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EVALUATION

Evaluation of United Nations Development Programme-financed technical co-operation activities of the United Nations Industrial Development Organization in the field of manufactures

Report of the Secretary-General

Addendum

Summary of the report of the evaluation team

* E/AC.51/1983/10.

CONTENTS

Tables

INTRODUCTION

1. At its twenty-second session, the Committee for Programme and Co-ordination (CPC) 1/ endorsed the evaluation study design as contained in the Secretary-General's report on progress in in-depth evaluation of the United Nations Development Programme (UNDP)-financed technical co-operation activities of the United Nations Industrial Development Organization (UNIDO) in the field of manufactures (E/AC.51/1982/6). The evaluation study was undertaken over a period of two and a half years and a summary of the findings is presented below.

2. Chapter I contains an assessment of the effectiveness and impact of a sample of manufactures projects drawn from an initial inventory of 906 projects, and a comparison of the findings is made with those of the preliminary analysis presented to CPC in 1980 and with other pertinent studies. Chapter II attempts to determine how and why projects achieved, or failed to achieve, effectiveness and impact. For this purpose, it was necessary to examine some of the external factors which comprise the project's environment, including the roles and capabilities of UNDP and UNIDO, the structure and functioning of the tripartite system and finally the characteristics of the industrial sector which require international technical assistance. Chapter III contains a synthesis of the findings, particularly concerning large-scale projects, and recommendations for consideration at policy, system and organizational levels. In view of the specialized terminology used in the present report an explanation of terms is attached in an annex.

3. The thoroughness of the study reflects the interests of the participating organizational entities. The current world-wide recession has sharpened the debate on the effectiveness of development assistance while resources for such activities are continually decreasing. UNDP and its Governing Council, through its Intersessional Committee of the Whole, have recently been giving serious consideration to improvements in the evaluation system of UNDP, a subject which has also received considerable attention in the past. On the verge of assuming new status as a specialized agency, UNIDO is also giving serious consideration to how it can most effectively restructure its policies, organization and manpower to carry out its heavy responsibilities in the field of industrial development.

I. ASSESSMENT OF ACHIEVEMENTS OF MANUFACTURES PROJECTS

A. Background and methodology

4. The study design and methodology for the evaluation study, which were endorsed by the Committee for Programme and Co-ordination at its twenty-second session, 2/ required an assessment of:

(a) The effectiveness of a sample of ongoing and completed projects in achieving their immediate objective(s);

(b) The actual or potential impact/contribution of those projects to the broader development objectives which they were intended to support.

5. The study was carried out in three phases, that is, phase I: a desk review of a wide range of selected projects in the field of manufactures for which UNIDO was primarily responsible; phase II: in-country studies of projects in a geographically representative number of countries for which UNDP played the co-ordinating role; and phase III: synthesis of the findings and recommendations which was the responsibility of the United Nations. In accordance with the concern of CPC that end-users in countries should be involved, a special effort was made to work with field staff and country nationals who, as end-users, would be acquainted with the changes that were expected from and had actually resulted from project activities.

6. The study was conducted by three staff members, one each from the United Nations, UNDP and UNIDO, who acted as evaluation co-ordinators and were given independence which permitted them to reach conclusions and formulate recommendations without supervision or intervention from their organizations once the terms of reference had been agreed upon. The team was assisted at various times by two senior principal consultants. In the field studies in each country there were two highly qualified national consultants knowledgeable in the subsector of the projects under review, bringing the total to 14 national consultants. The Senior Industrial Development Field Adviser (SIDFA) or equivalent also participated in both studies in each of the seven countries.

7. The methodology used for those assessments was described in the interim report to CPC (E/AC.51/1982/6), and had the following features:

(a) The study design provided for a series of five project groups, namely, the selected study inventory, the first sample and subsequent subsamples (hereafter called levels), of progressively decreasing size with each group subjected to a systematic process of information collection and analysis of progressively increasing intensity and depth. The size and composition of the five levels are shown in table 1. The study design was chosen because it ensured the maximum representativeness of project population samples at the lowest possible cost.

(b) The five levels of the study were:

(i) A total inventory of 906 projects within the manufactures area, including UNDP-funded large-scale and small-scale, Special Industrial Services (SIS) and non-UNDP-funded projects. The comprehensive range of the projects reflected the work of UNIDO in the areas of industrial planning, infrastructure, factory establishment and management, training, feasibility, agro-industry, metallurgy, engineering and chemical industries.

(ii) A sample of 317 projects (87 large-scale, 164 SIS and 66 small-scale) selected from the inventory for a preliminary review. A cross-project analysis (CPA I) (see annex, explanation of terms) was conducted and was based solely on data in official files.

Table 1. Composition of total UNIDO manufactures projects funded by UNDP by level of treatment, type and funding (1967-1981)

(Millions of dollars)

UNIDO and manufactures project portfolio and levels of treatment	Types of projects: Large scale: Above $400,000	Large scale: Between $150,000-$399,000	Large scale: Total number of projects	Small scale and non-SIS	SIS: Above $10,000	SIS: Below $10,000	Total small-scale and SIS projects	Grand total	Value in millions of United States dollars a/
Total UNIDO portfolio a/	330	200	530	4 500	2 000		6 500	7 030	610
"Manufactures" element in portfolio, a/ of which:	210	128	338	2 900	1 300		4 200	4 538	400
Level No. 1 (inventory) b/	57	30	87	569 a/	164	86	819	906	100
Level No. 2 (reconnaissance) c/	57	30	87	66	164		230	317	82
Level No. 3 (large-scale desk reviews)	49	-	49					49	66
Levels Nos. 4 and 5 (profile/field)	13	1	14	12	23		35	49	21
Value of total UNIDO portfolio in United States dollars a/	410	60	470	100	40		140		d/

a/ Approximate figure(s), which excludes the Government's counterpart contribution to the project, which is significant.

b/ The inventory of 906 projects in manufactures comprised 13 per cent of all UNIDO-executed projects since the establishment of UNIDO.

c/ The extent of the coverage at this level comprises 16.4 per cent of UNIDO's total portfolio of large-scale projects, 3.5 per cent of the total small-scale and SIS and 13.4 per cent of the grand total in value.

d/ Amounts cannot be aggregated because of overlapping.

/...

(iii) A subsample of 49 large-scale projects was selected from the above and more detailed data were collected, supplemented by interviews with backstopping officers when possible and subjected to more intensive desk review. A more comprehensive cross-project analysis (CPA II) was conducted and compared with CPA I.

(iv) Using predetermined criteria a further subsample of 14 large-scale Indicative Planning Figure (IPF) projects was selected from the third level and detailed written profiles and assessments were prepared as a basis for the in-country studies. In addition, 35 small-scale IPF and SIS projects were also selected from the 230 included in the second level, and abbreviated profiles were prepared. Where necessary and possible, project objectives were reconstructed and/or clarified, but not substantially revised, to facilitate evaluation.

(v) Additional data were collected on site for the same projects included in the sample just above and new assessments were prepared by an in-country team. The results were compared with the fourth level and CPAs III and IV were prepared and compared with CPAs I and II.

(c) The study considered each project as an entity incorporating inputs from all sources; there was no attempt to identify any differential project results attributable to UNIDO inputs alone.

(d) The final three levels of the follow-up study used a rating scale with five reference points: 1 - none or marginal, 2 - less than planned, 3 - as planned, 4 - more than planned, 5 - outstanding. An exception to this occurred at the second level where a three-point scale was used: 1 - poor, 2 - adequate, 3 - excellent. In all levels zero (0) was used to indicate "cannot determine".

8. In every case the project samples were randomly selected subject to certain methodological constraints of size, maturity and subject area and, in the case of the in-country studies, a country's willingness to participate. For the in-country studies, 20 Governments were invited to participate. Of these, 10 declined for various reasons, thereby restricting the project population from which a selection could be made. Seven countries were chosen on the basis of project criteria assuring adequate geographical representation. 3/ The information collection activities of the study, particularly at levels 4 and 5, produced such a large body of substantive information in support of study findings and conclusions that it was not possible within the constraints of time and staff resources to reduce all of it for incorporation in the present report. Even if sufficient time and staff had been available, the page limitation severely constrained inclusion. Further exploitation of this valuable information is suggested in recommendation No. 7.

9. The findings which are reflected in the present study are derived from project documentation, as well as observations of the evaluation teams and approximately 350 interviews. 4/ A large number of the persons interviewed had knowledge or some degree of experience in technical co-operation projects in industrial manufacturing. The majority of the interviews were directly linked to the seven in-country studies and included end-users and beneficiaries. There also were policy and management-oriented interviews with UNIDO and UNDP headquarters staff.

10. To the extent the present study has unique qualities, as compared with other evaluation studies by the United Nations, UNDP and UNIDO, they are to be found in the size and scope of the study, the focus on effectiveness and impact (rather than efficiency in input delivery or programming guidelines in a selected field), the rigour of the study design and of the data collection and analysis and the systematic examination of external factors.

B. Some representative statistics for the manufactures' project portfolio of UNIDO

11. Most of the following statistics in this section are based on the data from 49 large-scale projects at the third level. While the findings can be taken as representative of all levels, comparative analysis and absolute conclusions on this data subset must be highly qualified due to the small number of projects in some subsectors, for example, food processing (five projects rated) and fertilizer (four projects rated).

Table 2. Average ratings of large-scale projects by subsector

Third level, N = 49; rating scale: 1-5

Subsector	Number of projects	Achievement of project objective (effectiveness)	Impact	Significance
Packaging	11	3.64	3.64	4.0 (1)
Food processing	5	3.20	3.00 (2)	3.20
Fertilizer	4	3.25	3.50	3.25
Petrochemicals	12	3.18 (1)	3.20 (2)	3.90 (2)
Metal products	17	2.92 (2)	3.00 (4)	3.87 (2)

Note. Figures in parentheses in this and subsequent tables represent the number of projects which could not be rated.

