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Workshop on Information System on
Technologies and Projects with
Special Emphasis on Small and
Medium Enterprises

Bled, Yugoslavia, 18-20 April 1990

REPORT*

* This document has not been edited.

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International System on Technologies and Projects (ISTP)

I. Introduction

1. The Workshop on Information System on Technologies and Projects was held in Bled, Yugoslavia, from 18-20 april, 1990. The Meeting was organized by the Centre for International Cooperation and Development (CICD) in co-operation with Group of 77 - Perez Guerrero Trust Fund and UNIDO. It was attended by 25 participants from 7 developing countries, regional institutions and representatives of international organizations (see Annex I.).

2. The purpose of the Workshop was:

- to examine the study, prepared by CICD on Information System on Technologies and Projects (ISTP), and adopt recommendations aiming at ensuring a permanent flow of information on technologies and projects,
- to agree on development of the international network among the national centres for ISTP in different countries,
- to prepare the institutional framework for practical approach to the implementation of the pilot stage of the ISTP.

II. Background

3. Lack of informatin is one of the most serious obstacles to the selection, acquisition and application of appropriate technology options in developing countries. Some of the newly industrialized countries among the developing countries have in their process of industrialization achieved the level of techlological capability at which they are able not only to adapt imported technologies to their own local conditions and develop appropriate technologies but also transfer them (or projects embodying them) to other developing countries. Yet exchange of knowledge on available appropriate technologies/projects is not adequately developed.

4. There is a number of difficulties encountered in collecting and processing of information at the national level and/or in dissemination of collected information both nationally and internationally. There is a need for permanent flow of information, based on systematic, standardized collection, processing and dissemination of information on technologies and projects.

5. The Centre for International Cooperation and Development (previously known as Research Centre for Cooperation with Developing Countries - RCCDC) designed a computer-based system for gathering, processing, filling and transmission of information on technologies available in Yugoslavia for transfer to other developing countries. While the initial orientation of CICD was to promote technical cooperation among developing countries by providing more information on possibilities for such cooperation, the system also enables the creation of a national inventory of available technologies.

6. The Centre for International Cooperation and Development and UNIDO have jointly organized an Expert Group Meeting on Available Technologies in the Field of Small and Medium Scale Industries in Ljubljana, Yugoslavia, from 12-14 April, 1988. The participants from nine countries discussed the existing international information systems and the system developed by CICD. It was strongly felt that there is a need for a more business-oriented, user-friendly international information system on suitable technologies/projects available for transfer among developing countries. Particular attention should be given to such information appropriate for small and medium sized enterprises in developing countries.

7. CICD has already undertaken a number of activities in further development of ISTP international network as well as of national centres in a number of developing countries. Under UNIDO support, consultancy to Technology Transfer Centre, Ghana, on the establishment of a national centre has already been carried out, while others are in preparatory stages. With the assistance of Perez Guerrero Fund, CICD has been engaged in the preparation of a feasibility study which concentrates on detailed elaboration of an international network, with attention to the necessary institutional arrangements.

8. Within the project, coordinated by the Chairman of the Group of 77 and financially supported through Perez Guerrero Fund, the workshop's main objective was the examination of the study prepared by CICD and setting-up the timetable for the ISTP pilot stage.

III. Opening of the Meeting

9. The Workshop was opened by Ms. Maja Kosak, CICD Director, who welcomed the participating experts, observers and guests on behalf of CICD. The representative of the Federal Secretariat of Foreign Affairs, Mr. V. Sreckovic greeted the participants and stressed the importance of such meetings for the South-South co-operation. On behalf of Committee for Science and Technology of Republic of Slovenia, Mr. B. Pretnar welcomed the participants to the Workshop and pointed out the importance of technology transfer among developing countries in the light of current developments in the field of technology. Both speakers wished the participants successful and constructive work.

10. The participants acknowledged the message sent to the Workshop by the Chairman of the Group of 77, who wished it a complete success. Also, they were informed of the keen interest of the UNDP/TCDC Special Unit in ISTP project and its willingness to collaborate with the proposed network, as conveyed to the participants by the Head of the UNDP/TCDC Special Unit, Mr. Chadha.

