Originally Processed With FOIA(s):
2005-0336-F

FOIA Number:
2005-0336-F

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the George Bush Presidential Library Staff.

Record Group/Collection: George H.W. Bush Presidential Records
Collection/Office of Origin: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files

OA/ID Number: 62063
Folder ID Number: 62063-003

Folder Title:
International: General [6 of 10] [1992]

Stack:	Row:	Section:	Shelf:	Position:
	0	0	0	0

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9202412
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS
****

FROM: SCOWCORFT, BRENT: WHITE HOUSE

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/15/92

SUBJECT: LIBYAN SEARCH FOR INTERMEDIARIES

****
DIRECTORATE ASSIGNED: STAFF ASSIGNED:

ACTION REQUIRED: STAFF ACTION:

****
SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

****

COPIES TO: INTERNATIONAL/POLICY
D. Allan Bromley

****

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 08/19/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL

CENTRAL FILES:

Withdrawal/Redaction Sheet
(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01. Memorandum	To: Distribution List From: Brent Scowcroft Re: libya (2 pp.)	8/15/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files
WHORM Cat.:
File Location: International: General [6 of 10] [1992]

Date Closed:	5/4/2010	**OA/ID Number:**	62063-003
FOIA/SYS Case #:	2005-0336-F	**Appeal Case #:**	
Re-review Case #:		**Appeal Disposition:**	
P-2/P-5 Review Case #:		**Disposition Date:**	
AR Case #:		**MR Case #:**	
AR Disposition:		**MR Disposition:**	
AR Disposition Date:		**MR Disposition Date:**	

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P-3 Release would violate a Federal statute [(a)(3) of the PRA]
P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
(b)(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
(b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
(b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
(b)(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
(b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
(b)(9) Release would disclose geological or geophysical information

SEP 24 1992

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202461
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS C

****

FROM: MORI, Wataru: COUNCIL FOR SCIENCE AND TECHNOLOGY, JAPAN

TO: DR. D.A. BROMLEY

DATE OF CORRESPONDENCE: 08/14/92

SUBJECT: HE IS WRITING REGARDING THE SSC PROJECT AND ASKS DR. BROMLEY FOR ANY INFORMATION RELATING TO THE FUNDING OF THE SUPERCOLLIDER.

****

DIRECTORATE ASSIGNED: PHYSICAL SCIENCES

STAFF ASSIGNED: JEFF SCHWEITZER

ACTION REQUIRED: FOR DAB'S SIGNATURE

STAFF ACTION: FOR DAB'S SIGNATURE

****

SENDER'S DUE DATE:

OSTP DUE DATE: 09/30/92 STAFF DUE DATE

DATE COMPLETED: DATE COMPLETED/DEPT: 09/08/92 9/30/92

****

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

****

WHITE HOUSE TRACKING #: CONTACT PERSON:

PHONE: EXT:

REMARKS: Reassigned to Physical Sciences.

Dr. Eds drafted letter, but DAB spoke w/ MORI on phone on 9/30. Tossed letter.

OSTP RECEIVED: 08/26/92 DEPT RECEIVED: 08/27/92

FILE: P-INTERNATIONAL

CENTRAL FILES:

Withdrawal/Redaction Sheet
(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
02. Letter	To: Allan Bromley From: Wataru Mori Re: Superconducting Supercollider (2 pp.)	8/14/92	(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files
WHORM Cat.:
File Location: International: General [6 of 10] [1992]

Date Closed:	5/4/2010	**OA/ID Number:**	62063-003
FOIA/SYS Case #:	2005-0336-F	**Appeal Case #:**	
Re-review Case #:		**Appeal Disposition:**	
P-2/P-5 Review Case #:		**Disposition Date:**	
AR Case #:		**MR Case #:**	
AR Disposition:		**MR Disposition:**	
AR Disposition Date:		**MR Disposition Date:**	

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P-3 Release would violate a Federal statute [(a)(3) of the PRA]
P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
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(b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
(b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
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(b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
(b)(9) Release would disclose geological or geophysical information

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9202430
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS
****

FROM: SCHAMBRA, PHILIP: DEPARTMENT OF HEALTH & HUMAN SERVICES

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/13/92

SUBJECT: LETTER REGARDING AN INTERAGENCY EFFORT TO CHARACTERIZE THE U.S. GOVERNMENT S&T INTERACTIN WITH RUSSIA.

****
DIRECTORATE ASSIGNED: STAFF ASSIGNED:

ACTION REQUIRED: STAFF ACTION:

****
SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

****

COPIES TO: D. Allan Bromley
INTERNATIONAL/POLICY
FCCSET

****

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 08/18/92 DEPT RECEIVED:
FILE: P-DAB-INTERNATIONAL

CENTRAL FILES:

2430

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

August 13, 1992

RECEIVED
92 AUG 18 A 8:13
OSTP
MAIL ROOM

Dr. D. Allan Bromley
The Assistant to the President
for Science and Technology
The White House
Washington, D.C. 20500

Dear Dr. Bromley:

I have just today received your letter of August 4 requesting that, in my capacity as Vice Chairman of the Committee on International Science, Engineering, and Technology, I undertake an interagency effort to characterize the U.S. Government S&T interaction with Russia. You have requested that preliminary results from this effort be available by September 4.

This is to let you know that I would pleased to undertake this effort and hope that in the time available between now and September 4, we will be able to develop useful preliminary results for your consideration.

With best regards,

Sincerely,

Phil

Philip E. Schambra, Ph.D.
Director
Fogarty International Center

cc:
Dr. Ratchford

CB

Info systems fyi to DAB

Tom

FCCSET

T. U.

D

8/13

SEP 24 1992

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202456
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS C

****

FROM: RAUSELL-COLOM, J.A.: NATO

TO: DR. D.A. BROMLEY

DATE OF CORRESPONDENCE: 08/12/92

SUBJECT: HE IS WRITING TO ASK FOR DR. BROMLEY'S EVALUATION OF AN APPLICATION FOR A NATO COLLABORATIVE RESEARCH GRANT.

****

DIRECTORATE ASSIGNED: PHYSICAL SCIENCES

STAFF ASSIGNED: JEFF SCHWEITZER

ACTION REQUIRED: REVIEW FOR DAB

STAFF ACTION: REVIEW FOR DAB

****

SENDER'S DUE DATE: 09/11/92

OSTP DUE DATE: 09/30/92

STAFF DUE DATE

DATE COMPLETED:

DATE COMPLETED/DEPT: 09/08/92

9/28/92

****

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

****

WHITE HOUSE TRACKING #:

CONTACT PERSON:

PHONE: EXT:

REMARKS: To be reassigned to Physical Sciences.

DR. EKB drafted letter for DAB.

OSTP RECEIVED: 08/26/92 DEPT RECEIVED: 08/27/92

FILE: P-INTERNATIONAL

CENTRAL FILES:

THE WHITE HOUSE

WASHINGTON

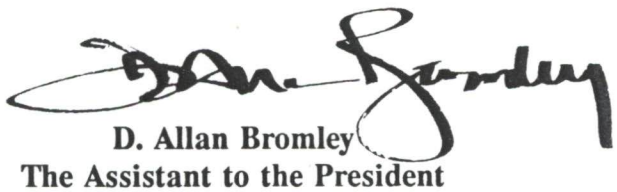
September 28, 1992

Dear Dr. Rausell-Colom:

I know Dr. Scheid to be a scientist of great ability, creativity and integrity. Any research proposal of his is assuredly first-rate.

Based on my knowledge of Dr. Scheid's accomplishments of the last two decades I recommend that the grant in question be awarded. Regrettably, my duties here in the White House prevent my devoting the time required to conduct a detailed analysis of this very interesting proposal.

Sincerely yours,



D. Allan Bromley
The Assistant to the President
for
Science and Technology

Dr. J.A. Rausell-Colom
NATO Collaborative Research Grants
NATO Scientific Affairs Division
B-1110 Brussels
BELGIUM

2456

ORGANISATION DU TRAITE DE L'ATLANTIQUE NORD

NORTH ATLANTIC TREATY ORGANIZATION

RECEIVED
92 AUG 26 A10 : 28
OSTP
MAIL ROOM

DIVISION DES AFFAIRES SCIENTIFIQUES ET DE L'ENVIRONNEMENT — SCIENTIFIC AND ENVIRONMENTAL AFFAIRS DIVISION

SA.5-2-05(920929)1550/92/JARC — August 12th, 1992

Dear Sir/Madam,

Request for Referee Comments

I have received the enclosed application for a NATO Collaborative Research Grant, and should very much appreciate your assistance in its evaluation.

NATO Collaborative Research Grants are intended to stimulate and assist cooperation in science by making funds available to projects in which the need for international collaboration is essential, so that your comments on this aspect would be particularly appreciated.

The competition for funds from this Programme is very keen and we rely heavily on the objectivity of the referees' evaluation in selecting projects for funding. I enclose an evaluation sheet for your use. The process is confidential and your comments will not be made known to the applicants explicitly.

If for any reason you are unable to review this application, I should be grateful if you could either pass it on to one of your colleagues or recommend someone whom I could contact. I would very much like to receive your valued comments at your earliest convenience and, if possible, not later than 11th September 1992.

Yours faithfully,

p.o.

Dr. J. A. Rausell-Colom
Director
Collaborative Research Grants (New)

Enclosures: 3

P.S. There is no need to return the application to us. In case the above deadline is too close for your reply, please note that our fax number is (322) 728.42.32. The original form may be mailed at your earliest convenience.

B - 1110 Bruxelles (Belgique) - Tel. : (32-2) 728.41.11 - Fax : (32-2) 728.4232 - Telex : 23-867(NATOHQ)

NATO International Scientific Exchange Programmes

Collaborative Research Grant

Scientific Affairs Division - NATO, B-1110 Brussels, Belgium - Tel. : (02) 728.41.11 - Telex 23-867 (NATO HQ)

INFORMATION FOR REFEREES

NATO COLLABORATIVE RESEARCH GRANTS

The grants encourage collaboration between teams in different member countriesof the Alliance. The Collaborative Research Grants Programme receives unsolicited applications for specific research projects proposed by scientists in non-profit making institutions, mainly universities and government research institutions.

PRINCIPAL INVESTIGATORS

One scientist from each of the participating teams is responsible as a principal investigator for the involvement of his or her team in the project. They normally hold permanent positions in their institutions. The Principal Investigators acts as the Project Coordinator who is responsible to NATO for reporting and accounting. He or she receives the award on behalf of the principal investigators.

FUNDING

The awards are made to cover mainly the international travel and living expenses necessary for the project. Basic costs (salaries, equipment, consumables) should already be covered from other sources. NATO may, if deemed necessary, contribute with a modest sum to allow for flexibility in carrying out the project. An average award of US $ 6,000 is made for a period of one year. After substantial progress has been made, normally documented by publications, a renewal award is possible. A Grant may be renewed twice, second renewals being rare, however. The maximum total duration of a grant is five years.

ELIGIBILITY

Applications from all sciences are considered. Preference is given to fundamental aspects rather than technological development but research with promising applications is also funded. Scientists working in member countries are eligible for support, irrespective of their nationalities.

No support is provided for sabbatical or other extended leave abroad, or for attending conferences, workshops, etc.

Projects which are a direct result or continuation of doctoral research work abroad are given low priority.

continued over leaf

EVALUATION

Applications are judged on scientific merit and on the need for the exchange of scientists. The project proposals are reviewed by an international Advisory Panel of 12 experienced scientists who, together, cover all major disciplines.

The Programme receives approximately 900 applications per year, of which about 600 are for new grants. The scientific quality of the proposals is generally high, but limitations in available funds do, nevertheless, reduce the success rate to approximately 60%.

The selection of projects for support is performed on a competitive basis. Objective and critical referee comments are, therefore, of importance for the Panel in reaching its decision. The referees are indicated by the applicants or chosen by NATO.

Your expertise is therefore gratefully sought to assist the Collaborative Grants Advisory Panel in assessing the scientific merit and potential of the collaborative work proposed. In your assessment please provide the following:

(1) A precise summary of the proposal including its aims, methods and collaborative aspects.

(2) An assessment of the strengths and weaknesses of the proposal, including your opinion of:

(a) Its originality;

(b) the appropriateness of the experimental approach and procedures;

(c) the scientific collaboration and its necessity;

(d) whether it has the potential to advance knowledge in the field.

A referee evaluation sheet is attached for your convenience.

May, 1992

NATO COLLABORATIVE RESEARCH GRANTS

NATO SCIENTIFIC AFFAIRS DIVISION, B-1110 BRUSSELS, BELGIUM

GA CO

REFEREE'S EVALUATION SHEET **APPLICATION N°:** 920929

All information provided is confidential

Assessment :

Name *(Typed)* _____ **Specialisation** _____

Affiliation _____ **Date** _____ **Signature** _____

additional pages may be used if necessary

888-88 AFF/SC

	Outstanding Top 5 %	Excellent Top 15 %	Good Top 30 %	Fair Top 60 %	Poor / Not Recommended
Originality of the Proposed Research					
Appropriateness of the Methodology of the Research Plan					
Principal Investigators' Qualifications (Please indicate by their initials)					
Reciprocity of Contributions					
Need for International Collaboration					
Uniqueness of Facilities (Please Indicate by Initials of Principal Investigators)					
Overall Rating					

Withdrawal/Redaction Sheet
(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
03. Form	Application for NATO Collaborative Research Grant (5 pp.)	4/21/92	(b)(4)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: Bromley, D. Allan, Files
Subseries: International Files
WHORM Cat.:
File Location: International: General [6 of 10] [1992]

Date Closed:	5/4/2010	**OA/ID Number:**	62063-003
FOIA/SYS Case #:	2005-0336-F	**Appeal Case #:**	
Re-review Case #:		**Appeal Disposition:**	
P-2/P-5 Review Case #:		**Disposition Date:**	
AR Case #:		**MR Case #:**	
AR Disposition:		**MR Disposition:**	
AR Disposition Date:		**MR Disposition Date:**	

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PRM. Removed as a personal record misfile.

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(b)(9) Release would disclose geological or geophysical information

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9202386
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS
****

FROM: GULLAUME, HENRI: ANVAR

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/05/92

SUBJECT: LETTER WRITTEN IN FRENCH

****
DIRECTORATE ASSIGNED: STAFF ASSIGNED:

ACTION REQUIRED: STAFF ACTION:

****
SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

****

COPIES TO: INTERNATIONAL/POLICY
D. Allan Bromley

****

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 08/14/92 DEPT RECEIVED:
FILE: P-INTERNATIONAL

CENTRAL FILES:

2386



RECEIVED
92 AUG 14 P2:45

LE DIRECTEUR GÉNÉRAL

Nos réf. : DC.LF.MJ

OSTP
MAIL ROOM

Sir Allan Bromley
The Assistant to the President
for science and technology
Office of science and technology
policy
Old executive office building
Room 360
Washington DC 20506
U S A

Paris, le 5 AOUT 1992

Monsieur,

Je vous remercie vivement d'avoir accepté de participer aux 6èmes Journées de l'Anvar à Nantes, les 10 et 11 décembre prochains.

Votre intervention lors de la table ronde du 11 décembre à 15h00, présidée par Hubert Curien, ministre de la Recherche et de l'Espace, intitulée «Gérer, c'est prévoir...la technologie de demain», conférera au débat le haut niveau de qualité qu'en attendent les congressistes.

Jean-Rémi Gouze, Directeur général adjoint de l'Anvar, responsable de l'organisation de cette table ronde, reprendra contact avec vous afin d'en préparer le déroulement.

Je suis persuadé que votre présence contribuera largement au succès de ces Journées et je vous prie de croire, Monsieur, à l'assurance de mes salutations distinguées.

Henri Guillaume

Siège : 43 rue de Caumartin - 75436 Paris Cédex 09 - Téléphone : 33 (1) 40 17 83 00 - Télex : 282932 Anvar - Télécopieur : 33 (1) 42 66 02 20
Agence Nationale de Valorisation de la Recherche - Etablissement public à caractère industriel et commercial - Siret : 692 005 432 00251

ANVAR

Logged

"Document Control"

TYPE: ACTION
ORIGINATOR: 02
DOCUMENT NUMBER: 9202218
STATUS I
DIRECTORATE STATUS

****

FROM: WAKELAND, H.L.: EAGLE

TO: DR. D.A. BROMLEY

DATE OF CORRESPONDENCE: 08/04/92

SUBJECT: HE IS FORWARDING INFORMATION TO DR. BROMLEY REGARDING A MEETING ON 08/13/92 OF INTEREST GROUPS IN INTERNATIONAL INITIATIVES IN TECHNOLOGICAL AREAS.

****

DIRECTORATE ASSIGNED: INTERNATIONAL/POLICY

STAFF ASSIGNED: JS

ACTION REQUIRED: AS NECESSARY

STAFF ACTION: as necessary

****

SENDER'S DUE DATE:

OSTP DUE DATE: 08/10/92

STAFF DUE DATE 8/10/92

DATE COMPLETED:

DATE COMPLETED/DEPT:

****

COPIES TO: D. Allan Bromley

****

WHITE HOUSE TRACKING #:

CONTACT PERSON:

PHONE:

EXT:

REMARKS:

OSTP RECEIVED: 08/05/92

DEPT RECEIVED:

FILE: P-INTERNATIONAL

CENTRAL FILES:

2218



EAGLE
JAPAN PROGRAM

EAGLE Secretariat • H. L. Wakeland • University of Illinois at Urbana-Champaign • College of Engineering
207 Engineering Hall, 1308 West Green Street, Urbana, IL 61801 Phone: 217-333-2280 FAX: 217-244-4974 email: axefini@uicvmc.bitnet

August 4, 1992

The Honorable D. Allan Bromley
Assistant to the President for
Science and Technology
Old Executive Office Building
17th Street & Pennsylvania Ave. N.W./Rm 358
Washington, D.C. 20500
FAX: (202)395–3261

Dear Dr. Bromley:

I have heard that there will be a meeting of groups that have interest in international initiatives in technological areas on August 13. I desire to briefly acquaint you with the EAGLE initiative which is an affiliation of fifteen leading engineering institutions in the United States. Enclosed is a brief brochure providing some information about this group.

Presently, we have fifty–five U.S. engineering students in intensive language training in Koriyama and Hakodate, Japan. Our program plan is very simple, we request the students to take one or two years of Japanese language in their home institutions to be followed by an intensive language and cultural study period in Japan and hopefully followed by an internship in Japan. We have been successful in developing a student identification process, an extensive student resume system, an extensive communications system and campus representation system among the EAGLE institutions, minimum language training standards, intensive language training in Japan, and have successfully placed approximately one–half of the students who have participated in EAGLE to date in Japanese internships (approximately 35).

EAGLE has received two NSF grants to help initiate the effort and is presently receiving support from AFOSR. The University of Wisconsin–Madison has served as prime investigator for the AFOSR contract, with the University of Illinois serving as sub–contractor for the student initiative of EAGLE, and Rose–Hulman Institute of Technology overseeing the language program. We have reasons to believe that we may be funded for another two years through the AFOSR initiative but are concerned about the future thereafter. EAGLE has also submitted a preliminary proposal to NSF to initiate a Russian program. The EAGLE program also has a program segment with the National Technical University in a distance learning program featuring associated language, culture, and Japanese course work. The distance learning program has approximately 250 learning sites. The Technical Japanese Language offered by the University of Wisconsin–Madison is also available through NTU and presently has 80+ students enrolled in industrial and governmental locations.

EAGLE believes we must initiate these studies at the undergraduate level if we ever hope to have a viable source of technical manpower prepared for international involvement. We have been very active in initiating international engineering programs at the University of Illinois, and I am enclosing a paper, which was published in the Annals of the American Academy of Political & Social Science, providing some of my own personal viewpoints.

