Sudan and the People's Democratic Republic of Somalia in order to create a nucleus of specialists in this field in the above countries.

Taking into account the theoretical and practical background of the participants, the methods of lecturing and presentation of case studies were adjusted accordingly. Priority was given to the most essential techniques of project formulation and evaluation, which are sufficient for the conditions prevailing in the two countries.

As a result of the very good preparation for the workshop by IDCAS, the good work of the team of lecturers, the high discipline and contribution of the participants as well as the co-operation of the Ministry of Industry and Mining, the above objective was successfully achieved.

2. Procedure of the Workshop

The Workshop was officially opened on 26 August in the premises of the Faculty of Engineering, Khartoum University. On behalf of the Government, the Acting Minister of Industry and Mining, Dr. Idris, and other senior Government officials were present. The Resident Representative of the UNDP in Khartoum, Mr. Cappelletti, was also there. Opening statements were made on behalf of the Government and the two organising agencies, UNIDO and IDCAS. On behalf of the Government, the Acting Minister of Industry and Mining welcomed the lecturers and participants

and expressed the Government's appreciation for the activities of UNIDO and IDCAS in the field of industrial development and of their co-operation in organizing the Workshop. He looked forward to co-operation in other projects which could assist the economic development of the Sudan.

The sessions were held every day except Friday from 8.30 to 14.00 with two breaks. An extra evening session was held during the last week. Most of the lecturing was done in English. Only the lectures on marketing aspects of project preparation were delivered in Arabic. All participants had a good working knowledge of English.

The Workshop was chaired by Mr. I. Angelov from UNIDO and Mr. M. Said Ali from IDCAS. The punctuality of the lecturers and participants was good.

The closing session was held on 16 September in the presence of all participants and a number of guests, among them: Mr. Mousa Awad Bilal, Minister of Industry and Mining; Mr. Abdalla M. Fadalla, Permanent Under Secretary, Ministry of Industry and Mining; Mr. L. Cappelletti, Resident Representative of the UNDP, H. E. The Ambassador of Somalia, senior Government officials. Closing statements were made on behalf of the Government, UNIDO, IDCAS and the participants.

Publicity was given to both the opening and closing sessions of the workshop by the information media.

3. Participants

Thirty-nine participants attended regularly the sessions of the Workshop - 34 from the Sudan and five from Somalia. The participants nominated by the Government of Sudan were from the Ministry of Industry and Mining, the National Planning Commission, the Industrial Production Corporation, the Industrial Projects Implementation Board, the Industrial Bank of Sudan, the Industrial Research and Consultancy Institute, the Management Development and Productivity Centre, the Sudan Textile Industry, Kenaf Projects and the Sudanese Industries Association (private industry). The participants nominated by the Government of Somalia came from the Ministry of Planning and Co-ordination, the Ministry of Industry and the Somali Development Bank. The travel and subsistence for the Somali participants were borne completely by IDCAS. All participants were university graduates. The ratio between engineers and economists was 50:50. Some participants had some knowledge of project formulation and evaluation, but almost all of them lacked systematic

theoretical knowledge of techniques of project preparation and evaluation and possessed only limited practical experience in this field. A list of the participants is included in Appendix I.

Most participants demonstrated great interest in the training workshop, attended the sessions regularly, asked questions, shared experience and raised many pertinent points for discussion. This was due to the good background of many of the participants and to the wish, clearly expressed by them, to become better acquainted with the subject as well as to the particular attention with regard to the workshop shown by senior Government officials.

4. Outline of the Workshop

The Workshop comprised presentation of the most essential techniques for preparation and evaluation of industrial projects in a developing country. The presentation of these techniques took approximately 52 hours of lectures and 15 hours of discussion related to lectures. Approximately 22 hours were devoted to the presentation of case studies on a cement plant, integrated textile mill and on a pulp and paper mill. The first case study was distributed among the participants in Arabic, the other two in English.

The main subjects taught at the Workshop were the following:

- Interrelationship between national, sectoral and project planning; stages in project planning;
- Importance and nature of market and demand analysis. Methods of demand forecasting;
- Technical (engineering) aspects of project preparation: capacity, production, technology, production materials, manpower, training and management, project design, infrastructure, plant location, site selection;
- Basic concepts and framework of economic analysis - investments, operating costs, cash flow analysis, break-even analysis;
- Basic principles in project evaluation; connexion between project preparation and evaluation; commercial versus national profitability;
- Commercial profitability analysis - basic concepts; methods of commercial profitability evaluation - pay-back period, net present value, internal rate of return; uncertainty;
- National profitability analysis - basic concepts; criteria for national profitability evaluation - aggregate consumption, foreign exchange effect, employment effect, distribution effect; project evaluation and pricing; national parameters; uncertainty.

