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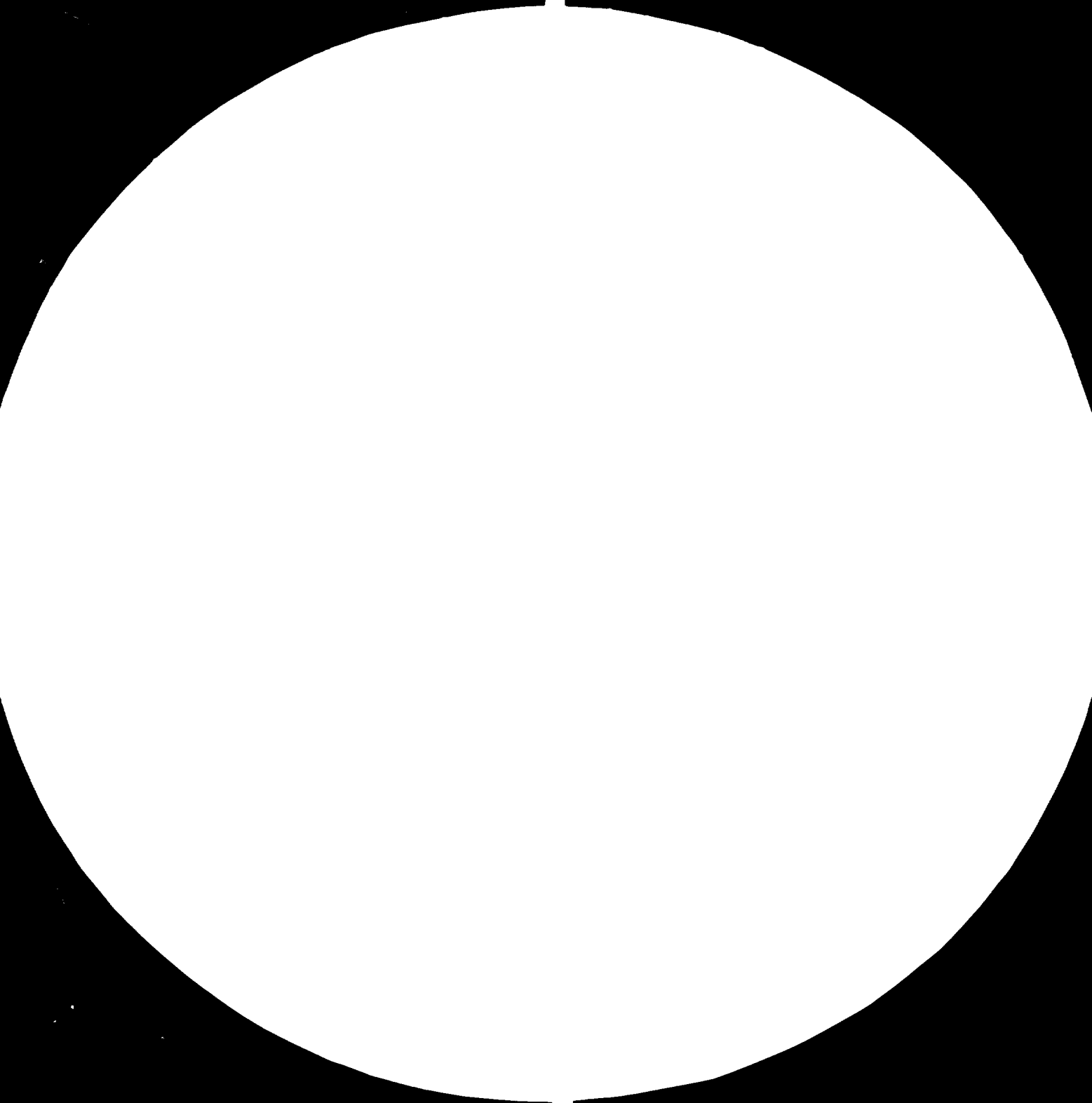
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10 July 1981

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FEDERAL INSTITUTE OF INDUSTRIAL RESEARCH

N I G E R I A

(DP/NIR/75/069/01/37)

Nigeria.

Terminal Report: Development of an Industrial  
Information Centre .

Prepared for the Government of Nigeria

by

S. Parthasarathy

Senior Industrial Information Expert of the  
United Nations Industrial Development Organization  
acting as Executing Agency for  
the United Nations Development Programme

This report has not been cleared with  
the United Nations Industrial Development  
Organization which does not therefore  
necessarily share the views presented

## SUMMARY

The UNIDO project for developing an Industrial Information Centre at the Federal Institute of Industrial Research, Oshodi, Lagos, was started in March 1978. The project was for a period of 18 months. During the first year a number of projects were initiated. A complement of additional staff was recommended for developing the projects and services. UNIDO assistance was provided during 1979 and 1980 for training the local staff.

UNIDO provided the services of a Senior Industrial Information Expert for a period of six months from February 1981 and that of an Expert in Industrial Information Training for three months beginning from March 1981. A Short Term Training Course in Industrial Information was conducted from 4-15 May 1981. A project report was prepared for setting up a Training Centre for Industrial Information at FIIRO. Steps were taken for promoting use of information by industries by making personal visits and by providing industrial information extension service. A Selective Dissemination of Information (SDI) service was started in the field of Food Science and Technology. Arrangements have been made with the Department of Computer Sciences of the University of Lagos for developing computerised information processing and services. A report was prepared for developing the Phase II of the project.

The Government should give a high priority for developing the project on Industrial Information Centre at FIIRO. The Phase II of the project should be included in the UNDP Country Programme. The areas to be developed are given in the project proposal.

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## 1 INTRODUCTION

The UNIDO project for developing an industrial information centre at the Federal Institute of Industrial Research, Oshodi (FIIRO), Lagos, was started in March 1978.<sup>1/</sup> The project was for a duration of 18 months. The UNDP allocation for the project was \$ 129,250 and that of the Government ₦ 61,450. UNIDO made available the services of a Senior Industrial Information Expert for a period of 12 months in the first instance and that of a Reprography Expert for 3 months. Provision was also made for international fellowships for training local staff.

During the first year (1978-79), a number of projects were initiated such as listing of institutions and industries; identifying sources of information; assessing the information needs of industries; collecting information on industrial products; inventory of current research projects; establishing links with industries; conducting a training course in reprography; training of personnel abroad under fellowship programme; on-the-job training for organising industrial information services — document procurement service, technical inquiry service, referral service, selective dissemination of information service, literature search, news clipping service, etc. A complement of additional manpower was recommended for running these projects and services.<sup>2/</sup>

At the end of the first year, it was agreed that the remaining part of the UNIDO assistance would be postponed by a year to enable FIIRO to absorb and consolidate the assistance received, to recruit the additional manpower required, and to utilise the fellowship programme for training.

The services of the Senior Industrial Information Expert was again made available for a period of six months from February 1981 and that of an Expert in Industrial Information Training for three months beginning from March 1981. The services of an Expert in Computer Programming will be available for three months during the end of 1981. One more person will be sent for training abroad under the fellowship programme during 1981.

The present phase of the project will be over by the end of 1981.

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<sup>1/</sup> Project document (DP/NIR/75/069). 1976  
<sup>2/</sup> Terminal Report (DP/NIR/75/069) by S. Parthasarathy. 21 Feb 1979.