Table 3. Types of technical assistance and different levels of entry

Function/type	Number of projects	Achievement of project objective	Impact	Significance
Direct support	19	3.31 (3)	3.33 (4)	3.71 (2)
Indirect support	30	3.16	3.23 (4)	3.81 (3)

Level of entry	Number of projects	Achievement of project objective	Impact	Significance
Industry at branch/ subsectoral level	12	3.40 (2)	3.40 (2)	3.58
Intermediary institute	33	3.15 (1)	3.25 (5)	3.82 (5)
Ministry or equipment	4	3.25	3.00 (1)	4.00

Level of national development represented in the manufactures portfolio

12. The following statistics are based on analysis of large-scale projects at the second level of treatment, the only level at which this information was available. At this level the definition of large-scale included projects of $US 150,000 and over.

Table 4. Average ratings on projects classified by level of national development a/

Second level, N = 85; rating scale: 1-3

National per capita income	Number of projects	Achievement of outputs/objectives
less than $200	26	1.65 (9)
$200 - $360	11	2.20 (6) b/
$360 - $1,250	33	1.64 (5)
over $1,250	15	1.83 (3)

a/ From the World Development Report 1980, World Bank, and the 1979 World Bank Atlas.

b/ Figures in parentheses represent number of projects which could not be rated. This is particularly pertinent in the $200-$360 group where over 50 per cent were not rated.

Table 5. Average ratings for ongoing and completed projects

Project status	Number of projects	Achievement of project objective	Impact	Significance
Ongoing	34	3.22 (2)	3.31 (5)	3.70 (4)
Completed	15	3.21 (1)	3.17 (3)	3.86 (1)

Note. Actual dates, which would permit a more acceptable estimate of the age or maturity of the projects, are not available.

C. Effectiveness and impact

1. Project findings

13. Table 6 below shows the distribution of ratings on three effectiveness variables for both large- and small-scale projects. Although the methodology did not allow for analysis of all three types of projects at every level, wherever they can be compared the tables indicate that regardless of the size of the project, the average ratings within each level are very similar. The average ratings on impact shown in table 7 reveal the same consistency. Thus, statements based largely on the findings from large-scale projects can be generalized to cover the small-scale and SIS projects in the study as well.

Table 6. Distribution of ratings and averages for project effectiveness

Effectiveness parameter	Rating scale	Large-scale projects: Second level (N = 87) No.	per cent	Large-scale projects: Third level a/ (N = 49) No.	per cent	Large-scale projects: Fourth level (N = 14) No.	per cent	Large-scale projects: Fifth level (N = 14) No.	per cent	Small-scale IPF projects: Second level (N = 66) No.	per cent	Small-scale IPF projects: Fourth level (N = 12) No.	per cent	Small-scale IPF projects: Fifth level (N = 12) No.	per cent	SIS projects: Second level (N = 164) No.	per cent	SIS projects: Fourth level (N = 23) No.	per cent	SIS projects: Fifth level (N = 23) No.	per cent
1. Progress in producing outputs	5	Not		0		0		0		Not		2	16.7	1	8.3	Not		0		0	
	4	included b/		16	32.7	4	28.6	2	14.3	included b/		2	16.7	1	8.3	included b/		9	39.1	3	13.0
	3			12	24.5	5	35.7	7	50.0			3	25.0	5	41.7			6	26.1	15	65.2
	2			13	26.5	2	14.3	3	21.4			1	8.3	4	33.3			2	8.7	2	8.7
	1			3	6.1	0		2	14.3			0		0				0		1	4.3
	0			5	10.2	3	21.4	0				4	33.3	1	8.3			6	26.1	2	8.7
	Average c/			2.9		3.2		2.7				3.6		2.9				3.4		3.0	
2. Achievement of project objective (effectiveness)	5			0		1	7.1	0				1	8.3	0				1	4.3	0	
	4			19	38.8	3	21.4	2	14.3			1	8.3	2	16.7			5	21.7	2	8.7
	3	5	5.7	19	38.8	6	42.9	6	42.9	9	13.6	4	33.3	5	41.7	33	22.0	5	21.7	15	65.2
	2	35	40.2	7	14.3	2	14.3	4	28.6	28	42.4	3	25.0	4	33.3	73	44.5	3	17.4	2	8.7
	1	22	25.3	1	2.0	0		2	14.3	5	7.6	1	8.3	0		20	12.2	0		2	8.7
	0	25	28.7	3	6.1	2	14.3	0		24	36.4	2	16.7	1	8.3	35	21.3	8	34.8	2	8.7
	Average c/	1.8		3.2		3.3		2.6		2.1		2.8		2.8		1.8		3.2		2.6	
3. Extent to which 2. can be attributed to 1.	5	Not		1	2.0	1	7.1	3	21.4	Not		Not		Not		Not		Not		Not	
	4	included b/		12	24.5	2	14.3	0		included b/		included b/		included b/		included b/		included b/		included b/	
	3			16	32.7	4	28.6	8	57.1												
	2			4	8.2	2	14.3	2	14.3												
	1			3	6.1	1	7.1	1	7.1												
	0			13	26.5	4	28.6	0													
	Average c/			3.1		3.0		3.1													

Note. 1. The five-point rating scale is as follows: 5 Outstanding
4 More than planned
3 As planned
2 Less than planned
1 None or marginal
0 Cannot be determined

2. The three-point scale at the second level is as follows: 3 Excellent
2 Adequate
1 Poor
0 Cannot be determined

a/ The third level contained only large-scale projects.

b/ Variables not rated at this level.

c/ Averages in this and subsequent tables exclude zero ratings.

/...

Table 7. Distribution of ratings and averages for project impact

Impact parameter	Rating scale	Large-scale projects: Second level (N = 87) No.	per cent	Large-scale projects: Third level a/ (N = 49) No.	per cent	Large-scale projects: Fourth level (N = 14) No.	per cent	Large-scale projects: Fifth level (N = 14) No.	per cent	Small-scale IPF projects: Second level (N = 66) No.	per cent	Small-scale IPF projects: Fourth level (N = 12) No.	per cent	Small-scale IPF projects: Fifth level (N = 12) No.	per cent	SIS projects: Second level (N = 164) No.	per cent	SIS projects: Fourth level (N = 23) No.	per cent	SIS projects: Fifth level (N = 23) No.	per cent
1. User utilization of results (outputs)	5	Not		1	2.0	1	7.1	2	14.3	Not		0		0		Not		0		1	4.3
	4	included b/		7	14.3	5	35.7	1	7.1	included b/		0		2	16.7	included b/		3	13.0	1	4.3
	3			19	38.8	3	21.4	4	28.6			1	8.3	6	50.0			1	4.3	10	43.5
	2			12	24.5	0		5	35.7			0		3	25.0			0		1	4.3
	1			2	4.1	0		2	14.3			0		1	8.3			0		4	17.4
	0			8	16.3	5	35.7	0				11	91.7	0				19	82.7	6	26.2
	Average			2.8		3.8		2.7				3.0		2.8				3.8		2.7	
2. Impact	5			3	6.1	1	7.1	0				0		0				0		0	
	4			16	32.7	1	7.1	2	14.3			2	16.7	1	8.3			4	17.4	4	17.4
	3	1	1.1	12	24.5	6	42.9	4	28.6	0		1	8.3	3	25.0	4	2.4	5	21.7	5	21.7
	2	7	8.0	9	18.4	1	7.1	3	21.4	5	7.6	1	8.3	2	16.7	7	4.3	2	8.7	2	8.7
	1	2	2.3	1	2.0	0		3	21.4	4	6.1	2	16.7	3	25.0	7	4.3	0		0	
	0	77	88.5	8	16.3	5	35.7	2	14.3	57	86.4	6	50.0	3	25.0	146	89.0	12	52.2	12	52.2
	Average	1.9		3.3		3.2		2.4		1.6		2.5		2.2		1.6		3.2		2.3	
3. Significance	5	Not		6	12.2	0		0		Not		0		0		Not		1	4.3	0	
	4	included b/		23	46.9	5	35.7	5	35.7	included b/		2	16.7	2	16.7	included b/		3	13.0	0	
	3			14	28.6	4	28.6	4	28.6			1	8.3	4	33.3			5	21.7	9	39.1
	2			1	2.0	1	7.1	0				1	8.3	2	16.7			2	8.7	5	21.7
	1			0		0		3	21.4			2	16.7	1	8.3			0		2	8.7
	0			5	10.2	3	21.4	1	7.1			6	50.0	3	25.0			12	52.2	7	30.4
	Average			3.9		3.4		2.7				2.5		2.8				3.3		2.4	

Note. 1. The five rating points represent a favour to disfavour scale as follows:
5 Outstanding
4 More than planned
3 As planned
2 Less than planned
1 None or marginal
0 Cannot determine

2. The three-point scale at the second level of analysis was as follows:
3 Excellent
2 Adequate
1 Poor
0 Cannot determine

a/ Only large-scale projects analysed at the third level.

b/ Variables not rated at this level.

.../

2. Analysis of project effectiveness and impact

14. Fifty-seven per cent of the 14 large-scale in-country projects ($400,000 and over) studies at the fifth level were rated as having achieved their project (immediate) objective as planned or better.

Table 8. Percentage of large-scale projects rated "as planned" or higher on effectiveness variables

Effectiveness parameter	Second level (N = 87)	Third level (N = 49)	Fourth level (N = 14)	Fifth level (N = 14)
1. Progress in producing outputs	Not included a/	57 (64)	64 (82)	64 (64)
2. Achievement of project objective (effectiveness)	46 (74)	77 (83)	71 (83)	57 (57)
3. Extent to which 2. can be attributed to 1.	Not included a/	59 (81)	50 (70)	79 (79)

Note. Figures in parentheses represent the percentage when projects rated "cannot determine" are excluded from the calculation.

a/ Variable was not rated at this level.

15. As can be seen from table 9 below, 50 per cent of large-scale projects were rated as having achieved an impact as planned or better (43 per cent if "cannot determine" ratings are included).

