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PRE-EVALUATION STUDY ON UNIDO'S ACTIVITIES IN THE
DEVELOPMENT OF HUMAN RESOURCES (HRD)*

Prepared by the
Evaluation Staff
Office of the Director-General

* This document has not been edited.

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LIST OF ABBREVIATIONS

COMFAR	Computer Model for Feasibility Analysis and Reporting
DSA	Daily subsistence allowance
FS	Fellowships/study tours
GC	General Conference
GTP	Group training programme
HRD	Human resource development
IDB	Industrial Development Board
IDDA	Industrial Development Decade for Africa
IDF	Industrial Development Fund
IHRD	Industrial Human Resource Development Branch
ILO	International Labour Office
ITU	International Telecommunication Union
MTP	Medium-Term Plan
NSA	National Supervising Agency
PTA	Preferential Trade Area for Eastern and Southern African States
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization

SUMMARY

The General Conference and the Industrial Development Board have selected UNIDO's HRD activities as a subject for in-depth evaluation. Given the complexity of HRD in general and the spread of UNIDO's activities in particular, the evaluation staff required assistance to elaborate a pre-evaluation study defining the scope, the issues and the methodological approach of the planned in-depth evaluation. The Evaluation Staff developed terms of reference for the pre-evaluation study. The study was made possible by financial support jointly provided by the former German Democratic Republic (GDR) and the Federal Republic of Germany (FRG). Two consultants were hired for one month to carry out the pre-evaluation study in co-operation with the Evaluation Staff. They were Professor Dr. Edwin Stiller, GDR, and Dr. Ansgar Eussner, FRG. The consultants, under the guidance of the Evaluation Staff, reviewed all relevant documentation on UNIDO's mandate, programmes, projects and related activities connected with HRD. This information was supplemented with numerous interviews and discussions held with staff members in various divisions of UNIDO's headquarters in Vienna. Where appropriate, comments to the draft report received from UNIDO staff were incorporated into the final report by the Evaluation Staff.

This report gives a brief overview of UNIDO's HRD activities, presents a set of issues to be addressed by the in-depth evaluation and recommends appropriate evaluation methods.

HRD has drawn wide and increasing attention throughout the U.N. system. UNIDO has defined the objective of its HRD activities as to build up in developing countries coherent and sustainable systems for upgrading local technological skills and managerial and entrepreneurial capabilities and integrating them into the industrial development process, in accordance with the national development strategies and priority plans of those countries. Based on this general definition, the aim, the means and the target groups should be determined in such a way that the trained people are able to act autonomously and successfully in their field of responsibility and to train others (multiplier effect).

The main activities of UNIDO in the field of HRD are group training programmes (GTPs); fellowships and study tours; training activities as components of sectoral projects; field projects focussing mainly on HRD institution building; HRD related activities like consultations, expert group meetings and workshops; studies and conceptual work; and finally, evaluations related to these activities. HRD activities are organized not only by the training branch but take place in most other branches, too. In 1989, UNIDO organized 85 GTPs with 1151 participants. The sum of US\$ 6.6 million were spent on these activities, while US\$ 13.6 million were spent on fellowships and study tours with 1896 participants.

While the number of GTPs and fellowships are quite impressive, there are only a few field projects explicitly aiming at HRD institution building. In IHRD, there remains about 14 field projects; several others are implemented by other branches, especially the Institutional Infrastructure Branch. In addition, there are large training components in projects in different sectors, which could not, however, be fully identified.

According to the resolutions of the Second and Third General Conferences and the Medium-Term Plan 1992-1997, UNIDO intends not only to continue but also to expand its HRD activities. UNIDO has many years of experience in this field. The question is, however, how to cope with new challenges related to HRD and the huge and increasing demand for support on the one hand, and restrictions in terms of qualified personnel and funds available on the other. How can UNIDO identify the priorities and develop an optimal operational strategy for its future activities? How can it manage these activities in the most effective way? An in-depth evaluation of UNIDO's HRD activities would be helpful to answer these questions.

The issues for an in-depth evaluation should be divided into four groups: the conceptual stage, the implementation stage, the sustainability of HRD activities and the (internal) management of UNIDO headquarters.

There seems to be a gap between the high level, ambitious Policy Making Organ resolutions and UNIDO policy statements and the current structure, activities and financial resources of UNIDO related to HRD. While the development objective is focusing on building up national planning and implementing capacities for HRD development, UNIDO's activities are to a large extent of a scattered and repetitive nature, without having a clear orientation towards the overall development objective. The issue arising from this preliminary analysis is to investigate in further detail why this gap between policy papers and practice is so large and what operational strategy could be developed to narrow it down. Certainly the traditional forms of cooperation such as GTPs, fellowships and study tours will continue to play an important role but their impact might be increased if they are placed more strictly in the framework of such an operational strategy.

The other issues concerning the conceptual stage are related to the assessment of demand for HRD projects, the consideration of policy framework conditions for HRD in the developing countries, the extent to which thematic programmes and priority problem areas are taken into account, and the coordination of UNIDO's HRD activities with other UN agencies and bilateral donors.

Issues related to the implementation of GTPs concern the conception, structure and contents of courses, the training methods, the selection of participants and the evaluation methods. For fellowships and study tours, experience has been accumulated for more than 20 years now but there was never an in-depth evaluation. The issue with regard to the training impact of technical experts is how to promote their aptitude as trainers and how to increase the attention for the HRD components of technical assistance projects.

The most important question of all is: What happens after the training? What are the final results of all training activities? There is no extensive organized follow-up to assess the changes achieved in each fellow's, participant's or otherwise trained person's workplace. The real results are not assessed. An issue for an in-depth evaluation, therefore, is to assess the impact of HRD activities on industrial development, in particular with regard to the establishing or strengthening of coherent and sustainable national training systems, the results of project experts regarding their training activities, and the changes/improvements introduced by fellows or participants of training programmes.

There are presently problems with regard to the division of labour between the IHRD Branch and the technical branches. Ideally, IHRD and the substantive branches should cooperate, with both sides providing their specific knowledge and views throughout the project cycle. In many cases, however, there is more competition than cooperation, particularly for GTPs and field projects.

Three basic alternatives for the future division of labour between the branches could be imagined:

- a) The present situation continues;
- b) The IHRD Branch will be made the focal point for HRD in UNIDO;
- c) The IHRD Branch would be dissolved.

Without being able to elaborate on these models in detail, it is obvious that the present situation should be improved. In model c), it would be difficult to develop a UNIDO approach or trademark with regard to industrial training. The success of model b), however, depends very much on the quality and dynamism of the division chief and the officers in IHRD, as it will not be easy to establish it vis-a-vis the substantive branches. An in-depth evaluation would have to discuss these models in detail, as they apparently affect UNIDO's ability to develop an operational approach to the ambitious development objective formulated in the Medium-Term Plan related to HRD.

The methods for the in-depth evaluation have to be related to the proposed issues. They have to include a detailed review of documents and interviews at UNIDO headquarters (regarding the conceptual work, the analysis of previous evaluations, files and the internal management). Then a sample of 20 projects in four African, two Asian and two Latin American countries should be evaluated in detail. Papers on the national HRD systems in the eight countries to be visited should be prepared. The findings of the various studies should be summarized in a synthesis report which is to be discussed in a final workshop. The evaluation should be guided by an advisory committee composed of UNIDO staff members from various branches.

A minimum evaluation approach would be to start with a UNIDO task force working on the conceptual issues; the GTPs and fellowships/study tours could be evaluated by the Evaluation Staff; the number of projects to be visited could be reduced and the synthesis report could be elaborated by Evaluation Staff. In this case, only innovative and conceptually interesting field projects should be evaluated.

According to a preliminary rough calculation, the financial resources required for the full-scale in-depth evaluation would add up to US\$ 268,000; the minimum approach would cost about US\$ 85,000.

1. Background and purpose

1.1 New industrial developments and their impact on HRD

1. Since HRD is a priority element of social and economic development, many theoretical views have been published and practical experience under various conditions gathered in many countries. A great number of them are reflected in important documents and studies of UNIDO. It is needless to repeat them. but attention should be paid to some essential questions. Why was, is and will HRD be a decisive element of development? Why will its importance grow in the coming decade? Why has HRD to continue to be a main field of UNIDO's activities as stated in resolutions of the Second and Third General Conferences and the Medium-Term Plan? It is generally acknowledged that economic growth and industrial development depend on four main factors which are human resources, natural resources, capital formation and technology. Certain relations of these factors have to be warranted or negative effects are unavoidable. The crucial point is mostly a shortage of skilled workforce, technical and managerial skills and entrepreneurial capability. But the development of human resources is a long lasting task and shows a large variety of national peculiarities. There are distinctions in the education and training systems, in traditions of crafts and trades, in materials and tools used, in the work moral and many other factors which might be considered as industrial culture. HRD has to be achieved starting from national traditions and conditions, it cannot be simply imported.

2. In the 1990's, all countries will be faced with new social and economic challenges. Rapid technological progress, increasing international division of labour combined with stiff competition, growing scarcity of natural resources and energy, natural environment problems on the one hand, and great difficulties in managing structural changes, ensuring economic growth, rehabilitation of industries, especially in many developing countries, on the other hand are features of these challenges. Can one master them without strengthening the activities in the field of HRD? What is needed more than ever before is a skilled workforce combined with entrepreneurship and an effective management. Training and continued learning at all levels is required.

3. Another reason why HRD remains a crucial element of development is the continuation of population growth. Increasing pressure on the labour market and a growing demand for consumer goods require economic and in particular industrial growth, which depends to a large extent on skills. In this context, the expansion of small- and medium-scale enterprises gains importance.

4. According to the resolutions of the Second and Third UNIDO General Conferences and the Medium-Term Plan 1992-1997, UNIDO intends not only to continue but also to expand its HRD activities. UNIDO has many years of experience in this field. The question is: how to cope with new challenges related to HRD and a huge and increasing demand for support on the one hand, and restrictions in terms of qualified personnel and funds available on the other hand. How can UNIDO identify the priorities and develop an optimal operational strategy and policies for its future activities? How can it manage these activities in the most effective way? An in-depth evaluation of UNIDO's HRD activities would be helpful to answer these questions.