The training programme also included a visit (7 September) to a textile factory in Khartoum North.

5. Participating Experts

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

- Mr. Jadranko Beniekovic, Economic Institute, Zagreb, Yugoslavia, recruited by UNIDO
- Mr. Friedrich Giersig, Creditanstalt-Bankverein, Vienna, recruited by IDCAS
- Mr. Abdel Samie A. Khalil, Central Auditing Organization, Cairo, recruited by IDCAS
- Mr. Jousry Khidr Ismail, Faculty of Commerce, University of Cairo, Cairo, recruited by IDCAS
- Mr. Ivan Angelov, Industrial Policies and Programming Division, UNIDO.

The lecturers selected the most essential of the techniques for project preparation and evaluation and presented them in a simplified way. To our satisfaction, the experts in most of their lectures did this successfully. The lectures were theoretically well-founded and at the same time presented in a simple way for easier understanding by the participants. The utilization of a number of simple illustrative numerical examples and charts on the blackboard, the presentation of relatively simple case studies, the very informal and business-like atmosphere between lecturers and participants, distribution among the participants prior to and during the workshop of a number of reference materials (many of them 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. All participants were invited to complete a questionnaire in English without indicating their names. The questions were as follows:

- a. What do you think about the timing of the Workshop?
- b. What do you think about the duration of the Workshop?
- c. Did you study any of the documents prior to the start of the Workshop? If yes, which?
- d. Did you study any of the documents during the Workshop? If yes, which?
- e. Which parts of the Workshop did you enjoy most and why?
- f. Which parts of the Workshop did you not enjoy and why?

- g. What is your opinion concerning the ratio between lectures and case studies?
- h. How far was the Workshop related to the daily work you do at your Ministry or Department, etc.?
- i. Having participated in this Workshop do you think you will be able to participate in formulating and evaluating projects in your country?
- j. Recommendations to UNIDO and IDCAS for future assistance to your country in the field of project preparation and evaluation.

7. Recommendations of the Workshop

While answering the last question of the questionnaire, 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 organize in the Sudan as a continuation of the present Workshop a training course on project implementation;
- b. UNIDO and IDCAS should organize next year a similar training workshop on project preparation and evaluation in Somalia;
- c. Training workshops on project preparation and evaluation to be held in the future in developing countries should last at least four weeks and allocate more time for discussion of practical problems and actual projects taken from the country;
- d. Participants from the Sudan and Somalia should be regularly invited to attend regional and interregional training courses and seminars on project preparation and evaluation in order to upgrade their skill and exchange experience with colleagues from other countries. Fellowships on this subject should also be given to Sudan and Somalia;
- e. UNIDO and IDCAS should send regularly to Sudan and Somalia relevant up-to-date documentation on this subject;
- f. More time should be allocated for lectures on technical, financial and managerial aspects of project formulation;
- g. UNIDO should recruit more experts for Sudan and Somalia to advise and assist in identification, preparation, evaluation and implementation of industrial investment projects.