11. The participants adopted the proposed Programme of the Workshop and elected Chairmen of each session (Annex 2). It was also agreed that the Report of the Meeting is to be prepared by CICD.

IV. Presentation of papers

12. During the Meeting, the draft prefeasibility study on Information System on Technologies and Projects was presented by CICD. The representatives of regional institutions (Asian and Pacific Center for Technology Transfer, African Regional Center for Technology and SELA) shared with the experts their experience in gathering information on technologies and presented their views on ISTP. Experts from individual countries presented their papers as well. (Annex 3).

13. The representative of UNIDO referred in his presentation to UNIDO's activities related to the promotion of economic and technical co-operation among developing countries. These activities enjoy a high priority in UNIDO's programme. Through its action-oriented programmes, UNIDO has been assisting developing countries in identifying and making greater use of the technologies and know-how originated in other developing countries. UNIDO's co-operation with CICD goes back to 1988, when UNIDO and CICD held the first workshop to discuss ISTP's potential to become an international system. Within its overall programme on support to South-South co-operation UNIDO is willing to contribute to the implementation of the ISTP with its orientation on TCDC and SMEs.

14. The CICD proposal on the development of ISTP into an international network was extensively discussed. CICD also presented its experience in organizing the ISTP in Yugoslavia. A detailed presentation was given of the methodology used in the process of gathering and processing information as well as of the software, supporting this methodology.

15. The basic principle of ISTP, i.e. its orientation towards identification, selection and processing of information suitable to the environment found in developing countries, in particular for small and medium-sized enterprises, was supported by the experts.

V. Conclusions and Recommendations

16. As a result of thorough discussion of all contributors, the following Conclusions and Recommendations were reached:

17. The participants felt that there is a need to further strengthen, develop and diversify the co-operation among developing countries in the field of exchange of information on technologies and projects available for transfer. The meeting also noted a number of difficulties encountered in collecting and processing of information on one hand and of successful dissemination of collected information to the business enterprises on the other hand. The need for permanent flow of information on technologies and projects, gathered by national centres and based on commercial interest of all parties was thus stressed.

18. Experts pointed out that small and medium scale enterprises play an important role in the national economies of developing countries, but need special assistance in identification of proper technology information. Successful transfer of technology to small and medium enterprises requires a national center to play also an important consultancy role, both in the process of identifying the information on technologies available as well as in the process of selecting the most appropriate one.

19. The Meeting recognized that the establishment of a successful information system on technologies and projects is a very complex task with a number of issues to be addressed in its preparation. However, the experts felt that step-by-step approach can be the most viable way of moving from the initial idea to the implementation of the system. In this regard, it was felt that more complex and newly raised questions should be addressed as the development of ISTP progresses.

20. ISTP should benefit from the existing UN specialized information systems, especially those within UNIDO and UNDP. There is a need for coordination between ISTP and the mentioned information systems in order to ensure the most appropriate and efficient South-South flow of information on technologies and projects and avoid eventual duplication.

21. In the light of the conclusions reached at the Meeting, the experts agreed to recommend that the pilot stage as envisaged in the prefeasibility study, prepared by CICD for the implementation of the ISTP at the international level, is to be launched. To this purpose, a project proposal on Information System on Technologies and Projects of selected developing countries (pilot stage) was put forward by the experts. (Annex IV).