## 2 PROGRAMME OF WORK

### 2.1 Projects to be Initiated

The following programme of work was drawn up for the period February-August 1981 (Annex 1):

- a) Preparation of a project proposal for Phase II;
- b) Plan and conduct a Training Course in Industrial Information;
- c) Prepare a programme for conducting Training Courses in Industrial Information on a regular basis;
- d) Prepare a programme for conducting a Training Course in Computerised Information Processing; and
- e) Develop information services at the Centre.

This programme was approved both by the Director of Research, FIRO, and UNIDO.

### 2.2 Counterpart Staff

A list of the counterpart staff available for the project is given in Annex 2. There is still shortage of manpower for carrying out all the project activities. Some of the staff trained earlier during the first year of the project have either left or are on study leave. The former Head of the Information and Documentation left in September 1980. Another person is on long study leave doing his PhD programme. This has naturally slowed down the pace of development. Some of the new staff in position require training. Three persons have been recently selected - two for computer processing and one for industrial information. When the necessary complement of staff is in position, the Centre can start offering information services to the industries on a regular basis.

### 2.3 Training

Mr R.O. Sodipe and Mr A. Shittu were given training abroad under the UNIDO fellowship programme (Annex 3). In addition, FIRO had sent under its own programme Miss O. Glover for training to NTIS (USA) for handling technical reports and Miss J. ... to Philippines for attending a three-month course on Information for Small Scale Industries. Mrs K.A. Aduwa will be sent shortly to Vienna for attending a course on Patent Documentation. As soon as the new staff join, one person will be sent for training under the UNIDO programme to the Technical Information Centre, NRC, Canada, and Technonet Asia, Singapore, in the field of industrial information extension service.

### 3 PROJECT ACTIVITIES

#### 3.1 Training Course in Industrial Information

A Short Term Training Course in Industrial Information was planned for two weeks from 11 to 22 1981. The course was intended to meet the information needs of Industries, R & D Institutes, and Government Departments concerned with industrial development in Nigeria and aimed at senior level personnel from these organisations. The number of participants were limited to 30. A course fee of ₦ 300 was fixed for each participant. The primary objective of the course was to promote the use of information by the industries in Nigeria and to make them aware of the sources of information.

A detailed programme was drawn up for organising the course (Annex 4). A bar chart was prepared indicating the various activities to be carried out. A tentative list of the areas and topics to be covered in the course was drawn up. The lecturers to be invited were identified and topics were assigned to them. The local staff were involved from the beginning in the planning and organisation of the programme. Circular letters were drafted for inviting institutions to send participants and specialists for delivering lectures. Letters were sent to 200 institutions for deputing participants. 37 persons attended the course (Annex 5).

Personal visits were made to various institutions in Lagos, Ibaden, Ile-Ife and Oshogbo to contact the specialists and request them to deliver lectures. The response was most encouraging. They welcomed the initiative taken by FIIRO. Many of the heads of organisations came forward to deliver the lectures. Generally copies of their papers were available for distribution before the lectures.

The services of Dr Peter Lazar, UNIDO Expert in Industrial Information Training were also available for organising and conducting the course. He obtained from a number of international organisations copies of their publications relevant to the training programme. More than \$ 6,000 worth of publications were received from them and many were in multiple copies for distribution to the participants. Their assistance was duly acknowledged.

To meet some local exigency, the Course was postponed and held from 4-15 May instead of 11-22 May as originally planned. This posed some communication problem. Participants and lecturers had to be personally contacted to inform them about the change. Advertisements were issued in two newspapers giving the revised dates.

The Hon'ble Dr Sylvester Ugoh, Federal Minister of Science and Technology accepted the invitation to inaugurate the Training Course on 4 May 1981. As he had to go abroad on an urgent mission, Chief R.S.G. Agiobu-Kenner, Permanent Secretary to the Federal Ministry of Science and Technology, presented the address on behalf of the Minister and inaugurated the Course. The function was covered by the radio and TV.

The training programme was carried out as planned, except for some minor changes. Even the general strike in the Country did not disrupt the programme. This is an indication of the dedication of the staff and the interest taken by the invited lecturers and the participants in the Course.

At the closing session on 15 May, certificates were distributed to the participants by Alhadji R.A.B. Omole, Chairman of the Board of Governors, FIRO.

The Course was evaluated by Dr Lazar on the basis of a questionnaire designed by him and completed by the participants at the end of the Course. His assessment <sup>1/</sup> brings out the positive impact made by this Course and the need for conducting similar training courses.

The successful completion of the training course has given confidence and necessary experience to the local staff for organising similar courses in the future.

### 3.2 Need for a Training Centre

One of the major drawbacks in organising industrial information facilities and services in Nigeria is the acute shortage of trained manpower. Even the academic as well as special libraries face this serious problem. The Outline of the Fourth National Development Plan 1981-85, 1981, estimates the present stock of librarians as 750 and the number of existing vacant posts as 500. The additional requirement for trained

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<sup>1/</sup> Technical report: Development of a training programme and a training centre for industrial information. Prepared by Dr Peter Lazar for UNIDO. 27 May 1981.

librarians during 1981-85 is placed at 900. It has been mentioned that this shortage may continue beyond the Plan period.

At present there is no facility for training professional manpower in industrial information. It is estimated that more than 200 trained persons will be required by the industries during the next ten years for manning their information centres. There is therefore an urgent need for setting up a Training Centre for Industrial Information. At present only FIIRO has the necessary potential for developing such a centre. This has been demonstrated by the successful organisation of a Short Term Training Course in Industrial Information. A proposal was made indicating the objectives, activities, inputs, and infrastructural facilities required for establishing a Training Centre (Annex 6). Dr Lazar, in his report mentioned earlier, has drawn up a detailed proposal, on similar lines, for the setting up of a Training Centre for Industrial Information at FIIRO.

### 3.3 Promotion of Information Awareness

Steps have been taken to promote the use of information by industries by making available to them the services of the Information Centre — technical enquiry service, compilation of bibliographies, document procurement service, SDI service, referral service, etc. — by enrolling the industries as Sustaining Members (Annex 7). Annual membership subscription is ₹ 100. This programme was started recently as a part of industrial information extension activity. Regular visits are paid to the industries to ascertain their information needs and to enrol them as Sustaining Members. Even though the response is slow in the beginning, it is likely to pick up gradually. This is a new field of activity for the local staff. They will gain experience and confidence in due course. They must be able to create an awareness for using information by the industries. Adequate transport facility will be needed by the staff for making regular contacts with the industries.

### 3.4 SDI Service

An SDI service has been started on an experimental basis in the field of Food Science and Technology (Annex 8). In the beginning it will be a manually operated service. Food Science and Technology Abstracts will be used for providing this service.

User Information Profiles are prepared for retrieving information. Pro forma for collecting information profiles of users have been distributed. Local staff are being trained in preparing user profiles and in formulating search strategies.

If this service is well received, a faster service would be provided by using FSTA magnetic tapes for batch processing. The computer facilities available in the University of Lagos will be used for this purpose. Arrangments are being made to obtain FSTA data base which is now offered free of charge to developing countries for a period of two years. The CAN/SDI software which is now available at the University of Ife Computer Centre could be used for providing this service. The expertise of the Department of Computer Sciences of the University of Lagos will be used for developing this project.