16. At the second level, effectiveness ratings for small-scale projects were 56 per cent and for SIS projects 67 per cent; these make up the majority of the project portfolio of UNIDO, but in 36 and 21 per cent of the cases, respectively, such assessments were not possible because of the lack of relevant data at the second or reconnaissance level (see table 6 above). In the case of impact at the same level, for 86 per cent of the small-scale and 89 per cent of the SIS projects, no assessments were possible due to the lack of data (see table 7 above). The average ratings for small-scale and SIS projects obtained during the in-country studies were similar to those for large-scale projects.

17. The large number of "cannot determine" ratings found in all levels of phase I clearly indicated that the tripartite system did not adequately produce or record data concerning project effectiveness or eventual development impact in industrial projects at all stages in the project cycle, regardless of size, duration and type of project.

Table 9. Percentage of large-scale projects rated "as planned" or higher on impact variables

Parameter	Second level (N = 87)	Third level (N = 49)	Fourth level (N = 14)	Fifth level (N = 14)
1. User utilization of results (outputs)	Not included a/	55 (66)	64 (100)	50 (50)
2. Impact	9 (80)	63 (76)	57 (89)	43 (50)
3. Significance	Not included a/	88 (97.7)	64 (82)	64 (69)

Note. Figures in parentheses represent the percentage when projects rated "cannot determine" are excluded.

a/ Variable was not rated at this level.

18. More than two thirds of the ratings at the second level are for ongoing projects and consequently are predictive since effectiveness and impact cannot normally be fully determined until after project completion. On the other hand, the distribution of ratings among both ongoing and completed projects is very similar (although slightly higher for ongoing) which indicates the possibility of valid extrapolation from predictive ratings.

19. There are three aspects to be considered. First, in the early stages of the project cycle it is common practice to state anticipated project accomplishment in ways which will increase the prospects for project approval and continued funding, that is, to exaggerate the value and to oversell the project. Secondly, most project reports are prepared prior to financial termination and therefore prior to the achievement of the project objective (effectiveness) and the development objective (impact); thus, most achievement reporting during implementation is necessarily a projection of what might occur after financial termination: many project staff are hopeful and optimistic about the future prospects of the project in which they are, or have been, engaged and thus tend to give overly optimistic reports. Thirdly, as additional information was acquired over time, particularly through in-country evaluation (phase II of the present study), the verifiable achievements and the adverse effects of the project's external environment emerged more clearly.

20. The ratings given at the levels prior to the in-country studies are subject to the qualifications noted in paragraph 19 above and must accordingly be reduced. This reduction and the methodological precautions taken (for example, the intensive data collection, the composition of the field teams including national consultants, the extensive contact with end-users and beneficiaries, comparisons between the cross-project analyses, verification through interviews and observations during the in-country studies) also give a high level of confidence that the in-country ratings are accurate and are representative of the total project inventory.

D. Analysis of the project cycle

1. Findings and analysis

21. The four major stages in the project cycle were analysed at all levels because each of these stages has a significant influence on project effectiveness and impact.

(a) Problem identification and diagnosis

22. The problem identification and diagnosis stage of the project cycle at all levels was found to be of critical importance to the subsequent stage of project formulation and approval and, ultimately, to the prospects for effectiveness and impact. This is particularly true in the case of industrial development projects which operate in a complex environment where there are a large number of crucial factors which lie outside of the control of the project's management, for example, the availability and cost of capital, effective demand, government policies and controls etc. Nevertheless, the findings indicate that this stage is often overlooked or the analysis is performed in a perfunctory manner, for example:

(i) The state of the industrial technology and manufacturing processes in the recipient country is often not assessed or is described only superficially. Information needed for selection of an appropriate technology and means for its transfer and adaptation and for the formulation of an effective project strategy is frequently not requested or available in sufficient depth and timeliness to support project design;

(ii) Sectoral planning at the government level often is not specific enough for the identification and analysis of industrial development problems which are susceptible to solution by individual technical co-operation projects;

(iii) Circumstances such as the magnitude of UNDP and UNIDO assistance relative to other resources availble to the country and the nature of the national development planning process vary from country to country. In some cases problem identification may be carried out by the Government as part of the national development planning process, separate from the country programming process of UNDP and prior to project selection. This does not, in all cases, result in an integrated project cycle from problem identification through project design to evaluation and feedback. When the Government wants UNDP involvement in the first of these stages they may do so by requesting an industrial country survey;

(iv) Participation in problem identification and diagnosis is rarely requested of UNIDO and thus it may not be in full agreement with the other parties at a later stage on the nature of the problem, the identification of end-users and their needs, and the most cost-effective approach to solving the problem.

(b) Project formulation and approval

23. The Policies and Procedures Manual (PPM) of UNDP 5/ accords the Government primary responsibility for project design, with associated roles for the executing agency and UNDP through its resident representative. Analysis of data collected at the third level indicates that, although in the large-scale projects the Government participated more frequently in the initial drafting of the project document than the other parties, that participation only occurred in 57 per cent of the projects. Other key participants were UNIDO headquarters (22.4 per cent), UNIDO expert on duty (28.6 per cent) and the resident representatives' office (28.6 per cent). Design missions were infrequently used (14.3 per cent) as was preparatory assistance (4 per cent).

24. A two-part analysis of the major elements of project design was conducted at the same level. First, internal elements were rated, such as the project objective, the project hypothesis (causal linkage of project outputs to immediate objective), the output targets etc., applying standards for clarity, viability, soundness etc., as stated in the project guidelines of UNDP and UNIDO, or using practical tests such as asking the kinds of question that could be expected in a systematic review and approval process.

25. Average ratings of these design elements, based on a scale of 1-5 (see para. 8 (d) above) (and including projects for which ratings could not be determined), were:

Project objective	2.9	Workplan	2.7
Project hypothesis	2.1	Internal logic	2.1
Outputs	2.2	Linkage of outputs to objective	2.2
Inputs	3.6		

26. In the second part of the analysis, project documents were examined to determine the clarity and explicitness of four basic project design elements which are considered important in the evaluation of impact: development objective, the development hypothesis (that is, the predicted causal linkage between the project objective and the development objective(s) of the co-operating Government), the intended end-users of the project outputs and the baseline conditions. In half of the projects the development objective(s) was not clear, or was too remote to be affected significantly by the project objective. In 73 per cent of the projects the development hypothesis could not be determined. End-users were defined satisfactorily in 75 per cent of the projects, but baseline data were rated satisfactory in only 30 per cent of the cases.

27. The length of time and expenditure of human resources required for project approval did not correlate with good project design. In fact, there was usually little substantive change in the project proposal document during the entire review and approval process. The study found that there were very few explicit quality standards to guide the project design process or the review and approval of project proposals. A comparison of project designs before and after introduction of the guidelines of UNDP (PPM, chap. 3400) and similar UNIDO guidelines in early 1976

shows that while a definite improvement took place over the previous highly deficient system, the improvements were not sufficient to ensure satisfactory design quality.

28. A number of statistical relationships between individual data sets were noted. For example, there was a strong relationship between quality of design and input delivery, project implementation and production of outputs. Analysis revealed a logical means-end chain running from design to impact where each link (design-input-delivery-implementation-outputs-utilization of outputs/achievement objective) was linked to one or even two preceding elements. No direct linkage, however, could be demonstrated between design and achievement, presumably because the causal relation was too diluted by external factors which were neither identified nor monitored.

29. In many cases there were serious deficiencies in project design caused, at least partially, by the failure to articulate clearly the basic elements of project design: the project immediate objective, the project hypothesis, outputs, project strategy and critical assumptions regarding external factors. These deficiencies were often permitted to persist by an approval process which tended to be input-oriented and pro forma. For example, one common problem was that the immediate project and development objectives were often stated at inflated levels to convince decision-makers of the significance of the project and the catalytic effect of modest inputs.

30. If a project proposal resulted from a government initiative, it was unlikely that the technical knowledge of UNIDO, if available, was inserted at that stage. Even when UNIDO participated, both the design and approval processes tended to concentrate on administrative and financial matters and particularly on the proposed UNDP inputs. The same tendency was noted at subsequent stages of the project cycle.

31. Problems caused in the implementation stage by poor project design often concerned the frequently observed lack of clear definition of the purpose or function of a project. This is particularly the case regarding institution-building versus direct assistance to specific industrial enterprises. There were many projects with an initial, short-term function of providing direct assistance by UNIDO experts to industrial firms and a longer term function of using the same experts to train local staff in order to achieve local institutional self-sufficiency. In many cases the first function continued to predominate, for a variety of reasons, including lack of clear agreement on the ultimate objective of the project, thus causing neglect of the pursuit of local institutional self-sufficiency.

(c) Project implementation

32. The implementation stage involves the transfer and use of knowledge and resources and their conversion into planned project outputs. The process requires close collaboration between the executing agency, the Government and the end-users.

33. While the implementation process per se was not a major area of focus in the present study, a number of deficiencies were identified in the phase I desk research and subsequently confirmed during the in-country studies in phase II:

(a) Delay in delivery of inputs by both UNIDO and the recipient Government;

(b) Absence of agreed upon indicators of performance and end-of-product status;

(c) Inadequate progress reporting focused almost exclusively on input deliveries and administrative problems;

(d) Tripartite reviews often not timely or not held at all; generally they were input-oriented with little attention to outputs and objectives;

(e) Absence of an effective evaluation effort, either ongoing, terminal or ex post.

34. Among input categories at the third level, the quality of UNIDO experts was rated less than satisfactory in 11 per cent of the cases. Twenty-six per cent of national counterparts were rated as less than satisfactory on quality, with inadequate quantity in 47 per cent of the projects and delays in arrival in 53 per cent. In 92 per cent of the projects the quality of equipment was rated as adequate or better. Timeliness of delivery ratings was more negative, with 69 per cent less than adequate. A similar spread between quality and timeliness was observed with government inputs. In 24 per cent of the projects the quality of the training was less than adequate, in 33 per cent the quantity was only fair or marginal, and in 52 per cent the timeliness was also less than adequate. For counterparts provided by the Government for training, 21 per cent were less than adequate in quality, 32 per cent in quantity, and 55 per cent in timeliness.