Annex I

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Annex II

WORKSHOP ON INFORMATION SYSTEM ON
TECHNOLOGIES AND PROJECTS
Bled, Yugoslavia, 18-20 April 1990

PROGRAM

Tuesday, 17 April

Arrival of guests to Hotel TOPLICE, Bled.
From 17.00 on: Registration of participants

Wednesday, 18 April

8.00 - 9.00: Registration
9.00: Opening of the meeting:
- adpption of agenda
- election of the chairman and rapporteur

9.45 - 10.00: Coffee, tea break
10.00 - 12.30: Working session: Chairman: Sogut Atilla, Turkey
- ISTP presentation by CICD
- Presentation by UNIDO
- Presentation by Asian and Pacific Centre for
Transfer of Technology
- Presentation by African Regional Center for Technology
- Presentation by Sistema Economica Latino-americana

12.30 - 15.30: Lunch
15.30 - 18.30: Working session: Chairman: S. K. Kinra, India

Country Presentation by experts from :
Zimbabwe, India, Argentina, Turkey and Indonesia

Comments by observers:
IFC, WASME, Indian Industrial Bank, INSTRAW,
UN Center for Science and Technology

Thursday, April 19

9.00 - 10.30: Working session: Chairman: Mike Humphrey, Zimbabwe
Discussion of draft feasibility study (i)
10.30 - 11.00: Coffee break
11.00 - 12.30: Working session:
Discussion of draft feasibility study (ii)
12.30 - 15.30: Lunch
- 15.30: Sightseeing tour of Bled

Friday, 20 April

09.30 - 10.30: Adoption of Workshop's report
- 11.00: Closing of the Workshop

Annex III

EXPERT GROUP MEETING ON
INFORMATION SYSTEM ON TECHNOLOGIES AND PROJECTS
Bled, Yugoslavia, 18-20 April 1990

LIST OF THE PRESENTED DOCUMENTS

1. Technology Information: An Integrated Approach in Asia and the Pacific,
S. M. Juanid Zaidi
2. SME Related Services Through Management Information System,
Mehmet Atilla Sogut
3. Small Industry Development Organization,
General Directorate, SIDO
4. General Information List According to the Firm Namr, SIDO
5. Presentation of India S. K. Kinra
6. Industrial Information Centre, Ministry of Industry - Indonesia
7. INTIB Programme - An Overview, Prepared by UNIDO
8. Presentation by World Assembly of Small & Medium Enterprises (WASME),
G. S. Ahuja
9. Draft Prefeasibility Study, Information System on Technologies and
Projects, Maja Kosak
10. ARCT's Activities in the Field of Industrial and Technological
Information, prepared by African Regional Centre for Technology

Annex IV

WORKSHOP ON INFORMATION SYSTEM ON
TECHNOLOGIES AND PROJECTS
Bled, Yugoslavia, 18-20 April 1990

PROJECT PROPOSAL FOR PILOT STAGE OF ISTP

1. Title

Information System on Technologies and Projects of selected developing countries - Pilot stage

2. Development Objective

To develop a mechanism of information exchange on technologies and projects available for transfer in the participating developing countries.

3. Immediate Objectives

- a) To identify appropriate institutions in developing countries which would serve as national centres for identification, processing and exchange of information;
- b) To stimulate collection of indigenously developed technologies and projects available for transfer in each of the participating countries and thus creating national inventories of such technologies and projects and making it available to SMEs;
- c) To provide necessary training to the staff at the national centres;
- d) To create linkages among the identified national centres so as to catalyze the process of technology transfer among the developing countries.

4. Background and justification

Lack of information is one of the most serious obstacles to selection, acquisition and application of appropriate technology options in developing countries. Some of the newly industrialized countries in their process of industrialization have achieved the level of technological capability at which they are able not only to adapt imported technologies to their own local conditions and develop appropriate technologies but also transfer them (or projects embodying them) to other developing countries. Yet exchange of knowledge on available appropriate technologies/projects is not adequately developed.

Realizing the importance of such information, CIGD established a system for gathering, processing, analysing and distributing of information on technologies and projects, available for transfer to other developing countries.

Building up ISTP meant to CIGD a new, original way to promote enterprise to enterprise South-South co-operation based on selected commercially available technologies and projects in Yugoslavia and linking them with potential needs and technological requirements in other developing countries. Experience of the CIGD in working of this system had so far been very satisfactory.