### 3.5 Computerised Industrial Information

Arrangements have been made with the Department of Computer Sciences of the University of Lagos for developing a joint programme in the field of computerised information processing and services. This is a pilot project for a period of six months starting from 1 July 1981. During this period, the staff of the Department of Computer Sciences propose:

- i) to assist FIIRO in selection and training of computing personnel;
- ii) to organise, under the auspices of FIIRO, Computer Appreciation Courses, Seminars and Workshops for Industrialists as well Scientists who may eventually interact with a computer-based industrial information system;
- iii) to develop and implement a pilot project on an industrial information bank;
- iv) to train prospective users of an industrial information bank; and
- v) to set into motion the machinery for developing or acquiring and implementing a national computerised industrial information bank.

For this purpose, the Department proposes to undertake the following:

- i) to design, program and implement an information bank covering information on current research projects, industries, machinery and equipment, abstracts published by FIIRO, institutional profiles, etc;
- ii) To design a suitable format and develop procedures for converting the data into machine-readable form;
- iii) To design and implement computer programs for retrieving information based on various query structures specified by FIIRO;

- iv) To develop detailed documentation describing the design specifications, flowcharts, input and output requirements, file structures and access protocols, operating controls and user manuals for the information bank system;
- v) To maintain the system for a reasonable period of time, following the implementation, during which minor modifications can be made to the system upon the request of FIIRO;
- vi) To train users of the system; and
- vii) To explore the possibility of initiating a computerised SDI system.

The Information and Documentation Division of FIIRO will provide all the information inputs for this pilot project and ₦ 15,000 towards its cost. Two persons with computer experience have been recently recruited by FIIRO. They will be attached to the project.

### 3.6 Training Course in Computerised Information

A programme has been drawn up for conducting a Short Term Training Course in Computerised Information Processing. The Course will be for a duration of two weeks tentatively scheduled to start in the third week of November 1981. This will be organised in collaboration with the Department of Computer Sciences of the University of Lagos. About that time the services of a UNIDO Expert in Computer Programming will also be available for organising and conducting the course.

### 3.7 Project Proposal for Phase II

A project proposal for developing the Phase II of the Industrial Information Centre at FIIRO has been prepared (Annex 9). The main areas to be developed are:

- i) Promoting the use of information by Industries;
- ii) Assessing the information needs of Industries;
- iii) Organising tailored information services to meet the needs of Industries;
- iv) Organising industrial information extension service;
- v) Developing computerised information facilities and services;
- vi) Establishing a Training Centre for manpower development in industrial information;
- vii) Providing advisory services in the industrial information field; and
- viii) Establishing links with information networks: sectoral, national, regional, and international.

The quantum of assistance needed from the Government would be ₦ 500,000 and from UNDP \$ 571,800. This project is recommended for inclusion in the Country Programme.

#### 4 PROGRAMME FOR 1982

The Information and Documentation Division of FIIRO has included in its budget proposals for 1982 adequate provision for developing a number of activities. This includes:

- i) Establishing a Training Centre for Industrial Information;
- ii) Computerising information storage and retrieval operations and introduce computer terminals;
- iii) Establishing and offering Selective Dissemination of Information (SDI) service to specialists who are working in specific subject fields or areas of economic endeavour throughout the country;
- iv) Developing the infrastructure required for linking up with data bases in advanced countries. Carrying out experimental link up with existing databases using possibly EURONET;
- v) Establish industrial liaison and extension information service for industries; and
- vi) Continuing the project activities developed so far.

Provision for additional staff, equipment, and publications have been requested for carrying out the activities.

#### 5 FACTORS FOR CONSIDERATION

For ensuring a rapid development of the Industrial Information Centre, it is necessary for FIIRO to take into consideration the policies and programmes of the Government and the various International Organisations relating to the promotion and development of information activities at the national, regional and international levels.

##### 5.1 Plan Priorities

The Fourth National Development Plan (1981-85) of Nigeria envisages a total investment expenditure of ₦ 82 billion. High priority areas are agricultural production and processing, agro-industries, small scale industries, development of technology, communication, transport, etc. Emphasis is also laid on developing information facilities for supporting these activities.

##### 5.2 Government Programmes

The Federal Ministry of Industries is setting up a data bank covering information on industries in Nigeria. The Federal Ministry of Science and Technology has a number of projects in the information area. It promotes and administers technology transfer programmes, the dissemination and commercial exploitation of the

results of scientific and technological research, and the establishment of a data base for providing technological information for economic and social development planning. It acts as the national focal point for the Technological Information Exchange System (TIES) of UNIDO. It participates in the AGRIS and CARIS programmes of FAO. In the Fourth Plan, it has identified as a priority area the development of capabilities for collection, storing and dissemination of information on production technologies.

### 5.3 International Programmes

Various international organisations are at present engaged in promoting the development of scientific, technological and industrial information facilities for the benefit of developing countries. They also recognise the need for building up of adequate information facilities and services at the national level as an essential prerequisite for rapid growth. The UN Conference for Science and Technology for Development (Vienna, 1979) recommended that the developing countries should "provide the fullest possible access to available information on technologies, terms and conditions of supply, local technical and management requirements, and activities of transnational corporations and enterprises in the fields of science and technology". UNESCO, in co-operation with the UN Interim Fund for Science and Technology, is preparing a series of in-depth country studies relating to S & T information resources, facilities and services in developing countries, as a basis for IF/STD funding. UNIDO is launching an extensive programme for promoting and developing industrial information facilities in the African Countries, both at the national and regional levels, based on a recommendation made at the Joint OAU/UNIDO Symposium on Industrial Technology for Africa (Khartoum, 5-11 November 1980). It has made a provision of \$ 1,610,800 for a project on Industrial and Technological Information Policies, Structures and Operations in the Countries of Africa. (Annex 10)

The time is ripe for Nigeria to take advantage of these developments for building up industrial information facilities and services at the national level. The Federal Institute of Industrial Research has the necessary potential for developing these facilities.



## 6 RECOMMENDATIONS

1. The Industrial Information Centre at FIIRO should be developed on a priority basis by the Government. This will contribute considerably to the acceleration of the development process in the industrial sector of the national economy.
2. The Government should include the development of the Industrial Information Centre at FIIRO as a priority item in the UNDP Country Programme. A proposal for the development of Phase II of the project is included in this report.
3. A Training Centre for Industrial Information should be established at FIIRO on a priority basis. At present there is an acute shortage of trained manpower. This is a major drawback in organising industrial information facilities and services in Nigeria.

UNIDO PROJECT ON INDUSTRIAL INFORMATION  
(DP/NIR/75/069)

Proposed Programme of Work  
Feb-Aug 1981

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My present assignment will be for a period of six months. I am giving below my programme of work:

1. Prepare a project report for developing the Information Centre at FIIRO as a National Industrial Information Centre.

The UNDP Country Programme is under preparation. UNIDO is likely to send a team shortly to discuss with your Government the areas requiring UNIDO assistance as part of the Country Programme. At this stage if the Government can indicate its interest in this project to UNIDO, it will be possible to get UNIDO assistance for the second phase of development of this project.

2. Prepare a programme and conduct a Short Term Training Course in Industrial Information in April 1981, as part of the manpower development programme in this area. The details will be submitted soon.

A UNIDO Expert on Training is expected to join this project in the first week of March 1981 and his services will be utilised for conducting this course.

3. Prepare a programme for developing expertise in the Centre for conducting Training Courses in Industrial Information on a regular basis. Gradually competence and necessary infra-structure can be built up for conducting international courses.

4. Prepare a programme for conducting a training course in computer programming to be held at a suitable time.

There is a provision for a UNIDO Expert on Computer Programming in this project. This course will be conducted when he joins the project. In the meanwhile, I am exploring the possibility of utilising the local computer facilities for conducting this course.