We believe EAGLE presently represents one of the most viable programs for developing international technical manpower. Should there be any value in having EAGLE represented in your August 13 meeting, we could make arrangements to attend.

Cordially,

H. L. Wakeland
Associate Dean & Director
EAGLE – Japan Program

HLW:tdt
bromley.ltr

Enclosures



EAGLE MEMBER INSTITUTIONS

Cornell University
Richard H. Lance
Professor in TAM
College of Engineering
322 Thurston
Ithaca, NY 14853–2201
Phone: 607–255–5064, FAX: 607–255–2011
Application Proc.: Lucy Barcelo, 607–255–7410
E–Mail: Lucy_Barcelo@qmrelay.mail.cornell.edu

Georgia Institute of Technology
William Sangster, Asst: Sandy Galli
225 North Avenue
Atlanta, GA 30332
Phone: 404–894–9153, FAX: 404–894–9525
E–Mail: Wsangste@gtri01.gatech.edu

Lehigh University
Kenneth N. Sawyers, Assoc. Dean
College of Engr. & Applied Science
Packard Lab. #19
Bethlehem, PA 18015
Phone: 215–758–4025, FAX: 215–758–5623
E–Mail: Kns0@ns.cc.lehigh.edu

North Carolina State University
Hubert Winston, Sec: Ms. Mazie Dunn
Director of Academic Affairs
College of Engineering
118 Page Hall, Box 7904
Raleigh, NC 27695–7904
Phone: 919–515–2315, FAX: 919–515–2463
E–mail: Winston@ncsuche

Rose–Hulman Institute of Technology
(EAGLE–Japan Language Program)
Jim Eifert, Dean
5500 Wabash Ave. Room 107–E
Terre Haute, IN 47803
Phone: 812–877–8222, FAX: 812–877–9925
E–mail: Eifert@hsls.rose–hulman.edu

John Mock – Interim Director – Language Program
Phone: 812–877–8377
E–mail: Mock@hsls.rose–hulman.edu
Asst: Karen DeGrange, Phone: 812–877–8285

State University of New York – Buffalo (SUNY)
Roger Mayne, Prof.
Dept. of Mech. & Aerospace Engr.
Furnas Hall
Buffalo, NY 14260
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"International Education for Engineers:
A Working Model"

By Howard L. Wakeland

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International Education for Engineers: A Working Model

By HOWARD L. WAKELAND

ABSTRACT: An overview is provided of the need for a portion of science and engineering graduates to have language and cultural backgrounds for international involvement. The nature and educational background of engineering students, which have changed measurably in recent years, are reviewed. The experimental international engineering programs developed in the College of Engineering at the University of Illinois are described. These include active programs in Latin America, Europe, Asia, and the Pacific Rim. A variety of experimental programs has been tried, and experiences from these efforts have provided a basis for establishing future goals and direction.

Howard L. Wakeland serves as the associate dean of the College of Engineering and professor of agricultural engineering at the University of Illinois, Urbana-Champaign. He has served on educational missions to the Pacific Rim, Micronesia, Europe, Africa, Australia, and Latin America. He has been a leader in developing international programs for technical students at his university and in forming an alliance of U.S. universities—the Engineering Alliance for Global Education—to develop international programs for technical students from the entire nation.

WHY should an engineering educator be concerned about establishing international capability in engineering graduates? Primarily because the engineering educator believes that these graduates are an increasingly important manpower resource in maintaining the technical competitiveness of our society and, in turn, our standard of living.

Ten years ago, American employers had virtually no interest in U.S. engineering graduates' having second- and third-language capabilities. We now find them ferreting out such capabilities. Also, for the first time in our history, foreign industry is coming to the United States to hire engineering graduates to work in companies abroad. Global competitiveness has created an increasingly interdependent and international world.

The United States has maintained technical leadership most notably through continued emphasis upon development and research. Our creative competitiveness through research and development is, however, already under challenge from Japanese and European countries. This challenge will increase further with the developing economic alliances such as that of the European Economic Community and others that will follow in Southeast Asia, Micronesia, and Latin America, all of which will provide broader, more stable foundations for their productive and creative capabilities. Senator Paul Simon has said, "You can buy in any language, but you can't sell in any language." The challenge that the United States faces today reaches far beyond sales, however. Increased worldwide competitiveness has challenged and will continue to challenge our productive, creative, and marketing capabilities.

Today's engineering graduate most likely will have some foreign assignment or will be involved with foreign counterparts within the first three years of employment. Further, the number of industrial executives coming from technical backgrounds has increased in recent years, and industry forecasts predict that the percentage will continue to grow. Technical manpower will be sought not only for productive and creative endeavors but more and more for leadership roles as well. We must prepare our engineering students to meet these challenges. This means providing undergraduates opportunities to gain much-valued international experiences and training.

It will be vital for graduates, if placed in these roles, to have more than a technical background. Without knowing the cultures of world markets—including their history, language, and values—they may easily misdirect their efforts. Clearly those best able to improve U.S. competitiveness are those skilled both technically and culturally. Typically, our college graduates are either one or the other. Can we produce graduates with both qualities? Perhaps not in large quantities or with complete backgrounds in each area, but we can produce hybrids—a combination of the two—though this requires more time and effort on the part of the student and the educator.

Engineering schools can find inventive ways to add nontechnical

courses to a crowded curriculum and to fund programs that involve overseas experiences. If international training is to have a larger role in engineering education, it must start at the earliest possible level, reach more students, and deal with a broader selection of languages and cultures.

Teachers of language and culture are needed by the technical community now more than ever before. The reverse is also true. The technical community can bring to the linguists' and culturalists' classrooms the very brightest of our students, who will be future leaders in our societies—local, national, and global.

THE ENGINEERING STUDENT

Currently, engineering schools in the United States are attracting more than their share of freshmen enrollees in both number and quality. It is a time when many of our brighter youths see the future in technology and pursue engineering, physics, chemistry, or other math- or science-based fields. The vast majority of these students, however, come from what has typically been known as the college preparatory spectrum in our high schools. Not only do they have strong math and science backgrounds, but the vast majority also have had strong language preparatory course work. At the University of Illinois at Urbana-Champaign (UIUC), for example, about one-third of the entering freshmen in the College of Engineering have had four or more years of foreign language in high school, and 90 percent or more have had two or more years.

Engineering schools are also receiving more than their share of first-generation immigrants, particularly from Asian and Hispanic cultures. These students are both bright and accomplished, and they have strong language capabilities in their native or near-native tongues.

Engineering colleges have been pleased to enroll these students and have had a high regard for their high school or native language background. Nevertheless, we typically have not encouraged the students to continue language studies in engineering schools. Engineering students represent a great reservoir of language training that has essentially been truncated as they enter college.

Though the freshmen entering engineering at UIUC have a strong language base, the languages of preparation are heavily biased toward the Western European languages—German, studied by 17 percent of the freshmen; French, 24 percent; Latin, 7 percent; and Spanish, 40 percent—with little exposure to other languages. Fifteen years ago we had more than 10 percent of our freshmen presenting Russian as a high school language, but that has now dwindled to approximately one-tenth of 1 percent. We should encourage students to continue in the Western European languages, but we should also make a major effort to move some of them into other languages—Chinese, Russian, Japanese, and Hindi, for example.

Engineering students in most other leading U.S. institutions will have nearly the same academic profile and interests as those at UIUC.

Thus UIUC is representative of trends and developments that are likely to be found in many leading U.S. engineering institutions.

PROGRAM DEVELOPMENT

A number of innovative initiatives have been made in the College of Engineering at UIUC to develop international capabilities in some of our students. To the extent possible, use has been made of regularly offered language and cultural courses and exchange programs serving primarily liberal arts students. These offerings tend to emphasize European studies and Western European languages with far fewer opportunities available for experiences in the developing world. Though other initiatives described herein have been successful, the major portion of our internationally oriented course work and exchanges are still gained through the regularly offered liberal arts programs.

Three developments within the College have had a major impact on our international programs: the development of an international minor in engineering, a special fund to support undergraduate international experiences—the Elmendorf Travel Award—and the greater use of work-experience programs.

International minor

The UIUC College of Engineering has developed an international minor in which courses in the language, history, economics, and politics of a non-English-speaking country or region are combined with regular engineering studies. The program allows students to obtain an international minor in Asian studies, European studies, Chinese studies, and so on as a part of their mechanical, electrical, or other engineering degree. Engineering accreditation policies require college engineering programs to have at least one-half year of studies in the social sciences and humanities, and the policies thereby serve as a base for the development of an international minor.

The international minor at UIUC requires that a student complete at least the equivalent of two years at college-level foreign language study in the chosen country or region and at least nine semester hours—three in advanced course work—of culture and political science and/or economics course work related to his or her chosen minor field. Additionally, the student must spend at least eight weeks working or studying in the chosen region or country. In recognition of the completion of these requirements, the international minor, with identification of the geographical region, is recorded on the student's transcript, for use in gaining employment or in the continuation of his or her education.

Elmendorf Travel Award

The College of Engineering received a small donation from an alumnus, Armin Elmendorf, to start a student travel fund for international experiences. Other sources now provide these funds. A travel grant is awarded to any engineering

student who undertakes overseas educational or work experience. Grants vary from $250 for students studying in the United Kingdom to $1000 for those going to Pacific Rim countries. Last year the College awarded 85 such travel grants to its students. These grants help students offset the anticipated loss of income from summer jobs, encouraging students to make the financial sacrifice necessary for overseas experiences. UIUC students usually receive some academic credit for a portion of their overseas experiences—other than work experience—and this increases their willingness. The results of the availability of such funding have been very positive; despite the costs, UIUC now has more potential participants than places to send them.

Work experience

Since 1970 UIUC has worked closely with the International Association for the Exchange of Students for Technical Experience (IAESTE), one of the programs of the Association for International Practical Training. Through our association with IAESTE, UIUC has placed more than 350 students in practical training positions throughout the world.

Typically, IAESTE places technical students in internship-type employment positions overseas. These are most often summer jobs, lasting 8-12 weeks, but positions are available for up to 12 months of experience. During this period the students receive, from their employers, maintenance wages and assistance in locating housing.

Technical students achieve great improvement in language and cultural skills and a better technical understanding through these experiences abroad. Recognition of this has caused us to develop programs that combine academic and work experience.

These three developments—the international minor, the Elmendorf Travel Award, and work experience—have served as guides in the development of our programs. A fourth concern, financial support, is a continuing one, and we are now seeking innovative ways to increase support.

ENGINEERING PROGRAM OFFERINGS

In our commitment to the international preparation of our engineering students, the College has, in the past 10 years, placed over 800 students in practical work or study experiences throughout the world. The program emphasizes undergraduate involvement and focuses upon conversational language ability as a primary goal. Engineering students may now choose from a smorgasbord of programs taking them to Latin America, Europe, Asia, or the Pacific Rim. Currently, 4 percent of UIUC engineering students are involved in international programs, and the immediate goal is to raise the level to 10 percent.

Our experiences have led us to believe that international programs for engineering students should

- emphasize conversational capability in a second or third language;

- offer cultural course work paralleling the language study;
- expose the student to foreign cultures through on-site study or work experience; and
- expose the student to the foreign technical community, also through on-site study or work experience.

With these principles in mind the college has developed the following range of opportunities for its students.

Europe

Study opportunities and work experiences in Europe have been well developed primarily by liberal arts educators. This wide variety of opportunities also serves technical students adequately in many cases. In some instances, though, technical students find they pay a lot, in money and time, to lose a year's worth of schooling. UIUC engineering students participate every year in standard liberal arts programs of this and other institutions that involve them in nearly every European country.

Separate from these liberal arts programs the College has developed exchange study programs of a technical nature with three technical schools in France, two in Germany, and one in Portugal.

Typically, the U.S. engineering student is behind the French student in theoretical mathematics but ahead in application-related subjects. Also, few of our students are really proficient in the French language. We have found that we need to prepare students better for the leading French technical institutions. Specifically, our students need stronger theoretical mathematics backgrounds and greater proficiency in French.

The transition to German schools is more moderate, and our students make the transition more easily. In a majority of cases, the students will complete an intensive German course such as those offered by the Goethe Institute prior to the academic year abroad. Through a variety of programs, more than 50 UIUC engineering students are involved in Europe each year.

China

In 1986, the University initiated targeted area programs in Asia and Latin America. The term "targeted area" was descriptive of our efforts to develop some type of a program in a given geographical region. Targeted area programs require students to spend one-half of each day in practical work experience at the foreign location. Typically, students work for a consulting engineering firm, a power company, university research labs, or a manufacturing plant. The other half of the day is spent in language instruction. The assignments are arranged by the foreign sister institution. We, in turn, provide an opportunity for our sister institution's faculty to study at UIUC with financial support.

An agreement with universities in the People's Republic of China trades a slot for one Chinese graduate student—with assistantship support—at UIUC for summer opportunities —including room, board, and tuition— for five American undergraduates.

This financially innovative technique allows our students to study and work in countries short of hard currencies. Since 1986, we have had 86 UIUC students spend the summer in China in this type of program. The program was canceled in 1990 for political reasons but will resume in 1991.

UIUC students participating in this program are not required to have any previous language training. They are, however, required to complete a five-semester-hour, intensive Chinese-language course, stressing speaking ability, during the spring semester before the summer trip to China. While in China, they continue with Chinese-language study half days for eight weeks and gain daily exposure to Chinese society through concurrent half-day experience in Chinese industries or research labs. Students then spend two additional weeks traveling in China.

The design of the program seeks to gain a 30-40 percent fluency level in conversational Chinese and enough background for growth in the future should the student be involved in further Chinese interactions. The design also includes introductory cultural course work and on-site experience.

Colombia and Argentina

In 1987, UIUC targeted Colombia as the location for its first Latin American program. Twenty-seven students have since participated in a Spanish-language program at the University of the Andes in Bogotá. The Colombian program is similar to the Chinese program; it places students in engineering work experience half days for eight summer weeks followed by travel in South America. Participation is limited to students with four years of high school Spanish or the equivalent, and they must complete a five-semester-hour, intensive Spanish course prior to the summer in Bogotá. Students completing this program achieve excellent Spanish capability. The Colombian program was also canceled in 1990 for political reasons; we hope it will resume in 1991.

Realizing that Colombia may be politically unstable for several years, we expanded the Latin American program to Argentina for 1990. A program similar to the University of the Andes program was initiated with the University of Belgrano, Buenos Aires, Argentina, for the summer of 1990. Upon reestablishment of political stability in Colombia we intend to continue both programs.

Brazil

In the summer of 1989, a program was initiated in Recife, Brazil, for UIUC students. Limited to students with four years of high school Spanish or the equivalent, it is open to engineering and science students from other U.S. universities. The eight-week program emphasizes work experience in addition to Portuguese-language training at the University of Pernambuco in Recife. UIUC students were also asked to complete a "Portuguese for Spanish Speakers" class on the UIUC campus in the spring semester prior to their summer involvement.

Australia

Exchange agreements have been made with three Australian institutions: the University of Sydney, the University of Melbourne, and the University of New South Wales. Initially, six to eight students will be exchanged each year starting in 1990. It is a one-semester program emphasizing engineering, science, and/or liberal arts courses and is open to engineering and science students from other universities.

Japan

Programs for our students interested in Japan have proven to be especially difficult. Introductory and intermediate Japanese is taught in a four-course sequence of five semester hours each, a program that has proven too demanding for engineering students, who typically must balance language study with the other requirements in a very full curriculum. The engineers performed in Japanese-language courses as well as the other students did but opted out as the course work became increasingly demanding on their time. Of those engineers starting the first-level Japanese course, one-half advance to the second course, one-fourth ultimately to the third course, and one-eighth to the fourth course. Though there is great interest on the part of engineering students, the demands are such that nearly 90 percent drop out after the first, second, or third course.

We have also had difficulty in arranging work experience with Japanese employers.

We are now developing a second sequence of Japanese courses for technical students. It requires an intensive 10-semester-hour summer course after the freshman year to be followed by four 3-semester-hour courses in hopes of retaining more students. Summer internships in Japan will also be a feature of the program. This language sequence will be further augmented with three additional cultural courses. The program will have its first group of students in the spring of 1991. The initial target is to graduate 20 students from this program each year.

UIUC has an excellent program with Konon University, and a few technical students have participated in it. The requirement of a full year in Japan and its attendant expense have discouraged more students from participating. Those that have participated have achieved very good Japanese language and cultural levels.

Russia

A new summer program is being initiated with the Siberian Institute of Terrestrial Magnetism, Ionosphere, and Radio Wave Propagation, part of the USSR Academy of Sciences in Irkutsk, Russia, in 1990. The first group of six students will have mixed Russian-language preparation—from poor to very good. The program model will be similar to those in China and in Colombia, namely, a Russian course at UIUC during the spring semester followed with an 8- to 10-week stay in Russia that includes language instruction half of the time and work experience

the other half, followed with a 2-week travel period.

PROGRAM OBSERVATION

As mentioned earlier, many of the needs for technical students can be met through standard liberal arts study and exchange programs. There are, though, many students who will never be involved in or meet their goals through these programs. Following are some observations that have been made in designing UIUC programs for technical students.

Based on our experience at UIUC, the following concerns should be considered in designing international programs for technical students.

1. Foreign languages are the heart of international understanding. A sense of cultural values, history, traditions, geography, and the like are important, but the ability to communicate is vital. If a choice must be made between cultural and language courses, for the technical student, it should be made in favor of language.

2. Some language capability is better than none. One may occasionally hear, "It's better to speak no Japanese than to speak poor Japanese." This is nonsense. Native speakers of Japanese and other languages may be sensitive on some points concerning their languages, but the poor foreign speaker will always receive greater acceptance and understanding than the nonspeaker.

3. Consistent with this concept and realizing that technical students are loaded with course work, it may be desirable to design a program to achieve 40-50 percent language proficiency. If the student is later placed in a full language environment, he or she will have the basics necessary to achieve full proficiency.

4. Based on experiences at UIUC, I believe that it is more important for technical students to gain conversational ability than written ability. It is more important to have general conversational ability than technical language ability in most cases, the exception being primarily in the research and advanced technical areas. The foundation for written capability must, obviously, be put in place, and it will have potential for improvement if the conversational ability has been developed.

5. Most engineering students are capable of language studies and are more often discouraged by course load than by course difficulty. For example, a five-semester-hour course requires major daily commitment, whereas a three-semester-hour course provides some breathing space. Retention for our students will be greater in three-hour sequences.

6. Typically, freshman and sophomore summers are McDonald's-restaurant-and-grass-mowing employment periods. It is during these periods, when the technical students' summer earning capabilities are low, that we must start intensive beginning language study.

7. Technical students are willing to take summer courses, hours beyond degree requirements, and semester-long internships if they are convinced of the value of the experiences. They are seeking an education for the future.

As the quality of entering freshmen in technical studies has increased dramatically in the past twenty years, the family economic level from which they come has also increased dramatically. Most now come from middle- and upper-income families. Many can now afford summer studies and offshore travel.

Encouraging students can make vast differences. Each year the dean writes all entering freshmen encouraging them to continue studying the foreign language that they started in high school or to start a new language. As a result of the first letter ever sent, the enrollments increased fourfold in German courses, from 20 to 80 students, and from 10 to 75 in Japanese.

THE FUTURE

Currently the College of Engineering envisions that 10 percent of its students—140 graduates per year—will have backgrounds for international involvement, primarily through the international minor. Many more will have language capability. Approximately 20 percent of our graduates have college-level course work that provides them with second-language fluency or near fluency.

The College has implemented a new three-year high school language requirement for admission in order to further strengthen students' language backgrounds. We hope that in the near future 50 percent of our graduates will have second-language fluency. The major portion of these capabilities now lie in the Western European languages, and heavy emphasis must be placed on non-Western European languages, such as Japanese, Chinese, and Hindi.