1.2 HRD in industry, UNIDO's objective and mandate

5. HRD has drawn wide and increasing attention throughout the U.N. system. However, the knowledge and understanding of the fundamental relationships

between HRD and social and economic development, and of the strong interactions among the different factors influencing HRD, is still inadequate. What is HRD? Related to a country's economy, we can, without going into detail, define human resource (HR): HR = employed and unemployed persons and trainees. This is the quantitative aspect of HR. The qualitative aspect is given by the physical condition, the knowledge, skills, capabilities, discipline, work moral, motivation and other features. Development of HR (HRD) in a positive sense means: quantitatively a growth of the employable population, qualitatively an increase of knowledge, skills and the other mentioned features.

6. UNIDO has defined the objective of its HRD activities as follows: "The primary objective of the human resource development activities of UNIDO is to build up in developing countries coherent and sustainable systems for upgrading local technological skills and managerial and entrepreneurial capabilities and integrating them into the industrial development process, in accordance with the national development strategies and priority plans of those countries..." (see Medium-Term Plan, IDB.7/7, PBC.6/8, para.27). Based on this general definition the aim, the means and the target groups are determined as:

Aim: Upgrading technological and managerial skills and entrepreneurial capabilities, required by the developing countries.

Means:

- Supporting the establishing and/or strengthening of national training systems;
- Training of local technical and managerial personnel via expert advice, training courses, etc.;
- Sending individuals abroad to bring back increased technical and managerial knowledge.

Target groups: (a) Policy-makers at the national level, (b) managers of industrial enterprises and professional organizations, (c) managers and staff members of research and training institutions, (d) staff members of international technical co-operation agencies and institutions, (e) entrepreneurs, especially of small- and medium-scale plants, (f) similar groups engaged in industrial training (see Medium-Term Plan, para.28).

UNIDO should focus its HRD activities in such a way that the trained people are able to act autonomous and successful in their field of responsibility and be able to train others (multiplier effect). This has to be a general principle for UNIDO's activities, because almost all UNIDO technical co-operation activities have components related to HRD.

7. According to the MTP, it is of particular importance to establish and strengthen national training systems meeting the training demand of the defined target groups. National training systems are part of the national education systems which differ from country to country. Nevertheless, there are generally three levels of activities:

(i) Direct training activities of public or private training institutions and of enterprises: preparation of training (curricula, training programmes, teaching materials), training (courses, in-plant training, inter-plant training, on-the-job training), co-operation between training institutions and industry;

(ii) Planning of training activities and programmes by government authorities and/or enterprises: planning the training needs and financial resources, planning the development of training institutions, development of manpower and training information systems;

(iii) Policy-making by government authorities and industrial associations: elaboration of national training strategies, harmonization of training programmes with public policies and labour market and with general education and training policies, co-ordination of training activities between countries and with international organizations.

UNIDO support should be provided to all these activities.

1.3 Terms of Reference of the pre-evaluation and methods applied

8. The General Conference and the Industrial Development Board have selected UNIDO's HRD activities as a subject for in-depth evaluation. Given the complexity of HRD in general and the spread of UNIDO's activities in particular, the evaluation staff required assistance to elaborate a pre-evaluation study defining the scope, the issues, and the methodological approach of the planned in-depth evaluation.

9. In line with the terms of reference prepared by the Evaluation Office of UNIDO, the consultants, Prof. Dr. Edwin Stiller and Dr. Ansgar Eussner, reviewed all relevant documentation on UNIDO's mandate, programmes, projects and related activities connected with HRD. This included a number of special studies, analyses, reviews, and evaluation reports prepared by UNIDO on the subject concerned. This information was supplemented with numerous interviews and discussions held with staff members in various divisions of UNIDO's headquarters in Vienna. In addition, several permanent missions accredited to UNIDO were interviewed (see annex II).

10. The consultants then prepared this paper which gives a brief summary of UNIDO's HRD activities, presents a set of issues to be addressed by the in-depth evaluation and recommends appropriate evaluation methods. The consultants spent four weeks (15.8. - 13.9.1990) at UNIDO Headquarters in Vienna to collect the information required and to prepare and discuss this report.

2. UNIDO's activities in HRD

2.1 Overview of the system

11. The main activities of UNIDO in the field of HRD are the following:

- group training programmes (GTP)
- fellowships and study tours
- training activities as components of technical co-operation field projects
- field projects focussing mainly on HRD institution building
- HRD related activities like consultations, expert group meetings, and workshops
- studies and conceptual work;
- evaluation related to these activities.

12. HRD activities are organized not only by the training branch, but take place in most other branches, too. The division of labour between the training branch and the other branches is not clear cut, and many conflicts have been arisen during the last years (for details, 3.4). The main activities of the training branch consist in organizing GTP's, fellowships and study tours. In addition, there is a unit for field projects and one for planning and training methodologies.

13. With effect from 1 September 1989, the functions of the training branch have been redefined by assigning some field projects to other substantive branches in the department; the name of the branch was changed to Industrial Human Resource Development branch (IHRD). The reorganization was made with a view to underline the service character of the branch while the new name shall express UNIDO's objective to place industrial training into the broader context of HRD development.

14. In 1989, UNIDO organized 85 GTP with 1151 participants. US\$ 6.6 million were spent on these activities, while US\$ 13.6 million were spent on fellowships and study tours with 1896 participants. These figures reflect not only the implementation figures of IHRD branch but the expenditures for training components in all technical co-operation projects implemented by UNIDO. All fellowships and study tours are administered by IHRD. GTP on the other hand are partly organized by IHRD, partly by other branches either in co-operation with IHRD or independently. The same is true with regard to HRD field projects. In addition, there are on-the-job training activities in most of the field projects carried out by UNIDO's technical advisers.

15. While the number of GTP and fellowships are quite impressive, there are only a few field projects explicitly aiming at HRD institution building. In IHRD, there remain about 14 field projects (see annex V); several others are implemented by other branches, especially the institutional infrastructure branch. In addition, there are large training components in projects in different sectors, which could not be fully identified, however.

2.2 Conceptual and methodological work

16. Major documents on HRD have been submitted to the Second and the Third General Conference, and in the Medium-Term Plan HRD receives priority attention. Although these documents provide a broad vision of HRD, there still exist no operational strategy. The reports submitted to the General Conference have been prepared by the Industrial Policy and Perspectives Division and not by IHRD.

17. In the last decade, there have been several attempts to develop a systematic approach of UNILCO to HRD in industry. In 1982, the first global UNIDO consultation on HRD was held in Stuttgart, followed by the second consultation on HRD for effective industrial maintenance, held in Paris in 1987.

18. In IHRD, one professional staff member is presently in charge of developing planning as well as training methodologies; others have prepared some brief papers on various conceptual issues. Some policy statements have been inherited from the former head of branch and by some officers who have left the branch for various reasons. In addition, there are two professional staff members in the Regional and Countries Studies Branch, who have recently started to work on HRD concepts.

A number of training manuals have been elaborated for GTP, partly by the IHRD Branch and partly by substantive branches and by consultants. The small library of IHRD is presently not staffed, however, due to funding problems. Therefore, the work started to develop a computerized documentation not only on training possibilities world-wide but also on training materials and manuals had to be interrupted.

2.3 Group training programmes (GTP)

19. This training activity aims at providing training programmes to advanced technical and managerial personnel from enterprises, institutions and government agencies. Two major types of GTPs can be distinguished:

- In-plant training programmes over a period of 2 to 5 months;
- Seminars (and meetings) up to about 6 weeks.

They are carried out by industrial enterprises and/or industrial and service institutions and contain lectures, exercises, study visits, actual in-plant training, discussions and other elements.

20. GTP host countries are developed or developing countries (see annex III). During the past five years only six GTPs were organized jointly by a developed and a developing country, each hosting a part of the course. Host countries with most GTPs (during the last five years) are USSR (7-9 courses per year), Turkey and Austria (4-7). No GTPs were offered from USA.

21. GTPs have been a major training activity of UNIDO for many years, with 22 programmes and 285 participants in 1975 up to 85 programmes with 1048 participants in 1989. During the last five years a relatively high stability can be observed with regard to:

- The number of programmes (with an increase of national programmes in 1988 and 1989);
- The number of participants (1100 on average per year);
- The subjects (a high number of courses in metallurgy [average 8 per year], chemical industry [average 7-8 per year], engineering industries [average 8 per year]). A remarkable increase of programmes can be observed in the field of project preparation, evaluation and financing (for details, see annex III).

The expenditures for GTPs have been increasing from US\$ 5.2 million in 1985 to US\$ 6.6 million in 1989, that means from US\$ 4,437 per participant to US\$ 6,298. In 1988, the average costs per person (US\$) were 4,925 for national projects, 5,600 for regional projects and 6,715 for interregional projects.

The programmes/seminars are mainly offer-oriented. The voluntary contribution to UNIDF in non-convertible currency is one of the reasons that many programmes were offered from USSR and other countries from Eastern Europe.

22. The responsibility of UNIDO is to promote GTPs which meet the priority need of developing countries, to find potential host countries/institutions, to organize, in collaboration with host institutions, the programmes and to finance them. The co-operation with the host institutions includes the identification of participants, the administration and management of the programmes and the evaluation of the results. The questionnaires completed by the participants at the end of the programmes allow conclusions with regard to the standard of the training received which in general met the expectations of the participants. Most GTPs took place under the responsibility of the training branch, but some of the other substantive branches are carrying out courses and seminars too, e.g. the Feasibility Studies Branch and the Industrial Management and Rehabilitation Branch (wood-working).

2.4 Fellowships and study tours

23. The aim of fellowships and study tours is to provide training for persons who wish to enhance their skill in a specific field by training abroad. While this programme can be financed from various sources, approximately 90 per cent of this programme are financed by UNDP resources and form part of a larger technical assistance project. The duration of a fellowship varies between one month minimum and two years maximum, with most of the fellowships having a duration of 4 to 6 months. Study tours are often organized for small groups of participants, lasting not more than one month. Participants are mainly high-ranking government officials responsible for industrial development, top managerial staff or technicians from industrial enterprises or institutions, national directors or counterpart experts from UNIDO-executed projects. Usually, they are visiting a number of industrial plants.

24. Fellowships and study tours are demand-oriented, i.e. UNIDO tries to design and implement them as much as possible according to the individual requests. They constitute the most traditional training activity of UNIDO, involving most member countries:

	<u>1985</u>	<u>1989</u>
Home countries of participants	96 ^{1/}	104 ^{2/}
Countries of study		
- total	87	85
- of which developing countries	29	29

^{1/} including 7 European countries

^{2/} including 11 European countries

The average number of fellowships and study tours between 1985 and 1989 was 1635, the total number over this period being 8173 (see annex IV). The expenditures increased from US\$ 8.3 million in 1985 to US\$ 13.6 million in 1989, i.e. average cost per participant rose from US\$ 4,812 to US\$ 7,173. As one reason, the increased duration of fellowship programmes is mentioned, as well as a trend to more cost-intensive study tours and of course the decline of the dollar.