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

APPENDIX I

LIST OF PARTICIPANTS

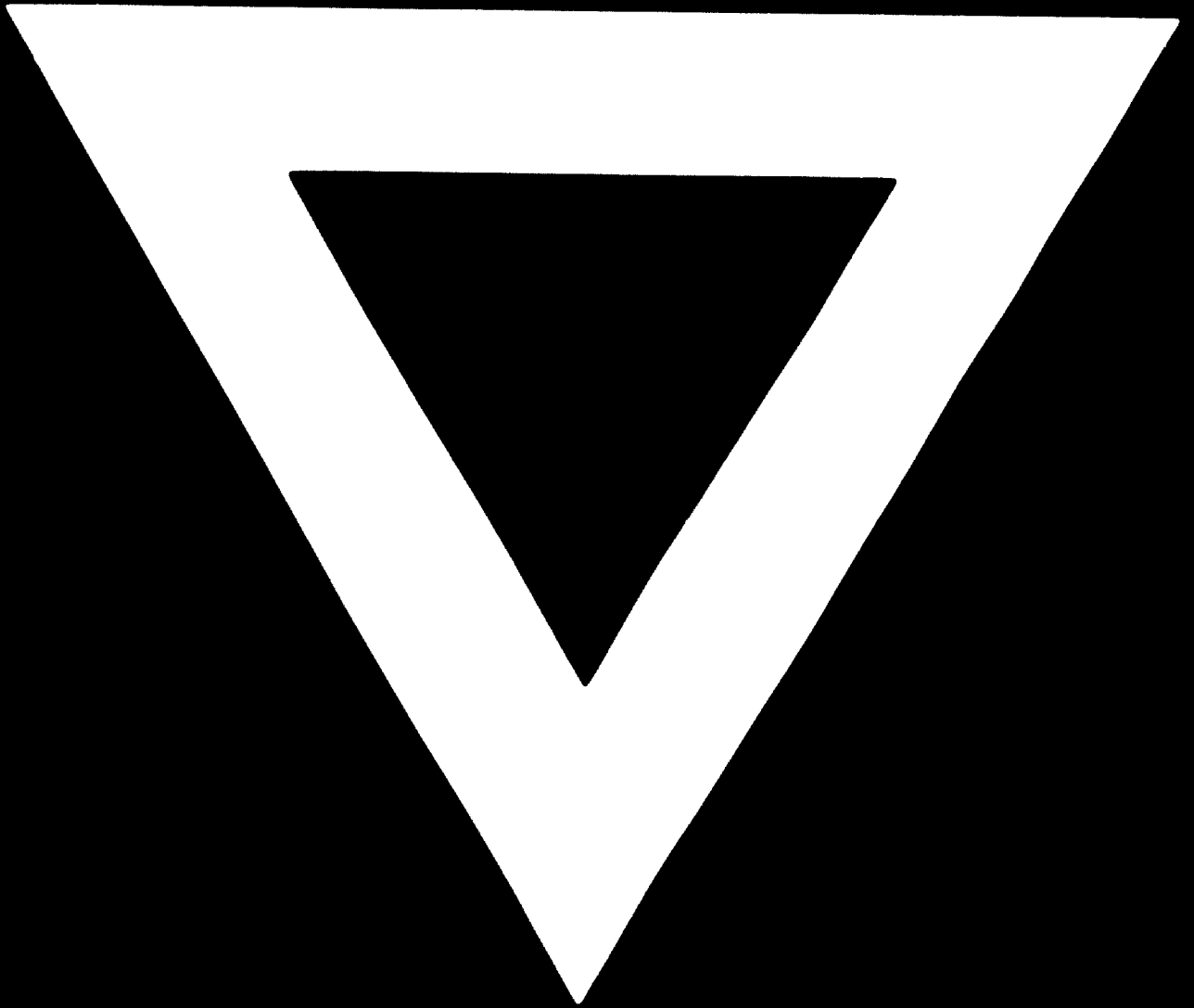
1. Mohamed Fathi Abdel Ghaffar
Director General, Sudanese Industries Association, Khartoum
2. Essa Mohamed Moawed
Cost Accountant, Sudan Textile Industry, Khartoum
3. A/mohsin A/Farrag Mohamed
Assistant Inspector, Ministry of Industry and Mining, Khartoum
4. Mohamed El Mostafa El Sayed
Assistant Inspector, Ministry of Industry and Mining, Khartoum
5. Mustafa El Mahdi Ahmed
Industrial Marketing Consultant, Khartoum
6. Iqbal Ali Elderdeene
Assistant Inspector, Ministry of Industry and Mining, Khartoum
7. Iqbal Hassan El Yamani
Assistant Inspector, Ministry of Industry and Mining, Khartoum
8. Osman Ali El Khalifa
Assistant Inspector, Ministry of Industry and Mining, Khartoum
9. Mohamed Abdel Bagi Sirag
Planning Officer, Industrial Production Corporation, Khartoum
10. Ibrahim Mohamed Mohamed Khalil
Assistant Inspector, Ministry of Industry and Mining, Khartoum
11. Omar Mohamed Osman
Assistant Follow-up Officer, Khartoum
12. Mahmoud Mergani Mohamed
Management Development and Productivity Centre, Khartoum
13. El Hag Ahmed Mohamed
Assistant Inspector, Ministry of Industry and Mining, Khartoum
14. Kamal Eldin Mousa
Follow-up Officer, Industrial Projects Implementation Board, Khartoum
15. Salih Elamin Mohamed Kheir
Industrial Economist, Industrial Bank of Sudan, Khartoum
16. Osman Ibrahim Emnur
Assistant Inspector, Ministry of Industry and Mining, Khartoum
17. Sulieman Abu Damir
Assistant Inspector, Ministry of Industry and Mining, Khartoum
18. El Hassan Osman El Hassan Malik
Assistant Inspector, Ministry of Industry and Mining, Khartoum
19. Fadel M. Nour
Inspector, Industrial Research and Consultancy Institute, Khartoum
20. Mohamed Agban Mohamed
Follow-up Officer, Industrial Projects Implementation Board, Khartoum
21. Leonardo Nhial Bol.
Production Engineer, Kenaf Projects, Khartoum