The overseas work experiences and the combination of work experience and educational experience have been highly successful and will be expanded. Efforts will be made to provide greater financial assistance for students in overseas experiences.

The College has benefited greatly from a strong liberal arts faculty, including language faculty, and an international studies office that has had the interest and willingness to work with technical students and to provide innovative courses and programs. There is also a recognition that the importance of language and cultural studies has never been greater for technical students. If language and cultural faculties seize the opportunities, they will bring to their classroom some of the brightest, most dedicated students preparing for industrial, society, and world leadership roles.

International competitiveness requires cultural awareness, international experience, and language skills. We are attempting to integrate international capabilities into undergraduate engineering curricula. U.S. engineering colleges now attract many of the nation's most capable high school graduates. We provide them with excellent technical training, but technical training alone is not enough. In this age of global technical competitiveness, engineering educators owe it to their students, and to the nation, to help them become not only good engineers but also potential world leaders.

Future of EAGLE

EAGLE intends to provide opportunities for engineering students in a variety of foreign locations but has chosen to focus on Japan until strong programs are in place. EAGLE has received two grants from the National Science Foundation and an associated $3 million grant from governmental sources to develop delivery programs.

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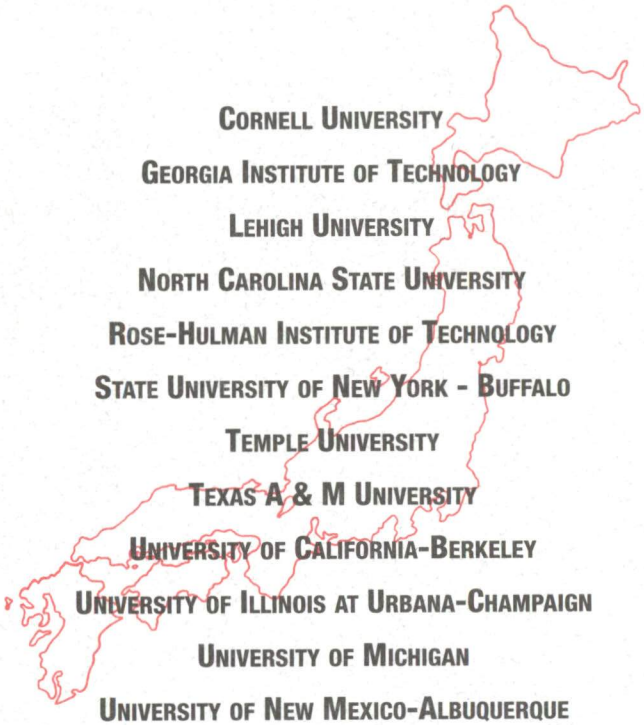
EAGLE
Member Institutions* A Summary of Their Engineering Educational Programs

	Total Engineering Enrollment Undergraduate	Total Engineering Enrollment Graduate	Bachelor Degrees Conferred	Master Degrees Conferred	Professional and Doctoral Degrees Conferred	Total Engineering Research Budget
Cornell University	2,539	1,139	583	94	331	$50,578,000
Georgia Inst. of Technology	6,608	1,703	1,031	512	81	$147,451.000
Lehigh University	1,585	728	332	100	32	$17,172,900
North Carolina State University	5,287	1,213	985	222	75	$28,812,679
Rose-Hulman Inst. of Tech.	1,082	115	231	19	0	$419,430
State Univ. of New York-Buffalo	2,425	737	525	149	40	$17,639,000
Temple University	336	75	65	10	0	$1,364,831
Texas A & M University	6,698	1,577	1,418	316	91	$29,891,270
Univ. of California-Berkeley	2,518	1,602	567	431	226	$46,022,000
Univ. Ill at Urbana-Champaign	5,233	2,072	1,353	507	201	$99,979,000
University of Michigan	4,016	1,867	842	526	108	$44,145,715
Univ. New Mexico-Albuquerque	1,764	542	272	123	23	$7,709,064
Univ. of Texas at Austin	4,442	1,796	638	408	115	$50,102,059
Univ. of Wisconsin-Madison	3,387	1,101	676	233	112	$35,362,000
Vanderbilt University	963	307	186	54	22	$8,666,351
Totals:	**48,883**	**16,574**	**9,704**	**3,704**	**1,457**	**$585,315,299**

*Based on 90-91 Figures

ENGINEERING ALLIANCE FOR GLOBAL EDUCATION

EAGLE
JAPAN PROGRAM



CORNELL UNIVERSITY

GEORGIA INSTITUTE OF TECHNOLOGY

LEHIGH UNIVERSITY

NORTH CAROLINA STATE UNIVERSITY

ROSE-HULMAN INSTITUTE OF TECHNOLOGY

STATE UNIVERSITY OF NEW YORK - BUFFALO

TEMPLE UNIVERSITY

TEXAS A & M UNIVERSITY

UNIVERSITY OF CALIFORNIA-BERKELEY

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

UNIVERSITY OF MICHIGAN

UNIVERSITY OF NEW MEXICO-ALBUQUERQUE

UNIVERSITY OF TEXAS AT AUSTIN

UNIVERSITY OF WISCONSIN-MADISON

VANDERBILT UNIVERSITY

Program Objectives

The United States has a growing need for technically-trained individuals with the knowledge and experience to function in today's international business arena. In particular, there is a severe shortage of engineers with an understanding of Japan and the world of Japanese industry.

The goal of the EAGLE Japan Program is to create a corps of American engineers with significant first-hand experience in the Japanese industrial setting. To accomplish this goal, the Program provides background training in Japanese language and culture and seeks work experience opportunities in Japan for graduates of the training program.

What is EAGLE?

EAGLE, Engineering Alliance for Global Education, is an alliance of engineering colleges (see cover) organized to provide global educational opportunities for their students.

Each of the EAGLE institutions offer Japanese language and cultural courses on their campus. They also view EAGLE as an opportunity to gain greater support as a group to seek industrial work experiences for their students in Japan.

It is estimated that the emphasis on the Japanese language and cultural studies has more than doubled the Japanese language enrollment among the resident enrollments in the EAGLE institutions. Enrollment of engineering students in Japanese language in EAGLE institutions is estimated to be 700 in any one semester.

EAGLE Educational Program Emphasis

The affiliation seeks to increase the number of engineering students undertaking language and cultural studies in their own institutions and to join in cooperative efforts to place them in foreign work or educational experiences. The affiliation is also in a position to join forces to enroll students in intensive language programs especially during summer periods.

Japan Initiative

It is the goal of the EAGLE affiliation to prepare annually 100+ U.S. engineering students in Japanese language and cultural studies for placement into Japanese industrial work experiences.

EAGLE has advanced to the level where adequate numbers of students are being identified, instructed in Japanese language and culture. Now EAGLE has support to offer intensive language programs in Japan as a first international exposure. The need now is to develop a method of placement of these students in Japanese work experiences.

EAGLE seeks to establish Japanese industrial fellowships which would provide support for one year of the experience period, but also having educational value and providing Japanese industries with tax incentives. Thus, it is being suggested that Japanese industrial fellowships be established for participants. EAGLE seeks to have applicants paid at essentially the same levels and to live in the same environment as beginning Japanese engineers.

Heavy emphasis is being placed on a preparation of students in Japanese language and culture in their home institutions with a focus on intensive Japanese language studies in Japan for one summer. It is the goal of EAGLE to be able to place the students in Japanese work experiences upon graduation at the Bachelor's degree or advance degree level.

Benefits to Students

The EAGLE Japan Program offers engineering students the opportunity to acquire the training necessary to qualify for work experiences with industries in Japan. In addition, EAGLE assists in finding and arranging work experience positions for students who successfully complete the language segment of the EAGLE Japan Program.

Eligibility

The EAGLE Japan Program is open to students majoring in engineering or engineering related studies, i.e., physics, computer science, chemistry, etc.

The EAGLE Japan Program requires the completion of one or two years of Japanese language studies in an American institution or equal preparation. All students are expected to obtain their bachelor's degree in engineering or engineering related studies as listed above as a minimum prior to placement in a Japanese work experience period.

First priority will be given to students attending EAGLE member institutions. Applicants **must** be U.S. citizens or Permanent Resident Aliens of the United States.

Student Costs & Support Services

The cost of the intensive summer Japanese language and culture course in Japan is $500 for each participant. Travel to and from Japan, room and board, instruction is included in the cost. Wages during the work experiences are expected to be the same as that of a beginning Japanese engineer working in Japan.

Applications must be received by the EAGLE Center Office no later than November 15 prior to the summer of study.

Achievements to Date

- Fall, 1988—establishment of EAGLE
- A Pacific Rim Conference was held in Washington, D.C. in February of 1989 involving industrial, governmental, and educational institution representatives. The focus of the conference was on the need for U.S. trained technological personnel capable of functioning in the Asian regions and methods to meet these human resource needs.
- A national EAGLE office was established at the University of Illinois at Urbana to serve as a secretariat for the initiative.
- An intensive language program was developed by Rose-Hulman Institute of Technology and offered for the first time in the summer of 1990.
- In 1991 a governmental grant was obtained thru the University of Wisconsin to expand EAGLE efforts in the United States.
- An intensive summer Japanese language program in Japan has been developed for EAGLE students having one or more years of Japanese language in their home institutions.
- An extensive resume data system has been developed to identify and represent students wanting to be involved in EAGLE programs.
- In February, 1991 & 1992, industrial conferences were held at the International House - Tokyo for Japanese industrial representatives.
- EAGLE has associated with University of Wisconsin and the National Technological University to provide technical language courses and an array of other courses related to Japanese economy, industrial production, manufacturing systems, business practices, global marketing, etc.
- An extensive database of industries interested in Japan-U.S. interaction has been established.

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ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

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FROM: BOISARD, Marcel A.: UNITED NATIONS INSTITUTE FOR TRAINING AND RESEARCH

TO: DR. D.A. BROMLEY

DATE OF CORRESPONDENCE: 07/31/92

SUBJECT: HE IS FORWARDING INFORMATION ON THEIR PROGRAMS FOR OSTP IF THERE IS AN INTEREST IN TAKING ADVANTAGE OF THEM.

Routine Act.

****

DIRECTORATE ASSIGNED: INTERNATIONAL/POLICY

STAFF ASSIGNED: FS

ACTION REQUIRED: AS/IF NECESSARY

STAFF ACTION: As/if necessary

****

SENDER'S DUE DATE:

OSTP DUE DATE: 08/21/92

STAFF DUE DATE 8/21/92

DATE COMPLETED:

DATE COMPLETED/DEPT:

****

COPIES TO: D. Allan Bromley
ENVIRONMENT

****

WHITE HOUSE TRACKING #:

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OSTP RECEIVED: 08/07/92 DEPT RECEIVED:

FILE: INTERNATIONAL

CENTRAL FILES:

THE WHITE HOUSE

WASHINGTON

August 13, 1992

Dear Mr. Boisard:

Thank you for your letter of July 31, 1991, and the package of material on the United Nations Institute for Training and Research (UNITAR). Your diverse program of training addresses one of the fundamental components of a healthy science and technology infrastructure.

I agree fully with your observation that the development of high technology in the United States benefits developing countries. Technology transfer is a critical element in today's global economy, and our policies seek to encourage such transfer under regimes which promote innovation and economic growth. I am pleased that the technical agencies of the U.S. government, such as the National Aeronautics and Space Administration (NASA) and the Environmental Protection Agency (EPA), have had the opportunity to collaborate with your organization.

Thank you again for the information on UNITAR.

Sincerely,

D. Allan Bromley

D. Allan Bromley
The Assistant to the President
for
Science and Technology

Mr. Marcel A. Boisard
Acting Executive Director
UNITAR
801 United Nations Plaza
New York, New York 10017

2265

UNITED NATIONS INSTITUTE
FOR TRAINING AND RESEARCH
(UNITAR)

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OSTP
MAIL ROOM

EXECUTIVE DIRECTOR

LE DIRECTEUR GÉNÉRAL

ED/92/186

31 July 1992

Sir,

You have been kind enough to send us the Report to Congress on Science and Technology. We have read it with great interest and wish to thank you for it.

On a very modest but concrete scale, UNITAR is trying to contribute its share on the transfer of technology to developing countries. We have greatly benefitted from expertise and generosity from the United States of America. Enclosed is our Work Programme 1992-1993. It may be of interest to some of the staff members of your Office.

- In the field of climate change, our training programme relies on the expertise of a Senior Scientific Adviser, graciously seconded to us by the National Aeronautics and Space Administration (NASA).

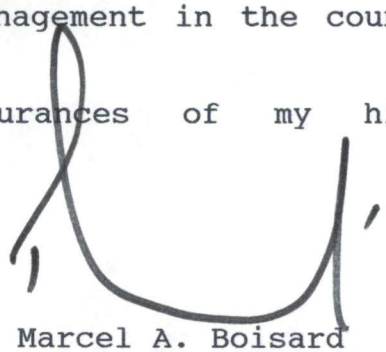
- Our training programmes in Geographical Information Systems (GIS) have developed, jointly with the Institute of Geography, Clark University (MASS), an innnovative and original software (IDRISI), now used in numerous developing countries. This cooperative endeavour was recently enhanced through the generous assistance of a private US corporation, Environmental Systems Research Institute (ESRI, CA), which promotes a stronger interface of different systems.

The Honourable
Dr. D. Allan Bromley
Director
Office of Science and Technology Policy
Executive Office of the President
Washington, D.C. 20506

- Finally, the Environmental Protection Agency (EPA) has from the onset, been supporting our training programme on the management of potentially toxic chemicals, by supplying very able resource persons for our workshops in Asia, and also by providing some funding.

It seems to me of some interest to mention these facts which tend to show that the development of high technology in the United States is also benefitting developing countries. UNITAR is one modest channel among many other more important ones. More concretely, this transfer of technology enhances the efficiency of environmental and natural resource management in the countries where we are operational.

Please accept, Sir, the assurances of my highest consideration.



Marcel A. Boisard
Acting Executive Director of UNITAR



United Nations Institute for Training and Research
European Office

WORK PROGRAMME

1992-1993

WORK PROGRAMME

1992-1993

UNITAR European Office

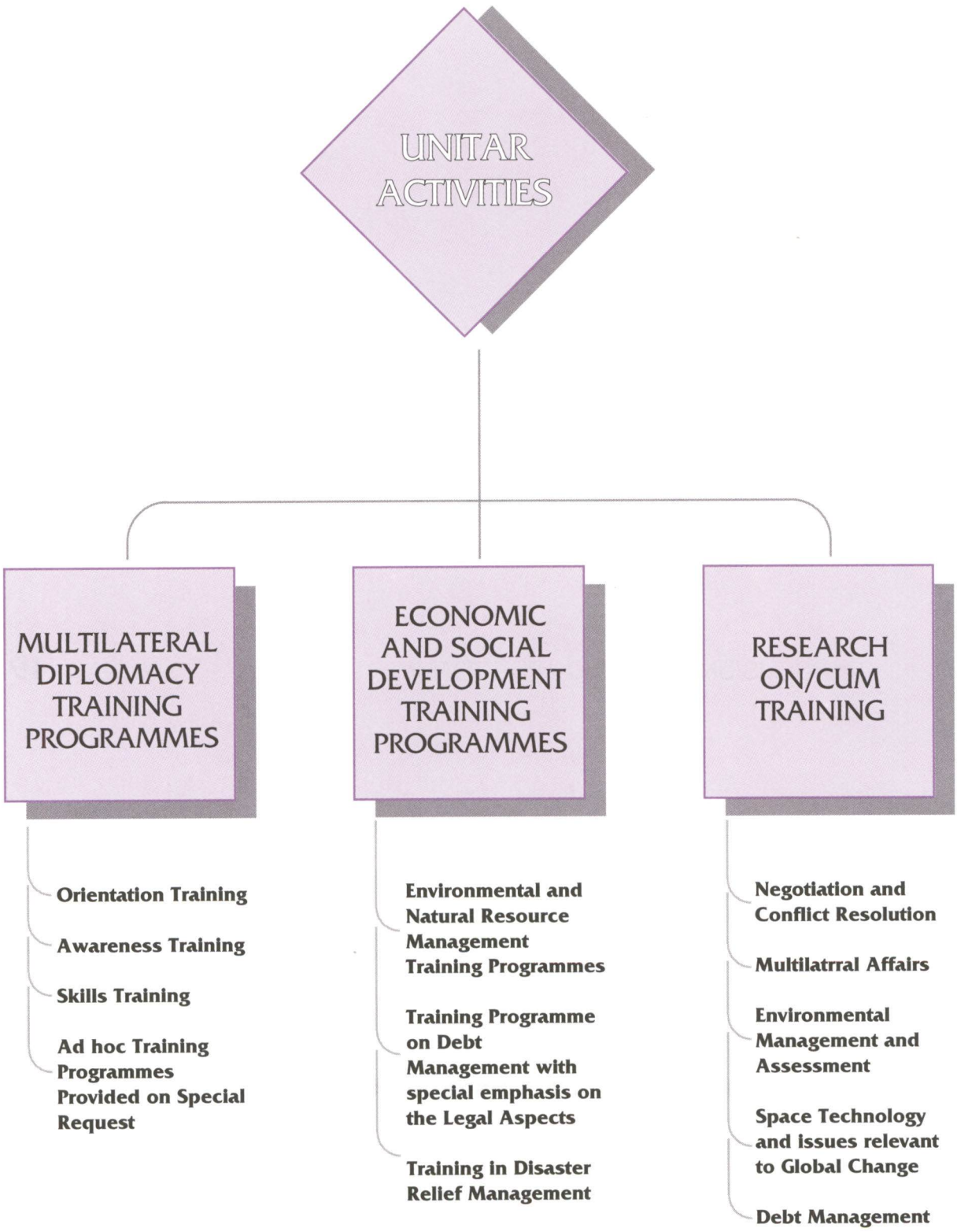


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INTRODUCTION

The work programme of the UNITAR European Office for the biennium 1992-1993 is designed as both a substantive report and a schedule of planned activities. The content and structure of each programme, including target participants and training methodologies are briefly described in this document. UNITAR's two main fields of training, namely, training in multilateral diplomacy and international cooperation on the one hand, and training for economic and social development on the other, are presented in the same document for easy reference. A schedule of training events for 1992 is appended on the back cover. It is updated every quarter.

The work programme is intended for Permanent Missions of the Member States accredited to the United Nations Office in Geneva (UNOG) and Resident Representatives of the United Nations Development Programme (UNDP), working with government authorities in their host countries. It is also addressed to academic institutions and their concerned faculties as well as to governmental and private development cooperation agencies, which may be interested in mobilizing their resources to help implement one or more of the programmes.

The mandate of UNITAR is to enhance "the effectiveness of the United Nations in achieving the major objectives of the Organization, in particular, the maintenance of peace and security and the promotion of economic and social development". The UNITAR European Office works to achieve these objectives through the provision of training in multilateral diplomacy and on matters related to economic and social development.

Multilateral Diplomacy and International Cooperation

Currently, UNITAR European Office has developed 17 regular courses and 3 programmes in multilateral diplomacy and international cooperation. These training programmes have evolved in response to demonstrated needs, and only after a thorough study of specific training needs and means to ascertain that there would be no duplication of efforts.

The training programmes in multilateral diplomacy and international cooperation are primarily designed for the benefit of diplomats, members of the Permanent Missions, in Geneva. Increasingly, however, UNITAR is offering these training programmes to government officials in developing countries. The programmes in multilateral diplomacy comprise three types of training - orientation, awareness and skills-building .