25. The procedure and administration follows established standards starting from the submission of the candidate through the placement up to the final report of the participant.

2.5 Training activities of project experts

26. Most technical co-operation projects of UNIDO foresee training activities of different kinds. In addition to fellowships and study tours abroad (budget lines 31 and 32), in the terms of reference and in the job descriptions of most technical advisers, provisions are made with regard to training of counterparts. In many cases, however, the relevant texts are not very precise and read like "training will be provided as requested". Thus, it depends very much on the initiative of the individual expert, the chief technical adviser, and the counterpart institution whether the general intention and readiness for training is actually put into practice.

27. Most training provided takes place in the form of day-to-day on the job training while the expert and the counterpart are working side by side. In addition, in a number of cases seminars and workshops are organized. Sometimes, manuals and other training materials are elaborated.

28. Certainly, it is not easy to determine at the design stage of a technical cooperation project what kind of training will be needed, how many counterpart staff will require training, and what the most effective methods would be. Nevertheless, with more detailed instructions and training, more emphasis could and should be placed on HRD in every project document. HRD should not be dealt with as a routine and often even completely neglected matter, as it is reportedly the case in many project designs, but should receive priority attention as a crucial component of project design, implementation and reporting.

2.6 Field projects

29. In addition to GTP, fellowships and study tours, IHRD always backstopped a number of field projects. Although their number decreased during the last years from 25 in 1985 to 17 in 1989 and 1990, yearly expenditures increased from US\$ 1,186 million in 1985 to US\$ 1,621 million in 1989. Following the bulletin of the Director General of UNIDO in August 1989, IHRD transferred two projects to other branches, one to agro-industry and another to chemical industry. Presently, field projects of IHRD consist of sectoral and sub-sectoral training needs assessments and surveys of training capacities, training seminars, and institution building projects. Their common characteristic is that they take place in developing countries. While surveys, studies, and seminars are small projects involving short-term experts and budgets of between US\$ 10,000 and 40,000, institution building projects engage long-term experts and involve expenditures of several hundred thousand US dollars. These projects may cover the whole industrial sector or cover a specific sub-sector. An overview of the field projects backstopped by IHRD in 1989 is given in annex V.

30. In only a few cases, all the different HRD activities are put together to form an integrated programme sequence, starting with an assessment of training needs and institutional capacities, developing curricula, training of trainers during fellowships, delivering equipment to a training centre in a developing country and providing short-term and long-term expert support. A programme like this has been developed by IHRD for the maintenance management of iron and steel industries of the PTA countries, concentrating on Zimbabwe. In other cases, however, there seem to be little coherence between the various measures. Sometimes, intended follow-up does not take place. For example, the numerous and costly surveys elaborated in the context of the so-called "Centre of Excellence" programme during the early eighties never resulted in field projects.

31. There are also a number of HRD field projects backstopped by technical or functional branches with no involvement of IHRD and vice versa of course. One of these projects is the petroleum training centre in Angola, and another the sugar training centre in Sudan. In addition, there are several institution-building projects with large-scale training activities but predominant research and technology components such as the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Trieste/Italy and New Delhi/India; the UNIDO support for this centre including the organization of various seminars and training courses is backstopped by the Industrial Technology Development Branch. The Institutional Infrastructure Branch also backstops a number of field projects, with particular emphasis being placed on entrepreneurial development.

2.7 Meetings, workshops, consultation meetings

32. The aim of meetings and workshops is to bring together, for a few days, senior decision makers and experts to discuss specific subjects. These are not training activities per se but have a training side effect for the participants and to promote further HRD activities.

33. Most of the meetings and workshops have sub-sectoral and functional character or are country presentations. The figures for 1985 and 1989 are:

	<u>Total</u>	<u>Sectoral</u>	<u>Functional</u>	<u>Country presentation</u>
1985	122	61	41	20
1989	118	46	36	36

Most of the sectoral workshops and meetings are related to agro-food industries (7), mechanical engineering industries (7), chemical industries (5), metallurgy (5) (Figures of 1989). The functional workshops and meetings discussed a large variety of subjects. In 1989, they were related to pre-investment studies (3), industrial planning (2), and industrial rehabilitation (2).

34. Another activity related to training are consultation meetings on HRD. Two such meetings on the training of industrial manpower were held by UNIDO, the first in Stuttgart (FRG) in 1982, the second in Paris (France) in 1987. The number and structure of the participants are shown below:

Sector	Participants														TOTAL PARTICIPANTS	
	Countries										International Organizations					
	Industry					Government			Other		United Nations	Intergovernment.	Non-Government.	Total		
	Countries	Enterprises	Ind. ass'ns	IRSI's+Training	Consulting firms	Ministries	Diplomatic missions	Labour	Finance	Commerce						Total
Training I	68	34	4	28	4	72	25	10	5	2	184	11	7	9	27	211
Training II	59	59	21	75	11	59	11	7	3	-	246	9	7	27	43	289

35. Whereas the first consultation meeting was dealing with more general subjects of training for industry, the second concentrated on training for industrial maintenance. Because of this concentration on a more specific subject, the second one was considered more effective. The main conclusion of UNIDO was to concentrate on the manpower requirements of industrial enterprises and the mechanism for linking these requirements with the output of the educational and institutional training systems.

2.8 Evaluations

36. The Evaluation Staff has initiated and conducted a number of in-depth evaluations, mainly of GTPs. Fellowships and study tours on the other side have never been subject of an in-depth evaluation. The same applies to field projects specifically geared to HRD. In the in-depth evaluation of the System of Consultations, the consultations on industrial training held in Stuttgart in 1982 and in Paris in 1987 were selected for a case study. Problems of training were taken into account also in the context of in-depth evaluations of other technical assistance projects, but up to now there were no thorough substantive evaluations of the training components of these projects nor of the training role of the technical advisers played in this field.

37. As mentioned above, several GTPs of both IHRD and other branches have been evaluated in detail, mostly by teams of consultants and the Evaluation Staff. In 1988, for example, in-plant GTP on electric welding, metalworking and mineral fertilizer production, organized by various institutions in the USSR, and on cement industries in Turkey, have been subject of in-depth evaluations. Another in-depth evaluation was carried out in 1989 of a GTP in the field of quality improvement of industrial products, organized in Japan. All these programmes were backstopped by IHRD. In 1988 and again in 1990, GTPs on Industrial Project Preparation and COMFAR analysis, organized in the Federal Republic of Germany and The Gambia respectively, have been evaluated. These programmes were backstopped by the Feasibility Studies Branch. In 1986, there was also an in-depth evaluation of training programmes in the wood working sector, which has been developed by the Industrial Management and Rehabilitation Branch which concluded that the programme is excellent and recommended that the programme be transferred to developing country regions in order to train a larger number of entrepreneurs at less cost.

38. In addition, it should be mentioned that the Evaluation Staff developed a new format for standardized internal evaluations at the end of each GTP. After long discussions with the Training Branch, this format, the so-called project evaluation report for group training projects (PER/GT), was declared obligatory by the Director-General in 1989. The format contains detailed questionnaires for the organization hosting the GTP, for IHRD and the technical branch backstopping the GTP. It is to be returned to the Evaluation Staff and partly also to the host organizations for feed back and consequent adaptation of the programme. In addition, there are still the final reports elaborated by officers of IHRD using their own questionnaires. The validity of these separate reports and questionnaires needs to be assessed as well as whether these reports are made use of by the training organizations and by UNIDO.

2.9 Studies

39. During the last decade, several studies were prepared on UNIDO's HRD activities. The most important are:

- Background paper prepared by the secretariat of UNIDO in collaboration with the secretariats of ILO and UNESCO, ID/WG.381/2. This study was used for the preparation of the Stuttgart consultation meeting;

- F.M. Roche, Training Branch - a study, 1983. It gives a detailed presentation of the activities and organization of the training branch at that time, pointed out problems and gave recommendations;
- A. Nickels, UNIDO's activities and strategy in the field of training, Report to the UNIDO Task Force on the Training of Industrial Manpower, Parts I and II, 1984. This study gives a detailed description of UNIDO's training activities and a critical analysis of the functioning of the training system;
- F. Motte, Human Resource Development: Analysis of 225 technical co-operation projects with reference to strengthening of national industrial training and development and transfer of technology capabilities, 1989. The study contains an assessment of UNIDO's training activities and analyzes shortcomings of the training system.

These studies, especially the Report to the Task Force, came to the following main conclusions:

- Apart from general resolutions of major conferences, there exist no operational strategy. Even for operations like GTPs and fellowships, there is a considerable discrepancy between the priorities assigned to the training system and its real output. No official document is available containing an overall appraisal of UNIDO's training activities.
- UNIDO is acting mainly as an intermediary, channelling funds and administering donor-driven programmes instead of developing its own approach to strengthening national HRD capacities.
- Most of UNIDO's training activities are related to technical assistance projects (fellowships, study tours and the training role of project experts). Decisions on priorities are mainly set by national governments. With regard to experts, UNIDO intervenes rarely in their training work, with the exception of some backstopping officers.
- The essential duality inherent in any kind of training activity between the technical element (requiring in-depth knowledge of the sector, of technologies, of enterprises, etc.) and the pedagogical element is often not acknowledged and respected by the technical branches and the experts.
- The division of labour between IHRD and the other branches is not well defined and properly working. The exchange of information is insufficient, experiences gained are not systematically discussed, the assessment of branch performance based on the Programme Allotment Document (PAD) figures results in more competition for projects than in co-operation.

Other critical remarks are related to the organization of GTPs and fellowships/study tours combined with a range of proposals. Particular attention is paid to the training role of technical assistance project experts. Proposals were made for drafting manuals on training methods and preparing teaching materials.

It has to be mentioned that most of the problems discussed in these studies are still existing, and little follow-up seems to have taken place.

3. Issues for an in-depth evaluation

3.1 Issues related to the conceptual stage

3.1.1 Gap between policy declarations and present activities

40. In recent policy documents (the Medium-Term Plan, MTP, and the report of the Director General to the Third General Conference, GC.3/8), the primary objective of UNIDO in the field of HRD is defined as building up in developing countries coherent and sustainable systems for upgrading local technological skills and managerial and entrepreneurial capabilities ... (draft MTP 1992-1997, p.9, document IDB.7/7, for details see chapter 1.2).