CICD and UNIDO organized an expert group meeting on the exchange of information between developing countries on available technologies in the field of small- and medium-sized industries, which was held at Ljubljana from 12 to 14 April, 1988. The meeting aimed at identifying appropriate national system in developing countries to ensure a permanent flow of information on locally available technologies, particularly within small- and medium- sized industries.

After intensive discussion, the experts, who came from Algeria, Argentina, China, Egypt, India, Pakistan, Romania, Turkey and Yugoslavia, supported the proposal of CICD to establish an international information system on technologies and projects (ISTP). This network of national centres would aim at identifying, selecting and processing information existing in developing countries available for transfer to other developing countries.

It was recognized that a considerable reservoir of technologies existed in developing countries regardless of their different levels of industrial development, and that considerable progress had been made in collecting information in different national institutions. What was needed, however, was a more business-oriented and user-friendly international information system, which would enable information on those technologies to be exchanged.

Then CICD got the mandate of the Group of 77 to carry out the prefeasibility study on implementing ISTP in other selected developing countries. Therefore, CICD, in collaboration with other regional and international institutions and with the financial assistance from Perez Guerrero Fund, UNIDO, the Solidarity Fund for Non-aligned and other developing countries (Yugoslavia), organized a workshop at Bled, from 18 to 20 April 1990. The workshop unanimously agreed to set up the network and prepared the project document for obtaining fundings from the possible donors.

5. Proposed network

a) Duration

Two years from the day of securing financial support - tentatively to start by January, 1991.

b) Participants and headquarter

In the pilot stage, the network will compsize of CICD (as coordinator), the regional centres from Asia (APCTT), Africa (ARCT) and Latin America (to be decided later on) and "national centres" from the developing countries. The membership will be extended later on. CICD will be the headquarters of the network.

c) Programme of activities with expected dates of completion

1. Identification of National Centres March 91

CICD in collaboration with the regional centres will identify national centres in the countries. The participants to the meeting will assist in identification of the national centres.
2. Preparation of Training Course Material April 91

CICD in consultation with the regional centres and with the help of independent consultants and international organizations (like UNIDO and TIPS) will prepare course material for the training of staff.
3. Meeting of the Heads of National Centres (2 days) May 91

CICD will call a meeting of the heads of the identified national centres to chalk out a programme of action and to get a firm commitment. Representative of regional and international organization will also be invited (8 heads + 2 Representatives of Regional Institutions + 4 from International organizations would be expected to participate.)
4. Training of Information Collectors June 91

At the regional centres, the information collectors (2 from each national centre) will be provided comprehensive information on training based on the material prepared earlier.
5. First stage of collection of information October 91

On the basis of training provided at the regional centres, information will be collected at the national centres.
6. Follow up training at the National Centres December 91

At the second stage, training will be provided at the national centres. The information collectors who get the training at the regional centres, representative of the CICD and of corresponding regional centre will serve as resource persons for the national level training.

7. Second stage of collection of information

June 92

Information collections at the national level will be intensified and a survey will be carried out on the status of technologies and projects collected so far.

8. Workshop to share the experiences of information collectors (2-day)

September 92

An interactive workshop will be organized at a common place where the information collectors will share experiences with their counterparts. In this workshop a working paper will be prepared for the meeting of the heads of the centres.

9. Final meeting of the heads of centres

October 92

The 2-day meeting will analyse in detail the implementation status of the project and prepare a future course of action. Furthermore, the meeting will also review final report.

10. Final Report of the project

November 92

The CICD, regional centres and the national centres will jointly prepare the final report and would be circulated by the CICD.

11. Follow up activities

December 92

CICD on the recommendation of the meeting of the heads of the national centres and on the basis of findings of the final report will prepare a follow up programme.

d) Budget

Most facilities to carry out the above mentioned activities will be provided by CICD, the regional centres and the national centres. CICD will be the headquarters of the network. Under the pilot stage of the project, the national centres would get training course material: two representatives from each of the national centres would be given 2-week training at the regional centres, seed money would be provided for information collection, and follow-up training will be conducted at the national centres. For the implementation of the pilot stage of the project, an estimated contribution of US\$250,000 will be requested from the donors.