Economic and Social Development

Responsibility for training programmes in economic and social development has been entrusted to UNITAR European Office. These programmes have developed rapidly over the past few years. The curriculum of each training programme is designed following a similar procedure: identification of demonstrated needs, a feasibility study including a survey of training needs and inventory of means, definition of target groups, and the design of the structure, content and the sequence of the training programme. UNITAR's main role is to propose a conceptual framework and training methodology. All of UNITAR's training programmes in economic and social development are implemented in collaboration with "lead agencies" within the United Nations system, and specialized centres, institutes and non-governmental organizations. The institutional partners of UNITAR provide the substantive resources for the programmes and allow UNITAR to focus on designing and developing innovative training methods while maintaining a lean and highly flexible organization. UNITAR's overture to outside expertise has greatly enhanced the relevance and effectiveness of its training.

Presently, UNITAR European Office has three training programmes in economic and social development:

- Training in environmental and natural resource management, which encompasses training in: the applications of Geographic Information Systems (GIS), information exchange systems for the management of toxic chemicals, and environment-development negotiations. A feasibility study is currently being conducted on a training programme for the implementation of the Convention on the International Trade in Endangered Species (CITES).
- Training on the legal aspects of debt management in English speaking Sub-Saharan Africa and, as of 1992, in Asia and the Pacific. Other training programmes are being considered under the broader framework of development finance management;
- Training for disaster relief managers in the countries of the Sahel.

UNITAR's training programmes in economic and social development are funded exclusively from extra-budgetary sources. In this respect, assistance from bilateral and multilateral donors has been very encouraging. While one single country provided financial support at the beginning of the programmes six years ago, funding sources for these programmes are now more numerous and diverse.

In 1992, UNITAR European Office intends to consolidate its efforts and further develop its capacity to design, develop, and implement relevant, innovative, practical and cost-effective training programmes. In this way, and by taking on the training aspects of various international initiatives, UNITAR can more efficiently fulfil its mandate.

I.

MULTILATERAL DIPLOMACY TRAINING PROGRAMMES

Training in multilateral diplomacy and international cooperation is offered primarily to Geneva-based diplomats. These training programmes focus on specific and, at times, technical aspects of the diplomatic career in Geneva. Course curricula are selected and developed only after training needs and means have been surveyed, and only after it has been ascertained that there would be no duplication of efforts. Training curricula are constantly revised on the basis of assessments made at the end of each course by the participants.

The training programmes in multilateral diplomacy are open to all diplomats accredited to the United Nations Office in Geneva (UNOG), irrespective of their rank, function or origin. Increasingly, the same programmes are now designed to be conducted on request, and specifically tailored for government officials dealing with the United Nations system. These courses can take place in the requesting country or region or in Geneva.

UNITAR's training programmes in multilateral diplomacy and international cooperation can be roughly subdivided into the following types of training:

A. Orientation training
B. Awareness training
C. Skills training
D. Ad hoc training provided on special request

The first three types of training programmes are conducted on a regular basis in Geneva and are normally free of charge. Ad hoc training programmes provided on special request must be funded from external sources.

The schedule of events at the end of this document indicates the dates and duration of the various training courses. These dates may change slightly depending on the availability of lecturers and trainers. Weeks prior to the beginning of each course, invitations are sent to all Permanent Missions in Geneva containing detailed information about the programme, and application forms.

In 1991, more than 20 different multilateral diplomacy training programmes were conducted with over 500 participants. The work programme for 1992-1993, including some newly developed courses, offers interesting and attractive choices. As has been the case in the past, requests or suggestions from Permanent Missions concerning the design or contents of the courses will be carefully studied and put into practice, human and material resources permitting.

A. ORIENTATION TRAINING

1) Orientation Seminar for Newly Accredited Members of Permanent Missions in Geneva

This seminar is primarily, though not exclusively, designed for members of Permanent Missions who have been accredited to Geneva in the course of the last 12-15 months. The purpose of this seminar is to familiarize new diplomats with the objectives and activities of the United Nations system in Geneva. The seminar provides practical information useful to all diplomats in their daily professional

lives. The seminar is open to diplomats, irrespective of their rank and function. Each Permanent Mission may designate more than one participant.

Working languages: English and French (simultaneous translation)

2) Inter-Agency Seminar on the International Civil Service and the UN System

This orientation seminar aims at introducing the participants to the basic concept of the international civil service and at examining the scope and functioning of the United Nations System. The seminar also provides participants with a broader knowledge of the status of an international civil servant and the capacity of the UN System as an instrument for shaping coherent global policies and addressing global issues. The structure of the seminar requires the active involvement of participants. It is designed primarily, but not exclusively, for recently appointed staff members in the professional category.

Working languages: English and French (participants should have a knowledge of both languages)

B. AWARENESS TRAINING

1) Introduction to International Economics

International economic negotiations play an important role within the framework of the United Nations system in Geneva. Numerous Permanent Missions place great emphasis on international economics and have found it extremely useful for diplomats who are not specialized in economics but who must deal with economic matters within the context of their work to be able to receive training on international economics.

The seminar provides participants with an introduction to the basic concepts and theories of international economics and provides an update on recent economic developments and problems. The seminar covers the following topics:

- General Introduction to International Economics
- Theories of International Trade
- Monetary Phenomena and Financial Flow
- Trade, Money and Finance
- New Issues in International Economics

The training programme is open to all members of Permanent Missions, irrespective of their rank and function.

Working language: English/French

2) Seminar on the Structure and the Function of the Principal Organs of the United Nations Organization

The objectives of this seminar are the following:

- to provide a general overview of the United Nations system,
- to examine the particular characteristics of the six principle organs of the United Nations system,
- to study the procedures and practices of the principal United Nations organs with their subsidiary bodies as well as their interrelations,
- to examine the decision-making process of various United Nations organs, in particular, the General Assembly and the Security Council,
- to familiarize participants with the practice of negotiating and drafting resolutions by means of a simulation exercise.

The seminar is open to all members of Permanent Missions, irrespective of their rank and function.

Working language: English/French

3) Workshop on the Implementation of Global Environmental Treaties with Focus on CITES

This workshop aims at facilitating the implementation of global environmental treaties at the national level and imparting techniques of analysis that can help identify institutional and administrative obs-

tacles to their effective and efficient implementation. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) will be used as case study. The workshop is open to national civil servants specializing in environmental matters.

Working language: English

4) Practices and Procedures of Some Geneva-Based UN Organizations and Bodies

The activities of the United Nations system are numerous, diverse and often highly specialized. This workshop provides an introduction to internal rules and procedures as well as practices, functions, and institutional aspects of some of the Geneva-based intergovernmental organizations and bodies. Introductions to the different UN organizations and bodies are combined with case studies. Each session is conducted by a trainer with theoretical and practical knowledge of the specific UN organizations or bodies under study. The workshop is open to all members of Permanent Missions, irrespective of their rank and function.

Working language: English

5) Law and Procedures of Multilateral Negotiations in the United Nations

Negotiations held in the context of the United Nations and its specialized agencies in Geneva often require the drafting and interpretation of international legal instruments. Therefore, a basic knowledge of international legal instruments used within the United Nations system is an important asset in multilateral negotiations. The objective of this training course is to study the structure, terminology and legal context of international legal instruments used in the United Nations. The course is open to members of Permanent Missions who have not previously worked on legal matters in the service of their governments.

Working language: English/French

C. SKILLS TRAINING

1) Seminar in International Environment-Development Negotiations

Many environmental problems have impacts that go far beyond national boundaries, requiring solutions within an international or global context. Moreover, environmental issues have been increasingly linked to other international issues such as global security, international trade and development. As many of the related negotiations take place within the framework of the United Nations system, UNITAR European Office is offering this seminar in order to provide participants with information on the scope of environment-development negotiations, past and present, as well as to familiarize them with the institutional setting and procedures of negotiations on environmental issues. The seminar is open to members of Permanent Missions dealing with environmental affairs.

Working language: English

2) Workshop on the Structure, Retrieval and Use of UN Documentation

This workshop is organized in cooperation with the UN Library and has the following objectives:

- to deepen and update the participants' knowledge and understanding of the inter-relationship between the structure and activities of the United Nations system and its documentation,
- to develop skills in retrieving information from the variety of sources within the system,
- to familiarize participants with relevant reference tools,
- to effectively organize and maintain document collection.

This workshop is specifically designed for document specialists, librarians and diplomats actively engaged in information retrieval or the maintainance of document collection within their Permanent Mission.

Working language: English

3) Workshop on Procedures for the Settlement of Commercial Disputes at GATT

Working within the framework of multilateral negotiations, a basic knowledge of international economic law is essential. This also applies to the procedures for the settlement of disputes. The objective of this workshop is to explain dispute settlement procedures, including mediation and conciliation, that are used in GATT. The workshop will proceed from an explanation of the institutional structure of GATT and its basic rules to a descriptive analysis of the processes used by the contracting parties to resolve trade disputes. The workshop is open to members of Permanent Missions dealing with the affairs of GATT (and UNCTAD), who have already acquired some experience in the field of international negotiations.

Working language: English/French

4) Seminar on the Setting, Issues and Techniques of Multilateral Economic Negotiations

Multilateral negotiation is a principal "raison d'être" of the United Nations system. Any attempt to enhance the technical knowledge and skills of diplomats who are called upon to take part in negotiations will thus help to improve the operation of multilateral institutions. The objective of this seminar is to provide knowledge on the setting, issues and techniques of economic negotiations with due consideration of specific UN organs and their conferences. The seminar is open to members of permanent missions charged with the affairs of UNCTAD, GATT or other economic organizations in Geneva.

Working language: English/French

5) Seminar on Basic Communication Skills

The purpose of this seminar is to familiarize the participants with the basic elements of communication and to help them improve their communication skills. This includes an introduction to different communication levels, an analysis of the participants' own communication styles and their adaptability to different situations as well as constructive ways of achieving more effective communication. The seminar is open to all members of Permanent Missions, irrespective of their rank and function.

Working language: English

6) Course on Time Management

This new training course was initiated by UNITAR on request from the Permanent Missions. Its purpose is to teach participants to make more effective use of their time. Following an analysis of their daily work flow and an identification of different work styles, participants will learn how to set goals and priorities more effectively, restructure their working days, and plan more efficiently. Active participation is an important factor for the success of this seminar. The course is open to all members of Permanent Missions, irrespective of their rank and functions.

Working language: English

7) Workshop on Public Speaking

This workshop aims at improving the participants' speaking and presentation skills and developing a convincing personal style of addressing audiences. Basic principles of delivering public presentations will be discussed, and styles and techniques will be studied. The workshop will be practical and participatory in nature. The workshop is open to all members of Permanent Missions, irrespective of their rank and function.

Working language: English

D. AD HOC TRAINING PROGRAMMES PROVIDED ON SPECIAL REQUEST

Several training programmes on various subjects relating to multilateral diplomacy and cooperation are conducted with the extrabudgetary funding and support from institutional partners.

1) UN/UNITAR Fellowship Programme in International Law

Under the United Nations Programme of Assistance in the Teaching, Study, Dissemination and Wider Appreciation of International Law, UNITAR European Office, in collaboration with the United Nations Legal Office, organizes and administers the annual Fellowship Programme in International Law at the Hague Academy of International Law.

The objectives of the programme are:

- to broaden the participants' knowledge of recent developments in international law,
- to familiarize participants with international legal issues, particularly questions of special interest for developing countries, and
- to exchange information on legal problems of common interest or of special concern to the participants' countries.

This programme is open to law graduates with practical experience in the field of international law acquired by working for a public or private organization or university.

Working language: English and French

Venue: The Hague, Netherlands

2) Workshop on International Economic Development

Since 1988, this workshop has been organized on a regular basis by the UNITAR European Office in collaboration with the Centre d'Etudes et de Recherches sur le Développement International (CERDI), University of Clermont Ferrand, France. It exposes the expertise of international scholars on the various organs of the United Nations system in Geneva. With the participation of senior international civil servants from UN organs and specialised agencies and the academic staff of the CERDI, participants discuss critical economic development issues. The workshop is addressed to university teachers, researchers, and graduate students from CERDI specializing in development studies.

Working language: French

Venue: Geneva

3) UNITAR/IIAP Training Programme in Multilateral Diplomacy and International Cooperation

UNITAR European Office and the Institut International d'Administration Publique (IIAP), Paris, have been organizing this programme since 1982 on a regular basis. The main objectives of this programme are to give the participants an opportunity to acquire knowledge and broaden their experience in the field of multilateral diplomacy and international cooperation and to obtain first-hand information about the work of international organizations and the Permanent Missions. The programme is addressed to French-speaking diplomats with some practical work experience. Scholarships for the programme are offered by the French Government.

Working language: French

Venue: Geneva

4) FASID/UNITAR Course on International Organizations

This course was developed in response to a request by the Foundation for Advanced Studies in International Development (FASID) based in Tokyo. It aims at providing participants with a basic understanding of international development cooperation and at familiarizing them with the role and functions of international organizations. The course is designed for administrators and professionals dealing with development cooperation in a multilateral framework.

Working language: English/Japanese

Venue: Geneva

5) UNITAR Training Programme in Multilateral Diplomacy, Viet Nam

Following a request from the Government of the Socialist Republic of Viet Nam and with financial support from the Government of Australia, UNITAR organized this programme with special focus on development diplomacy and its implications, economic multilateral negotiations, and trade dispute settlement. The course was organized for senior government officials from the Vietnamese Ministry of Foreign Affairs and other ministries and public organs.

Working language: English

Venue: Hanoi, Viet Nam

Over the past two years, UNITAR European Office has received a growing number of requests to design and conduct diplomacy training courses at the country and sub-regional levels. These requests come largely from developing countries in which training institutions are still weak or non-existent. Training courses organized *in situ* present a high cost/benefit ratio as the cost of a mission of two resource persons typically allows the training of some 30 national civil servants. In order not to deprive government officials from developing countries of such opportunities, UNITAR European Office is working to establish "tripartite" cooperation where an industrialized country or a development agency provides funding to UNITAR to design and implement training courses on multilateral diplomacy and cooperation for civil servants in developing countries.

II.

ECONOMIC AND SOCIAL DEVELOPMENT TRAINING PROGRAMMES

A. ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT TRAINING PROGRAMMES

The environmental and natural resource management training programmes encompass three major areas:

1. Training in the uses and applications of Geographic Information Systems (GIS) and Image Processing Systems (IPS) for natural resource and environmental management;
2. Training on the Implementation of the London Guidelines, specifically as related to the Prior Informed Consent (PIC) procedure, and the establishment of National Registers of Potentially Toxic Chemicals (NRPTCs);
3. Training in environment-development negotiations.

A fourth potential training programme on the Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is currently under study.

All of the ongoing programmes have been designed in collaboration with lead agencies within the U.N. system, and in response to demonstrated training needs. In this sense, UNITAR's training programmes complement the programmes and initiatives taken by other U.N. agencies by taking charge of the training aspects while employing the substantive resources of the lead agency. This strategy has allowed UNITAR to specialize on developing effective, innovative, and practical training programmes while maintaining its cost-effective advantage and allowing the lead agency to focus on the substantive aspects of its initiative. As an autonomous organ, UNITAR is able to concentrate on delivering effective training programmes and cultivating a broad resource network with academia, research centres, NGOs, and private sector groups, and other U.N. agencies, all of which strengthen the capabilities of UNITAR to conduct training. UNITAR's access to this broad resource network is particularly important when developing and implementing training related to environmental issues which require a multi-disciplinary approach and the participation of a wide array of training participants such as technicians, scientists, managers and decision makers.

UNITAR's ability to coordinate these programmes is enhanced by its small and flexible organizational set-up, which allows it to share field experiences, training methods and approaches, and contacts with people responsible for environmental affairs. This has led to faster development periods, the application of state-of-the-art methodologies and pedagogical tools, shared resources, and the accumulation of valuable experience in training and teaching diverse groups of people.

The competitive advantage of UNITAR has allowed it to be at the forefront of developing innovative training. In the field of GIS/IPS training, for example, UNITAR took on a pioneering role within the UN System, looking at the training applications of the technology in terms of the particular needs and means of developing countries. At the early stages of the GIS programme, efforts were undertaken to further develop a low-cost GIS/IPS software package, called IDRISI; develop hands-on, problem-oriented curricula; research and develop application workbooks conceived so as to allow independent, case-study based research work by developing country scientists; and provide training, equipment, and project follow-up assistance for setting up GIS units at the national level, conducted jointly with United Nations Environment Programme (UNEP)/Global Environment Monitoring System (GEMS)

and Global Resource Information Database (GRID). The training for PIC and the establishment of National Registers of Potentially Toxic Chemicals (NRPTCs) is also the first of its kind and of increasing importance for rapidly industrializing countries. The programme is conducted in close consultation on a day-to-day basis with UNEP/International Register for Potentially Toxic Chemicals (IRPTC). Another breakthrough is the emerging environmental negotiations field, identified by UNITAR to be of growing concern and relevance to developing countries in the 90's and beyond.

Each of UNITAR's environmental and natural resource management programmes addresses one aspect of several very fundamental issues: what are the most pressing environmental problems in developing countries today, how can they be dealt with in a given socio-economic context, who are the individuals and what are the institutions that must tackle them, what is already being done, and how can training help. UNITAR's training capabilities in this field have grown considerably in recent years, and the European Office will continue to mobilize whatever resources it can to respond to expressed needs - the institute will continue to work to bridge the gap between those who have the know-how and those who need it most.

1. UNEP/UNITAR ENVIRONMENTAL TRAINING PROGRAMMES IN GEOGRAPHIC INFORMATION SYSTEMS FOR NATURAL RESOURCE MANAGEMENT

Overview

The United Nations Environment Programme (UNEP)/UNITAR Environmental Training Programme in Geographic Information Systems (GIS) for Natural Resources Management held its first training course in September 1986. Since then UNITAR has held a number of 1-week to 6-month long training events designed to help scientists and planners from developing countries develop capability to use GIS. To date, over 130 individuals representing over 40 countries from Asia, Africa, Latin America, and Eastern Europe have been trained.

The programmes result from UNEP's mandate to monitor and make periodic assessments of the health of the world environment. In this perspective, the Global Resource Information Database (GRID) was established and, in 1985, joint UNEP/UNITAR GIS training programmes were launched.

GIS uses computer technology to analyze, monitor, and model geographically referenced environmental, cultural, and economic data. GIS is a fully integrated system that can analyze and map spatial data, and provide statistical and computer graphic products. The technology bridges the disciplines of information management, computer science (including remote sensing and pattern recognition), cartography, and environmental science. The GRID Centres provide extensive and varied GIS datasets used for investigating the potential for developing natural resources on a sustainable basis. The GRID network, with nodes in Nairobi, Geneva, Bangkok, Arendal, and Sioux Falls, provides scientists and planners with access to critical environmental information around the globe.

While there has been an increase in the use of GIS in the developing countries, unfortunately, there are still few trained and qualified individuals. UNITAR therefore undertakes regular GIS training programmes on behalf of UNEP, or in cooperation with other UN agencies or national governments. These programmes are carried out in conjunction with educational establishments, GRID centres, and other institutions in different regions around the world.

The training programmes have four principal aims:

1. To train scientists and planners from developing countries to operate and benefit from GIS technology;
2. To guide trainees through their first GIS application project;
3. To encourage and assist trainees establish GIS information exchange networks in their own countries capable of benefitting from GRID's technology and datasets; and
4. To enable trainees to train others within their respective regions in GIS technology.

Recent Activities

1991 was an active year for the UNITAR GIS training programmes. In addition to organizing various training events, 1991 saw UNITAR become more active in promoting the use and application of GIS in environmental management.