41. There seems to be a gap between the high level, ambitious policy statements and the current structure of UNIDO's activities. While the development objective is focussing on building up national planning and implementing capacities for HRD development, UNIDO's activities are to a large extent of a scattered and repetitive nature without having a clear orientation towards the overall development objective.

42. There are only a few field projects aiming at institution building for HRD in developing countries. Some of them are backstopped by IHRD, some by other branches. The programme of Centres of Excellence in the early eighties never went beyond the preparatory stage (surveys, institutional contacts and assessments). There are also rarely projects explicitly addressing the development of national human resource development strategies and planning. On the other side, there are numerous activities such as GTP and fellowships which might contribute to the building of national capacities in HRD but only if they are designed in that larger framework, i.e. if they are combined to project sequences aiming at national institution-building, which seems to happen only in some cases. The same holds true for technical assistance projects in various sectors where training might play a role or not, depending on the initiative of the technical advisers and counterparts involved.

43. The issue arising from this preliminary analysis is: To investigate in further detail why this gap between policy papers and practice is so large, and what operational strategy could be developed to narrow it down. Certainly the traditional forms of cooperation such as GTP, fellowships and study tours will continue to play an important role but their impact might be increased if they are placed more strictly in the framework of such an operational strategy. This would enable UNIDO also to develop an own 'drive' instead of implementing and administering donor driven programmes. After some initial discussions, this approach will probably strengthen the attractiveness of UNIDO for both, the donors and the developing countries and strengthen UNIDO's hand in negotiating with donors and enable UNIDO to become more competitive in the field of IHRD.

3.1.2 Demand versus offer oriented projects

44. Most GTPs are offer-oriented programmes based on voluntary contributions of different industrialized countries, with the exception of Turkey, Zimbabwe and China. Generally, they are tied to use the training institutions and teaching staff of the country financing and/or hosting the programme. Although these programmes might meet a real demand in the developing countries, they are usually not based on a systematic demand analysis, at least not one elaborated or assessed by UNIDO. As they are provided cost free to the participants, the number of applications which often exceeds the available places by two or three times, might not be a sufficient indicator that the scarce resources of UNIDO and the donor country are used for the most pressing training needs. (For details see 3.2.1.)

45. Fellowships and study tours on the other side are by nature closely linked to the demand of the developing countries although the selection of the most appropriate candidates might in some cases be exposed to various considerations beyond immediate project objectives. It will be helpful, however, if the share of fellows exposed to training of trainers programmes could be increased, and if the multiplier effect of fellowships and their contribution to the development of national HRD capacities would be more systematically planned for.

46. Analysis of demand for HRD on national and sectoral levels would ideally provide the systematic framework for UNIDO country programme and project priorities in the field of HRD.

The issue arising here for a later in-depth evaluation is: To analyze in more detail to what extent demand analysis for HRD activities of UNIDO takes place, and to determine the most appropriate methods which on the one hand are more systematic than at present but not too academic to avoid useless additions to the shelf of surveys and reports.

3.1.3 Policy framework in developing countries

47. In addition to demand analysis, the respective country policy framework has to be analyzed in order to avoid getting trapped in constraints easily to be overlooked when confining planning to a narrow project design. Some of the factors to take into consideration are the following: usually low salaries in public training Centres and government administration in general, the resulting fluctuation of people trained, the budgetary constraints in most countries resulting in little funds for building and even maintaining local training institutions, the relation between the public and the private sector, the attitude of industry to training and the cooperation with public institutions, the priority attached to industrial development and the image of industrial work, etc.

48. UNIDO should draw on its wealth of experience in industrial training to more systematically define favourable framework conditions of success for HRD programmes in the field of industries and discuss them with the national authorities.

The issue for an in-depth evaluation is: To examine to what extent this approach is already taking place, and to determine what conclusions could be drawn from the experience with regard to suitable framework conditions for HRD development in industry, and to propose appropriate ways by which UNIDO could assist in promoting them in the developing countries.

3.1.4 Relating HRD to the other priority problem areas and thematic programmes

49. According to the Medium-Term Plan the priority problem areas and corresponding thematic programmes beside HRD are development and transfer of technology, industrial rehabilitation, small and medium scale industries, and environment and energy. The three common elements fostering industrial development are also mentioned, i.e. mobilization of financial resources, economic co-operation among developing countries, and the integration of women in industrial development.

In the report of the Director-General to the third session of the General Conference on development and transfer of technology and development of human resources (GC.3/8), an attempt was made to combine the first two thematic programmes, HRD and the development and transfer of technology to one comprehensive policy framework.

50. The issue for the in-depth evaluation is: To analyze to what extent the HRD activities of UNIDO are already related to the said thematic programmes and common elements, to summarize the experiences gained so far, and to develop recommendations on how to strengthen the linkages between HRD and the other programmes.

3.1.5 Coordination with other UN agencies and donor countries

51. Although there exist agreements between UNIDO, ILO and UNESCO about the division of labour with regard to HRD development, there is still some overlapping, especially between ILO and UNIDO. While UNIDO is concentrating on training of managers and technicians in industry, ILO supports primarily vocational training but has a comprehensive Management Development Training Programme. Some overlapping might not necessarily be negative, but could also facilitate co-operation, especially with the ILO Turin Centre.

52. Since the 1970's already, there are two working groups for the co-ordination of training activities of the UN agencies. one is the meeting of senior fellowship officers which is working group of the sub-committee on training of the CCAQ (Personnel); the other is the Inter-Agency Working Group on Technical Education and Training. Both groups meet every second year to exchange ideas and experiences. UNIDO also has an observer status in the Board of the Turin training centre of the ILO.

53. Thus the issue for the in-depth evaluation is: How effectively has the co-ordination been ensured in the past, and what scope exist for further co-operation. The policies of bilateral donors should also be taken into account to define the specific role of UNIDO's HRD programme. In view of the limited financial resources available, UNIDO programmes will only have an impact if a specific UNIDO approach can be identified which focusses on a "market niche".

3.2 Issues related to the implementation (operational) stage

3.2.1 Group Training Programmes (GTP)

54. The success of GTPs depends on many factors: identification of demand, using appropriate offers, interests of host countries and institutions, selection of participants, contents of courses, pedagogical standard, administration and evaluation. Problems related to GTP are manifold and can be grouped into four parts.

Problems related to the structure and the contents of GTPs

(a) UNIDO currently does not assess the general structure of HRD programmes in line with defined priorities of demand. Programmes tend to be repetitive to a high extent. But are they vital to the developing countries? Some sub-sectors are offering seven to eight programmes per year, others only one.

(b) National training programmes are most suitable to strengthen national HRD capacities and capabilities. Most of GTPs are interregional or regional. But training groups in their own country may be more effective, since on average the largest number of people per programmes can be trained and are, therefore, less expensive. They can even have an impact on strengthening the national training institutions.

(c) The contents of the programmes (teaching programme, curricula, training elements, etc.) are mainly determined by the host institution. But such a supply-oriented assistance cannot sufficiently take into account all

the socio-economic conditions of each country, which for some types of courses may be essential. UNIDO should play a more active role using its expertise and technical assistance capabilities.

(d) The interests of host countries are different. A particular role plays the financing of GTPs with non-convertible currency (this may change in the coming years). Others want to continue a long lasting co-operation or consider GTPs as a means to promote bilateral economic co-operation in the long run. Some donor countries which are potentially good hosts are not interested in financing GTPs. In general, the role of host countries and institutions is too strong in relation to UNIDO's role and input.

Issues for evaluation:

Are GTPs most effective means to provide in-service training? Are there alternatives?

What is the role of UNIDO in determining the structure and contents of GTPs, how can UNIDO strengthen it?

Subissues:

- What is the optimal number of programmes UNIDO should offer?
- What is the programme structure (according to subjects) which meets the demand best? How to set preferences?
- How can long lasting co-operation with host countries/institutions be maintained but adjusted to the priority objectives adopted by UNIDO? How can new institutions and host/donor countries be interested to offer GTPs according to demand?
- How can the number of national programmes and of programmes implemented by UNIDO branches themselves be increased?
- How can UNIDO develop a stronger role in the elaboration of programmes?

Provisional recommendations:

- Continuation of efficient programmes but step by step adapting to demand and preparation of new GTPs (in co-operation with host institutions);
- Preparing and introducing group training programmes to be implemented by UNIDO technical branches themselves (similar to manufacturing of wood articles);
- Study on demand and criteria of preferences, optimal number and structure of GTPs.

Problems related to training methods

(a) The selection of lectures, trainers, training methods, and teaching material are mainly decided upon by the host institution. The impact of UNIDO is not strong enough with some exceptions (i.e. manufacturing of wood articles where lecturers had to deliver their lectures for printing, prepare slides, etc. during the preparation of the programme and a subsequent manual by the UNIDO branch).

(b) UNIDO professionals are presenting lectures or are conducting exercises only in a few GTP (i.e. application of COMFAR).

(c) Teaching materials are of different standards and are often not handed over to the participants. In some cases, participants do get a complete set of printed materials which they can use later.

Issue for evaluation:

What is the substantial and methodological standard of the GTP, how can it be improved?

Subissues:

- How can the substantive standard of GTPs be assessed?
- What is needed to involve UNIDO professionals directly in GTPs?
- Should UNIDO provide a special advisory service related to training methodology for GTPs?
- Should a 'standardized' type of teaching materials (including manuals, slides, etc.) be introduced (which can be used by the participants for their training activities)?

Provisional recommendations:

- UNIDO professionals should occasionally act as lecturers/trainers (UNIDO experts) in GTPs;
- Host institutions should be requested to provide for each programme a set of materials which can be used by the participants for training activities in their home countries;

Problems related to the selection of participants

(a) The candidates are nominated by national authorities, and based on the nomination form and sometimes supplementary reports. UNIDO selects the participants in co-operation with the training institutions. But the form used does not give enough information which is of importance for an effective selection (firm in which the candidate works, output of the firm, product line, exporter or not, technologies and equipment used, candidate's actual responsibility in the firm/institutions).

(b) Training of one or two persons per country is only useful if she or he is in a position either to influence improvements and/or to train others.

Issue for evaluation:

How is the selection procedure of candidates, how can it be improved?

Subissues:

- How can the nomination forms be improved?
- Who should be responsible for the final selection?
- On what criteria should the selection be based?