5. Develop some information services at the Centre for meeting the needs of industry.

I seek your approval for the above proposals.

Dr O.A. Koleoso  
Director of Research, FIIRO

S. Parthasarathy  
16 February 1981

COUNTERPART STAFF

	<u>Function</u>	<u>Duration of Assignment</u>
1. Mr R.O. Sodipe Assistant Chief Research Officer	Overall management of Information & Documentation Division  Development of industrial information services  Development of regular training course in industrial information  Publishing Technical Information Bulletin for Industries  Editing FIIRO publications	February 1981 onwards
2. Mrs M.A. Aduwo Senior Research Officer	Preparing and publishing FIIRO Industrial Abstracts	February 1981 onwards
3. Mr C.J. Ezeiyi Senior Research Officer	Development of computer software for information processing and SDI service	July 1981 onwards
4. Miss O. Glover Research Officer I	Information storage and retrieval, indexing, technical inquiry service, current awareness service, SDI service	February 1981 onwards
5. Mrs E. Onabanjo Senior Technical Officer	General library administra- tion, photocopying service, loan service, shelf maintenance	February 1981 and July 1981 onwards
6. Mr A. Shittu Senior Technical Officer	Information storage and retrieval, indexing, technical inquiry service, current awareness service, SDI service	February 1981 onwards
7. Miss P. Ozuluonye Higher Technical Officer	Acquisition and processing of books, periodicals, reprints, etc.	February 1981 onwards
8. Mr P. Nwoke Technical Officer	Printing	February 1981 onwards
9. Mr A. Okolo Technical Officer	Printing	February 1981 onwards
10. Mrs M. Babatunde Technical Officer	Assist in acquisition work	February 1981 onwards
11. Mrs C. Aluko Asst T.O.	Assist in information processing, computer work	February 1981 onwards

FELLOWSHIPS AWARDED TO LOCAL STAFF

1. A UNIDO fellowship was awarded to Mr R.O. Sodipe from June to August 1979 to study industrial information systems, especially for technology transfer, industrial licensing, patents and small scale industries. Practical training was arranged in the following institutions: National Register of Technology Transfer (Mexico), INFOTEC/CONACYT (Mexico), Intermediate Technology Information Centre (London), British Library Lending Division (Boston Spa), British Library Reference Division (London), Tropical Products Institute (London), Small Firms Information Service (Bristol), British Building Research Establishment (Watford), UNIDO Library (Vienna), and INPADOC (Vienna). He has submitted a report on the training received.
2. UNIDO assistance was provided to Mr R.O. Sodipe (June to August 1980) to participate in a training course on patent documentation organised jointly by the Austrian Patent Office, Vienna, and WIPO. He has submitted a report on the training received.
3. UNIDO assistance was provided to Mr A. Shittu (October 1980 to January 1981) to participate in a training course in information storage and retrieval system organised by the SIET Institute, Hyderabad, India. During the course, he received practical training in the National Institution of Nutrition, Hyderabad, and the Central Food Technological Research Institute, Mysore. He has submitted a report on the training received.

SHORT TRAINING COURSE IN INDUSTRIAL INFORMATION \*  
Federal Institute of Industrial Research  
Oshodi, 11-22 May 1981

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The Federal Institute of Industrial Research, Oshodi, is operating a UNIDO Project on Industrial Information. As part of the Institute's manpower development programme, a Short Training Course in Industrial Information is being organised from 11-22 May 1981. The course is tailored to meet the needs of industries, R & D Institutes and Government Departments concerned with industrial development. The course is aimed at senior level personnel from the various organisations. The number of participants will be limited to 30.

The primary objective of this course is to promote the use of information by the industries in Nigeria and to make them aware of the sources of information. Information is needed for accelerating their development and for solving their day-to-day problems.

The training programme is intended to familiarise the participants with:

1. Sources of information generated by the various Government Departments and agencies concerned with industrial development in Nigeria;
2. Information on policies, plans, programmes and regulations emanating from Government relating to industrial development;
3. Opportunities — incentives, credits and institutional facilities — provided by Government for stimulating industrial development;
4. Major sources of industrial information available in Nigeria;
5. Over-view of the international sources of industrial information which can be used by industries in Nigeria; and
6. Range of information services that can be used by industries.

Lectures will be delivered by invited specialists from various institutions. The services of two UNIDO experts will be available for conducting this course.

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\* Proposal sent to Director of Research, FIIR, on 16 Feb 1981 for organising a training course.

Course of Lectures

Venue: FIIRO

Duration 11-22 May 1981

- Area 1: INDUSTRIAL POLICY, PLANNING & PROGRAMMES
- 1.1 Industrial Policy - Ministry of Industry
  - 1.2 Fourth Development Plan - Ministry of Planning
  - 1.3 Industrial Regulations - Ministry of Industry
  - 1.4 Industrial Financing - Nigerian Industrial Development Bank
  - 1.5 Investment Information - Nigerian Investment Centre
  - 1.6 Procedures for setting up  
Small Scale Industries: Documentation - Ministry of Industry
  - 1.7 Organising Infra-structures for  
Small Scale Industries - UNIDO Team, IDC, Oshogbo
  - 1.8 Small Scale Industries Development:  
Problems and Prospects - University of Ife
  - 1.9 Feasibility Study - NISER
  - 1.10 FIIRO in the service of Industry - FIIRO
  - 1.11 Industrial Liaison - FIIRO
  - 1.12 UNDP Country Programme - UNDP
- Area 2: ORGANISATION OF INDUSTRIAL INFORMATION (10 Lectures)
- 2.1 Sources of Information: R & D, Techno-  
Economic, Marketing & Management - FIIRO
  - 2.2 Information Tools - FIIRO
  - 2.3 Information Services - FIIRO
- Area 3: INTERNATIONAL SYSTEMS
- 3.1 International Industrial Information  
Services - FIIRO
  - 3.2 Global Information Networks - FIIRO

In addition, there will be visits to Institutions.

Organisation of the Course

1. Letters to institutions (about 200) calling for nominating participants to be despatched by 23 Feb 1981. Last date for receiving confirmation: 31 Mar 1981.
2. Letters to Lecturers to be despatched by 1 Mar 1981. Last date for acknowledgement: 15 Mar 1981. Last date for receiving script: 15 Apr 1981.
3. Duplication of Lectures to be completed by 25 Apr 1981.
4. Drawing up of final programme: 16 Apr 1981. Mailing invitations to top management from industries, Government Departments, R & D institutions for the inauguration: 20 Apr 1981.
5. Budget: N= 4,000. Document Preparation - N 2,000; Remuneration to Lecturers - 1,000; Hospitality - N 500; Miscellaneous - N 500.