Each year UNITAR conducts a four-month long training programme in partnership with the Ecole Polytechnique Fédérale de Lausanne (EPFL), Department for Agriculture, Environment, and Survey Engineering (AESE). The course, developed by UNEP, UNITAR and EPFL, was attended in 1991 by six scientists from Burkina Faso, Mexico, Niger, Senegal, Syria, and Tunisia. The participants worked on specific applications projects relevant to the work being conducted at their respective institution.

TYPICAL TRAINING COURSE SCHEDULE IN GIS FOR ENVIRONMENTAL MANAGEMENT - EPFL, LAUSANNE, SWITZERLAND

Week 1:	Introduction to computer and GIS technology
Week 2:	Concepts in GIS Introduction to remote sensing
Week 3:	Initial project presentations Concepts in image processing Introduction to management of geographic numeric information Introduction to environmental science
Week 4:	Management of geographic numeric information Concepts in GIS Concepts in environmental science Begin individual project research
Week 5:	Management of geographic numeric information Concepts in GIS Concepts in image processing Concepts in environmental science Individual project research
Week 6:	Technical visits to GRID Geneva
Week 7-9:	Management of geographic numeric information Concepts in GIS Concepts in environmental science Individual project research
Week 10-11:	Individual project research
Week 12:	Intermediate project presentations Introduction to ARC/INFO - ESRI Individual project presentations
Week 13:	Advanced concepts in IDRISI - Clark University Individual project presentations
Week 14-16:	Individual project research
Week 17:	Technical visits to ESA (European Space Agency), Ispra, Institute for Remote Sensing Applications Individual project evaluations by lecturers/advisors
Week 18:	Final project report preparation Final project presentations

In addition to the annual UNITAR/UNEP course held at the EPFL, UNITAR develops and conducts one-week to one month-long intensive sensitization workshops, and gives presentations at conferences organized by other international organizations.

In May 1991, UNITAR conducted two one-week GIS workshops in Czechoslovakia. In October, UNITAR participated in a conference sponsored by the Interim Secretariat of the Basel Convention (ISBC), held in Hungary, which focused on the transboundary movement and management of hazardous waste. UNITAR presented how GIS can be used as a management tool for addressing environmental issues in hazardous waste management. In September and October, two UNITAR trainers conducted an eight-day workshop at the International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, Nepal. UNITAR also provided a trainer for two weeks in July to train the staff at ICIMOD in preparation for this autumn workshop. In November, UNITAR participated in a conference sponsored by the International Energy Foundation (IEF) on Energy and the Environment, in Tripoli, Libya. UNITAR's presentation was on the role of GIS as a tool for monitoring, assessing, and predicting energy supply and use. Also in November, UNITAR, in cooperation with the International Academy of the Environment (IAE) and GRID Geneva, jointly sponsored a one week seminar entitled "Local to Global Environmental Management: The Geographic Information Systems Approach". Some 30 participants from over 15 developing countries around the world participated in the event, which included lectures by GIS experts and a variety of on-line computer demonstrations.

TYPICAL SHORT TERM AND INTENSIVE GIS TRAINING WORKSHOP
INTRODUCTORY WORKSHOP

Day 1:	LECTURE - Introduction to GIS LECTURE - Fundamentals of GIS LECTURE - Raster Data Structures LABORATORY EXERCISE - Introduction to IDRISI LECTURE - Analysis in GIS
Day 2:	LABORATORY EXERCISE - Database Query LABORATORY EXERCISE - Map Algebra LABORATORY EXERCISE - Distance-Neighbourhood Operators/1 LABORATORY EXERCISE - Distance-Neighbourhood Operators/2
Day 3:	LECTURE - Overview of Remote Sensing LECTURE - Digital Image Processing/1 LECTURE - Digital Image Processing/2 LABORATORY EXERCISE - Digital Image Processing
Day 4:	LABORATORY EXERCISE - Unsupervised Classification: (local case study using satellite images) LABORATORY EXERCISE - Supervised Classification: (local case study using satellite images) LECTURE - Vector Data Structures & Analysis LABORATORY EXERCISE - Vector & Database Management Systems
Day 5:	LECTURE - Data Entry LECTURE - Data Transformation DEMONSTRATION - Digitizing & Data Transfer Techniques LECTURE & DEMONSTRATION - Change & Time Series Analysis

Following this introductory exposure workshop, the participants are provided with a copy of the GIS software that they used during the training. The participants are thus equipped with the knowledge and some basic tools necessary to strengthen their initial training. After a period of between six

TYPICAL SHORT TERM AND INTENSIVE GIS TRAINING WORKSHOP
EXAMPLE TAKEN FROM CHILE WORKSHOP 1992
ADVANCED WORKSHOP

Day 1: *PROGRAM EVALUATION:* One day is devoted to evaluating the progress made since the workshop participants completed their initial UNITAR training course.

Day 2: *GEOREFERENCING*
LECTURE - Georeferencing/1
LECTURE - Georeferencing/2
LABORATORY EXERCISE - Georeferencing
(field exercises using global positioning systems [GPS] with local satellite data)

Day 3: *ERROR, UNCERTAINTY & DECISION MAKING*
LECTURE - Value Error Assessment
LECTURE - Decision Making: Overview
LECTURE - Decision Making: Single Objective/Single Criterion
LABORATORY EXERCISE - Decision Making: Single Objective/Single Criterion (land use classification using GPS, probability analysis)

Day 4: *DECISION MAKING/2*
LECTURE - Single Objective/Multiple Criteria
LECTURE - Multiple Objective/Multiple Criteria
LABORATORY EXERCISE - Decision Making:
Multiple Objective/Multiple Criteria (soil erosion potential, land suitability anlysis)

Day 5: *CHANGE & TIME SERIES ANALYSIS*
LECTURE - Change & Time Series Analysis Techniques
LECTURE & DEMONSTRATION - Data Input Using TOPOS
LECTURE & DEMONSTRATION - GIS & Cartographic Production
LABORATORY EXERCISE - Change & Time Series Analysis

months and one year, the participants will have had ample time to experiment with the technology and begin to build GIS databases. To reinforce and build upon the initial training, advanced workshops are held on issues specific to the needs of the trainees. In addition to organizing advanced workshops, UNITAR is developing, in close cooperation with Clark University in Massachusetts, USA and other institutions, a series of educational workbooks which concentrate on particular disciplines in GIS. These workbooks are being designed in direct response to the needs of UNITAR *alumni*, and follow the curriculum for the advanced workshops. The workbook titles include *Change and Time Series Analysis, Forestry Applications in GIS, Mountain Eco-systems Applications in GIS, Coastal Zone Management Applications in GIS, Hazards Management Applications in GIS, and GIS and Decision Making.*

Plans for 1992-1993

The 1990's will see an increased demand for scientists and planners trained in the use of GIS technology. To cater to this need, the UNEP/UNITAR training programmes will have to further expand geographically.

In cooperation with the EPFL, UNITAR is conducting the annual four month long GIS training course for six professionals from Latin America (January-May 1992). Each participant is working on a specific environmental topic directly related to the work being carried out at his institution. Upon completion of the course, the trainees will take back their respective project results and incorporate the new

technology into the existing framework of their institutions. As the programmes evolve, the course in Lausanne, Switzerland is likely to become more specialized and geared toward high-level resource managers from developing countries.

As for training held outside of Switzerland, the main workshops in GIS will be held increasingly at regional training sites in Africa, Asia, and Latin America. Follow-up programmes will also be expanded through the publication and distribution of UNITAR's training workbooks in addition to advanced specialized workshops currently being developed. Simultaneously, the informal network of trainees, lecturers and institutions involved in the training programme will be expanded and strengthened.

Many academic and government bodies, already involved in the development of GIS technology, have expressed a willingness to become more closely involved in the training programme. The course now provided in Switzerland by EPFL will in the future also involve staff from other institutions which specialize in GIS/IPS (image processing systems) technology. Many European universities have expressed interest in participating in the training programme, and close ties are being developed with research centres such as the International Training Centre (ITC) in the Netherlands, the National Centre for Geographic Information Analysis (NCGIA), the National Aeronautical and Space Administration (NASA) and Clark University in the United States. Similarly, cooperation is being sought from relevant institutions in other regions, including those in developing countries.

In 1992, in addition to its work with EPFL, UNITAR is planning to focus on providing regional and sub-regional short term, intensive training courses and workshops. The following activities are being planned for 1992:

- *Latin America:* An advanced GIS training workshop/seminar to be held in March 1992 in Chile. The workshop will be attended by UNEP/UNITAR's former Latin American trainees and will focus on issues in data error checking using global positioning systems (GPS), change analysis, GIS and cartographic production, and single versus multi-objective decision making processes. A special session, conducted jointly with UNEP/GRID, will be devoted to an overall assessment of the five years of training for scientists from Latin America. 10 out the 12 Latin American alumni will participate. This ratio is extremely high and proves that the networking and follow-up efforts are successful.
- *Asia:* UNITAR will conduct introductory and advanced workshops in cooperation with ICIMOD's Mountain Environment Natural Resource Information Systems (MENRIS) in March, June, and November, for Nepali, Chinese, and Bangladeshi nationals, respectively. UNITAR will also continue to train MENRIS trainers and evaluate their training material as they continue to make progress towards self-sufficiency in training.
- *Central and Oriental Europe:* Depending on the availability of funds, and in cooperation with GRID/Arendal-Stockholm, an introductory GIS workshop for Lithuanian scientists and planners of natural resources is being planned for the summer of 1992. A follow-up workshop could then take place later in the year as well as one for the Czech and Slovak Federal Republic.
- *Middle East:* Following discussions held in Tripoli in November of 1991 and in Geneva in January 1992, a subsequent proposal for UNITAR training in GIS was prepared and sent to the United Nations Centre for Human Settlements (HABITAT). HABITAT and UNITAR agreed to explore the possibility of developing a training programme that focuses specifically on issues in population distribution, energy, and the environment. Both parties have agreed to meet in April in Cairo to prepare training curriculum and exercise material for training workshops, scheduled for 1992, in cooperation with Cairo University.
- *Africa:* (see below, section on the GEMS/UNITAR Africa Programme) National GIS seminars are scheduled for Tanzania in January, Botswana and Mozambique in February, and Ghana and Lesotho in March. In addition, a two month long course will be held for scientists from Mali, Burkina Faso, and Niger at the AGRHYMET Centre located in Niamey, Niger, in March. The two AGRHYMET trainers are former UNITAR trainees from the EPFL-based course in Lausanne.

These short term training workshop in the different developing regions are designed to gradually expand and build upon previous workshops, creating regional groups of trained professionals who continue to evolve in their experience as the technology itself evolves. Another important element of

the UNITAR GIS programmes is the fostering and support of the establishment of regional and/or national personal and informal networks capable of providing a pool of qualified individuals for training and technical backstopping.

An increasing number of donors are bringing support to UNITAR GIS training programmes, reflecting a widespread recognition of its importance. In the long term, the UNITAR GIS training programmes will broaden its scope to embrace additional environmental and natural resource management techniques. UNITAR intends to continue close cooperation with UNEP to ensure that the training programmes provided are always appropriate and available to the broadest extent possible.

Since its inception over five years ago, UNITAR GIS training programmes have acquired professional credibility, and the potential for further expansion is great. Growth could take place on a sub-regional level, or with a focus on a particular theme in a limited local perspective. The training concepts, methodologies, and material gathered on a selected ecosystem - such as mountains, arid lands, or coastal zones - can be transferred to other sub regions experiencing similar environmental concerns and conditions. Another possible approach would be a thematic one, touching upon one selected pressing environmental concern in developing countries, such as urban explosion and planning. GIS is a useful tool for monitoring the effects of population growth and migration, human settlements, distribution of public services, in particular, health, transportation, and energy consumption. Such topics necessarily impose close cooperation among concerned bodies from within and outside the United Nations system. UNITAR is already playing a catalyst role in the field of training. The potential for these tools is great and the requests for training are numerous. Notwithstanding the financial challenge of growth and expansion, UNITAR intends to remain realistic and pragmatic in order to monitor and master each step in the growth of its GIS training programmes, maintaining relevance and fulfilling all possible identified needs.

2. THE GEMS/UNITAR AFRICA PROGRAMME

Overview

The Global Environment Monitoring System (GEMS)/UNITAR Africa Programme aims to strengthen national capabilities in environmental monitoring and assessment. Working with selected national institutions in 11 African countries, the programme offers training in GIS and IPS to professional resource managers, upgrades to computer hardware and software, assistance with a pilot GIS project, and medium to long term support in terms of networking, training, and funding.

At the sub-regional level, technical support programmes, consisting of training courses, technical backstopping and seminars, are being established in existing sub-regional training facilities.

Support to Environment Information Networks

Environment information networks will support decision making processes at national, sub-regional and regional levels.

At the **national level**, an environment information system (EIS) will meet the information requirements of strategic planning frameworks for resource management, such as the Environment Action Plan of the World Bank, the National Plans of Action to Combat Desertification of United Nations Sudano-Sahelian Office (UNSO), and the National Conservation Strategies of the International Union for the Conservation of Nature and Natural Resources (IUCN). By facilitating the flow of environmental data into sectoral and national planning, EIS supports the environmental decision making process for the sustainable utilisation and development of natural resources, the conservation of biodiversity, and for estimating impacts of climate change and ozone depletion.

At the **sub-regional level**, an environment information network will link national EIS data bases with established sub-regional organisations and secretariats to support decision making within existing sub-regional Action Plans, such as the Zambezi Action Plan which addresses the management of shared water resources; the Mediterranean Action Plan, which addresses transboundary pollution

problems; the sub-regional early warning systems, for both food security and refugee flows, of the Intergovernmental Authority on Drought and Desertification (IGADD) and Southern African Development Coordination Conference (SADCC); the sub-regional desertification monitoring now being implemented among the Inter-State Committee on Drought Control in the Sahel (CILSS) member states; and, in Eastern Africa, the sub-regional data bases on biological diversity.

At the **regional level**, an environment information network will provide a dynamic link between the sub-regional and national EIS and the specialised databases of UNEP, and through them to the data bases of other specialised UN agencies. This will facilitate the two-way flow of data, and will support the programme of global assessments (of desertification, land cover, rangelands, biodiversity conservation) and assessments of the state of the environment.

Recent Activities and Plans for 1992-1993

At the **national level**, the GEMS/UNITAR Africa Programme has carried out needs assessment reviews in 17 African countries and has established 11 national GIS units to be the kernel of national EIS. The programme has provided training to professional resource managers, installed computer hardware and software upgrades, and supported pilot project activities with technical backstopping and national seminars.

With funding from UNSO, the programme has established the first of its sub-regional technical support programmes. Based at *AGRHYMET* in Niamey, Niger, technical support will be provided to EIS units among CILSS member states in terms of training courses for resources managers, technical backstopping to operational EIS units and sub-regional technical workshops. The first training course starts in March 1992 with participants from Burkina Faso, Cape Verde, Niger, Mali and Chad.

A similar programme is under development to support EIS/GIS units among SADCC member states. In cooperation with the SADCC-Environment and Land Management Systems (ELMS) Coordination Unit, Gesellschaft für Technische Zusammenarbeit (GTZ) and the IUCN, a sub-regional GIS workshop is being held in Harare, Zimbabwe in April 1992, a GIS training course will start in August 1992, and an Executive Seminar is planned for the directors of all operational EIS/GIS units.

At the regional level, the programme is preparing, with the assistance of GRID/Programme Activity Centre (PAC), regional and sub-regional data bases for distribution throughout the network. A start has also been made to develop national-level data bases for each of the eleven GIS units to catalyse their work on national resource data bases.

At the national level, the programme will catalyse the provision of long-term development support from cooperating multi-lateral agencies to the national environment information systems in the countries where they have been started. This support must cover a five to ten-year investment programme, and will include operational expenses, data acquisition, staff support and training, internal networking, networking with sub-regional and regional organisations, and the sensitization of high-level managers and planners to the opportunities afforded by environment information systems.

At the sub-regional level, the programme will strengthen the sub-regional technical support programmes, and will support the growing network of national and sub-regional environment information systems. Finally, at the regional level, the programme will distribute regional, sub-regional and national level data sets and will develop links between the network and the specialised data bases of the UN system.

3. UNEP/UNITAR TRAINING PROGRAMME ON THE IMPLEMENTATION OF THE LONDON GUIDELINES FOR THE EXCHANGE OF INFORMATION ON CHEMICALS IN INTERNATIONAL TRADE

Overview

In 1989, the Governing Council of UNEP amended the London Guidelines for the Exchange of Information on Chemicals in International Trade to include the Prior Informed Consent (PIC) procedure. The PIC procedure refers to the principle that chemicals banned and/or severely restricted for health and environmental reasons should only be traded internationally with the consent of the importing country. As of 1 March 1992, more than 100 governments have reported to UNEP's International Register of Potentially Toxic Chemicals (IRPTC) that they will participate in the PIC procedure. At the international level, both UNEP/IRPTC and the Food and Agriculture Organization of the United Nations (FAO) have received a mandate to administer the PIC procedure. To fulfill this responsibility both organizations coordinate their work and have established a joint programme on the operation of PIC.

In the fall of 1991, PIC became operational, after further refinements by a FAO/UNEP joint group of experts. Participating governments were requested to submit to IRPTC an inventory of all chemicals banned and severely restricted in their country. At the same time, Decision Guidance Documents for several chemicals on the initial list of PIC chemicals were sent out to participating governments with a request to submit a final or interim import decision to the UNEP/FAO secretariat within 90 days.

Programme Goals and Objectives

In response to these developments, UNEP's IRPTC and UNITAR European Office, in early 1991, joined forces and established a Training Programme on the Implementation of the London Guidelines. The training programme has two main objectives:

1. To assist developing countries in the implementation of the PIC procedure through regional and sub-regional workshops as well as through selected national follow-up activities;
2. To assist developing countries establish National Registers of Potentially Toxic Chemicals (NRPTCs) to serve as a tool for the storage and exchange of information on chemicals.

Sequence of Training Activities

The training programme has initially focused on countries in the Asia and Pacific Region, however, plans are being developed to expand the activities to Latin America and the Caribbean and Africa as soon as possible. Each "regional training package" features a series of modules which build on and complement each other:

Phase 1: Assessment of Region-Specific Training Needs Including the Establishment of Institutional Contacts
Phase 2: Regional Workshop on the Implementation of PIC
Phase 3: Sub-Regional Follow-up Workshop(s) on the Implementation of PIC
Phase 4: Sub-Regional Workshops on the Establishment of NRPTCs
Phase 5: National Follow-up Activities Relating to PIC and NRPTCs, as appropriate

Assessment of Training and Technical Assistance Needs

In July 1991, some countries in Asia and the Pacific (Indonesia, Malaysia, Sri Lanka and Thailand) were visited by UNITAR/IRPTC with the objective to:

- alert and brief governments about the planned IRPTC/UNITAR training activities,
- discuss with potential participants the structure and content of the upcoming workshops,
- conduct an assessment of training and assistance needs of NRPTCs, and
- obtain a better understanding of the practical problems of chemicals management in countries of the region.

Several ministries concerned with the implementation of PIC and chemicals management were interviewed, in particular the Ministries of Environment, Agriculture, Health, Trade, and the Customs Authorities. This allowed IRPTC/UNITAR to draw several conclusions:

- Most of the countries in the region are not in a position to appropriately monitor the flow of chemicals into the country.
- Inventories of existing chemicals and notification systems for new chemicals are being considered in a few countries, but severe difficulties arise during the implementation of such schemes.
- Access to international information sources on hazardous chemicals is not sufficient and hampered by the lack of computer hardware and software.
- Harmonized hazard assessment and hazard communication systems (e.g. classification and labelling schemes) usually exist for the transport sector, however, they do not exist with regard to occupational and consumer application and use of chemicals.
- Capabilities to conduct risk assessment studies are moderate and need to be strengthened.
- Coordination between the various ministries concerned with chemicals management issues at the national level is very difficult and international organizations often exacerbate this problem by working exclusively with one ministry rather than taking a cross-sectoral approach.