(d) Project completion and follow-up

35. The following findings were typical of the project sample:

(a) The project system does not define a clear functional linkage between the completion of project operations by UNIDO, financial termination of a project by UNDP, and the achievement of outputs or the project objective. End-of-project status indicators are not required by the Policies and Procedures Manual of UNDP and consequently were not used. Instead, termination was linked to, and defined by, the exhaustion of project inputs, that is, financial completion.

(b) From a substantive standpoint, major reliance was on the project terminal report written by the chief technical adviser (CTA) or last international project staff member on the site. It was often late, sometimes not submitted and had very limited value in identifying, recording and assessing project achievements and the reasons for shortfall. The review and comment process at UNIDO generally added little substance and may even reduce or soften a pointed criticism or recommendation. The resident representative's transmittal letter was often pro forma and rarely included a required terminal assessment. There appeared to be

little real demand from programme managers and other decision-makers in the tripartite system for objective information concerning project effectiveness and almost none concerning actual or potential impact.

(c) The official files of UNDP and UNIDO contained only sparse information regarding effectiveness and virtually none on project impact. This is because there has been virtually no UNDP nor UNIDO insistence on the Policies and Procedures Manual requirement for project specific evaluation and reporting of impact, and no resources have been allocated for such a review. 6/

36. There has not existed in UNDP, nor until 1982 in UNIDO, a project management information system which routinely collects information on project effectiveness and impact, analyses this information, recommends initiation of remedial actions if required, and extracts patterns and conclusions which are purposefully fed back into the project design process. This critical cycle of extracting lessons from experience is currently limited to UNDP thematic evaluation reports, programme advisory notes based upon evaluations and the personal initiative of individuals who must rely on seriously deficient project files or the informal exchange of experience among colleagues. The thematic evaluation studies of UNDP constitute a good start toward the development of such a project management information system. At present, there are delays in distribution of these studies and of the programme notes summarizing their findings for use by planners. Knowledge of these studies is not yet sufficiently widespread. These are administrative problems, easily solved.

2. The 1980 preliminary study

37. It should be noted that direct comparisons are not possible between the 1980 and the present studies because of the substantial differences in study methodologies. Nevertheless, a rough attempt has been made to assess the differences. For example, the preliminary study of 1980 found that 54 per cent of the projects in its sample were successful in achieving the immediate project objective. The follow-up study rated 57 per cent of the projects studied in-country "as planned" or higher. The preliminary study found that 31 per cent had achieved their long-range objective. The follow-up study gave "as planned" or higher ratings to 50 per cent of the projects (43 per cent if "cannot determine" ratings are included) for achievement of the development objective.

38. The findings of this follow-up study concerning the technical co-operation process (that is, the effectiveness of the four stages of the project cycle) coincide with the findings of the preliminary manufactures evaluation of 1980. These findings are neither new nor unique and serve only to confirm similar findings in other system-wide evalutions 7/ and raise the serious question as to why necessary and self-evident changes in the system are taking place, if at all, at such a slow pace.

39. The following chapter addresses those internal and external factors which form the project environment and are crucial in any analysis of effectiveness and impact.

II. PROJECT ENVIRONMENT; EXTERNAL FACTORS AFFECTING PROJECT EFFECTIVENESS AND IMPACT

40. Efforts to correct the deficiencies noted in the project cycle above will not by themselves improve the effectiveness and impact of technical co-operation projects without at the same time addressing more fundamental issues which were encountered in the study which deal with: the capacity of UNIDO, the role of UNDP, the structure and the functioning of the tripartite system, and the relationship of projects to the industrial sector.

A. Capacity of UNIDO

41. The responsibility to help and advise Governments of developing countries in the identification, design and implementation of industrial development projects has been assigned to UNIDO.

42. The roles and responsibilities of the secretariat staff of UNIDO are sometimes undefined or overlapping with regard to the preparatory stages of problem identification and diagnosis and the subsequent project formulation and approval. In practice, except for occasional country programming missions, these first two activities are frequently omitted or sharply reduced with speedy delegation of project approval to the resident representative. Competition for assignment of projects among the different UNIDO technical units sometimes discourages necessary multidisciplinary or multifunctional approaches thus distorting project designs and subsequent work plans.

43. There also was some confusion among staff regarding the responsibilities and duties of headquarters and field staff in the project cycle and the extent to which UNIDO is solely or primarily responsible for results. This lack of clear understanding of UNIDO roles and responsibilities can overshadow other internal project problems and make their solution even more difficult.

44. The secretariat of UNIDO sometimes is requested only to assist in the formality of preparing a project document, reflecting a project design already developed by the Government or the national implementing agency or to formulate selection criteria for the purchase of equipment. Once the design has been prepared there is a reluctance on the part of the Government and UNIDO programming and technical personnel to take any action that might interfere with project approval.

45. On the basis of interviews at headquarters and in the field, it was found that the majority of UNIDO staff engaged in project activities did not have the range of technical industrial knowledge or experience needed to fulfil the mandate of UNIDO. Similarly, it was found that the staff concerned with projects were also not sufficiently knowledgeable in project design concepts and practices.

B. Participation of UNDP

46. The funding for international technical co-operation projects is provided by UNDP and it designates, in concultation with the Government, the executing agency for the implementation of the technical assistance component of a government project, the execution of which is carried out by a national agency selected by the Government.

47. The Policies and Procedures Manual defines terms and concepts, procedures and methodologies for UNDP assistance to government projects under the country programming concept and the fundamental tenet that the project is within the aegis of the Government. The obligations and responsibilities regarding resource inputs, legal liabilities etc., of the three parties for each project are spelled out in a project document signed by the Government, UNDP and UNIDO.

48. The preparation of a country programme for a five-year UNDP development cycle describing the Government's development strategies and plans for international technical assistance and taking into account other anticipated assistance is required by UNDP. In addition, the Government is also expected to include its planning of UNDP participation within the scope of Indicative Planning Figures (IPF) which are approved by the Governing Council of UNDP for a five-year period.

49. The effectiveness and development impact of projects are influenced, inter alia, by the relevance of the projects' objectives to the key problem which the project is intended to address. Relevance depends upon how clearly the problem is understood, thus the problem identification and diagnosis stage of the project cycle is crucial to the project's ultimate effectiveness and impact. The country programme of UNDP sometimes does not include, or have access to the kind and level of problem analysis needed for the selection and design of projects. The Government may nevertheless have included a preliminary list of projects in the country programme. Although there may be an intensive dialogue between the Government and the field office of UNDP during this period, once the IPF has been allocated by projects, even tentatively, the pressures to move directly and promptly to the preparation of a project document tend to inhibit any real prospect for undertaking an orderly problem identification and diagnosis or for consideration of alternative project strategies or objectives.

50. The Policies and Procedures Manual of UNDP spells out the authority of the Government Council to approve projects and the delegation of this authority to the administrator and others. It also lists criteria for such approval. The study found, however, that in actual practice the secretariat of UNDP almost never withholds approval of projects, even when poorly conceived or poorly designed. Further information can be requested by UNDP or it can record the reservations raised by technical advisory staff and give approval with the proviso that such reservations will be resolved during project implementation. This may prove very difficult to do at the country level once implementation has begun. Consequently, UNDP headquarters is sometimes called upon to supply technical advisory staff for appraisal of larger project proposals. The small size of this staff of two persons, who are responsible for industrial projects world-wide and in all industrial subsectors, constrains the ability of UNDP to respond.

51. With regard to project implementation, the country offices of UNDP need to strike a balance between adherence to annual budget schedules and managing purposefully to achieve effectiveness and impact. The general perception in the field is that adherence to annual programme budget schedules is usually considered to be an important indicator of performance by UNDP headquarters. Although UNDP has the right to monitor implementation and to call for consultation on implementation problems, in actual practice UNDP has little influence over the work programme since most of these activities depend on the national implementing agency and UNIDO.

C. Structure and functions of the tripartite system

52. Several key features of the tripartite system described in the Policies and Procedures Manual which are of particular interest for the present study are:

(a) Recipient Governments have the ultimate responsibility for determining priorities for UNDP assistance. The projects funded by UNDP are actually the projects of the countries concerned; recipient countries can be entrusted with the responsibility of executing projects assisted by UNDP.

(b) The activities in particular sectors, subsectors or areas are assessed jointly by UNDP and the executing agency, with a view to identifying gaps in UNDP assistance and developing new programmes and innovative approaches for responding to the evolving needs of developing countries.

(c) The executing agency (for example, UNIDO) participate jointly with UNDP and Governments in the identification, formulation and evaluation of projects and programmes and assumes responsibility, jointly with the Government, for implementation.

53. The three aspects of the tripartite system which most profoundly influenced the effectiveness and impact of technical co-operation projects, particularly at the field level, were:

(a) The diffusion and lack of definition of responsibilities and authority, both real and perceived, at the major stages of the project cycle;

(b) Operational problems resulting from differences in status of the participants;

(c) The difficulties in determing the critical needs of the industrial sector.

These three aspects are addressed in chapter III, section A, below. Other relevant findings regarding the tripartite system are discussed in the following paragraphs.

54. In practice, UNIDO was infrequently involved in problem identification and diagnosis and sometimes only in a limited way in project formulation and design (see para. 23). Both UNDP field offices and headquarters may play an assertive role in the early stages of the cycle or conversely, one or both may be ignored by

the Government if it feels its sovereign prerogatives are threatened. On the other hand, the Government may be unwilling or not prepared to assume the leading role in project planning.

55. Tripartite reviews were found to have only a marginal influence on project effectiveness and impact because they were held infrequently, were not always scheduled to support decision-making, tended to focus largely upon input delivery, budget issues and administrative changes and lacked end-user participation. In-depth evaluations were infrequent in comparison with PPM requirements and, when held, Government participation in them was found to be lower than the other partners. Recent UNDP corrective action is noted in paragraph 100.