TRAINING COURSE IN INDUSTRIAL INFORMATION  
Federal Institute of Industrial Research, Oshodi  
4 - 15 May 1981

List of Participants

1. Mr T.R. Adegboye, Package Development Manager, Lever Brothers Nig. Ltd, P.O. Box 15, Apapa, Lagos.
2. Mr A.A. Adelana, Industrial Analysis Division, FIIRO, Lagos.
3. Mrs M.A. Aduwo, Information & Documentation Division, FIIRO, Lagos.
4. Mr Hadji Tokunboh Alli, Executive Manager, Universal Nigeria Industrial Co. Ltd., 18 Awosika Avenue, Ikeja, Lagos.
5. Mr R.A. Aloba, Higher Trade Officer, Lagos State Ministry of Trade and Industry, Ikeja, Lagos.
6. Mrs C.K. Aluko, Information & Documentation Division, FIIRO, Lagos.
7. Mr T.N. Ananyi, Trainee Programmer, National Library of Nigeria, 4, Wesley Street, P.M.B. 12626, Lagos.
8. Mr L.E. Appah, Librarian, Nigeria National Petroleum Corporation, Ikoyi, Lagos.
9. Mr Lenrie Olatokunboh Aina, Lecturer, Department of Library Studies, University of Ibadan, Ibadan.
10. Mrs G.M. Akinsoji, Analytical Chemistry Division, FIIRO, Lagos.
11. Mrs S.O. Akinola, Applied Biology Division, FIIRO, Lagos.
12. Mr P.O. Ariyo, Principal Technical Officer, Ministry of Trade, Industry and Co-operative, Akure, Ondo State.
13. Mr J.I. Chinedo, Principal Research Officer, Project Development Institute (PRODA), P.O. Box 609, Enugu.
14. Mrs Monica Edordu, Senior Librarian, National Library of Nigeria, 4, Wesley Street, P.M.B. 12626, Lagos.
15. Mr J.O. Fashina, Higher Trade Officer, Lagos State Ministry of Trade and Industry, Ikeja, Lagos.
16. Mr Omeje Moses Idoko, Librarian I, National Library of Nigeria, 4 Wesley Street, P.M.B. 12626, Lagos.
17. Mrs M.O. Kasim, Industrial Analysis Division, FIIRO, Lagos.
18. Mr Obitayo Korede, Economist, Central Bank of Nigeria, Tinubu Square, Lagos.
19. Mr E.M. Krishna, Industrial Analysis Division, FIIRO, Lagos.
20. Miss C.F. Makanjuola, Industrial Analysis Division, FIIRO, Lagos.
21. Mr A.B. Meadows, Food Technology Division, FIIRO, Lagos.
22. Mr N.E. Ngochindo, Assistant Librarian, Research Library, Central Bank of Nigeria, Tinubu Square, Lagos.
23. Mr E.A. Oguntokun, Engineer, Efbiko Engineering, 34 Queen Street, Yaba, Lagos.

24. Mrs Omolara Ojo-Ade, Senior Librarian, University of Ife, Ile-Ife.
25. Mr A.B. Oladipo, Industrial Analysis Division, FIIRO, Lagos.
26. Dr O. Olatunji, Food Technology Division, FIIRO, Lagos.
27. Mr O. Olowu, Managing Director, Addis Engineering, P.O. Box 2645, Lagos.
28. Mr E.A. Olugbade, Engineering Division, FIIRO, Lagos.
29. Mrs R.U. Onuorah, Principal Librarian, NISER, University of Ibadan, Ibadan.
30. Dr A.B. Oniwinde, Microbiology Division, FIIRO, Lagos.
31. Mr Ajaero Sunday Orji, Librarian I, National Library of Nigeria, 4 Wesley Street, P.M.B. 12626, Lagos.
32. Dr F.C. Osinowo, Chemistry Division, FIIRO, Lagos.
33. Mr Josuah Kumasongum Osu, Industrial Officer II, Ministry of Trade and Industry, P.M.B. 2077, Makurdi, Benue State.
34. Mr Chukwuemeke Oyeka, Paint Technologist, International Paints (W.A.) Ltd., P.O.Box 67, Ikeja, Lagos.
35. Miss P.O. Ozuluonye, Information & Documentation Division, FIIRO, Lagos.
36. Mr O.A. Shittu, Information & Documentation Division, FIIRO, Lagos.
37. Mr B.O. Ademilua, Industrial Analysis Division, FIIRO, Lagos.



ESTABLISHMENT OF A TRAINING CENTRE  
FOR INDUSTRIAL INFORMATION AT FIIRO\*

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1. There will be considerable growth in demand for industrial information during the next five years as a result of the ambitious programme for rapid industrialisation launched by the Federal Government covering all sectors of its economy. The activities of R & D institutions will increase. With the present drive for the indigenisation of industries, most of the industrial enterprises will have to have R & D programmes which will require information support. At present there are more than 60 industries having R & D units.

2. A major factor in the development of industrial information services in Nigeria is the shortage of trained manpower. There are at present training facilities in Library Science in some of the Nigerian Universities. The training is intended to turn out academic librarians mainly and to some extent special librarians. Most of the students are deputed by their institutions and they go back to their institutions after training. The number of trained persons available in the open market even for academic and special libraries is therefore limited. There is no facility for training adequate number of personnel for industrial information. The professional manpower in the field of industrial information required during the next ten years will be about 50 for the Information Centre at FIIRO and 20 for its Sub-Centres located throughout the country. About 200 trained persons will be required by the industries for manning their Information Units. There is therefore an urgent need for setting up a Training Centre for Industrial Information at FIIRO. About 20 persons may be trained every year. The industries can be approached for deputing candidates for training. At present, only FIIRO has the necessary potential, by way of organised collection, services and expertise for developing a Training Centre for Industrial Information.

3. Objectives

3.1 The main objective is to establish a Training Centre for Industrial Information to build up the required manpower for providing necessary information support to industries in Nigeria.

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\* Proposal sent to Director of Research, FIIRO, on 2 Mar 1981 for organising a Training Centre.

3.2 The sub-objectives are:

1. To develop professional expertise in industrial information;
2. To conduct a regular training programme in industrial information;
3. To run short term extension courses on different aspects of industrial information from time to time;
4. To organise seminars, workshops, etc., in industrial information periodically;
5. To provide advisory services to industries for setting up their information centres;
6. To develop new techniques in the field of industrial information; and
7. To run international courses in industrial information.

4. The immediate activities of the Centre are:

1. To build up the faculty by training the existing staff to conduct courses and to recruit the necessary complement of staff for developing the training programme;
2. To prepare course material;
3. To build up a document collection;
4. To provide the necessary infrastructure by way of accommodation, amenities and services for the training centre; and
5. To set up an Advisory Committee for overseeing the development of the Centre.

5. Inputs

5.1 Government Inputs:

1. Faculty: Principal Research Officer - 1  
Senior Research Officer - 3  
Research Officer - 2  
Typists - 2  
Provision for invited lecturers to be made.  
Staff for catering  
Drivers - 2
2. Accommodation - 3,000 sq. m.  
(Lecture Rooms (2); Reading Room (1); Hostel Rooms for 30;  
Guest Rooms for visiting Faculty (10); Canteen; Common Room;  
Recreation Room; Library)  
Furnishing and equipping the building
3. Transport: Bus - 1; Minibus - 1

5.2 UNDP Inputs to be Requested: US \$ 500,000

1. Short Term Consultants (30 m/m)
2. Fellowships for training abroad (24 m/m)
3. 3,000 books
4. 100 periodicals for 5 years
5. Equipment: Audio-visual; Video-tape; Copying equipment;  
Electric typewriters; Duplicating equipment; Computer and  
peripherals including Video Terminals.

INDUSTRIAL INFORMATION CENTRE

Federal Institute of Industrial Research, Oshodi

Sustaining Membership

The Industrial Information Centre is charged with the responsibility of promoting the use of technological information available within the country and abroad by the Nigerian Industries. The Library carries a stock of over 8,000 publications covering a wide range of subjects in science and technology. The special collections include the publications of the United Nations Industrial Development Organization (UNIDO), National Technical Information Service (NTIS), USA, Tropical Products Institute (UK), British Standards Institution, etc. The bulk of the collections consists of research reports, technical memoranda, industry profiles, technical periodicals, annual reports, reference materials, etc.