Provisional recommendations:

- Introducing a new nomination form.

Problems related to evaluation of GTPs

(a) UNIDO has gathered experience over many years. But there are other U.N. organizations implementing programmes in other sectors. Their experiences are not known in detail (regarding objectives, achievements and programme outputs).

(b) The course end-evaluations provide information on various training programme aspects and reflect the impression of the participants. But they do not provide a sufficient assessment of what participants actually learned against a clear set of course objectives.

(c) Costs per participant are increasing.

Issue for evaluation:

Is the course end-evaluation sufficient and good? Is there a feedback to programme design?

Subissues:

- Should the evaluation procedure be expanded? (Evaluation of printed teaching materials etc. by the appropriate UNIDO branch?)
- How is the cost-effectiveness of GTPs?
- What are experiences of other organizations in GTPs?

Provisional recommendations:

- Experiences of other HRD organizations should be studied (ILO Geneva?)
- Top experts (lecturers/trainers) of GTPs should be increasingly used for other seminars, workshops or as project experts.

3.2.2 Fellowships/study tours (FS)

Problems related to fellowships:

(a) FS are on the whole positively and effective measures (particularly study tours). Problems are seen in the selection. The government of a country plays the decisive role. FS are in principle demand-oriented, but it cannot be ruled out that in some cases other influences exist. The whole procedure starting from nomination until the placement is a long one (about four months in the average).

(b) The placements according to fields of training indicate remarkable differences (462 placements related to chemical industries in 1989, 22 to investment). Some countries are benefitting from a number of FS (in relation to the size of their industry). Training is given mainly in Western developed countries while training, at a similar level, in developing countries is too rare.

(c) The costs of FS are increasing.

Issues for evaluation:

- After more than 20 years of experience a general evaluation should be carried out.
- Are there possibilities to shorten the procedure?
- Should some kind of selection criteria be established as a means of better identifying the best qualified candidates?
- Should UNIDO continue with to the present ad hoc approach or envisage setting training priorities and systematically develop programmes to meet them, especially within the context of technical co-operation programmes?

3.2.3 Training activities of project experts

Problems related to training activities of project experts:

(a) The training role of project experts is generally acknowledged as a decisive element of the experts' activity. It implies a process of interaction between the experts and the local counterparts, a dialogue under real conditions, a direct and permanent linkage between training and action (learning by doing). When the expert leaves, the local counterpart must be able to act autonomously, but this depends on three pre-conditions, according to the report of the UNIDO Task Force on the Training of Industrial Manpower (see para.39 of the report):

- The existence of a good local counterpart, this requirement being a sine qua non which is often not fulfilled;
- The expert's aptitude for training;
- The availability of teaching materials, information, technical literature and teaching aids.

The aptitude of the expert as a trainer is essential. But experts are mainly trained and experienced in their particular field and, as a rule, have insufficient knowledge and experience in training methods.

(b) There are different proposals to solve this problem. One is to include training experts in expert teams (larger projects), which is costly. Another is to brief experts in training methods and provide them with teaching materials. Finally, the recruitment of experts should consider their training capability.

Issues for evaluation:

- What is the real training impact of experts, what can be done to improve the situation?
- How can experts be better prepared for their training function?
- Should special teaching materials, manuals, etc. be prepared, which could be used by other experts?
- Are the training tasks given in the job descriptions of experts sufficiently defined?

Provisional recommendations:

- The job description of experts and their reports should be analyzed regarding training activities;
- Examples of successful work should be propagated.

3.2.4 HRD field projects

Problems related to HRD field projects:

55. As mentioned above (see 2.6), 17 field projects are completed, on-going or new. Under the supervision of the training branch, one project is on-going in Mozambique. Another field project is the programme started at the Zimbabwe Iron and Steel Company to train personnel engaged in maintenance. But compared with GTPs and FS, the experience is limited, problems are not sufficiently identified. Therefore, a set of problems cannot be presented, for the time being. It has to be reviewed by country studies. Critical questions were risen with regard to the "Centres of Excellence" idea.

Issues for evaluation:

- What are the problems and experiences of the completed or on-going field projects in achieving sustainable training capacities?
- How can UNIDO define priority areas for HRD field projects?
- How can HRD field projects be efficiently and effectively managed, particularly with respect to an optimal combination of in-country and external training?
- The "Centres of Excellence" conception has to be looked at in the light of the experiences gained since 1980.

3.3 Issues related to the sustainability of HRD activities

Problems related to the sustainability of the different training activities mentioned above have to be assessed.

56. The most important question of all is: What happens after the training, what are the final results of training activities? Although the evaluation reports are compulsory, there is actually no organized follow-up to assess the changes achieved in each fellow's, participant's or otherwise trained person's workplace. The real results are not assessed, neither in relation to the objectives envisaged nor in relation to the expenditures.

Issues for evaluation:

- What impact have training activities on the establishing or strengthening of coherent and sustainable training systems?
- What are the results of project experts regarding their training activities? Are their counterparts acting autonomously?
- What kinds of changes/improvements were introduced by ex-fellows or participants of training programmes?

- Do trained people act as trainers and with what results?

3.4 Issues related to the management of UNIDO projects

3.4.1 Relations between IHRD and other branches

57. Apparently, there are at present unsolved problems with regard to the division of labour between IHRD and the other Branches. Particularly for GTP and for field projects, in many cases, there is more competition than co-operation. Every branch is keen to reserve full responsibility for a project, mainly because the implementation figure is to be maximised (Programme Allotment Document (PAD) syndrome). For fellowships and study tours, this problem does not arise because for these activities, IHRD has already assumed a service function for the other branches. Ideally, IHRD and the other branches should cooperate, with both sides providing their specific knowledge and views throughout the project cycle. While IHRD will lack specific technical expertise and sector know how, the technical branches will often not be aware of training needs, concepts and methodologies, and may not be sufficiently concerned with the difficult and time consuming task of HRD to develop more than routine approaches.

58. Three basic alternatives for the future division of labour between the branches could be imagined:

(a) The present situation continues: IHRD maintains a service function for fellowships and study tours; in addition, some field projects specifically oriented towards HRD in developing countries and a number of GTP's will be backstopped.

(b) IHRD will be made the focal point for HRD in UNIDO; this includes to continue the present activities and possibly to concentrate all specific HRD projects in the Branch. It would mean to increase the conceptual work for HRD demand analysis and policy planning in the developing countries as well as for the development of a specific UNIDO approach to HRD. IHRD would mobilize the UNIDO internal know how and coordinate it to provide a more substantial input to GTP as well as to field projects instead of relying almost exclusively on external know how and teaching staff. The increased teaching activities and the development of training methodologies, manuals, visual aids, etc., could result in founding an UNIDO Industrial Development Institute. The data base on world-wide training offers would be further developed and marketed to all interested parties. In a computerized form, it would contain not only data on training courses but also on resource persons, manuals, teaching aids, etc.

(c) IHRD would be dissolved. The service functions (fellowships, study tours) would be shifted to an administrative division, the field projects, GTP, and other activities like expert group meetings, studies, etc. would come under full responsibility of the substantive branches. In order to maintain an impetus for HRD, several supplementary arrangements could be foreseen: the project appraisal branch could be strengthened to include one or two training specialists checking every project document on its HRD component; every substantive branch and every large technical assistance project could have one training officer to take care of HRD, which does not seem to be very practical, however.

59. Without being able to elaborate on these models in detail, it is obvious that the present situation should be improved. In model c), it would be difficult to develop a UNIDO approach or profile with regard to industrial training. The success of model b), however, depends very much on the quality and dynamism of the division chief and the officers in IHRD, as it will be not easy to establish it vis-a-vis the substantive branches.

60. The issue for the in-depth evaluation is: To analyze the different models in detail, as they apparently affect UNIDO's ability to develop an operational approach to the ambitious development objective formulated in the Medium Term Plan.

3.4.2 Co-operation with industry

61. Given the limited funds of UNIDO as well as of most developing countries, it is essential to ensure the active participation of industry in UNIDO's HRD activities. There are already a number of industrial companies providing in-plant training and hosting fellows. In addition, UNIDO gives advice on how to design contracts in a way to ensure effective transfer of know-how by obliging the supplier to train the workforce and the management (e.g. for fertilizer plants).

62. There might be some more ways to increase co-operation with industry which are not yet sufficiently explored. Industrial companies could provide trainers free of charge and/or sponsor complete training courses as part of their advertising and corporate image building. Twinning arrangements could result from this without necessarily pre-supposing a formal joint venture. In addition, the senior executive services existing for example in the USA and FRG could be mobilized to tap on resources for low-cost trainers.

63. The issue for the in-depth evaluation is: To examine past examples of successful co-operation with industry as sponsors in order to draw lessons on how UNIDO could further develop the co-operation with industry in both the industrialized and the developing countries. In addition, possibilities to introduce financial participation of participants, at least from newly industrializing developing countries, should be explored.

3.4.3 HRD for UNIDO staff

64. Internal training might be an important instrument to increase the awareness of first of all the technical officers in the substantive branches on HRD needs, concepts and methodologies. Even if training implies somewhat "soft" skills which are not as easily measured and examined as technical skills, there are nevertheless methods which are based on solid experience, are scientifically tested and proved, and need some effort to be learned. Their training should be provided for improving the HRD components of project documents, and for improving the awareness of technical experts for training needs and methods in projects in the field.

65. The issue for the in-depth evaluation is: What is HRD for UNIDO staff contributing to increase the awareness of technical officers and experts for HRD, and how could appropriate internal training programmes be developed?

66. By including HRD for UNIDO staff as an evaluation issue, the in-depth evaluation should reflect from the beginning on possibilities for increasing the feed back of evaluation results into the day-to-day work of the organization.

4. Methods for an in-depth evaluation

4.1 Institutional set-up

- Constitution of an advisory committee with professionals of the UNIDO staff. Members should be: 1 from Evaluation Staff, 2 from IHRD, 4 from substantive branches (representing different fields).

Objectives: Discussion and confirmation of the general approach of the evaluation, discussion with UNIDO professionals and consultants of main stages of the evaluation, discussion of the final report before presenting it to the final workshop.

- Appointment of a co-ordinator from the evaluation staff. He or she is leading the advisory committee, supervising the whole evaluation process and guiding the consultants/professionals involved in the evaluation.