56. The rules and procedures of UNDP are perceived as overly lengthy and cumbersome in relation to the comparatively small financial resource transfers and in comparison to bilateral and government sources. In the projects reviewed, it was found that the project document, and the key design elements it contains, were often not revised when circumstances warranted such revision. The system tends not to resist actual, pragmatic change in project design, but resists the onerous process of officially proposing, approving and recording such change.

57. The termination of project operations and the closing of a project's financial books usually occurs before the successful achievement of the project's immediate objective can be determined and invariably before the impact on the development objective begins to emerge.

58. For the most part the day-to-day project level operations within the tripartite system were dominated by the heavy workload in initiating and servicing the implementation process. At the several stages of the project cycle the anticipated achievement of the project objective and the contributions of the project to the development objective were usually not given priority or sustained attention. In practice it was often not clear who was held responsible for pursuing or even observing impact, nor did the tripartite system facilitate or provide incentives for that purpose.

D. Industrial environment

59. It is not possible within the confines of the present report to discuss thoroughly such a complex issue as the relationship between the national industrial sector and the projects executed by UNIDO which operate within the sector. This section describes briefly the major factors in the industrial development process which can be affected by international technical co-operation projects.

60. An industrial enterprise requires the acquisition and management of a large and disparate number of elements and resources, including investment capital, machinery, equipment, buildings, technology for its manufacturing process, skilled management, technical and operating staff, raw materials, energy and other services, working capital and a market. In some countries these resources must be managed in a high-risk rapidly changing industrial system to create products with a competitive quality and cost appropriate to the requirements of the market. This

complex industrial system is often strongly influenced by government regulatory and promotional activities, as well as by the demands and constraints of the domestic and international economic environment.

61. The study found that although the situation of each country is unique, industrial development requires at least three factors: entrepreneurial and management capability, marketing skills and information and technological knowledge at a level appropriate to the product and market requirements. These three capabilities could be strengthened through technical co-operation projects. A fourth factor of crucial importance, industrial financing, cannot be addressed directly through technical co-operation.

62. If a technical co-operation project is to have a substantial effect on the managerial, marketing and technological capabilities of a specific industry in a developing countries, then project formulation should begin with a diagnosis of the following three areas:

(a) The industrial/economic environment in which the project will operate;

(b) The nature and level of industrialization which already exists in the country and the policies and practices of the Government regarding it;

(c) The present levels of capability of industrial management, marketing and technology.

63. An understanding of these areas will permit the Government, UNDP and UNIDO to focus the technical assistance project at the most critical and immediate needs of industry. A piecemeal approach, which is the practice today, is unlikely to be effective: projects requested by Governments and assigned to UNIDO for execution often seem too narrowly conceived or too peripheral to affect industrial sector growth.

III. SYNTHESIS AND RECOMMENDATIONS

A. Synthesis of findings

1. Sample of projects

(a) Effectiveness and impact

64. In the case of the 14 large-scale projects ($400,000 and over) studied at the fifth level, 57 per cent were rated as having achieved their project (immediate) objective as planned or better. 8/ At the second level, ratings of effectiveness were similar for small-scale (57 per cent) and higher for SIS projects (67 per cent); these make up the majority of the project portfolio of UNIDO but in 36 and 21 per cent of the cases, respectively, such assessments were not possible because of the lack of relevant data at the record or reconnaissance level.

65. at the fifth level, 50 per cent of large-scale projects were rated as having achieved an impact as planned or better (43 per cent if "cannot determine" ratings are included). At the second level, in 86 per cent of the small-scale and 89 per cent of the SIS projects no assessments were possible due to the lack of data. The average ratings for small-scale and SIS projects obtained during the in-country studies were lower than for large-scale projects.

(b) Interpretation and conclusions

66. The large number of "cannot determine" ratings found in all levels of phase I clearly indicated that the tripartite system did not adequately produce or record data concerning project effectiveness or eventual development impact in industrial projects at all stages in the project cycle, regardless of size, duration and type of project.

67. Given the current paucity of such information produced by the project reporting system, only in-country studies can produce a reasonably accurate assessment of effectiveness and impact.

68. With some qualification, there was enough consistency within and between each sample level for the report to assert that the methodological design had produced results which permitted analysis and formed the basis for the findings and conclusions which follow. It is important to note that there is no framework or reference point upon which to judge the statistical results. There are no established standards of acceptable performance for industrial technical co-operation projects, nor are there comparative studies of such projects by other organizations. The ratings in themselves may reflect the difficulties and complexities of the task as much as they reflect any absolute performance standards.

2. Project cycle

69. In many instances serious gaps and weaknesses were found to exist in the several stages of the project cycle, reflecting system-wide as well as internal UNIDO and UNDP constraints. These include: the widespread absence of systematic problem identification and diagnosis; the generally poor quality of project design; the inadequate attention given to effectiveness and impact at all stages; the over-emphasis on resource inputs in the approval and implementation stages; the lack of result-oriented work planning, reporting, monitoring and evaluation; the insufficient attention to critical external factors; the lack of baseline data and performance indicators; and the almost total absence of thorough terminal and ex post evaluations of effectiveness and impact or concern with follow-up actions to sustain or increase the intended impact. There were also widespread and serious deficiencies in project documentation.

(a) Problem identification and diagnosis

70. The Government ministries in the countries visited were sometimes unable to make available the resources, experience and skills needed to identify and diagnose industry needs and to construct well-designed programmes of technical co-operation

aimed at eliminating key obstacles to industrial development. In some cases the country programming process of UNDP resulted in the premature assignment of project funds and a de facto decision to pursue a project, thus inhibiting the orderly identifiction and diagnosis of problems which should have preceded project selection. Since the problem identification process was often perfunctory, industry was rarely involved in any effective way. This can and has resulted in the selection of project approaches based on an inaccurate perception of industry needs.

71. The staff of UNIDO seldom had the opportunity to participate in a systematic way at this early stage. Other non-operational headquarters supporting units which could have been particularly useful at this stage, were not used in any significant extent even though their knowledge and experience may have been relevant and valuable.

(b) Project formulation and approval

72. Projects were often justified and planned on the basis of unrealistically high expectations and without due consideration to resource and time constraints or critical external factors. There were sometimes strong pressures on UNDP headquarters and the country office for quick approval of projects with a concomitant reluctance, particularly by the government sponsor concerned, to accept advice or revisions in the draft proposal which may have already passed through numerous clearance channels.

73. The limitations of UNIDO in project design have also been exacerbated by the truncated treatment of UNDP of the project logical framework concept which omits some of the essential elements of good project design (see paragraph 84). Consequent efforts to follow these incomplete guidelines have resulted in confusion between project levels and objectives and, in practice, have proved ineffective. The guidelines also cause problems in harmonization of UNDP design practices with those of executing agencies which are using the logical framework methodology in their own systems.

(c) Implementation

74. In all of the cases studied, once a project was approved, the interest and management systems of UNIDO were focused predominantly on the scheduled delivery of inputs. As a consequence, many of the deficiencies noted above had a pervasive effect on implementation and quality. They included:

(a) Absence of agreed-upon indicators of performance, end-of-project status and impact;

(b) Inadequate progress reporting focused almost exclusively on input deliveries, activities and administrative matters;

(c) Tripartite reviews which were: ill-timed for decision-making; often omitted; lacked adequate participation of end-users and technical inputs from non-project sources and were perfunctory or input-oriented; rarely concerned with critical external factors, progress in producing outputs or the continuing validity of the original project strategy;

(d) Almost total absence of objective, rigorous evaluation either ongoing, terminal or ex post;

(e) Lack of timely feedback to higher levels from project management on problems.

(d) Completion and follow-up

75. The termination of a project should be a planned event based upon the production of targeted outputs. It should be the occasion to record actual results and identify actions needed to consolidate project achievements. In actual practice, it is linked only to the exhaustion of project inputs and administrative actions. There was little demand from any of the parties, during implementation, at termination, or after project completion, for objective information on effectiveness and impact, nor did the study find evidence of any serious assessments of this type made as a regular part of the project cycle. Headquarters backstopping staff rarely returned to the project site. It was left to the Government or the resident representative to form the final judgement on the status and outcome of the project. The study found no record that such a judgement had been systematically formulated in any of the projects reviewed except where the project had been included in a thematic evaluation study.

3. Roles, responsibilities and authority

(a) The tripartite system

76. The most important and pervasive problem of the tripartite system was the effect at the operational level of the diffusion and lack of definition of responsibilities with commensurate authority. This lack of definition was observed within the organizational structures of the three participating entities and in their interactions with each other. The actual roles and functions of the three participants and their actual participation varied from country to country and sometimes by projects within a country and even within each of the entities concerned.

77. The complexity of a Government's structure sometimes resulted in a diffusion of responsibility and authority both within the several levels of Government (for example, the central co-ordination office for external assistance, the sectoral ministry, the planning, foreign or finance ministries and the implementing agency) and between quasi- or non-governmental institutions and the industry itself. The Government's role was further complicated by its dual status, namely, as a partner in the tripartite system it consults with and depends upon the other two parties; as a sovereign power, it has the authority to make almost all decisions.

78. The authority of the Government is the dominant factor in the functioning of the tripartite system, determining the stage and the extent to which UNDP and UNIDO are called upon to participate in key decisions, the amount of project funds which can be used throughout the project cycle and the substantive, technical and other inputs which are delivered to project management. It also substantially reduces the likelihood that UNDP or UNIDO could impose quality standards for the project process, for example, design.

79. The ability of UNDP to deal with questions to project effectiveness and impact was somewhat inhibited by (a) the lack of clear definition of its responsibilities and authority vis-à-vis its other partners and within and between headquarters and the field, and (b) the reluctance to withhold approval of projects which had a low potential for effectiveness and impact or to require changes or the consideration of alternative approaches. Its role as financial sponsor was sometimes limited to the supply and accounting of funds. Its supervision of implementation was inhibited by the pressure of budgetary expenditure targets with emphasis on input procurement and delivery and by lack of accurate, timely and results-oriented information from the field.