The Centre is well equipped to supply information on industrial, commercial and statistical matters and also on such scientific and technological aspects as have a direct bearing on industrial applications, e.g., information on industrial processes and equipment.

The Centre maintains contact with a number of local and overseas information centres and can draw upon their resources, facilities and services. It acts as a focal point for NTIS, whereby reports on Government sponsored research and development studies in the United States can be obtained for Nigerian Industries. In Nigeria, it has contacts with Government Departments, Research Organisations, Universities, Technical Colleges, Chambers of Commerce, Commercial Houses, etc.

The Centre offers the following information services to Nigerian Industries:

1. **Technical Enquiry Service:** The Centre can answer technical enquiries based upon its resources and the expertise available in FIIRC. Examples of some of the enquiries handled are: Feasibility study on the manufacture of sodium silicate; Manufacture of lead-acid batteries; Information on stone crushing industry; Storage and processing of pulses; Manufacture of clay bricks; Location and extent of clay deposits in Lagos; Agricultural waste utilisation; Industrial enzymes; Textile industry in Nigeria; Vulcanization of rubber.
2. **Compilation of retrospective bibliography on a specific topic, on request.**

3. Document Procurement Service: The Centre can provide copies of scientific papers, reports and other technical documents, on request.
4. Selective Dissemination of Information (SDI) Service: This is a personalised information service. Current information on a specific area or topic of interest to an industry is supplied at regular intervals, say once in a month. This will enable an industry to keep itself abreast of world developments in its selected field of interest.
5. Referral Service: Guiding the users to appropriate information sources, specialists or institutions for getting their information.
6. Loan of books.
7. FIIRO Technical Information Bulletin for Industry (TIBI): Quarterly bulletin containing useful information to Nigerian Industries.
8. FIIRO Industrial Abstracts: Quarterly publication giving abstracts of current technical literature of relevance to Nigeria.

Some of these services are available on payment of charges based on cost of material and staff-time involved. For availing the information services any industry or institution can become a Sustaining Member by paying an annual membership subscription of ₦ 100/-. For becoming a Member, please complete the enclosed form and mail it to:

The Director of Research  
Federal Institute of Industrial  
Research, Oshodi  
P.M.B. 21023, Ikeja  
Lagos State.

(Attention: Mr R.O. Sodipe)

Application Form for Sustaining Membership  
of the FIIRO Industrial Information Centre

Name of the Organisation:

Address:

Telephone:

Field of Activity:

Topic for SDI Service: (Please specify a topic of interest to your  
industry on which you would like to get  
current information on a regular basis)

Please enrol our organisation as a Sustaining Member. A cheque  
for ₹ 100/- drawn in favour of the Director of Research, Federal  
Institute of Industrial Research, Oshodi, is sent herewith.

Signature:

Designation:

Date:

SDI SERVICE IN FOOD SCIENCE AND TECHNOLOGY

Selective Dissemination of Information (SDI) Service is a personalised information service. The Federal Institute of Industrial Research, Oshodi, is offering, on an experimental basis, an SDI service in the field of Food Science and Technology.

The SDI service will provide, at regular intervals, a list of references appearing in the current issues of the Food Science and Technology Abstracts, which are of relevance to the topic of interest indicated by a user. For this purpose, a user information profile is prepared in advance which is used for retrieving the relevant information.

The SDI service minimises the time spent in searching current literature by an individual for getting his information. It produces personalised bibliographies of currently published documents needed by him. It can also be used for building up information files for current and future use. It has a mechanism for feedback for monitoring the performance of profiles.

If this is well received, a faster service could be offered by using FSTA tapes for computer processing.

For availing the SDI service, kindly complete the enclosed pro forma for Profile Information and return it to:

The Director of Research  
Federal Institute of Industrial Research, Oshodi  
P.M.B. 21023, Ikeja, Lagos State.

PROFILE INFORMATION

1. Name:
2. Position:
3. Institution:
4. Address:
  
5. Topic of Interest: (Please give a fairly detailed description of your field of interest, including any aspect NOT required)
  
6. List of significant words (Keywords) under which you normally search the literature on the topic: (please consult the subject index of Food Science and Technology Abstracts for selecting your terms)
  
7. Please give the Section Numbers of the Food Science and Technology Abstracts in which the topic of your interest usually occurs:
  
8. Please list citations of at least five titles of papers that have relevance to the topic of your interest:

Food Science and Technology Abstracts

Abstract Sections

- A. Basic Food Science
- B. Food Microbiology
- C. Food Hygiene & Toxicology
- D. General-Food Economics & Statistics
- E. Food Engineering
- F. Food Packaging
- G. Commodity Technologies - General
- H. Alcoholic and Non-Alcoholic Beverages
- J. Fruits, Vegetables and Nuts
- K. Cocoa and Chocolate Products
- L. Sugar, Syrups, Starches and Candies
- M. Cereals and Bakery Products
- N. Fats, Oils and Margarine
- P. Milk and Dairy Products
- Q. Egg and Egg Products
- R. Fish and Marine Products
- S. Meat, Poultry and Game
- T. Food Additives, Spices and Condiments
- U. Statutes, Laws and Regulations



A PROPOSAL  
FOR SEEKING UNDP ASSISTANCE  
FOR PHASE II OF THE PROJECT  
(DP/NIR/75/069)

Development of an Industrial Information  
Centre at the Federal Institute of Industrial  
Research, Oshodi, Lagos

UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Government of

N I G E R I A

**TITLE:** Federal Institute of Industrial  
Research, Industrial Information Centre

**Project No:** DP/NIR/75/069 Phase II      **Duration:** 5 Years

**Sector:** Industry

**Sub-Sector:** Industrial Services and  
Institutions (3530)

**Government Co-operating Agency:** Federal Institute of  
Industrial Research,  
Federal Ministry of  
Science & Technology

**Executing Agency:** United  
Nations Industrial Development  
Organization (UNIDO)

**Date of Submission:**      **Starting Date:** 1 January 1982

**Government Contribution:** ₦ 500,000      **UNDP Contribution:** \$ 571,800

## I. BACKGROUND AND SUPPORTING INFORMATION

### A. Justification for the Project

1. The Fourth National Development Plan (1981-85) of Nigeria envisages a total investment expenditure of ₦ 82 billion. High priority areas are agricultural production and processing, agro-industries, small scale industries, development of technology, communication, transport, etc. Emphasis is also laid on developing information facilities for supporting these activities. The Federal Institute of Industrial Research, which now comes under the Federal Ministry of Science and Technology, has already initiated an industrial information project with UNDP assistance.

2. During the last three years, a number of projects were initiated such as listing of institutions and industries; identifying sources of industrial information; assessing the information needs of industries; collecting information on industrial products; inventory of current applied research projects; establishing links with industries; conducting short term training courses in reprography and industrial information; and on-the-job training for organising industrial information services — document procurement service, technical inquiry service, referral service, selective dissemination of information service, literature search, news clipping service, etc. A few persons were trained abroad under the UNDP fellowship programme.