22. Bakri Ageeb Babiker
Management Development and Productivity
Centre, Khartoum
23. Bakri Ahmed El Hassan
Research and Consultant Officer,
Sudan Industrial Research Institute,
Khartoum
24. Ali El Sayed Ali Omer
Research Officer, Sudan Industrial
Research and Consultancy Institute,
Khartoum
25. Zahir Yacoub Abd El Sayed
Inspector, National Planning Commission,
Khartoum
26. Khalid Mohamed El Hassan
Electrical Engineer, Industrial Projects
Implementation Board, Khartoum
27. Hassan El Zubeir El Tahir
Engineer, Ministry of Industry and
Mining, Khartoum
28. Mahmoud Gismalla Khairalla
Industrial Engineer, The Industrial
Bank of Sudan, Khartoum
29. Abdelmoneim Mohamed Attia
Head of Production Department, Industrial
Production Corporation, Khartoum
30. Abu Elgasim Elamin A/Rahman
Electrical Engineer, Ministry of
Industry and Mining, Khartoum
31. Elsheikh Tambal
Production Manager, Khartoum South
32. Eltoun Ibrahim El Agib
Statistician, Sudan Textile Industry,
Khartoum
33. Salah Eldeen Hussein Hassan
Chemical Engineer, Ministry of Industry
and Mining, Khartoum
34. Mohamed Ali Mohamed Osman
Chemist, Khartoum
35. Osman Yusuf Farah
Head of Economic Department, Somali
Development Bank, Mogadiscio
36. Musa Ismail Ahmed
Ministry of Industry, Mogadiscio
37. Ahmed Aden Yusuf
Ministry of Industry, Mogadiscio
38. Yassin Ismail Jama
Ministry of Industry, Mogadiscio
39. Abdi Mahmoud Giirre
Head of Industry Section, Ministry of
Planning and Co-ordination, Mogadiscio

APPENDIX II

List of Reference Material

1. Guidelines for Project Evaluation (ID/SER.H/2)
2. An Arabic summary of Parts I and II of the Guidelines for Project Evaluation, prepared by Dr. E. Shafie
3. Stages of Industrial Project Development (Classification of Pre-Investment Studies), UNIDO/IPP/35 (in Arabic)
4. "Essential Elements in the Preparation of Industrial Projects", an article from the UNIDO publication Evaluation of Industrial Projects (in Arabic)
5. Checklist of Project Information, ID/WG.22/4 (in Arabic)
6. Stages of Project Preparation (Introductory Study), ID/WG.55/1 (in Arabic)
7. Checklists for Individual Studies and Planning Stages used in Project Screening Operations, ID/WG.55/3 (in Arabic)
8. Extracts of Industrial Feasibility Studies (first 17 pages only) ID/WG.52/2 (in Arabic)
9. Basic Concepts in Project Evaluation, UNIDO/IPP/9
10. "An Introduction to Industrial Planning", an article in Industrialization and Productivity Bulletin, No. 16 (in Arabic)
11. Detailed summary of lectures on Financial Aspects of Project Preparation and Commercial Profitability (in English), prepared by Mr. Abdel Samie Khalil
12. Detailed summary of lectures on Technical Aspects of Project Preparation (in English), prepared by Mr. F. Giersig
13. Detailed summary of lectures on Marketing Aspects of Project Preparation (in Arabic and English), prepared by Mr. Y. Khidr
14. Interrelationship between Sectoral and Project Planning, prepared by Mr. I. Angelov
15. A Case Study on a Portland Cement Project
16. A Case Study on an Integrated Textile Mill
17. A Case Study on a Pulp and Paper Mill



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