80. Until the role and areas of authority of UNDP vis-à-vis the other members in the tripartite process are clarified, it is unlikely that procedural or process changes in the project cycle will have any significant effect on the ability of UNDP to respond meaningfully to its Governing Council's mandate.

81. Similar problems confronted UNIDO, particularly regarding the responsibilities and areas of authority of headquarters vis-à-vis field staff (both SIDFAs, and project staff) in the project cycle and the extent to which UNIDO is responsible for results. This lack of clarity of role and the vacuum created by inadequate project design sometimes required the chief technical adviser or national project director to assume de facto responsibility for project management without having the necessary authority.

82. The present role of UNIDO in technical co-operation in manufactures seems to be primarily that of a purveyor of internationally financed goods and services, with its management orientation and systems primarily focused on project approvals, inputs and expenditures and with a very limited participation in industrial planning, problem identification and project formulation. It also appears that UNIDO lacks information on project results.

83. Within the tripartite system there has been no clear responsibility for setting and enforcing explicit quality standards for project design, no perceived incentives for good design, nor accountability or sanctions for poor design. Of the five elements normally required for good project design (baseline measurement, targeted outputs and objectives, objectively verifiable indicators of progress and achievement, assumptions about external factors, and project and development hypotheses/linkages), the Policies and Procedures Manual of UNDP explicitly requires only one. In actual practice, this one explicit requirement for design, that is, clear, verifiable statements of objectives, is almost universally not observed by all three parties. That part of the Manual dealing with evaluation is not yet fully developed. Hence it is clear that neither the Manual nor the 1976 guidelines of UNIDO have had a sufficient effect.

84. Programme policy formulation, the establishment of industrial development strategies, programme planning and other central management activities generally appear to be carried forward by all three parties without the benefit of objective information about the potential development impact of types of projects or the factors associated with such intended impact. It is recognized that the unique nature of each project situation limits the possibilities for lateral transfer of

experience. Nevertheless, decisions taken by co-operating Governments, UNDP and UNIDO during the stages of problem identification and diagnosis and project formulation and approval, generally have not been supported by systematic knowledge of what has or has not been effective in the industrial sector elsewhere, and why. An exception is the analysis provided by the thematic evaluation series of UNDP 9/ noted in paragraph 36 above.

85. The factors described in the preceding paragraphs have produced the following observed consequences in tripartite operations which may affect, in various ways and in varying degrees, the achievement of project and development objectives:

(a) A frequent lack of clarity in roles and responsibilities among the parties in planning, implementation and other project management functions which in effect (i) leaves open the question of who is responsible and accountable and (ii) assumes that events will take care of themselves;

(b) A widespread tendency to leave unresolved difficult and controversial issues or to compromise at the lowest common denominator;

(c) Inadequate collaboration and unclear communication among the parties sometimes resulting in differing perceptions of project functions, objectives and strategies;

(d) A persistent lack of rigour and discipline in all stages of the project cycle, that is, tripartite system policies and procedures are not widely enough known, are often found to be complicated and receive inadequate attention and compliance.

(b) Technical and management capacity and competence

86. There are no accepted measures for determining the difficulty and cost of solving a problem in a developing country by the transfer of knowledge and other resources through a technical co-operation project. Similarly, there are no clear, agreed upon criteria for determining the extent of the roles of UNIDO and UNDP in the technical co-operation project cycle. In the absence of such criteria it was necessary to use the in-country studies as a device for finding out the extent to which available UNIDO and UNDP substantive/technical staff resources match the needs of the projects included in the samples. On that basis it appears that current staff resources are inadequate in comparison to the workload inherent in the large and complex industrial project portfolio (see paragraph 108).

87. UNIDO has a portfolio of 1,200 active projects encompassing a broad range of complex subjects, numerous choices of kinds and levels of technology, and a variety of means available for delivering technical co-operation and for the transfer of technology. At the same time, UNIDO has a staff of only 135 technical officers with varying levels of technical qualifications available for project activities. Therefore UNIDO cannot, with presently available resources, fully cover the range of knowledge and practical experience needed to plan and manage a project portfolio of such size and diversity.

88. Technical competence in an industrial sector or subsector is not the same as knowledge of project design concepts and practices. For example, it does not follow that an expert in textile production will be able to formulate the design of a development assistance project to create a national centre for research, quality control testing and technical advisory services for the textile subsector. In those cases where UNIDO programming and technical headquarters staff, as well as SIDFAs, did participate in project design, there were found to lack a common and precise understanding of project design logic and also tended not to recognize the quality aspects of project design. There has been no apparent institutional recognition of the limits of the technical or design capacities of UNIDO.

89. Full benefits cannot be realized from the recommended effort to improve the several stages of the project cycle until the imbalance between the resources of UNIDO and its role and responsibilities is corrected. Such efforts will also be tied, to a significant extent, to a similar examination of the role and capacities of UNDP.

90. The resident representatives of UNDP handle a very heavy administrative workload occasioned in part by cumbersome UNDP procedures and the need to assist the Government and project staff on project-related matters. Its lack of industrial technical capacity, both at headquarters and in the country office, has kept UNDP from making the kinds of substantive technical contributions and decisions needed to fulfil its role in the achievement of project effectiveness and impact. Skills in project design concepts and methods also are lacking. Its capability to develop and use project design, evaluation and information systems integrated with other management functions is also seriously inadequate. These shortfalls were particularly acute at the headquarters level. The need for UNDP industrial technical capacity can only be determined after the roles, relationships and division of labour in the tripartite system have been clearly defined.

4. Industry, a fourth participant

91. Government was found to play an influential role in industrial development in the countries studied. Since industrial development requires policy and investment continuity over at least a 10-year span, political changes can have a long-term impact on the direction, momentum and structure of industrial development which in turn can accelerate or impede the intended impact of a technical co-operation programme or project.

92. The extent to which the tripartite system can induce development in the industrial sector depends directly on its ability (a) to forge close working relations with the sector, (b) to understand the crucial problems and needs of the sector, (c) to explore fully the entire range of industrial knowledge available at the country level as well as through UNIDO and (d) to formulate technical co-operation projects which effectively address those needs.

93. The study observed that active participation by the industrial sector in the planning of industrial development programmes and projects tended to result in clearer mutual understanding and agreement on project objectives and strategies and

the ability to make adjustments during implementation. Conversely, it was found that projects based on misconceptions of industry's felt needs and intentions were often the result of inadequate participation by the industrial sector in problem identification, project selection and design and work programmes. In some cases, the participation of industrial end-users in tripartite reviews and evaluations would have permitted the early identification of potential problems, a key consideration since there was no UNDP requirement to identify and monitor external factors.

94. During the study a number of factors were noted which must be clearly understood prior to the selection and design of technical co-operation projects. These factors apply to some situations and not to others. These are summarized as follows:

(a) There is a critical lack in many countries of entrepreneurs and industrial managers who understand the complex and rapidly changing industrial sector, have techno-economic skills and can solve problems in the areas of market assessment and development, and technology assessment, transfer and assimilation;

(b) There is sometimes not sufficient use of market assessment and market intelligence techniques to identify differentially industrial and consumer market opportunities based on real disposable income and effective demand. Information networks regarding such elements as market and price trends and competition at regional and international levels in the most important industrial sectors are usually not sufficiently developed. Adequate packaging and marketing channels for consumer goods need to be explored;

(c) With the current world recession, the relative availability of industrial technology has tended to decrease. The desire of most Governments to control the activities of transnational corporations can have as a negative side effect a slow-down in the transfer of industrial technologies. There is no systematic, readily accessible information on world-wide availability of industrial technology. The technical skills for technology adaptations are often not available in the recipient country and the possible participation of local industrial research and service institutes is often not utilized to their full potential.

B. Recent developments within UNDP and UNIDO

95. Some of the deficiencies and gaps noted in the project cycle as they relate to effectiveness and impact have been recognized by UNDP, UNIDO and their respective intergovernmental bodies and, particularly in the last year, they have initiated some remedial actions in so far as the deficiencies were perceived to be within their control and the resources available.

96. Beginning in 1983, UNDP started limited use of a new project document format and checklist, which had been field-tested, as a beginning to a modified approach for the project cycle as a whole. The intent is to apply the logical framework concept to the major design elements for use as a project management tool (see paragraph 83). The shortened document will emphasize the need for clear definition

of the objective or function of the project and the outputs to be produced, thereby facilitating the prospect of achieving effectiveness. Impact is not addressed except incidentally in connection with project justification.

97. A requirement for output-oriented workplans and the use of performance indicators has also been introduced by UNDP, but without supplying adequate guidance or relating them to other elements of the project management system, particularly reporting. In September 1982, however, UNDP decided to try to improve the quality, timeliness and increase the number of tripartite reviews and provide specific criteria for the conduct of in-depth evaluations intended to verify the current validity of a project's design. 10/ Guidelines for such evaluations, however, have not yet been developed.

98. Early in 1983 UNDP presented a series of proposals to the second session of the Intersessional Committee of the Whole of its Governing Council, intended to increase the effectiveness and impact of development co-operation. 11/ These included, inter alia:

(a) Improving the compliance and quality of tripartite monitoring;

(b) Introducing a feedback system concerning the use of evaluation results;

(c) Integrating design, appraisal and evaluation aspects of the project cycle, including selective checks on the quality of the project design;

(d) Requiring terminal evaluations to examine and record project achievements;

(e) Introducing ex post project evaluations on a selective basis for the implied purpose of verifying and/or taking follow-up actions to sustain intended impact. This has the potential of a major new departure in the evaluation activity of UNDP but requires considerable further development;

(f) Collaborating with the executing agencies in harmonizing project design and evaluation practices and systems.