3. Various international organisations are at present engaged in promoting the development of scientific, technological and industrial information facilities for the benefit of developing countries. They also recognise the need for building up of adequate information facilities and services at the national level as an essential prerequisite for rapid growth. The UN Conference for Science and Technology for Development (Vienna, 1979) recommended that developing countries should "provide the fullest possible access to available information on technologies, terms and conditions of supply, local technical and management requirements, and activities of transnational corporations and enterprises in the fields of science and technology". UNESCO, in co-operation with the UN Interim Fund for Science and Technology, is preparing a series of in-depth country studies relating to S & T information resources, facilities and services in developing countries, as a basis for IF/STD funding.

UNIDO is launching an extensive programme for promoting and developing industrial information facilities in the African Countries, both at the national and regional levels, on the basis of a recommendation made at the Joint OAU/UNIDO Symposium on Industrial Technology for Africa (Khartoum, 5-11 November 1980). It has made a provision of \$ 1,610,800 for a project on Industrial and Technological Information Policies, Structures and Operations in the Countries of Africa, for a two year period. The time is ripe for Nigeria to take advantage of these developments for building up industrial information facilities and services at the national level. The Federal Institute of Industrial Research has the necessary potential for developing these facilities.

B. Institutional Framework

1. The Federal Institute of Industrial Research, Oshodi, Lagos shall be responsible for the project. The Institute comes under the Federal Ministry of Science and Technology and is therefore wholly funded by the Federal Government of Nigeria.
2. The major activities of the Institute are in the areas of Food Science and Technology and supporting services such as Analytical Services, Foundry and Metallurgy, Design and Fabrication, Process Development, Production Engineering, Industrial Analysis, and Library, Documentation and Information Services. It has a branch at Kano to serve as its extension centre for the Northern region. The total staff is about 400 out of which 245 are in the professional category.
3. The project will be operated by the Information and Documentation Division. The Library carries a stock of over 8,000 publications. Its collections include the publications of UNIDO, NTIS (USA), Tropical Products Institute (UK), etc. It is equipped to supply scientific, technological, and industrial information. It maintains contact with a number of local and overseas information centres and can draw upon their resources, facilities and services. It has photocopying and printing facilities.

C. Other Related Activities

1. The Federal Ministry of Industries is setting up a data bank covering information on industries in Nigeria.

2. The Federal Ministry of Science and Technology is responsible for the promotion and administration of technology transfer programmes, the dissemination and commercial exploitation of the results of scientific and technological research, and the establishment of a data base for providing technological information for economic and social development planning. It acts as the national focal point for the Technological Information Exchange System (TIES) of UNIDO. It participates in the AGRIS and CARIS programmes of FAO. In the Fourth Plan, it has identified as a priority area the development of capabilities for collection, storing and dissemination of information on production technologies.

3. Nigeria is also participating in the Pan-African Documentation and Information System (PADIS) set up by the Economic Commission for Africa.

4. The Nigerian Society of Engineers is planning to develop information facilities for engineers in collaboration with the Federal Institute of Industrial Research.

5. The Federal Institute of Industrial Research is collaborating with the Department of Computer Sciences of the University of Lagos for developing computerised information services.

#### D. Future UNDP Assistance

1. Towards the end of the Phase II of the project in 1986, a review shall be undertaken to determine if further assistance is required.

2. Further assistance may be required for developing "on-line" information services by providing access to international information networks, using the Nigerian External Telecommunications (NET) facilities.

## II. OBJECTIVES OF THE PROJECT

### A. Long-Range Sectoral or National Development Objectives

The long-range objective of the project is to develop a full fledged industrial information centre capable of providing expeditiously a range of information services relevant to the needs of industrial and socio-economic development.

B. Immediate Objectives of the Project

1. To promote the use of information by Industries.
2. To assess the information needs of industries.
3. To organise tailored information services to meet the needs of industries.
4. To organise industrial information extension service.
5. To develop computerised information facilities and services.
6. To set up a training unit for manpower development in industrial information.
7. To provide advisory services in the industrial information field.
8. To establish links with information networks: sectoral, national, regional, and international.

C. Provision for Follow-up

The Federal Institute of Industrial Research will continue the activities of the project after the completion of UNDP technical assistance, in close co-operation with Government organisations, research institutes, and industries.

III. WORK PLAN

A. Description of the Project Activities

The project activities would be carried out by the Information and Documentation Division of the Federal Institute of Industrial Research, Oshodi, Lagos. Most of the activities are of a continuing nature and would be spread over the project duration.

<u>Project Activities</u>	<u>Proposed Starting Date</u>	<u>Duration</u>
<u>Objectives 1 &amp; 2</u>		
Identify and establish contact with current and potential users of industrial information through personal visits for assessing their information needs	Jan 1982	Continuous
<u>Objective 3</u>		
Organise information services: Current Awareness Service Literature Search Service Document Procurement Service Technical Inquiry service Translation Service	Jan 1982	Continuous

<u>Project Activities</u>	<u>Proposed Starting Date</u>	<u>Duration</u>
<u>Objective 4</u>		
Establish regular contacts with industries through personal visits, identify and assess their operational problems and provide advice and information for solving the problems	Jan 1982	Continuous
<u>Objective 5</u>		
a) Design and develop a computerised information bank covering information on current research projects, industries, machinery, products, institutions, specialists, current papers on special topics, etc.	Jan 1982	Continuous
b) Design a suitable format and develop procedures for converting the data into machine readable form	Jan 1982	2 months
c) Design and implement computer programmes for retrieving information	Jan 1982	6 months
d) Develop detailed documentation describing the design specifications, flowcharts, input and output requirements, file structures and access protocols, operating controls and user manuals for the information bank	Jan 1982	6 months
e) Organise a computerised SDI service	Jul 1982	continuous
<u>Objective 6</u>		
Organise a regular training programme for manpower development	Jan 1982	Continuous
a) Prepare course material	Jan 1982	6 months
b) Organise short term course in industrial information (2 months duration) 2 Courses per year	Jul 1982	
c) Organise workshops on special topics (1 week duration) 2 Workshps per year	Apr 1982	
d) Organise regular training course in industrial information (1 year duration)	Jan 1983	Continuous
<u>Objective 7</u>		
Assist industries in organising their in-house information facilities and provide on-the-job training for their personnel	Jan 1982	Continuous
<u>Objective 8</u>		
Identify and establish links with sectoral, national, regional, and international information centres for using their information resources	Jan 1982	Continuous

B. Description of UNDP Inputs

1. Assignment of International Staff

During the course of Phase II of the project, the areas to be developed are industrial information services, training in industrial information, computer programming for information processing, and industrial information extension service.

Short term experts would be assigned to develop these areas and provide on-the-job training to the local staff. (36 m/m)

2. Provision for Sub-Contractual Services

None.

3. Training Provisions

Fellowships (30 m/m) would be made available for providing practical experience in operation and management of activities relating to industrial information services, training in industrial information, computer programming for information processing, and industrial information extension service.

4. Equipment and Supplies

The equipment needed for the project would be made available on the recommendation of the International staff:

- a) Minicomputer and peripherals for computerised information processing (\$ 150,000)
- b) Audio-visual equipment for the training programme (\$ 30,000)
- c) Books and Periodicals for the training programme (\$ 50,000)
- d) Project car for the industrial information extension service (\$ 10,000)

C. Description of Government Inputs

1. Pre-requisites

None.