4.2 Methods for data collection and analysis related to the proposed issues of the evaluation

4.2.1 The first group of issues under consideration is related to the conceptual work of UNIDO headquarters. All the HRD related documents (MTP, documents of GC and IDB, etc.) have to be reviewed and combined with selected interviews. This work should be done by a consultant at UNIDO headquarters. Country papers should be elaborated by consultants during their visits to selected countries (see 4.2.2.c) below), to assess the framework conditions for HRD in the countries. This is to be done by three consultants, as part of the three project evaluation teams.

4.2.2 The second and third groups of issues are related to the implementation (operational) stage and to the sustainability of HRD activities.

(a) GTP: The available in-depth and end-evaluation reports of GTPs should be reviewed at UNIDO headquarters by a consultant, combined with selected interviews. Additionally, a consultation at another UN organization (e.g. ILO and ITU Geneva) would be useful.

(b) Fellowships/study tours (FS): Because no in-depth evaluations were carried out over a long period, more detailed research is required. It should involve:

- Analysis of FS files;
- Preparation of a questionnaire, distributing it to previous fellows and analyzing the results;
- Inviting some previous fellows to a follow-up seminar;
- Selected interviews at NSAs and host institutions. These activities should be done by 1-2 consultants and one UNIDO professional.

(c) Training activities of project experts combined with HRD field projects (sample): It has to include:

- Review of job descriptions and project reports with regard to training activities, to be done by 1 consultant at UNIDO headquarters.

- Sample of in-depth evaluations of training activities of project experts and field projects in selected countries. Proposal: 4 African countries (2 Anglo-phone, 2 Franco-phone); 2 Asian countries; 2 Latin American countries (in each continent, countries at different levels of development). The sample should involve 8 projects in Africa, 6 in Asian countries and 6 in Latin American countries. The projects to be evaluated should be chosen randomly with due consideration being given to geographical distribution but also those which have particular characteristics which would allow generalizable conclusions and recommendations. Three teams should be formed (1 for each continent), consisting of two consultants each (including the expert for policy framework analysis mentioned under 4.2.1.) plus 1 staff member from UNIDO's Evaluation Staff, if possible.

4.2.3 The fourth group of issues is related to the management of UNIDO projects. The evaluation of this part should be done by one consultant in Vienna, mainly by interviews and reviewing documents.

4.3 Synthesis report and final workshop

- The synthesis report based on the findings according to 4.1 and 4.2 should be elaborated by two consultants at UNIDO headquarters.
- This report has to be presented to the advisory committee and after revision to the final workshop.
- The final workshop should be prepared by the evaluation staff. Participants: Selected UNIDO staff members from different divisions, the consultants involved in the evaluation and interested members of permanent missions.
- After the workshop, a final revision of the in-depth evaluation report should be done by one consultant or a staff member of the evaluation office.

4.4 Minimum evaluation approach

67. If there are not enough resources available to conduct an in-depth evaluation of the scope outlined above, the following minimum evaluation should be envisaged:

(a) Establishment of a Task Force on HRD consisting of UNIDO staff from various branches (like the advisory committee proposed under 4.1). This Task Force should analyze the reasons for the lack of follow-up to the previous Task Force and the studies mentioned in 2.9. Secondly, it should analyze the reasons for the gap between UNIDO policy declarations and HRD activities. Thirdly, it should draft a paper on UNIDO's approach to HRD, including concepts for the internal division of labour between IHRD and the technical branches.

(b) The proposed summary of in-depth evaluation reports on GTPs could be elaborated by an Evaluation Staff member. The same is possible for a limited analysis of FS files, leaving aside the proposed visits to NSA's and the follow-up seminar.

(c) The sample of UNIDO projects evaluated could be reduced in number, focusing on several examples of conceptually interesting HRD activities. Although reducing the representativity, this approach might generate new ideas and demonstrate that even in a difficult institutional environment, promising initiatives can be developed. In the following, some projects are listed which seem to merit further evaluation:

- Training for industrial maintenance for iron and steel industries in the PTA countries (backstopped by IHRD);
- Development of leather industries in Pakistan and in the Philippines (backstopped by Agro-based Industries Branch);
- Training for wood working industries (backstopped by Industrial Management and Rehabilitation Branch);
- Model contract for buying fertilizer plants (backstopped by Systems of Consultations Division);
- Entrepreneurial development (backstopped by Institutional Infrastructure Branch).

Concentrating the sample on innovative and/or successful HRD projects might be helpful also in attracting donor attention and support. One focus should be in all cases to analyze how financial participation could be mobilized from sponsoring industries and possibly also from participants.

(d) The synthesis report on these evaluations should be elaborated by the Evaluation Staff. It should concentrate on generating conclusions for refining the conceptual paper of the Task Force on an UNIDO approach to HRD by putting the various HRD activities in the perspective of promoting national HRD capacities in the developing countries.

(e) A final workshop would discuss the results of the evaluations and of the conceptual work of the Task Force with a wider audience of UNIDO staff, other U.N. agencies, representatives of donor countries and developing countries.

5. Time schedule and resources required

<u>1st Phase</u>		<u>2nd Phase</u>			<u>3rd Phase</u>
Review of documents and interviews at UNIDO HQs	Visit to NSA/ host institutions	Follow-up seminar/ fellowships	Country visits	Synthesis report	Final workshop and final report
- Conceptual work 1 cons./2 weeks	- NSA/host instit. in 2 countries 2 cons./1 week or 1 cons./2 weeks	- Seminar (prep./ implement./report) 1 cons./3 weeks 1 prof./1 week	- 8 country papers on HRD systems 1 cons./1 week per country	- Report and dis- cussion (advisory committee) 2 cons./4 weeks	- Workshop and final report 1 cons./1 week
- GTP 1 cons./2 weeks			- Project evaluation (training provided by proj.experts and HRD field projects) Sample of 20 proj. 1 week per project: 8 - Africa (4 countries) 2 cons.,1 prof./ 8 weeks		
- Fellowship/study tours 1 cons./2 weeks			6 - Asia (2 countries) 2 cons.,1 prof./ 6 weeks		
- Project experts/field projects 1 cons./2 weeks			6 - Latin America (2 countries) 2 cons.,1 prof./ 6 weeks		
- Internal management 1 cons./2 weeks					
2 cons./5 weeks or 1 cons./10 weeks	2 cons./1 week or 1 cons./2 weeks	1 cons./3 weeks 1 prof./1 week	6 cons.,3 prof./ 7-9 weeks	2 cons./4 weeks	1 cons./1 week
<u>Activity period (consulting time)</u>					
5 weeks (10 weeks)	1 week (2 weeks)	3 weeks (3 weeks)	7-9 weeks (48 weeks)	4 weeks (8 weeks)	1 week (1 weeks)

Summary of time schedule and resources required for the full-scale in-depth evaluation

1. Time schedule:

With some interruptions and some overlapping about 30 weeks.

2. Resources required:

About 17.5 man-months for consultants, and about 6 man-months for UNIDO professionals.

Consulting fees: 17.5 x US\$ 7.000	US\$ 122.500
DSA: 500 days x US\$ 150	US\$ 75.000
DSA for travelling professionals: 150 days x US\$ 150	US\$ 22.500
Travel expenditures for consultants and professionals: field visits 9 x US\$ 5.000	US\$ 45.000
visits to NSA's and UN agencies 2 x US\$ 1.500	US\$ 3.000
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TOTAL	US\$ 268.000
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Resources required for the minimum approach

5 in-depth evaluations of various HRD activities of UNIDO, each by 1 consultant and 1 Evaluation Staff member

4 man/months consultant: 4 x US\$ 7.000	US\$ 28.000
DSA: 120 x US\$ 150	US\$ 18.000
DSA for travelling professionals: 60 x US\$ 150	US\$ 9.000
Travel expenditures for consultants and professionals (combined visits): 6 x US\$ 5.000	US\$ 30.000
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TOTAL	US\$ 85.000
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Annex I

List of documents reviewed

A. Basic documents

Medium-term plan. Draft medium-term plan. 1992-1997. IDB.7/7. PBC.6/8.
15 May 1990

Updated draft medium-term plan 1992-1997 Addendum. 12 April 1990

UNIDO Industrial Training Offer Programme 1990. PI/106. 6 December 1989

General debate. including major problems related to industrialization.
Development of human resources for industrial development. GC.2/18.
22 September 1987

Development and transfer of technology and development of human
resources. Human resource development: A comprehensive policy framework
for UNIDO operations. GC.3/8. IDB.5/37. 2 June 1989

Human Resource Development. UNIDO's strategy for the 1990-1995
Medium-term Plan Period and Some Specific Proposals. 30 March 1989
(document for the Special Advisory Group to the UNIDO Director-General.
24-26 April 1989)

Programme and Budgets. 1990-1991. GC.3/10/Rev.1. 12 April 1990

Annual Reports of UNIDO 1985. 1986. 1987. 1988. 1989

B. Studies and Consultations

Projet ONUDI-PNUD ZAI/86/008 - Schéma Directeur d'Industrialisation.
Consultation en systèmes de formation industrielle et de valorisation des
ressources humaines dans l'industrie. Rapport de mission. D.J. Pétry.
juillet 1989

Report to the UNIDO Task Force on the Training of Industrial Manpower.
UNIDO's activities and strategy in the field of training. Part I. First
provisional draft. A. Nickels. Secretary of the Task Force.
1 February 1984

Internal Report to the UNIDO Task Force on the Training of Industrial
Manpower. UNIDO activities and strategy in the field of industrial
training. Part II. First draft. A. Nickels. 25 May 1984

Training Branch. a study. F.M. Roche. 29 July 1983

Human Resource Development: Analysis of 225 technical co-operation
projects with reference to strengthening of national industrial training
and development and transfer of technology capabilities. F. Motte (UNIDO
Consultant). PPD.148. 15 December 1989

Background Paper for the First Consultation on the Training of Industrial
Manpower (Stuttgart. FRG. November 1982). ID/WG.381/2. 8 October 1982

The System of Consultations. PI/84

Report of the First Consultation on the Training of Industrial Manpower (Stuttgart, FRG, 22-26 November 1982). ID/294 (ID/WG.381/3)

Report of the Second Consultation on the Training of Industrial Manpower (Paris, France, 14-19 September 1987). ID/353 (ID/WG.469/15)

C. Evaluation reports

UNIDO Internal Programme Evaluation Report on Establishing and Strengthening of Training Facilities in Developing Countries, prepared by the Evaluation Unit, 3 November 1981