99. In 1982, UNIDO inaugurated a project self-evaluation system with total coverage which is output-oriented and designed to complement the system of UNDP. 12/ The system of UNIDO is focused on project effectiveness and introduces the requirement for monitoring critical external factors and giving some consideration to eventual impact, particularly in large-scale projects. Effective utilization of the system for ongoing projects is being hindered by the poor design of projects in the active portfolio.

100. Self-evaluation is being facilitated by efforts to increase the quality of project design, 13/ by issuing guidelines on output-oriented work planning and establishing performance indicators, 14/ and by the initiation of extensive training in design and evaluation methodology for headquarters and field staff.

101. During 1983, the self-evaluation system is expected to begin providing data on quality and progress in producing outputs which will add a new dimension to implementation reviews carried out at the headquarters level and place more emphasis on project effectiveness.

102. The value of these efforts will depend, to a large extent, on UNIDO management's use of the results produced, both in the field and at headquarters, and on the effectiveness of similar measures being taken by UNDP.

103. While these recent efforts are commendable, enthusiasm must be tempered by the realization that in the past, similar efforts by both UNDP and UNIDO have had little effect on traditional management practices. This can be explained, at least in part, by the external factors already discussed above and which form the basis for the recommendations which follow.

C. Recommendations

104. The recommendations in this section are directed to individual organizations to facilitate review and implementation. The recommendations should be considered as a whole since they are integrated and mutually reinforcing. Where joint action is required, primary responsibility is suggested for one of the three parties concerned. Where Governments are involved, it is suggested that the appropriate intergovernmental bodies call upon Governments to participate in this effort.

105. Recommendations to give increased responsibility or activity to an organizational entity should be reviewed in the context of related recommendations to strengthen the capability of that entity.

106. In the recommendations which follow, there are several which arise from and are specific to the industrial sector. These include recommendations 1, 2 (b), (c) and (d), 4 (b), (c), (d) and (e) and 7. A second group of recommendations emerged from the industrial sector specifically, but would require changes in UNDP system-wide organizational arrangements, policies and/or procedures. These are recommendations 2 (a) and (e), 4 (a) and (f) and 5 (a) and (f). These recommendations should be further studied by UNDP to determine the desirability and feasibility of generalizing these changes to sectors other than industry. The remaining recommendations, although identified in the context of the industrial sector, are obviously applicable to all sectors, and can be applied systemwide without further study.

107. Having identified the main problems, it was possible to indicate the nature and direction of change which is needed but not to forecast the magnitude of those changes or the resources necessary to bring them about. For this reason, it is recommended that the appropriate intergovernmental bodies should request UNDP and UNIDO to develop proposed programmes of follow-up action for their review. It is recommended also that an annual report be prepared for CPC summarizing the progress in implementing these recommendations over the next two years.

108. There is widespread awareness of the scarcity of resources available to UNDP and UNIDO during this period of world-wide recession. Nevertheless is is important to call attention to the finding that at present levels of technical co-operation project assistance the substantive and technical staff resources of UNIDO and UNDP are well below that which is needed to carry out the broad range of technical co-operation projects which the two organizations are presently attempting to do and consequently, to bring about substantial improvements in the present levels of

project effectiveness and impact. If an expansion of resources is not feasible, then the alternative of selectively reducing workload should be considered.

Recommendation No. 1

United Nations Industrial Development Organization

109. UNIDO should consider adopting policy, organizational and staffing arrangements which will increase its capacity to participate more effectively in all stages of the project cycle. Specifically UNIDO should:

(a) Strengthen its technical specialized capacities in individual subsectors and technical subjects in which UNIDO considers itself competent. Actions could include (i) supporting and using technical information networks on a subsectoral basis to augment the technical capability of headquarters staff, (ii) more systematic utilization of country studies and other pertinent inputs from the Division of Industrial Studies for problem identification and diagnoses, including industrial system diagnoses and (iii) better utilization within the Division of Industrial Operations of qualified technical engineering staff specialists with practical industrial experience;

(b) Improve recruitment policies and staff selection focused on the subsectors and technical subjects in which technical competency is required, such as expertise in marketing methods for identifying new industrial production opportunities;

(c) Redefine the responsibilities and authority of staff involved in project management and direct support, including the chief technical adviser, the national project director, the Senior Industrial Development Field Adviser and headquarters backstopping officers;

(d) Assign to a small central unit, staffed at senior levels and independent of operatons, the following functions:

(i) Problem identification and diagnosis, including participation in UNDP country programming exercises;

(ii) Identification of the technology transfer aspects of high-risk venture projects;

(iii) Advice on multidisciplinary or multifunctional approaches;

(iv) Long-range country industrial development programming;

(v) Project design and quality control;

(e) Reassign the responsibility for design and approval of projects financed by UNDP to the implementing or operations division, including the necessary staff;

(f) Expand training for both headquarters technical staff and field project staff in project design, preparation of work plans, and evaluation methodologies and requirements (see recommendation No. 2 below);

(g) Prepare a UNIDO manual of policies and procedures covering the roles, responsibilities, authorities, functions, procedures, guidelines etc., for all aspects of secretariat participation in technical co-operation activities;

(h) Develop the appropriate use of the self-evaluation system to review project effectiveness and initiate corrective actions as required;

(i) Assuming the development of a result-oriented project reporting system as suggested above, supplemented by tripartite and internal reviews, evaluations and similar reports, develop a technical co-operation project information system with a focus on the production of outputs, effectiveness and, when possible, impact. In addition to its use in project implementation reviews and similar exercises, it should be designed for use in programming and project design guidance, technical reference and training of staff.

Recommendation No. 2

United Nations Development Programme

110. (a) It is recommended that UNDP should endeavour in the UNDP country programme process to emphasize more strongly the relationship between the problem identification and diagnosis stage and optimal project selection and should ensure that de facto project approval is not given prior to the completion of the project design process (see recommendation No. 5 (a) and paragraph 106). It should also take into consideration the desire of its Governing Council to have adequate and timely information on projects;

(b) Explore the need for special arrangements for the technology transfer aspects of high-risk venture industrial projects;

(c) Strengthen the industrial development technical support capabilities of the organization through better staff utilization and changes in recruitment policies and priorities to obtain professional engineering staff with techno-economic skills and industrial management experience. The qualifications should take into account requirements for problem identification and diagnosis, project design, implementation, oversight and evaluation (see paragraph 106);

(d) Revise the recruitment policies for the programme staff dealing with industrial projects at headquarters and in the field by emphasizing engineering and science qualifications with appropriate practical industrial experience so that over time, there will be an increased capability for substantive programme oversight (see paragraph 106);

(e) Redefine the responsibilities and authority of staff, both at headquarters and in the field, in line with the agreements reached in recommendation No. 5 and make the resident representative the principal focus of responsibility for ensuring the relevance and quality of project design with support and oversight by the Bureau for Programme Policy and Evaluation (see paragraph 106);

(f) Expand and intensify training in project design and evaluation methodology;

(g) Redesign and reorganize the reporting system to require substantive, output-oriented progress reports based on approved work plans and performance and achievement indicators, enforce reporting requirements and utilization of reports;

(h) Clarify and strengthen the procedures and guidelines for the project cycle in accordance with recommendation No. 3.

Recommendations Nos. 3, 4 and 5 involve changes in the tripartite system. It is suggested that UNDP should assume the primary responsibility, working closely with UNIDO and Governments as appropriate

Recommendation No. 3

Institute remedial actions to improve planning and management at all stages in the project cycle

111. (a) In project design, introduce use of more proximate subsectoral problems or objectives in lieu of remote macro-development objectives; use of a single objective at project level; time-limited explicit targets; baseline data; end-of-project-status indicators; development and project hypotheses; and explicit formulations of critical external factors, namely, the complete logical framework concept;

(b) During project implementation, introduce or expand use of: targeted outputs expressed in kind, magnitude and quality; output-oriented workplans with performance indicators; output-oriented progress reporting; monitoring of critical external factors; and reviews and evaluations focused on effectiveness and expected impact;

(c) Develop simplified procedures for revisions in project design, work plans and budgets to facilitate feedback from evaluation findings;

(d) Require in-country terminal evaluations on a routine basis and conduct ex post evaluations of impact on a selective basis and upon government request only;

(e) Encourage Governments to involve end-users in both private and public industry at all stages of the project cycle.

Four kinds of co-ordinated actions are necessary, in view of the inadequacy of past attempts, to ensure effective implementation of this recommendation

112. (a) Clear and comprehensive procedural guidance and instructions;

(b) Clear assignment of specific responsibilities to project and backstopping staff;

(c) Systematic orientation and training to prepare both headquarters, field and counterpart staff to fulfil their assigned responsibilities;

(d) Establishment and firm enforcement of standards of quality at all stages in the project cycle. Any UNIDO guidelines should be compatible with UNDP guidelines.

Recommendation No. 4

Clarify and expand the country programme concept of UNDP to include problem solving at the sectoral and subsectoral levels

113. (a) Explore the possibility of providing authority to UNDP to enter into the planning of IPF resources on a programme basis adapted to the industrial planning and investment cycle of approximately 10 years, subject to government continuity of supporting industrial development policies, regulatory activity and monetary policies (see paragraph 108);

(b) Government involvement of the industrial sector, for example, entrepreneurs, managers, public enterprises, professional societies, industrial associations and research institutions should be encouraged in the planning process;

(c) Give priority to comprehensive technical co-operation projects which, in addition to production, also address problems in management, market assessment and techniques and technology search, assessment, adaptation, and transfer;

(d) Assist Governments in problem diagnosis at the subsectoral level which should begin with collecting and analysing information on:

(i) The industrial environment;

(ii) The process of industrialization which already exists in the country and the policies and practices of the Government regarding it;

(iii) The present levels of capability and the principal deficiencies and problems affecting management, marketing and technology;

(e) Identify the technology transfer aspects of high-risk ventures which require special arrangements for the management and technical advisory committees;

(f) Governments should be encouraged to use IPF funds for this stage (see paragraph 106).