2. Assignment of National Staff

The Federal Institute of Industrial Research would recruit the following staff before the start of the project and assign them to work with the International staff:

- a) Industrial Information Services
  - Senior Research Officer - 2 posts
- b) Training in Industrial Information
  - Principal Research Officer - 1 post
  - Senior Research Officer - 1 post
- c) Computerised Information Processing
  - Senior Research Officer - 1 post
  - Research Officer (I) - 1 post



d) Industrial Information Extension Service

Senior Research Officer	-	1 post
Research Officer (I)	-	1 post

e) Secretarial Work

Typists	-	4 posts
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Administrative and secretarial assistance shall be provided for the International staff.

3. Equipment and Supplies

The Federal Institute of Industrial Research would make provision for the purchase of:

a) Books and periodicals	-	₤ 100,000
b) Reprographic equipment	-	₤ 100,000

4. Building

The area at present occupied by the Information and Documentation Division comes to 400 Sq. metres. Adequate accommodation would be made available for its expansion and for running the training courses.

Office space complete with furniture would be provided for the International staff.

The International staff shall have the option of staying either in a guest chalet within the premises of the Institute or in a hotel near the Institute.

UNDP Contribution

Country: NIGERIA

Project No: DP/NIR/75/069 Phase II

(in US Dollars)

Project Title: Federal Institute of Industrial  
Research, Industrial Information Centre

		TOTAL		1982		1983		1984		1985		1986	
		m/m	\$	m/m	\$	m/m	\$	m/m	\$	m/m	\$	m/m	\$
10.	<u>PROJECT PERSONNEL</u>												
11	Experts												
11-01	Industr Info Expert	15	94,500	3	18,900	3	18,900	3	18,900	3	18,900	3	18,900
11-02	Consultant Training	6	37,800	3	18,900	3	18,900						
11-03	Consultant Computer Programming	6	37,800	3	18,900	3	18,900						
11-04	Consultant Information Extension	15 3	56,700	3	18,900	3	18,900	3	18,900	3	18,900	3	18,900
11-99	Sub-total	36	226,800	12	75,600	12	75,600	6	37,800	3	18,900	3	18,900
13-01	Driver	60	25,000	12	5,000	12	5,000	12	5,000	12	5,000	12	5,000
15	Official Travel		5,000		1,000		1,000		1,000		1,000		1,000
19	Component Total		256,800		81,600		81,600		43,800		24,900		24,900
30.	<u>TRAINING</u>												
31	Individual Fellowships	30	45,000	6	9,000	6	9,000	6	9,000	6	9,000	6	9,000
40.	<u>EQUIPMENT</u>												
41	Equipment (Print-computer)		190,000		20,000		110,000		60,000				
42-01	Books & Periodicals		50,000		10,000		10,000		10,000		10,000		10,000
49	Component Total		240,000		30,000		120,000		70,000		10,000		10,000
59.	MISCELLANEOUS		30,000		6,000		6,000		6,000		6,000		6,000
99.	GRAND TOTAL		571,800		126,600		216,600		128,800		49,900		49,900

Government Contribution

(in Naira)

Country: NIGERIA  
 Project No: DP/NIR/75/069 Phase II  
 Project Title: Federal Institute of Industrial  
 Research, Industrial Information Centre

		TOTAL		1982		1983		1984		1985		1986	
		m/m	₦	m/m	₦	m/m	₦	m/m	₦	m/m	₦	m/m	₦
10.	<u>PROJECT PERSONNEL</u>												
11	Experts												
11-01	Principal Res Officer	60	37,020	12	7,404	12	7,404	12	7,404	12	7,404	12	7,404
11-02	Sr Research Officer	300	144,000	60	28,800	60	28,800	60	28,800	60	28,800	60	28,800
11-03	Research Officer (I)	120	46,680	24	9,336	24	9,336	24	9,336	24	9,336	24	9,336
11-04	Supporting Staff	240	56,640	48	11,328	48	11,328	48	11,328	48	11,328	48	11,328
19	Component Total	720	284,340	144	56,868	144	56,868	144	56,868	144	56,868	144	56,868
40.	<u>EQUIPMENT</u>												
41	Equipment		100,000		20,000		20,000		20,000		20,000		20,000
42-01	Books & Periodicals		100,000		20,000		20,000		20,000		20,000		20,000
49	Component Total		200,000		40,000		40,000		40,000		40,000		40,000
59.	MISCELLANEOUS		15,660		3,000		3,000		3,000		3,000		3,660
99.	GRAND TOTAL		500,000		99,868		99,868		99,868		99,868		100,528

DEVELOPMENT OF INDUSTRIAL INFORMATION FACILITIES \*  
BY INTERNATIONAL ORGANISATIONS

UNIDO is launching an extensive programme for promoting and developing industrial information facilities in African Countries, both at the national level and the regional level. As a follow up of the resolution adopted at the Third General Conference of UNIDO (New Delhi, 1980) recommending that the 1980's be declared as the Industrial Development Decade for Africa, a Joint OAU/UNIDO Symposium on Industrial Technology for Africa was organised in Khartoum, Sudan, from 5-11 November 1980. The recommendations at this symposium call upon UNIDO, in co-operation with UNDP, to continue to assist African Countries in industrial technology development and transfer, including:

- i) preparing technology policies, plans and programmes and establishing the appropriate institutional structures for this purpose;
- ii) strengthening and/or establishing industrial technological information systems and linking them with regional and international systems;
- iii) collecting and disseminating information on technologies in the informal sector;
- iv) developing more pilot projects of adapted technologies and their widespread use;
- v) developing programmes for training technology manpower, including non-formal training.

The Symposium calls for an intensification of intra-African technological co-operation activities for strengthening institutional arrangements at the regional level. OAU is urged to intensify its activities in this regard. To this end, the OAU and UNIDO with the assistance and co-operation of the UNDP, ECA, ARCT and other relevant international and African regional organisations are called upon to:

- i) carry out a cross-country analysis of African technological experience in technology policy and planning as a prerequisite for meaningful action in this area, and dissemination of information and experience;
- ii) organise a symposium on industrial and technological information exchange systems in Africa;
- iii) prepare a directory of African industrial technology experts and institutions;
- iv) carry out an appraisal of existing regional industrial technology centres and suggest actions for a full utilization of their potential;

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\* Note sent to Director of Research, FIRO, on 25 Apr 1981 for participating in the programmes of international organizations

- v) organise more regional training programmes in industrial technology skills on a regular basis in African centres of excellence;
- vi) promote the establishment of mechanisms for joint acquisition of technology by groups of African States;
- vii) analyse African experience with external assistance in technological fields and propose the implementation of the recommendations of the Symposium, and to bring the results to the notice of African Governments for review and initiation of further meaningful actions;
- viii) assist in the preparation of African participation in the UNIDO system of industrial consultation.

On the basis of the recommendation of the OAU/UNIDO Symposium on Industrial Technology for Africa, UNIDO has drawn up a project on INDUSTRIAL AND TECHNOLOGICAL INFORMATION POLICIES, STRUCTURES AND OPERATIONS IN THE COUNTRIES OF AFRICA. A provision of \$ 1,610,000 has been made for two years (1981/82/83). The overall objective of this project is to carry out a fruitful programme of sensitisation, training and operation in the area of industrial and technological information. It is proposed to hold four Regional Seminars and four National Workshops each year in the field of Industrial Information.

Taking into account the activities developed so far in the field of industrial information at FIIRO, if some initiative is taken now to get Government support for expanding these activities, we can derive considerable benefit from the UNIDO regional programme for Africa on industrial information. We can offer to UNIDO to host a Regional Seminar on Industrial Information and a National Workshop on Industrial Information.