Establishment of a Textile Training and Service Centre. DP/SRL/79/054. Report of the evaluation mission. DP/ID/SER.C/5. 21 May 1986

In-depth evaluation of seminars on furniture and joinery industries. US/INT/85/156. Evaluation report. ODG/R.1/Rev.1. 18 December 1986

Workshop on Industrial Project Preparation. Evaluation and Financing at the HAWA - Hamburg Institute for Economic Research. US/INT/86/241. Evaluation report. ODG/R.2. 21 January 1988

UNDP/USSR Trust Fund (INT/86/U07, INT/87/U03, INT/87/U06, INT/87/U07). Report of the evaluation mission. ODG/R.3. 22 February 1988

Industrial Projects Development. Phase III. DP/ETH/83/013. Report of the evaluation mission. DP/ID/SER.C/18/Rev.1. 20 October 1988

Report on the independent mid-term evaluation of the Industrial Development Decade for Africa (IDDA) and the proclamation of the second IDDA. Addendum. CAMI.9/20/Add.1. ICE/1989/20/Add.1. 12 April 1989

In-plant Group Training Programme in the Field of Quality Improvement of Industrial Products (Japan, 26 January - 1 March 1989). Evaluation report, prepared by Evaluation Staff. ODG/R.5. 12 April 1989

Report on the Evaluation of the System of Consultations, prepared by the Evaluation Staff. ODG.8(SPEC.). 12 June 1989

End-programme evaluation mission report, Group Training Programme in the Field of Human Resource Development for Industry (Moscow, USSR, 20 June - 25 July 1989). T. Kumazawa, Industrial Training Branch. August 1989

Follow-up Evaluation Seminar for Former Participants in the In-plant Group Training Programme in the Field of Cement Industry, Turkey, held regularly between 1979 and 1985. Evaluation report, prepared by Evaluation Staff. ODG/R.4. 30 January 1989

A Management Services Division at the Textile Training and Services Centre (TT&SC). DP/SRL/87/012. Report of the evaluation mission. DP/ID/SER.C./27. 7 February 1990

Training Seminar on the Application of Computer Model for Feasibility Analysis and Reporting (Gambia). XP/GAM/89/059. Report of the evaluation mission. DP/ID/SER.C/28. 20 March 1990

End-evaluation report, Group Training Programme in the Field of Human Resource Development for Industry (Moscow, USSR, 5 June - 10 July 1990). P. de Moustier, Human Resource Development Branch

D. Various background material

Guide to Training Opportunities for Industrial Development, 1990, PI/105

Train-the-Trainer Guide, Industrial Human Resource Development Branch,
Department of Industrial Operations

Human Development Report 1990, published for the UNDP, New York/Oxford,
Oxford University Press 1990

Human Resource Development through Technical Co-operation, Joint
Inspection Unit, JIU/REP/89/10, 1989

Chief Technical Adviser's Manual, UNIDO/IO.222/Rev.4, 13 February 1984

Economic Development Institute, Programme 1990-1991

Vocational Education and Training, A Review of World Bank Investment,
World Bank Discussion Paper, J. Middleton, T. Demsky, 1989

An Introductory Course in Teaching and Training Methods for Management
Development, ILO, ISBN 92-2-101006-6, first published 1972

E. Working papers

Progress report for the Fourth Session of the IDB, concerning the
Development of Human Resources and Technological Capabilities for
Industrial Development

Project document, Expert Group Meeting on New UNIDO Approaches to Human
Resources Development for industry, May 1990

Questionnaire for the Impact Evaluation of 12-Year UNIDO, Training in
Japan, article from Newsletter, published by Management Training
Department, The Association for Overseas Technical Scholarship, Japan

Interoffice Memorandum from I. Lorenzo, Head, IHRD to L.N. Soumarokov,
Deputy Director-General, DIO, 26 April 1990, on UCD Regional Meeting for
Latin America and Caribbean

UNDP Programme Advisory Note on Programming and Formulation of Technical
Co-operation Projects in the Manufacturing Industry, PPM 8923, January
1985

Guidelines for the design of technical co-operation projects for group
training programmes, Evaluation Staff, June 1987

Evaluation Staff Note, Evaluation of group training programmes (GTP),
25 June 1987

Checklist for IPGTP/GTP evaluation mission, M. Sato, 22 May 1986

Approved and/or operational technical co-operation projects,
DIO/IIS/INFR, 30 June 1990

Technical co-operation programmes of the Institutional Infrastructure
Branch (IO/IIS/INFR), 1987

Interoffice Memorandum from Zhang Xianwu, Director, ESC to A.A. Vassiliev, DD-G, DIO, H.P.F. Wiesebach, DD-G, PPD, F.S. Souto, DD-G, IPCT, 29 September 1988, on Evaluation of projects financed from UNIDO-administered funds

Gestion stratégique du développement industriel, Principes de base et méthodologie, F. Richard, IO/IIS/PLAN, juillet 1990

Technical Co-operation Programmes of the Institutional Infrastructure Branch (IO/IIS/INFR), C. Antonio

UNIDO's management and human resources programmes, Industrial Human Resource Development Branch, 15 August 1990

Several conjectures on UNIDO's Industrial Human Resources Development Strategy, A. Gorbachev, IHRD, 10 August 1990

Some conjectures on Industrial Training Institutions Programme, A. Gorbachev, IHRD

A new type of investment in training, A. Gorbachev, IHRD, 2 August 1990

UNIDO, Industrial Training Information System (INTRIS), Project proposals by A. Gorbachev, IHRD

Training policy and strategy for the development of human resources for industry in the PTA member countries, IHRD

UNIDO's activities for the development of human resources, IHRD

Report on management development programmes at the Irish Management Institute, Ashorne Hill, Management College and British Steel PLC (April - June 1990), ZISCOSTEEL

In-plant Group Training Programme in Maintenance Engineering in Iron and Steel Industry for PTA Countries, XA/RAF/88/673, Report for follow-up mission to Ethiopia, Mauritius, Mozambique, Tanzania, Uganda and Zimbabwe from 18 September to 21 October 1989, by K. Eastburn and R.G. Birt, 10 April 1990

Annex II

List of people interviewed at UNIDO Headquarters

Industrial Human Resource Development Branch (IO/OS/IHRD)

Mr. W. Behrens, Officer-in-Charge of IHRD
Mr. M. El-Gallaf, Industrial Development Officer
Mr. A. Gorbachev, Industrial Development Officer (Technical Adviser)
Mr. K. Hanselmann, Industrial Development Officer
Mr. A. Karamanoglu, Industrial Development Officer
Mr. T. Kumazawa, Industrial Development Officer
Mr. I. Loguinov, Industrial Development Officer
Mr. P. de Moustier, Industrial Development Officer
Mr. R. Ramanantoanison, Industrial Development Officer
Ms. E. Schurz, Professional Assistant
Mr. H. Deimann, former staff member

Other departments/branches

Mr. L.N. Soumarokov, Deputy Director-General, Department of Industrial Operations (IO)
Mr. H.P.F. Wiesebach, Deputy Director-General, Department for Programme and Project Development (PPD)
Mr. T. Abela, Officer-in-Charge, Unit for Common Topics, System of Consultations Division (IPCT/CONSULT)
Mr. M. Abtahi, Industrial Development Officer, Unit for Process Industries Sector, IPCT/CONSULT
Mr. C. Antonio, Senior Industrial Development Officer, Institutional Infrastructure Branch, IO/IIS
Mr. A. Bassili, Senior Industrial Development Officer, Industrial Management and Rehabilitation Branch, IO/IIS
Mr. A. de Faria, Chief, Project Appraisal Section, PPD/SMA
Mr. C. Falcke, Senior Industrial Development Officer, Regional and Country Studies Branch, PPD/IPP
Mr. A. Hasnain, Programme and Planning Officer Strategy, Policy and Planning Office, ODG
Mr. H. Heep, Senior Evaluation Officer, Evaluation Staff, ODG
Mr. O. Gonzalez-Hernandez, Chief, Evaluation Staff, ODG
Mr. R. Kennedy, Industrial Development Officer, Institutional Infrastructure Branch, IO/IIS
Mr. A. Lacanlale, Senior Programme and Planning Officer, Strategy, Policy and Planning Office, ODG
Mr. P. Lillie, Senior Programme and Planning Officer, Strategy, Policy and Planning Office, ODG
Mr. R. Muller, Senior Industrial Development Officer, Industrial Planning Branch, IO/IIS
Mr. K. Preusser, Officer-in-Charge, Section for Integrated Industrial Projects, IO
Mr. F. Richard, Senior Industrial Development Officer, Industrial Planning Branch, IO/IIS
Mr. K. Venkataraman, Director, Industrial Technology Development Division, IPCT

Mr. A. Nickels, UNIDO Country Director in Algeria

Permanent Missions in Vienna

Mr. R. Schroder, Counsellor, Permanent Mission of the Federal Republic of Germany to UNIDO
Mr. J. Heucke, Third Secretary, Permanent Mission of the German Democratic Republic to UNIDO

Annex III

Group training programmes

	1985	1986	1987	1988	1989	1985 to 1989	85-89 Average
Number							
of programmes							
<u>national</u>	9	8	8	12	16	53	10.6
<u>regional</u>	24	25	21	18	25	113	22.4
<u>international</u>	46	46	48	41	46	227	45.0
Total	79	79	77	71	87	382	78.0
Number of participants	1619	1337	1262	1151	1401	6820	1364
Number of programmes							
of Training Branch	46	45	48	45	46	230	46
Number of participants	724	677	719	619	657	3396	679