Recommendation No. 5

Roles, responsibilities, accountability and authority within the tripartite system should be clearly defined at the programme policy and individual project levels with sharp distinctions between the rules that would apply at each level

114. (a) At the programme policy level, the country programming process of UNDP should emphasize problem identification and diagnosis prior to the allocation of IPF funds to individual projects (see recommendation 2 (a) and paragraph 106);

(b) At the level of the individual project the tripartite system should centre its efforts on the identification and formulation of industrial projects based on the logical framework concept;

(c) At the level of the individual project the government co-ordinating office and UNDP should act as financial sponsors of the project, each being responsible and accountable for the financial support contributed by it. Each financial sponsor would have authority to decide on the expenditure of monies under its control. A decision not to support a project by UNDP would be based on its judgement of whether the project's objective was directly relevant to identified problems or whether the project design effectively addressed those problems. Approvals could be withheld if necessary until appropriate preconditions or prerequisites were fulfilled. Those resources would still be available for other technical co-operation projects in the same economic sector. Although UNDP now has such authority, it exercises it only rarely; consequently, a clear and unequivocal directive to UNDP to use this authority in appropriate circumstances should be issued;

(d) The primary responsiblity for establishing and enforcing standards for project design should rest with UNDP;

(e) Technical implementation criteria should be developed by UNIDO to assure that the exercise of its right to decide whether a project proposal meets clearly defined standards for implementation or not. If a proposal does not meet such standards, there should be a review at headquarters before another executing agency is considered;

(f) Recognizing that there are several participants jointly involved in project implementation, it is nevertheless necessary to define primary responsibilities more clearly. It is recommended that the allocation of primary responsibility for each major element of the project design be as follows:

Element	Primary responsibility
Pursuit of project impact, that is, achievement of development objective	Government 15/
Project effectiveness, that is, achievement of project objective	UNDP 15/
Production of project outputs	UNIDO 15/
Work programme	National implementation agency
Inputs	Joint

Recommendation No. 6 requires joint tripartite action with UNDP acting as co-ordinator

Recommendation No. 6

Improve the professional and technical qualifications of tripartite system staff

115. Design programmes of action to address three areas of weakness in staff capabilities of all three members of the tripartite system which may adversely

affect project effectiveness in industry: (a) insufficient understanding of project design concepts and methodologies, (b) shortage of techno-economic management skills in contrast to business management and (c) inadequate techno-economic knowledge and experience in important industrial subsectors, for example:

(a) Programmes of action should develop skills which are specific to the functions carried out by each of the three parties (see recommendation No. 5), and should be planned and implemented as a tripartite effort. For the government co-ordination office, priority should be given to all three of the problems noted above to permit that office to participate more effectively in the project cycle, with particular attention to the early stages. For UNDP, the emphasis should be on project design as well as techno-economic capability to enhance its design, review and approval capabilities. UNIDO should stress subsectoral technical engineering specialization, for example, chemical, metallurgical, agro- and engineering industries, as well as support of project design.

(b) Undertake (i) the formulation of new recruitment policies and criteria, (ii) intensive training and orientation activities and (iii) better utilization of existing staff as necessary.

116. All of these actions should take into consideration the subsectors which are expected to receive priority programme attention in the foreseeable future.

Recommendation No. 7 could be undertaken primarily by UNDP with co-operation from UNIDO and other executing agencies

Recommendation No. 7

117. Undertake further study of the information collected and generated by this in-depth evaluation to develop more specific project guidelines, case studies, training material and other useful products for improving knowledge and understanding of the technical co-operation process in general and the industrial technical co-operation area in particular.

Annex

EXPLANATION OF TERMS

A technical co-operation project is an undertaking which is designed to achieve certain specific objectives within a given budget and a specified period of time, for example, establishment of a technical research and training centre, expanding an existing foundry to permit production of new products.

Effectiveness is a measure of the extent to which a project achieves its own immediate objective.

Impact is a measure of the contribution of a project to its development objective.

Significance is a measure of the extent to which impact can be attributed to the project immediate objective as opposed to some other causal factors.

The four major stages in the life cycle of a technical co-operation project are:

1. The problem identification and diagnosis stage

This stage usually is preceded by, and is the logical outgrowth of, sectoral planning. Its purpose is to identify and examine obstacles, usually at the subsectoral level, which impede industrial growth and which are susceptible to solution by a technical co-operation project. This stage differentiates problems which can be addressed by that type of project assistance from problems which require policy, legislative or structural (non-project) change. This stage is crucial in that it (a) establishes the extent to which the project is essential to development, (b) assesses the nature and magnitude of the problem, (c) formulates the development hypothesis linking the project to the development objective at a sectoral or subsectoral level, (d) assigns a priority to the solution of the problem and (e) proposes a strategy for its solution.

2. Project design and approval

This stage is highly dependent upon the prior stage. At this stage, the project designers articulate the major design elements: the immediate objective, the development hypothesis, the project strategy, the function, kind and level of technology, the output, etc. Resource input requirements (expert services, training, physical plant, equipment etc.) are specified and a work plan is proposed. Approval is based upon the critical assessment (appraisal) of the relevance, feasibility and potential effectiveness of the project. More specifically, the proposed project proposal is reviewed to ensure (a) the relevance of the project to the recipient country problem, (b) the logic and adequacy of the causal linkage between inputs, outputs, project immediate objective and development objective and (c) whether these outputs and objectives are sufficiently explicit and precise to permit objective verification of progress and achievement.

3. Implementation

In this stage the work plan is carried out. The implementation stage includes the adaptation, transfer and utilization of resources (that is, material resources, technology and skills) through close collaboration between the executing agency and the recipient Government. In the case of institution-building projects, the creation of institutional capability occurs during implementation.

4. Project completion and follow-up

At present a project is financially terminated when the inputs have all been procured. A terminal report on the completion of scheduled activities, outputs and objectives and recommended future actions is required by UNDP. Following financial termination, no United Nations funds are available for further project activities.

Supervision is defined as a line management function which involves direct and continuing control of a process. Oversight is defined as a non-line management function which does not involve direct control of the process.

Special industrial services (SIS) are UNDP financed for short-term service designed to meet unforeseen requirements of a high priority, mainly through the speedy provision of expert advisory services.

A cross-project analysis (CPA) is a comparison of one set of project variables (for example, size, subject, means of implementation) with another set (for example, ratings of quality and results).

Other technical terms are defined in the text.

A high risk venture project has a probable high rate of return/multiplier effect, a substantial risk of failure and an important element of science or technology. Such a project requires that the sponsors take an active role in selecting the entrepreneur or manager, in dealing with technological or other impediments and in encouraging innovation and experimentation.

Notes

1/ Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 38 (A/35/38), para. 72.

2/ Ibid., Thirty-seventh Session, Supplement No. 38 (A/37/38), para. 375.

3/ The seven countries were Argentina, Egypt, India, Indonesia, Kenya, Peru and Yugoslavia. Although UNDP policies and procedures provide for the use of IPF project funds for evaluation, it is to be noted that five of the seven countries which participated were unwilling to authorize the use of IPF funds for the travel and per diem expenses of one person (team leader).

4/ At the in-country study level, interviews were carried out with project staff, both national and international experts, industrial end-users of project results, government representatives at policy-making as well as working levels, resident representatives and their staffs, including specifically SIDFAs if on post; at UNIDO headquarters at Vienna, senior and operating staff of the Division of Industrial Operations, Division of Programme Co-ordination and Division for Industrial Studies; at UNDP headquarters in New York, senior policy-making and working level staff of each of the four Regional Bureaux for Africa, Asia, Arab Countries, Latin America, as well as the Unit for Europe and the Bureau for Programme, Policy and Evaluation. The co-ordinators also benefited significantly from the discussions and views expressed at the Workshop on Signficant Issues, held at Vienna, at which a group of 16 persons selected from the national consultants, SIDFAs and participating staff of the study were present.

5/ United Nations Development Programme, Policies and Procedures Manual (New York, December 1975) and revisions.

6/ The project self-evaluation system of UNIDO, introduced in February 1982, requires that consideration be given to project effectiveness and impact during implementation and at project termination (see UNIDO/PC.31).

7/ Joint Inspection Unit, Evaluation of Technical Co-operation Activities of the United Nations System in Sri Lanka (JIU/REP/79/16), vol. 1; Note by the secretariats of the Consultative Committees on evaluation (ACC/1980/OPPG/2); "Evaluation: joint UNDP/UNIDO evaluation of industrial research and service institutes" (ID/B/C.3/86/Add.1); "Programme implementation: government execution and management; project design, monitoring and evaluation; and UNDP-financed experts" (DP/558).

8/ Based on in-country studies (fifth level).

9/ Three such evaluations have been carried out by UNDP and UNIDO covering industrial planning and strategy projects, textile industry projects and IRSIs.

10/ "Project monitoring, evaluation and duration" (UNDP/PROG/96, UNDP/PROG/FIELD/150, UNDP/PROG/HQTRS/152).

11/ "Arrangements for the evaluation of the results and of the effectiveness of the Programme" (DP/1983/ICW/6).

12/ UNIDO/PC.31.

13/ UNIDO/PC.41.

14/ UNIDO/PC.3/Add.1.

15/ The concept of responsibility assumes that all factors necessary for its fulfilment are under the control of the entity responsible. In the above proposal, the assignment of responsibility at the output level is shared by UNIDO and the national implementing agency since each contributes inputs and participates in

implementing. The prime responsibility is assigned to UNIDO because it provides the critically needed contribution to produce the outputs. This in no way diminishes the overriding responsibility of the national project director. The responsibility of the resident representative of UNDP for achievement of the project objective and of the Government for the achievement of the development objective have to be understood in different terms since neither one would have full control of the critical external factors at those levels. Their responsibility would be to monitor, influence and try to mobilize any participation and actions needed to exert as much control as possible over the external factors affecting the project, thus maximizing the probability for achievement of the project and development objectives.