Recent Activities

Training Activities in the Asia and Pacific Region: Regional Workshop on PIC

IRPTC/UNITAR training activities commenced in the Asia and Pacific Region with the:

> FAO - UNEP/UNITAR Regional Workshop on the Implementation of PIC (Manila, Philippines, 29 July - 2 August 1991).

This workshop was jointly organized with FAO and brought together all Designated National Authorities (DNAs) in the region, those for pesticides and those for industrial and consumer chemicals. Emphasis was placed on major elements and steps of the PIC procedure, as well as on the administrative responsibilities of DNAs.

Specific sessions discussed in detail chemical management problems of industrial and consumer chemicals in connection to PIC and provided IRPTC and UNITAR with pragmatic guidance for their follow-up activities. Four main conclusions could be drawn from those sessions, reinforcing some of the earlier findings.

1. While the management of pesticides in the region has already received considerable attention, sound management systems and legislation for industrial and consumer chemicals are lacking in many countries and therefore require specific attention and assistance.
2. PIC and other related chemical management schemes require a cross-sectoral approach and therefore the support of all concerned government sectors. Only through inter-agency cooperation can PIC be implemented at the national level.
3. . Although PIC is being administered on a global scale, increased cooperation at the regional and sub-regional level is necessary to implement the procedure effectively.
4 . PIC is not an end in itself, but rather should be regarded as an interim and intermediate step towards the establishment of comprehensive chemicals management schemes in developing-countries.

Sub-Regional Workshop on PIC

Taking into consideration the experiences gained during the first two phases of the programme, IRPTC and UNITAR invited several countries to a more in-depth sub-regional follow-up workshop:

> UNEP/UNITAR Sub-Regional Workshop on the Implementation of Prior Informed Consent: From PIC to Chemicals Management
> (Kuala Lumpur, Malaysia, 9-13 December 1991).

The workshop discussed in more detail institutional, legal, administrative and technical issues related to the implementation of PIC at the national level. For this event, in addition to DNAs, each participating country was represented by several other government agencies concerned with the management of chemicals. Workshop participants represented the Ministries of Environment, Agriculture, Health, Trade and Industry, and the Customs Authorities.

For DNAs, the Kuala Lumpur workshop provided the first opportunity to report back to IRPTC on some of the operational difficulties encountered during the starting phase of the PIC procedure. In addition, and equally important, the workshop featured a combination of information sessions in plenary and a series of small working group discussions, during which:

Typical UNEP/UNITAR Sub-Regional Workshop on The Implementation of Prior Informed Consent (PIC)

From PIC to Chemicals Management

Day 1:

- Work of UNEP and FAO Relevant to PIC: Progress in Implementation of the FAO/UNEP Joint Programme on PIC
- Work of Other International Organizations, the Private Sector and the NGO Sector Relevant to PIC
- Plenary on General PIC Related Matters
- PIC in a Summary
  - -Steps of the PIC Procedure
  - -Responsibilities of DNAs
  - -Operational difficulties encountered by IRPTC and FAO
- The Operational Experience with PIC by DNAs

Day 2:

- The Process of Developing a Comprehensive National Implementation Strategy for PIC:
  - -Institutional and Administrative Considerations
  - -Information and Data Requirements
  - -Legal Considerations
  - -Enforcement Considerations
- National Working Groups - Development of National Action Plans
- Discussion of National Action Strategies (Plenary)
- Identification and Discussion of Sector Specific Issues and Problems Relevant to the Context of PIC:

  Group A: DNAs (Chemicals and Pesticides)
  Group B: Ministries of Industry
  Group C: Ministries of Health
  Group D: Trade/Customs Authorities

Day 3:

- Presentation of Sectoral Working Group Discussions and Recommendations
- The NRPTC Experience of Participating Countries
  - I. Presentation of NRPTC Concept and IRPTC PC-Version
  - II. Discussion on NRPTC (National Information Exchange Networks, Data Collection/Chemical Inventories, Management Issues, Training Needs)
- Additional International and National Information Sources Available on Chemicals (Databases and Documents)
- From Data Collection to Data Management: An Introduction to Notification, Classification and Labelling Schemes for Hazardous Substances

Day 4:

- International Instruments and Initiatives Concerned With the International Trade of Certain Chemicals: A Comparative Overview with Focus on Provisions Related to PIC
- Model Chemicals Legislation/Guidance Material in Preparation by International Organizations: Their Relevance for Implementing PIC
- Integration of Chemicals Information Exchange Provisions and PIC into National and Regional Chemicals Legislation
- Guidance for Integrating PIC - Relevant Provisions Into National Chemicals Legislation

  A.The Case of An Importing Country: Import, Production and Use Control Provisions
  (1) Banned Chemicals
  (2) Severely Restricted Chemicals
  B.The Case of an Exporting Country: Export Notification and Control Provisions

Day 5:

- Introduction to Hazard Assessment, Risk Evaluation and Risk Management
- Simulation Exercises on an Import Decision for an Industrial Chemical
- Plenary on PIC Case Study
- Workshop Recommendations and Follow-up
- Workshop Evaluation and Assessment

Typical UNEP/UNITAR Workshop on National Registers of Potentially Toxic Chemicals

Day 1:	Group Exercises on Training Needs of Participants Workshop Objectives and Methodology The Work of IRPTC: An Overview Functions and Responsibilities of NRPTCs: An Overview
Day 2:	Overview on the IRPTC Databank: structure, format, and files Introduction to the IRPTC- PC version Introduction to MS DOS (including exercises) Installation of the PC Version (including exercises) Identification of Chemicals (including exercises)
Day 3:	Regulatory and Other Chemicals Control Instruments The IRPTC Legal File (including exercises) The "Life Cycle" of Chemical Substances The IRPTC Environmental Fate Files (including exercises)
Day 4:	Introduction to Human Toxicology The IRPTC Mammalian Toxicity Files (including exercises) Introduction of Eco-Toxicology The IRPTC Ecotoxicity Files (including exercises)
Day 5:	Advanced Data Extraction and Data Entry Practical Training on the Use of Data Entry Worksheets Exercises for Using the PC Version for National Data
Day 6:	Arrival and Welcome of NRPTC Managers Status Report of Existing NRPTCs The Work of Other Organizations Relevant in the NRPTC Context
Day 7:	Development of a Comprehensive NRPTC Concept Establishing a NRPTC Query Response Service Query Response Simulation Exercises (working groups)
Day 8:	Establishing an Inventory of Existing Chemicals Using the IRPTC PC version for Storing Inventory Information Developing Criteria for Priority Chemicals
Day 9:	Notification Systems for New Chemicals: A Comparative Overview Using the IRPTC version for Storing Notified Data (practical exercises) Hazard Assessment of Dangerous Chemicals: An Introduction Case Study Simulation Exercises on Assessing the Hazard of a Chemical
Day 10:	Criteria for Developing a Comprehensive NRPTC Management Plan National Working Groups on the Development of National Action Plans Results of National Working Group Discussions and Discussion of Follow-up Activities Evaluation

- National Working Groups identified gaps in the national chemicals management infrastructure related to PIC;
- Sectoral Working Groups discussed the role of the environment, health, industry and customs/trade sector respectively, with regard to PIC; and
- Case Study Working Groups worked through a simulation exercise leading them through the process of making an import decision for an industrial PIC chemical.

The Kuala Lumpur workshop generated a wealth of suggestions and recommendations not only aimed at improving the PIC procedure itself, but also addressing other international organizations (e.g. the Customs Co-operation Council) to make their work fully consistent with the London Guidelines and PIC.

Plans for 1992-1993

Regional Workshop on NRPTCs

Phase 4 of the training programme in the Asia and Pacific region will be implemented through an:

IRPTC/UNITAR Regional Workshop on the Establishment of National Registers of Potentially Toxic Chemicals (Cha-Am, Thailand, 30 March - 10 April, 1992).

Through NRPTCs, national decision making bodies can be provided with valuable additional data (e.g.import and production data, additional hazard data) to make a more informed import decision on specific PIC chemicals.

IRPTC and UNITAR are inviting government personnel whose responsibilities include the operation of the PC-version of the IRPTC database and the management of the NRPTC. During the first week, participants with technical responsibilities will be made familiar with the data profiles of the IRPTC database and the newly developed PC-version of the database. During the second week, their supervisors/managers will join the seminar and cover such issues as national information exchange networks, national inventories of chemicals, hazard evaluation techniques, etc.

National Workshop(s) on the London Guidelines

During the Sub-regional Workshop on the Implementation of PIC in Kuala Lumpur, several participating countries expressed an interest to conduct national follow-up workshops on the implementation of the London Guidelines in collaboration with IRPTC and UNITAR.

Plans have been finalized to hold a first national follow-up workshop to the Kuala Lumpur workshop in New Delhi, India in the summer of 1992. While the workshop will be primarily organized by the Government of India, IRPTC and UNITAR will assist by providing legal and technical expertise, developing background material, and facilitating working group discussions, as appropriate. Experiences gained through the assistance of national workshops by IRPTC in Malaysia (February 1990) and by IRPTC and UNITAR in China (October 1991) will be most valuable in this respect.

Other planned training activities in 1992

Following the successful completion of a first series of training activities in the Asia and Pacific Region, plans are being finalized to move the UNEP/UNITAR Training Programme to the Latin American and Caribbean and African regions.

Also, while past activities have focused so far on training the government sector on the implementation of the PIC procedure, IRPTC and UNITAR increasingly realize the need to increase contacts and cooperation with private sector industries. Plans are being considered to cooperate with industry associations in the Asia and Pacific Region to organize a regional workshop on the implementation of PIC this time focusing on the important role of the private sector.

Almost one year of training and research activities has provided IRPTC and UNITAR with valuable guidance for further developing and improving its training programme. Training needs have been identified and are progressively met through practical "hands on" training sessions. However, ample room is left for bi-lateral aid agencies to further assist countries in the implementation of the London Guidelines through specific technical assistance and training activities. All these follow-up activities can help to make sure that training does not remain a one time event but rather triggers a sustainable process of implementing PIC in developing countries.

4. UNITAR TRAINING PROGRAMME FOR THE PROMOTION OF COOPERATION IN ENVIRONMENT-DEVELOPMENT NEGOTIATIONS

Overview and Recent Activities

In July 1991, UNITAR initiated research to determine the need and feasibility of a training programme in the field of environment-development negotiations. UNITAR prepared a proposal which was sent to more than 80 experts and practitioners in the areas of international environmental law, negotiation, diplomacy and environmental training. The response from these experts revealed a strong and urgent need to provide training for two types of negotiations, 1) international environmental negotiations such as those conducted under the auspices of UNEP, and 2) international economic / development negotiations where environmental issues are discussed under an economic development agenda such as negotiations with foreign investors, UNDP, World Bank and other development agencies. UNITAR prepared proposals on each of these types of negotiations and circulated them to the pool of experts together with an invitation to an expert meeting, which was convened in November 1991 in Geneva.

The group of experts confirmed the urgent need to provide training and assistance to governments, particularly from developing countries and countries with economies in transition. They pointed out the novelty of the field and expressed concern at the lack of training and assistance in this area and urged UNITAR to further develop the present programme.

Programme Goals and Objectives

The goal of the programme is to promote cooperation and sustainable development in environment-development negotiations by assisting countries develop their capacity to effectively negotiate and resolve issues which have a significant impact on environment and development. The programme seeks to achieve this goal through the provision of training that will build the skills of, and bring the advancements in negotiation theory and practice to, key national and international officials directly or indirectly involved in such negotiations.

Training conducted under this programme is envisaged to specifically meet needs arising out of and to complement:

1. ongoing global negotiations such as the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (INC-FCCC) process and the various regional and international environmental negotiations conducted under the auspices of UNEP,
2. bilateral and multilateral development assistance negotiations such as those involving UNDP, World Bank and other development agencies, and
3. negotiations at the national level initiated and/or managed by government agencies arising out of the formulation and implementation of national environment-development policies and plans.

Training

Training activities will be conducted under the auspices of UNITAR in close cooperation with partners from the U.N. system, intergovernmental, private and non-governmental sectors. Training will be innovative with heavy emphasis on interactive pedagogical methods such as negotiation simulations, case studies, and feedback exercises, and will maintain a systematic multidisciplinary approach.

Target Participants

The criteria for identifying participants will be their potential to improve negotiation processes, help implement mechanisms to promote sustainable development, and assist countries develop their negotiating and dispute resolution capacity. Following this criteria, target participants can be broadly categorized and prioritized as those whose training would be used to:

1. improve ongoing or oncoming international or global environmental negotiations, e.g., delegates to international environmental negotiations, particularly those who have specialized skills (scientists, etc.) but do not have much experience in international negotiations;
2. implement mechanisms that promote sustainable development, e.g., government officials and

staff of development agencies who implement processes to integrate environmental protection in development policy, programmes and projects;

3. prevent ongoing or anticipated environmental disputes, e.g., planners and negotiators of countries who share vital natural resources such as lakes, rivers, underground aquifers, forests and which have transboundary environmental impacts, and the staff of international agencies who aim at assisting them;
4. negotiate a broad range of environmental and development issues at the international and/or national levels, e.g., diplomats, policy-makers and negotiators from ministries of environment, trade, economic development, etc.;
5. train others in negotiation and dispute resolution, e.g., faculty, researchers, NGOs, etc.

Each of these groups of potential participants constitute and justify separate training programmes. Depending on the desired impact of training intervention, more focused and detailed programmes can be developed.

Programme Areas

The programme will focus on three areas for training as suggested by both working groups at the UNITAR Expert Meeting. These areas may be considered as complementary modules which can be modified to meet specific needs. The basic purpose of each module, however, will remain the same - to provide key people with skills to effectively resolve conflicts and promote and participate in mutually gainful negotiations.

Module 1: Training on Negotiation and Dispute Resolution

This module will provide training on negotiation skills that promote mutual gain and consensus. The various functions/uses of negotiation will be treated in detail to promote skills in utilizing negotiations — as a method for resolving disputes or conflicts, as a way for joint-problem solving, and as a means of exchanging information and understanding each others' interests. The module will aim at exposing participants to a number of techniques and tools that can help them effectively manage practical and concrete negotiation situations at the national and international levels - such as initiating and managing negotiations, brainstorming, interest clarification, use of single-text in multilateral negotiations, effective chairmanship, etc. Special attention will also be given to the principal-agent relationship pervasive between governments and their diplomats, and to cross-cultural negotiations.

Some of the topics under this module are the following:

Mutually Gainful Negotiations
Consensus Building
Initiating and Managing Negotiations
Environmental Interest Clarification
Dispute Resolution

Module 2: Training on Environmental Protection Mechanisms in Environment-Development Negotiations

This module will expose participants to legal, financial and other mechanisms that can be employed to protect environmental concerns without jeopardizing sustainable development opportunities. It will address needs at the national level arising out of bilateral development projects, foreign investment, infrastructure development, structural adjustments, etc. In a concrete and practical fashion, this module will also address ways to improve international environmental law.

Some of the topics under this module are the following:

Legal and Financial Aspects of Environmental Protection
International Environmental Law

Module 3: Training on Economic/Development Aspects in Environment Development Negotiations

This module will present the economic and development aspects of environmental negotiations and expose participants to the economic mechanisms being proposed to meet environmental issues,

including links between market conditions and the intensity of resource use; the Polluter-Pays, User-Pays and Precautionary Principles; international financial mechanisms like tradeable carbon emission entitlements for limiting greenhouse gas emissions; and debt for nature swaps. Courses under this module are being discussed with UNCTAD under their proposed project to provide support to developing countries on the developmental aspects of global environmental deliberations.

TENTATIVE OUTLINE

WORKSHOP ON MUTUALLY GAINFUL NEGOTIATION*

(3-5 Days)

WORKSHOP CONTENT

Topics covered in the workshop would include:

- **Systematic Preparation for Negotiations Using a 7-Element Analytical Framework.** Participants are taught to use a framework composed of basic elements of negotiation which have proven to be universally applicable. It has been successfully used by diverse cultures on six continents as well as in a full range of business, governmental, environmental,interpersonal, labour-management, and international contexts.
- **Negotiation Strategy.** Using a proven, systematic approach to negotiations, participants are taught to identify and articulate interests underlying positions, structure the negotiation process to generate more and better options, use standards of legitimacy independent of the will of the parties, design commitments in an uncertain environment, and disentangle the relationship issues (e.g. emotion and reliability) from substantive ones (e.g. terms and conditions).
- **Systematic Approach to Influence.** Participants are taught tools for developing and reframing proposals in order to address the realistic constraints of decision-makers and maximize the chances of acceptance and implementation. Also addressed are ways of dealing with a party that appears to be acting unreasonably and how to influence those from sharply differing economic, political, cultural, and social backgrounds.
- **Managing Internal and External Negotiations.** Participants learn approaches for dealing effectively with the problems of relating negotiations inside the agency and the government, with negotiations conducted with those outside the government.
- **Coalition-Building and Multilateral Negotiations.** Participants learn strategies for dealing with multi-party negotiations including understanding coalition dynamics and preventing blocking coalitions; building support for proposals; developing options; securing operational, compliance-prone commitments without unanimity; and techniques for effective facilitation.
- **Negotiating Power.** Participants focus on dealing with power imbalances in negotiation. Enhancing and using one's power effectively in negotiation.

Methodology. Consistent with UNITAR's "hands on" philosophy, the workshop would first teach participants about negotiation theory,then offer a series of negotiation exercises on topics outside of the environmental field, and finally take participants through a simulated environment-development negotiation.

** The Workshop was designed by Mr. Roger Fisher, Director, Harvard Negotiation Project, and Senior Adviser, Conflict Managment Group.*

Plans for 1992-1993

UNITAR's programme on environment-development negotiations is still in its early stages. Plans exist for several training activities in 1992, but these will depend on extrabudgetary funding.

Currently, UNITAR, INC-FCCC, and the Intergovernmental Panel on Climate Change (IPCC) are working on a negotiation workshop for delegates to the climate change negotiations to be conducted in April, immediately preceding the extended fifth session of the climate change negotiations. The

objectives of the workshop are to introduce participants to a systematic understanding of negotiation processes and to expose them to some of the strategic options available through the use of negotiation simulations and case studies.

In coordination with UNITAR's Multilateral Diplomacy Training Programme, a 20 hour course on international environmental negotiations will be organized by the programme for the diplomatic community in Geneva in March 1992.

In 1992, it is hoped that the programme would continue conducting workshops in connection with the major ongoing global and regional environmental negotiations - climate change, biodiversity, forestry, ozone, regional seas, etc. There are plans to hold regional and national workshops on negotiation and conflict resolution in developing countries. A core curriculum for the workshop is being developed jointly with UNITAR's institutional partners in the academia and in the U.N. system. This curriculum would be modified depending on the specific needs of target participants. Quite advanced discussions are being held in this respect with the World Foundation on Environment and Development (WFED), based in Oslo, Norway and the National Institute for Dispute Resolution, based in Washington, D.C., USA. Should an agreement be reached, a joint training programme aimed at building the capacity of developing countries to resolve environment-development disputes should commence in 1992.

There are also discussions for training activities in conjunction with UNCTAD and UNDP. Work with UNCTAD would focus on exposure to economic principles and mechanisms increasingly introduced in environmental negotiations. Work with UNDP would relate to the resolution of disputes arising out of the processes in the preparation of country and project programmes under UNDP's Guidelines for Environmental Management and Sustainable Development.