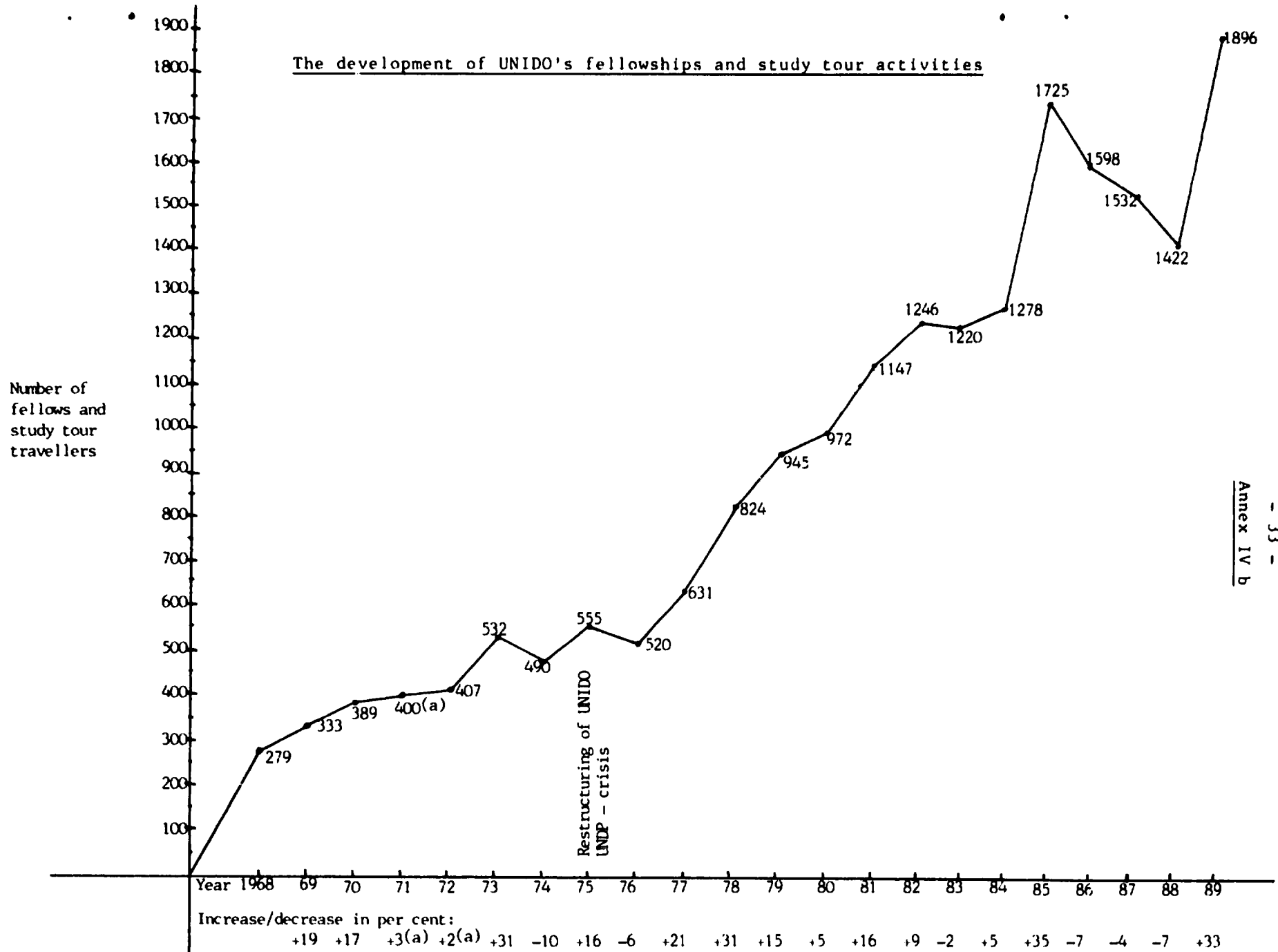
Annex IV a

Fellowships and study tours

	1985	1986	1987	1988	1989	1985 to 1989	1985 to 1989 average
Number of Fellowships and Study Tours	1725	1598	1532	1422	1896	8173	1635
Countries with high rates of fellowships and study tours (more than 50)	India 216	India 194	India 257	China 277	China 228		
	China 159	China 129	China 213	India 170	India 158		
	Bulgaria 123	Bulgaria 101	Bulgaria 73	Bulgaria 81	Vietnam 145		
	Ethiopia 111	CSSR 68		Poland 71	Bulgaria 131		
	Sri Lanka 51	Ethiopia 62		Vietnam 65	Egypt 78		
	CSSR 51	Vietnam 62		Yugoslavia 54	Poland 74		
Countries with high rates of studies offered	UK 295	FRG 307	UK 262	UK 295	UK 365		
	FRG 281	UK 290	FRG 221	FRG 256	FRG 336		
	USA 221	USA 248	USA 100	USA 225	USA 259		
	UNIDO ¹⁾ 128	France 123	France 193	France 169	France 197		
	France 137	Austria 117	Austria 127	UNIDO ¹⁾ 126	Italy 189		
	Japan 110	UNIDO ¹⁾ 104	Japan 125	Austria 118	Austria 152		
Austria 102	Japan 101	Italy 115	Italy 115	UNIDO ¹⁾ 114			

1/ UNIDO Headquarters, Vienna

The development of UNIDO's fellowships and study tour activities



(a) estimated

Source: UNIDO Annual Reports

IMPLEMENTATION OF FIELD PROJECTS
BACKSTOPPED BY IHRD

<u>Year</u>	<u>Number of operational projects</u>	<u>Expenditure (in\$000)</u>
1982	20	1,962
1983	26	1,591
1984	24	893
1985	25	1,186
1986	18	1,189
1987	16	1,234
1988	16	1,423
1989	17	1,621

Total	162	11,099

HRD Field Projects 1989, backstopped
by IHRD

PROJECT NUMBER	TITLE OF PROJECT	CY PHASING	BSO	STATUS
DP/ARG/88/086	Assessment of training needs and capacities in machine tools sector	22,100	RR	ongoing
DP/BOL/83/012 US/BOL/84/115	Establishment of training centre for meat and milk products processing		EG	TRANSFERRED TO AGRO
DP/HUN/87/004	Training in the use of repair and maintenance of micro-processor based medical equipment	16,167	IgL	ongoing
US/INT/85/007	Strengthening the training capacity of training centres/institutions in design and pattern-making for the leather industry	443,195	EG	ongoing
DP/IVC/87/012	Renforcement du Centre Ivoirien de Gestion des Entreprise (CIGE) II	213,020	EG	ongoing
DP/MOZ/86/016	Human resources development of the industrial sectore (phase II)	10,950	RR	completed
DP/PAK/89/020	Development of national scheme for industrial training in the investment advisory centre of Pakistan	33,000	RR	ongoing
DP/RAF/81/015	Insitut sous-régional, multisectoriel de technologie appliquée, de planification et d'évaluation des projets. (DP/RAF/87/168 for 2nd phase had to be cancelled upon request of UNDP).	677,521	EG	ongoing
DP/RAF/87/017	Industrial training programme for the Portuguese-speaking countries in Africa	27,262	EG	completed
XA/RAF/88/663	Création au sein de CIGE d'une unité pilote de formation des femmes entrepreneur de l'Afrique de l'ouest franco-phone dans le domaine de la gestion de la direction.	316,218	RR	ongoing
XA/RAF/88/668	Renforcement de la capacité de formation du CAMPC dans le domaine des PME/PMI	18,525	RR	ongoing with 1990 phasing

XA/RAF/88/677	Renforcements des capacités de formation du CESAG dans le domaine du management industriel, SENEGAL	196,654	RR	ongoing
XA/RAF/88/682	Strengthening capacity/capability of CMD and CIRD in Nigeria	470,424	AK	completed
XA/RAF/89/614	Survey of manpower and training needs (energy)	123,000	BT	completed
US/RAF/86/274	Survey of the training capacity of selected management institutions in East Africa	-	RR	rephased
US/RAF/89/253	Assistance à la préparation d'une sur la formation continue en entreprise pour les pays d'Afrique francophone au sud du Sahara	31,500	IL	ongoing
DP/RAS/89/059	Modular approach to managerial and and entrepreneurial skill development	35,000	TK	ongoing
XP/STP/88/020	Programme modulaire de formation des cadres de l'industrie (Sao Tome and Principe)	-	RR	rephased to 1990
DP/SRL/86/009	Corporate training programme for the Sri Lanka Tyre Corporation.	-	PM	TRANSFERRED to CHEM.
DP/TUR/89/0025	Personnel training and development centre - fertilizer industry	39,500	RR	ongoing
SI/URU/89/801	Advisory services for preparing a programme for distance learning industry	22,000	IL	ongoing

Operational Field Projects 1990,
backstopped by IHRD

PROJECT NUMBER	TITLE OF PROJECT	CY PHASING	BSO	STATUS
XP/ARG/88/086	Assessment of training needs and capacities in machine tools sector	RR	ongoing?
XP/ETH/90/012	In-depth assessment of training capabilities of AKAKI spare parts factory's training centre (preparatory assistance).	18,590	RR	new
DP/HUN//87/004	Training in the use of repair and maintenance of micro-processor based medical equipment	6,387	IgL	ongoing
US/INT/85/007	Strengthening the training capacity of training centres/institutions in design and pattern-making for the leather industry	276,500	EG	ongoing revised
DP/IVC/87/012	Renforcement du Centre Ivoirien de Gestion des Entreprise (CIGE) II	238,366	RR	to be temp. suspended
SI/MAT/90/801	High-level assistance to identify alternative strategies for technical training in electronics industry	44,935	RR	new
DP/PAK/89/020	Development of national scheme for industrial training in the investment advisory centre of Pakistan	11,664	RR	ongoing
DP/RAF/81/015	Institut sous-régional, multisectoriel de technologie appliquée, de planification et d'évaluation des projets. (DP/RAF/87/168 for 2nd phase had to be cancelled upon request of UNDP).	166,950	RR	ongoing Mand.Rev.unsigned
XA/RAF/90/601	Renforcement de la capacité de formation du CAMPC dans le domaine des PME/PMI	78,225	RR	cont'n of XA/RAF/88/668

US/RAF/86/274	Survey of the training capacity of selected management institutions in East Africa	36,000	RR	rephased
US/RAF/89/253	Assistance à la préparation d'une table ronde sur la formation continue en entreprise pour les pays d'Afrique	2,300	IRL	completed
US/RAF/89/170	Mission préliminaire pour analyser les conditions des équipements portuaires en Afrique de l'Ouest et du Centrale en vue d'élaborer un programme modulaire de formation francophone au sud du Sahara	32,300	PM	new
DP/RAS/89/059	Modular approach to managerial and and entrepreneurial skill development	526,858	TK	ongoing
XP/STP/90/020	Programme modulaire de formation des cadres de l'industrie (Sao Tome and Principe)	24,000	RR	cont'n of XP/STP/88/020
SI/URU/89/801	Advisory services for preparing a programme for distance learning industry	IL	completed
US/RAF/90/065	Reunion d'experts sur formation en entreprise pour pays d'Afrique francophones au sud du Sahara, France, 18-22/6/1990 (include under expert meeting in annual report)	95,220	EG	new
XP/TUR/90/136	Training in the small-scale footwear industry, Turkey, September 1990	15,000	EG	new