UNITAR will continue in 1992-1993 to build its network and database on resources in international environment-development negotiations. This activity was started in 1991 and will remain a priority even as training activities intensify. Another important task of UNITAR in 1992-1993 is to continuously develop training curricula. This will be done in close coordination with the institutional partners of UNITAR and with regional and national resource centres, particularly those from the developing countries. It is anticipated that 1993 will see the consolidation of the programme's training activities. As the programme progresses, continuous assessments will point out key areas for training. Without preempting the lessons that will be gained from experience, it is foreseen that institution building will become a major focus for the programme.

5. CITES SECRETARIAT/UNITAR JOINT RESEARCH ON TRAINING IN THE IMPLEMENTATION OF CITES

Overview

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which entered into force in July 1975, is the most widely adopted international environmental convention with 112 Parties, including 74 developing countries. The main objective of the Convention is to protect endangered species from over-exploitation by means of a system of import/export permits. These permits are designed to lead to the world-wide control of the international trade in endangered wildlife and wildlife products by regulating the commercial exploitation of endangered species, which is one of the main causes for their extinction.

Protected species of wild animals and plants are listed in three appendices to the Convention, according to the degree of danger of extinction. The rules for each of these appendices vary according to the required level of protection. The export and import of live specimens or parts and derivatives are either prohibited or subject to uniform permit requirements recognized by all member states. The contents of the appendices are negotiated every two years at the Conference of the Parties.

Recently, the increasing demand in developed countries for exotic animals, plants and their products from developing countries has led to an enormous illegal trade in this sector and to a heavy burden on the personnel and technical resources, particularly of developing countries. More than ever before, stricter and more effective implementation of CITES is required. Training responsible officials at the national level can help achieve this.

Recent Activities and Plans for 1992-1993

The Secretariat of CITES and UNITAR launched a joint study to determine training needs and the feasibility of training to help implement CITES. As a first step, UNITAR, in late 1991, developed a survey questionnaire to get relevant information about the actual problems in the implementation of CITES and to determine in what areas training could be useful. The world-wide survey has been launched and results are expected to be received in the first half of 1992.

After the results of the survey have been analyzed, UNITAR will convene a workshop possibly in Spring 1992 to interpret those results and to develop an appropriate training programme. The programme is expected to address officials who deal with the convention, including government officials, management authorities, wildlife officers, and customs and police officers. Training is expected to begin in late 1992.

B. TRAINING PROGRAMME ON DEBT MANAGEMENT WITH SPECIAL EMPHASIS ON THE LEGAL ASPECTS

Overview

The programme on debt management commenced after a high-level expert meeting in Geneva in 1987. The meeting noted the lack of training in debt management, particularly on the legal aspects, and recommended the establishment of a training and information dissemination programme focusing on the least developed countries (LDCs).

Special emphasis was placed on the legal aspects of debt management as a result of extensive studies and surveys of needs and means among managers of foreign debt in sub-Saharan Africa. Improved legal support is seen as an important element in negotiating and implementing stronger and better loan agreements which can strengthen the economies of developing countries. It has also been pointed out that in many cases, debt management is improved by maximizing the protection afforded through legal means. Finally, it was noted that very little institutional assistance is available in these countries to provide information and training in this particular field.

The programme has progressed steadily since the expert meeting. In 1990-1991, several seminars and workshops were conducted in sub-Saharan Africa and an Operational Support Unit was established to assist in the collection and dissemination of information for the use of debt managers. In 1992, the programme will expand to Asia and the Pacific.

Programme Objectives

The programme seeks to raise the awareness of decision-makers and train senior-level debt managers on the often neglected legal aspects of debt management as well as provoke ideas and actions on building regional, sub-regional, and national strategies on debt management issues.

To achieve these objectives, a 7-stage programme cycle is followed:

Stage 1: Surveys and Country Visits - to review current policies, regulations, debt strategies, and training needs in the legal aspects of debt management; gauge the potential impact of training; identify potential areas where training can be effectively applied; identify potential participants; secure the commitment and cooperation of government officials with respect to the purposes and objec-tives of the programme; and establish working relations with local resource persons.

Stage 2: Regional Awareness and Sensitization Seminars - to raise the awareness of decision-makers to the importance and opportunities of giving priority to the legal aspects of debt management; secure government commitment to the promotion of debt management; facilitate regional cooperation and networking and the development of regional implementation strategies.

Stage 3: Sub-regional Seminars - to expose participants to the legal aspects of, and the experience of other countries in, debt management; facilitate the development of national implementation strategies with respect to debt management.

Stage 4: National Follow-up Workshops - to deal with country-specific, concrete aspects of debt management; assist in building institutional capacity in debt management; facilitate exchange of information and networking of national resources; train government cadres on the opportunities afforded by careful attention to the legal aspects of debt management.

Stage 5: Evaluation of Training Activities - to assess the impact of training and the extent of activities following-up on the recommendations generated during the seminars and workshops.

Stage 6: Development and Introduction of Self-Contained Training Material - to assist national institutions train their staff on debt management and provide material for use not only

by academic institutions but also for on-the-job training in Central Banks, non-technical and technical ministries (including Ministries of Finance, Economy andJustice, Attorney General's Office), large borrowing entities (such as ports, rail-ways, airlines, communication utilities, shipping lines, etc.), Public and PrivateBanks; facilitate self-reliant education and training on debt management.

Stage 7: **Networking of National Resources** - to facilitate the networking of the various African countries which have been prepared through the sub-regional seminars and the national follow-up workshops, following the arrangement prescribed in the Abuja Plan adopted by the Ministers of Law of all African countries in November 1989.

The 7-stage programme cycle is intended to have a significant effect in:

- promoting the prudent management of external debt through the effective use of lawyers from the early phases of debt negotiation and contract drafting to project monitoring and beyond;
- facilitating the development of self-reliant education and training on debt management, networking of local and regional resources, and the sharing of information among countries in the South;
- enhancing the capacity of developing countries to negotiate fair, effective, and sustainable debts, debt restructuring agreements, and debt management settlement;
- facilitating the development and implementation of regional, sub-regional, and national debt management strategies.

Operational Support Unit

Parallel to the seminars and workshops, the programme has created an Operational Support Unit with the following objectives:

- To mobilize material and human resources (information, documentation, expertise, etc.) from a broad range of international sources in support of the debt management training programme;
- To seek cooperative initiatives for the participation of multilateral, bilateral, regional, and non-government agencies in the effort to train officials from developing countries in various aspects of debt management;
- To improve access to information of debt managers in developing countries through active and broad dissemination of information concerning debt management, including information on available technical assistance and training; and
- To facilitate the implementation and continuous development of the training programmes proposed by UNITAR and endorsed at the high-level expert meeting convened in Geneva in April 1987.

Recent Activities

With the active support of the East African Development Bank (EADB), UNITAR has conducted the following seminars and workshops in three East African countries from 1990 through early 1992 and trained over 175 participants:

1. Awareness Seminar for Senior Officers on External Debt Management - Dar es Salaam, Tanzania, January 1990.
2. Awareness Seminar for Senior Officers on External Debt Management - Kampala, Uganda, January 1990.
3. Sub-regional Training Seminar on Legal Aspects of External Debt Management - Nairobi, Kenya, February 1990.
4. National Follow-up Workshop on Legal Aspects of External Debt Management - Dar es Salaam, Tanzania, July 1991.
5. National Follow-up Workshop on Legal Aspects of External Debt Management - Nairobi, Kenya, July 1991.
6. National Follow-up Workshop on Legal Aspects of External Debt Management - Kampala, Uganda, January 1992.

TYPICAL SUB-REGIONAL TRAINING SEMINAR ON LEGAL ASPECTS OF DEBT MANAGEMENT

PROGRAMME SCHEDULE

Day 1:	Introduction to Debt Management Introduction to Main Legal Issues and to the Role of the Lawyer
Day 2:	National Loan and Guarantee Approval Procedures
Day 3:	Conditions Precedent to Loan Agreements Covenants Project Description Exercises
Day 4:	Parties to Agreement and Applicable Law Financial Obligations Default Clauses Force Majeure - Change of Circumstances
Day 5:	Drafting Exercise: Default, Force Majeure, Change of Circumstances Settlement of Disputes Co-financing
Day 6:	Export Credit Practice
Day 7:	Syndication in relation to Loan Agreements Loan Agreements from a Borrower's Perspective
Day 8:	Restructuring Sovereign Debt
Day 9 & 10:	Case Study

Participants

- *Awareness/Sensitization Workshops*

  Senior officers and middle management of government agencies, central banks, large public entities (e.g., railways, ports, airlines), and public and private banking institutions;
  Law professors, and government and private lawyers (from the Attorney General Offices, Bar Associations, Ministries of Finance, etc.) working on the negotiation of loan agreements.

- *Sub-regional Training Seminars and National Follow-up Workshops*

  Lawyers from government ministries, parastatal institutions, and major private entities to its training seminars and workshops.

Whenever deemed useful, UNITAR's debt management training programme holds awareness/sensitization workshops to provide general information on debt management with specific focus on its legal aspects, to senior officers and middle management from government, central banks, large public entities (e.g., railways, ports, airlines), and public and private banking institutions. Law professors, and government and private lawyers (from the Attorney General Offices, Bar Associations, Ministries of Finance, etc.) working on the negotiation of loan agreements are also invited to awareness/sensitization workshops. Such high-level awareness seminars were organized in Tanzania and Uganda in cooperation with the East African Development Bank (EADB).

TYPICAL NATIONAL FOLLOW-UP SEMINAR ON LEGAL ASPECTS OF DEBT MANAGEMENT

Day 1 & 2:	Debt Re-scheduling, Cancellation and Swaps - How to avoid debt problems * Paris and London Clubs * Case Study on Agreed Minutes * Case study: Comparison between bilateral agreements * Debt cancellation and swaps * Final discussion
Day 3:	Sovereign Borrowing and the Principles of Budgetary Law
Day 4 & 5:	Arbitration

Following the recommendations of the participants to the Sub-Regional Seminar held in Nairobi for lawyers from EADB member countries to the effect that linkages should be made with national institutions in every country, particularly with law faculties, UNITAR has employed "National Focal Points" with the view to progressively establish a network of trainers and promote self-sufficiency in the regions where it operates. To this end, UNITAR appointed five National Focal Points in 1991 in Ghana, Kenya, Nigeria, Tanzania and Uganda, who were not only active in their own countries but also involved in sub-regional activities. The involvement of National Focal Points will contribute significantly to efforts at African and South-South cooperation and respond positively to Resolution 23 of the Abuja Plan of Action, which reads, "African States should evolve a common legal approach on the problem of African Debt. A common negotiating framework with creditor nations and International Financial Institutions should also be evolved".

Plans for 1992-1993

Since 1987, the debt management training programme has been funded by the Swiss Directorate of Development Cooperation. In 1992, UNITAR European Office received new financial assistance from the Division for Global and Inter-regional Programmes (DGIP) of the United Nations Development Programme (UNDP). These additional funds will be used to expand the training programme to countries in Southern Africa and in Asia and the Pacific.

UNITAR plans to organize eight to nine seminars and workshops on debt management and legal aspects of debt management in countries of sub-Saharan Africa and Asia and the Pacific during 1992 and 1993. 350 participants are expected to attend.

In addition to the expansion of its seminars and workshops into new countries, the debt management programme will work in 1992 and 1993 to increase cooperation with other institutions and expand both UNITAR and local networks of debt management resources. UNITAR will continue to work towards the establishment of regionally-based programmes for ongoing training in debt management and develop comprehensive training packages on the more important aspects for use by regional centres for ongoing training. UNITAR also plans to bring its contributions to two African Development Bank (ADB)/World Bank Seminars in Rabat and Harare to be held in 1992.

The Operational Support Unit (OSU) will be enhanced in 1992-1993. The OSU will continue to improve its collection of resources and develop means for better distribution of information on debt management. The OSU will be available to respond to queries by debt managers and plans are being developed to regularly publish contributions of experts and resource persons. The programme will also publish reports on seminar content and proceedings with summaries of important lectures and a listing of recommendations for future legal strategy in debt management.

1992-1993 WILL SEE THE EXPANSION OF THE PROGRAMME ALONG SIX LINES OF ACTION:

1. Follow-up activities in East and West Africa,
2. Commencement of training activities in Southern Africa,
3. Commencement of training activities in Asia and the Pacific,
4. Cooperation with other development and financing institutions,
5. Development of local networks for capacity building,
6. Use of Operational Support Unit for original training material development, information dissemination and the improvement of information access in developing countries.

C. TRAINING IN DISASTER RELIEF MANAGEMENT

Overview and Recent Activities

Through appropriate training at all levels, it is possible to improve the prevention and mitigation of disasters, to reduce their consequences, and to organize faster and more efficient post-disaster rehabilitation in the perspective of economic development. In short, it is possible to improve the management of disasters, with resulting savings in human lives and material losses. UNITAR's training programme, in cooperation with UN agencies and other bodies involved in disaster management, aims at such improvement.

After a world-wide feasibility study on training needs in disaster relief management in 1987-1988, UNITAR concluded that any training programme must be adapted to the specific type of disaster to be "managed". Priority was given to training of disaster managers in the Sahelian countries, which are often stricken by drought, locusts, epidemics, floods and other disasters.

A training programme was agreed upon following a fact-finding mission which took place at the end of 1988 in nine countries (members of the Inter-State Committee on Drought Control in the Sahel - CILSS), and following a further detailed study in 1989 (with inter-governmental and non-governmental organizations). The necessary funding was obtained towards the end of 1990, which made it possible to begin the programme in 1991.

The main target of the programme is the training of mid-level managers involved in disaster prevention, mitigation and rehabilitation in the Sahelian countries. The first stage of the programme is to organize awareness workshops for decision makers in each country, in order to obtain their full support for the programme and the nomination and training of mid-level managers.

Three first-stage workshops were held in 1991, in Burkina Faso, Niger and Chad.

Plans for 1992-1993

Two major events are planned to take place in 1992-1993:

1. Organization of awareness workshops for decision-makers in other CILSS-countries (Mali and Mauritania);
2. Organization of training activities for mid-level managers in countries where awareness workshops have already taken place, according to the needs identified in those workshops.

In this context, there are plans to organize training activities in Burkina Faso and conduct a detailed assessment of priority training needs in Niger.

III.

RESEARCH AND PUBLICATIONS

Following a decision of UNITAR's Board of Trustees, basic research is conducted only if extra-budgetary funds are provided. Various research activities, mostly concerned with training, are currently being undertaken. They include the selection and gathering of texts and articles, or the conceptualization of original "case studies" and simulation exercises. This activity, sometimes conducted with the assistance of graduate students, is doubtless important. Training and reference material are particularly important for civil servants in developing countries given that specialized literature is often not available or very expensive. Most material used in UNITAR's training programmes is prepared specially for specific training events and is reproduced but not printed.

UNITAR research for, on, and cum training may also lead to publications for sale or free distribution.

1. PUBLICATIONS ON MULTILATERAL AFFAIRS

UNITAR European Office regularly publishes works which deal with diplomacy and multilateral affairs. In recent years, UNITAR European Office published the following:

1. Research on conference diplomacy under the title "East-West Diplomacy for Environment in the United Nations",and
2. A reference book entitled "The United Nations System at Geneva (Scope and Practices of Multilateral Diplomacy and Co-operation)".

Research on the International Civil Service is being finalized and will become another original publication in 1992.

2. PUBLICATIONS IN GEOGRAPHIC INFORMATION SYSTEMS TECHNOLOGY

The training programme in Geographical Information Systems (GIS) is also producing part of its own training material. Various publications are planned for the future.

UNITAR and UNEP-GRID have released the first of a series of publications entitled "Explorations in Geographic Information Systems Technology". The series consists of a set of workbooks designed for self-exploration of analytical techniques and major application areas in GIS technology by environmental managers.

The first in this series, entitled "Change and Time Series Analysis" was published in November 1991. As with each of the workbooks in the series, this volume starts with a review of analytical techniques - in this case, the analysis of change in the environment as evidenced in digital maps or remotely sensed satellite images. The workbook contains a set of exercises that allow the user to explore these techniques using real digital data sets and GIS software. The volume is of importance to scientists and environmental managers working at a variety of scales, ranging from, for example, environmental monitoring of land degradation in the Sahel to the broad scale assessment of tropical deforestation.

Other volumes in the series are currently under development. These include:

Forestry Applications (expected release: March 1992),
Coastal Zone Management (expected release: June 1992),
Error Tracking and Decision Theory in GIS (expected release: August 1992),
Mountain Ecosystems (expected release: September 1992), and
Environmental Hazards (expected release: November 1992).

The Forestry Applications and Coastal Zone Management workbooks give an overview of how GIS has been applied in these fields with a selection of actual case studies to explore the techniques used. The Mountain Ecosystems workbook focuses on special problems in the application of GIS to mountain environments, with particular emphasis on data collection and problems of microregion characterization. The Environmental Hazards workbook examines the role of GIS in assessing and managing risk for both technological and natural hazards. Finally, the Error Tracking and Decision Theory workbook attempts to provide basic tools for the decision maker in the context of uncertainty in making single and multi-objective decisions.

The Workbooks are intended to serve a variety of functions. They provide hands-on teaching materials for courses conducted by UNITAR under its GIS training programmes. They also provide a focus for research on issues of substantive concern to UNEP-GRID in the application of GIS to digital datasets in environmental management. In addition, because of their self-exploratory nature, they are also useful in a variety of educational and training settings, including university curricula and continuing professional education.

3. SERIES OF PUBLICATIONS BY THE DEBT MANAGEMENT OPERATIONAL SUPPORT UNIT

Through the establishment of its Operational Support Unit, the debt management training programme of UNITAR plans to provide information to developing countries on various aspects of debt management with a view to meeting the information needs of debt managers and alleviating the tremendous lack of basic information on debt management in many developing countries.

At each training event, Training Material consisting of compilations of articles and reference material prepared for each training event is distributed to the participants. They are, however, not published and not available to a larger audience. In addition, a series of publications is planned for the coming months. Two publications planned for distribution in 1992 include:

1. "Debt-Restructuring: Summary of Lectures at National Follow-up Workshops", a compilation of presentations on rescheduling of external debt, arbitration, sovereign borrowing and the principles of budgetary law. These presentations were given by professors and experts who have deep theoretical and practical knowledge in the field of debt management.
2. A "Set of Recommendations" will be published, summarizing recommendations made by seminar and workshop participants for consideration by their respective national authorities.

These publications are distributed free of charge to help articulate what debt managers in some developing countries think and believe needs to be done to help their countries address the problems associated with mismanaged foreign debts. Publications of this nature are expected to create greater awareness among concerned parties at all levels and give them a better grasp of the problems they face and give ideas for overcoming such problems.

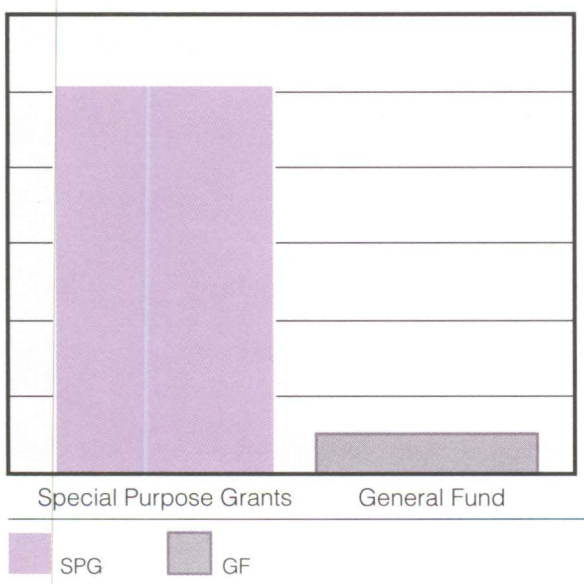
IV.
FINANCE

UNITAR General Fund covers exclusively the training programmes in multilateral diplomacy and international cooperation, prepared and conducted for diplomats accredited to the United Nations Office in Geneva (UNOG). It also covers the staff costs of the Director of the UNITAR European Office and of one Administrative Assistant. (In all, some 5% of the total disbursements of the European Office.)

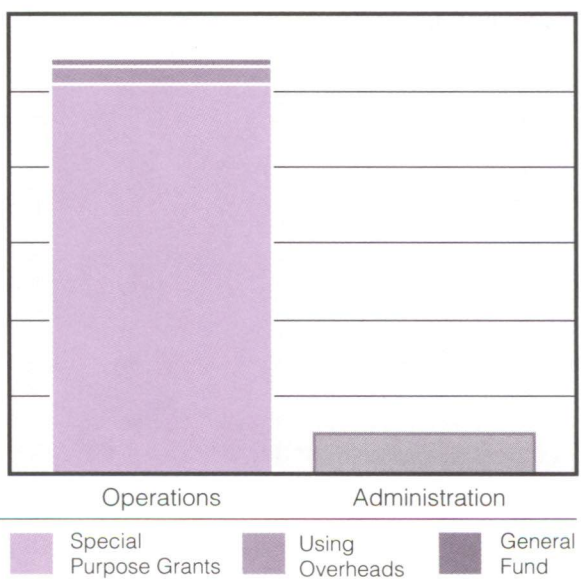
All training programmes in the field of economic and social development are funded by extra-budgetary resources, so-called "Special Purpose Grants". Funds raised from outside sources represent the main support to the training programmes. These funds cover the cost of the economic and social development training programmes conducted in Geneva, and out of Geneva for Europe, and all developing regions, as well as those diplomacy training programmes specially designed and tailored upon request from governments or institutions. These extrabudgetary funds also cover the staff costs and fees of some 15 collaborators, professionals, general service staff, and fellows associated with the various economic and social development training programmes.

A rough presentation of the 1991 budget structure of the UNITAR European Office follows. Graphs show clearly the limited share of administrative costs compared to operational commitments, as well as the large proportion of "Special Purpose Grants" used in the general funding of operations.

A. Sources of Funding (1991)



B. Breakdown of Expenses (1991)



While initially UNITAR's programmes were supported only by a single bilateral donor, the Swiss Directorate for Development Cooperation, over the last few years several other funders have begun contributing to UNITAR's work.

In 1992 and 1993 the main bilateral donors to these programmes are expected to be those who had also contributed in 1991 and/or pledged for 1992. They are presented in alphabetical order.

Australia:	Ministry of Foreign Affairs
Austria:	Ministries of Foreign Affairs and of Science
Finland:	FINNIDA
France:	Ministry of Cooperation and Economic Development and the International Institute for Public Administration (IIAP)
Germany:	Büro Führungskräfte zu internationalen Organisationen (BFIO), and Gesellschaft für technische Zusammenarbeit (GTZ)
Japan:	Foundation for Advanced Studies in International Development (FASID)
Netherlands:	Ministry of Development Cooperation, and Ministry of Housing, Physical Planning and Environment
Switzerland:	Directorate for Development Cooperation, and the Federal Office for the Protection of the Environment
United States:	Environmental Protection Agency (EPA) and National Aeronautics and Space Administration (NASA)

The main multilateral donors are expected to be the United Nations Development Programme (UNDP), Division for Global and Interregional Programmes (DGIP) and United Nations Sudano-Sahelian Office (UNSO); the United Nations Environment Programme (UNEP) and the Environment Fund; and the United Nations Organization (Programme of Assistance in Teaching, Study, Dissemination and Wider Appreciation of International Law). Joint ventures, another potential means for obtaining necessary funding for training programmes, are being seriously discussed with UNDP, Bureau for Programme Policy and Evaluation (BPPE); United Nations Population Fund (UNFPA); and the United Nations Centre for Human Settlements (UNCHS/HABITAT).



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U N I T A R

The United Nations Institute for Training and Research (UNITAR) was established in 1965 as an autonomous body within the United Nations system with the purpose of enhancing the effectiveness of the UN through appropriate training and research. UNITAR is governed by a Board of Trustees and is headed by an Executive Director. The Institute is supported by voluntary contributions from governments, intergovernmental organizations, foundations and other non-governmental sources.

The Institute provides training at various levels to persons, particularly from developing countries, for assignment with the United Nations or the specialized agencies or for assignment with their national services which are connected with the work of the United Nations, related organizations or institutions. The programmes include training for staff members of the UN and of the specialized agencies as well as training for special UN field assignments.

The UNITAR European Office has the following functions:

- To ensure liaison with organizations and agencies of the UN system in Geneva and with permanent missions accredited in Geneva and to establish and strengthen cooperation with faculties and academic institutions in Europe.
- To conduct training programmes in multilateral diplomacy and international cooperation for diplomats accredited in Geneva and for national officials, involved in work related to United Nations activities.
- To carry out a wide range of training programmes in the field of social and economic development which include:
    a. Environmental and Natural Resource Management Training Programmes;
    b. Training Programme on Debt Management with special emphasis on the Legal Aspects;
    c. Training Programme in Disaster Relief Management with activities, at present, in the Sahel.

It can not be guaranteed that all candidates will be able to participate in the scheme they have chosen ; the number of fellowships for scheme A and B are limited.

When selecting participants and assigning them to the various study schemes, the United Nations Office of Legal Affairs and UNITAR will give due regard to the candidates' qualifications, to the scope of their professional duties and to the need to ensure adequate geographical distribution of the awards.

APPLICATION PROCEDURE

Applications should be submitted through the Office of the Resident Representative of the United Nations Development Programme (UNDP) for transmittal to :

UNITAR
European Office
Palais des Nations
1211 Geneva 10
Switzerland

Application forms are available at the local UNDP offices (Ref. : TCD-71). Applicants from countries without UNDP Representation can obtain the forms directly from UNITAR.

Candidates are requested to observe the deadlines. Applications received after the deadlines cannot be considered.

UNITAR

The United Nations Institute for Training and Research (UNITAR) was established in 1965 as an autonomous body within the United Nations with the purpose of enhancing the effectiveness of the UN through appropriate training and research programmes. UNITAR works under the policy direction of a Board of Trustees and is headed by an Executive Director. The Institute is supported by voluntary contributions from governments, intergovernmental organizations, foundations and other non-governmental sources.

The Institute provides training at various levels to persons, particularly from developing countries, for assignment with the United Nations or the specialized agencies or for assignment with their national services which are connected with the work of the United Nations, related organizations or institutions. The programmes may include training for staff members of the UN and of the specialized agencies as well as training for special UN field assignments.

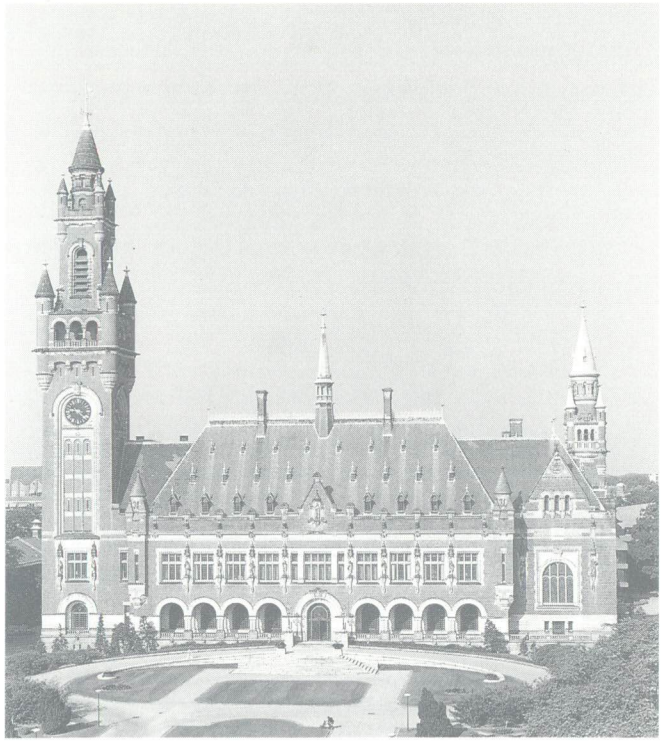
The UNITAR European Office has the following functions :

It ensures the representation of the Executive Director to the organizations and agencies of the UN system in Geneva and to permanent missions accredited in Geneva and it establishes and strengthens cooperation with faculties and academic institutions in Europe.

UNITAR European Office conducts training programmes in multilateral diplomacy and international cooperation for diplomats accredited in Geneva and for national officials, involved in work related to the United Nations activities.

It also carries out a wide range of training programmes in the field of social and economic development as well as research programmes on specific aspects of training methods and techniques.

UNITAR



UN/UNITAR FELLOWSHIP PROGRAMME IN INTERNATIONAL LAW

– THE HAGUE –

UNITED NATIONS INSTITUTE FOR TRAINING AND RESEARCH

PURPOSE OF AWARD

The UN/UNITAR fellowships in International Law are intended to enable qualified professionals, in particular mid-level government officials and young university teachers of international law, to acquire additional knowledge on international law and on the legal work of the United Nations and its associated bodies. The fellowships are administered by the United Nations Institute for Training and Research (UNITAR) in cooperation with the United Nations Office of Legal Affairs. It is anticipated that a minimum of 15 fellowships will be awarded to applicants from developing countries.

QUALIFICATIONS OF INTERNATIONAL LAW FELLOWS

To qualify for the fellowship, candidates should be in the 24 - 40 age group. They should be law graduates with practical experience in the field of international law acquired by working for a public or private organization or a university. The courses in The Hague are conducted in English and French - therefore it is essential that candidates have a thorough knowledge of either language.

In their application, candidates should state their qualifications precisely and describe clearly in what way the experience gained from the fellowship programme would be useful for the performance of their regular duties.

FINANCIAL ARRANGEMENTS AND ACCOMMODATION

The United Nations and UNITAR will assume responsibility for travel expenses connected with the fellowship. During the tenure of their awards, fellows will be paid specific allowances which are intended to cover living expenses only, in accordance with policies and procedures governing the administration of United Nations fellowships.

UNITAR will help to provide the fellows with accommodation at reasonable rates during their stay at The Hague.

STUDY SCHEMES

The candidates can choose between study scheme A, B or C. The duration of the fellowship varies depending on the type of study scheme recipients will be invited to pursue.

STUDY SCHEME A

Study scheme A includes attendance at the lectures on public and private international law given by the Hague Academy of International Law as well as participation in the special seminar programme organized by UNITAR for the benefit of the fellowship recipients. Thereafter, participants will be able to spend a practical training period in one of the Legal Offices of the United Nations and associated bodies.

When selecting the participants for this scheme, preference will be given to government officials who wish to pursue a course of studies relating to legal activities of the United Nations and associated bodies, and who demonstrate that the proposed training would be of particular value to them in their official responsibilities.

Following the conclusion of the courses in The Hague, participants selected under scheme A will have a practical training period of up to three months in the Legal Department of one of the following organizations or agencies :

- United Nations Organization (New York)
- Food and Agriculture Organization of the United Nations (Rome)
- International Maritime Organization (London)
- International Atomic Energy Agency (Vienna)
- International Bank for Reconstruction and Development (Washington)
- International Civil Aviation Organization (Montreal)
- International Labour Organization (Geneva)
- Office of the United Nations High Commissioner for Refugees (Geneva)
- United Nations Development Programme (New York)
- United Nations Conference on Trade and Development (Geneva)
- International Monetary Fund (Washington)
- World Intellectual Property Organization (Geneva)
- United Nations Educational, Scientific and Cultural Organization (Paris)

STUDY SCHEME B

Study scheme B includes participation in the international law courses at the Hague Academy of International Law and in the special programme of seminars organized by UNITAR. In addition, it offers participants selected under scheme B the opportunity to carry out research for a certain period of time on a topic of their choice. It is thus primarily intended for academic-oriented candidates. Participants will also attend the International Law Seminar organized in connection with the Annual Session of the International Law Commission in Geneva.

STUDY SCHEME C

Study scheme C, which is of the shortest duration, consists of participation in the special UNITAR programme of seminars at The Hague combined with attendance of the international law courses at the Hague Academy of International Law. This scheme will be available to candidates who cannot be released from their posts for an appropriate lenght of time.

CHOICE OF SCHEME

When submitting their applications, candidates should indicate their preference for one of the three schemes. If they are interested in study scheme A, they should clearly specify in which international organization(s) they would like to be trained, the kind of training they wish to acquire and their special field of interest.

SELECTION OF PARTICIPANTS

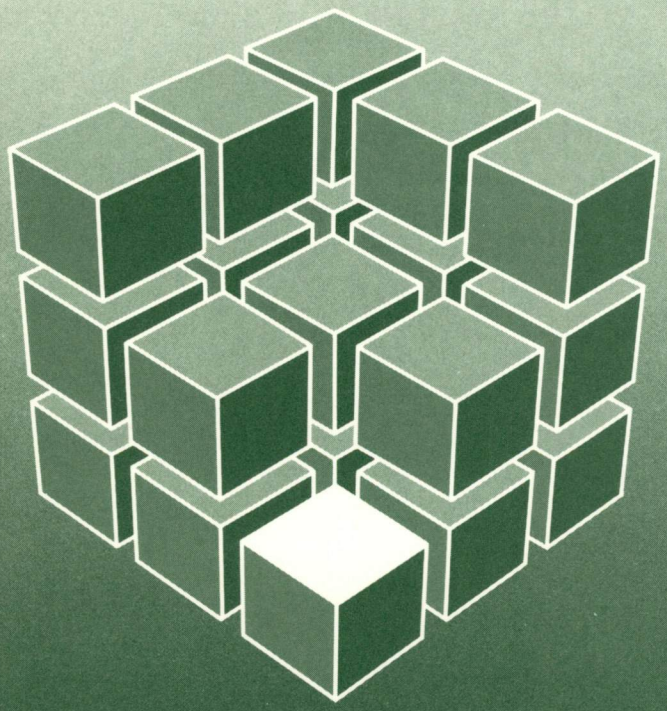
The annual selection of participants is made in spring. Successful candidates are notified by cable. A letter of confirmation will follow, stating the terms of the fellowship and containing a detailed study programme.

UNITAR

European Office

UNITAR TRAINING PROGRAMMES
IN THE LEGAL ASPECTS OF DEBT MANAGEMENT

DEBT RE-STRUCTURING



Document No. 1

DEBT RE-STRUCTURING

Summary of lectures at the national follow-up workshops

(Dar es Salaam & Nairobi)

From 8 to 12 July 1991

GENEVA, February 1992

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INTRODUCTION

The UNITAR European Office (Geneva) initiated a training programme in the field of external debt management aimed at meeting the priority training needs of LDC debt managers, and emphasizing the legal aspects of debt management. This programme was identified by the UNITAR/UNCTAD high-level expert meeting held in Geneva, 27-29 April, 1987 and subsequently confirmed by the inter-agency meeting held in October 1990, in New York, under the auspices of the United Nations Development Programme (UNDP).

Since the on-set of this programme in 1987 training activities have been successfully undertaken both in East and West Africa, thanks to funding provided by the Swiss Directorate for Development Cooperation (DDA). In light of technical assistance to be provided by the United Nations Development Programme in the coming years, it is planned to develop training programmes in Southern Africa as well, all with a view to building a networking arrangement in African countries in order to enhance local capacity-building. The technical assistance provided by UNDP will be in addition to the Swiss funding.

Following the high-level expert meeting in 1987, UNITAR's European Office organized, with active support of the East African Development Bank (EADB), six sensitization/training seminars in three countries of East Africa. These included:

(1) Awareness Seminar for Senior Officers on External Debt Management in Dar es Salaam (Tanzania) in January 1990.
(2) Awareness Seminar for Senior Officers on External Debt Management in Kampala (Uganda) in January 1990.
(3) Sub-Regional Training Seminar on Legal Aspects of External Debt Management in Nairobi (Kenya) in February 1990.
(4) National Follow-up Workshop on Legal Aspects of External Debt Management in Dar es Salaam (Tanzania) in July 1991.
(5) National Follow-up Workshop on Legal Aspects of External Debt Management in Nairobi (Kenya) in July 1991.
(6) National Follow-up Workshop on Legal Aspects of External Debt Management in Kampala (Uganda) in January 1992.

The purpose of these seminars/workshops was to create awareness of various aspects of debt management among senior officers, middle-level debt managers, law professors, economists and lawyers from Kenya, Tanzania and Uganda.

Similarly, in West Africa UNITAR has recently organized a sub-regional training seminar on legal aspects of external debt management in Accra (Ghana) for 42 participants from The Gambia, Ghana and Nigeria. This shall be followed by two National follow-up workshops, one in Lagos (Nigeria) and the other in Accra (Ghana) in 1992.

Through its experience in African countries, UNITAR has realized that many developing countries need to raise legal capabilities and that greater attention should be given in the future to assisting debtor countries to acquire the necessary legal skills and tools to prepare themselves for loan negotiations, including rescheduling through the London and Paris Clubs. In addition, the very real financial and economic benefits to be realized from improved external debt management, the need for greater technical exchanges and consultations among debtor countries and the need for greater coordination among the providers of technical assistance in this field should also be considered.

Parallel to UNITAR's training activities and following the UNITAR/UNCTAD expert meeting in 1987, an Operational Support Unit (OSU) was established as a matter of priority. After careful consideration of various ideas from several sources, it was concluded that the support unit should be constituted as a mainstay to the various training programmes by assisting in the dissemination of information to the various parties concerned.

Now that the Operational Support Unit is beginning to be operational, it is felt necessary to keep the various players in the field of debt management posted on the activities undertaken by UNITAR. As a first step towards its dissemination activities, the Operational Support Unit is circulating information on current topics of interest and importance in legal aspects of debt management.

The present compilation contains summaries of presentations made by various UNITAR resource persons having extensive theoretical and practical experience in the field of debt management. The topics dealt with in this compilation were considered and studied in-depth in recent UNITAR seminars/workshops. They will hopefully prove useful.

Marcel A. Boisard
Director
UNITAR European Office

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RESCHEDULING OF THE EXTERNAL DEBT: PARIS CLUB

*Contribution by Michael Graf von Korff-Schmising**

This paper describes the mandate, organization and functioning of the "Paris Club", (i.e. the grouping of creditor governments through which these governments' representatives negotiate with representatives of debtor countries the rescheduling of the latter's official debt to the former). Special attention is paid to the role of lawyers acting on the debtors' behalf in such negotiations.

1. Salient features of a Paris Club rescheduling

(a) IMF conditionality

The basic condition to be fulfilled by a country before it can apply for a rescheduling of its foreign debt is that default on service of the debt must be imminent or else that payment arrears have already accumulated.

A positive response by creditor governments to a debtor country's request for debt relief is, moreover, conditional upon the conclusion of an appropriate credit arrangement between the government of the country concerned and the International Monetary Fund (IMF) in the upper credit tranches. Creditors insist on IMF conditionality in order to ensure that the debtor country concerned will use the temporary financial relief provided by a rescheduling agreement in order to carry out an adjustment and reform programme.

(b) Multilateral approach

The Paris Club is a multilateral forum of official creditors. The terms agreed upon bind all participating creditor govern-

* **Michael Graf von Korff-Schmising (Germany)** — ***From 1986 to the present, Graf von Korff-Schmising has been Head of a newly-created unit in charge of Paris Club reschedulings and the international debt strategy at the Ministry of Economy. From 1979 to 1981, he was Economic Counsellor at the German Embassy in Algiers. In 1971, he joined the Federal Ministry of Economy, having had responsibilities in such areas as agriculture, budgetary issues, energy policy, export credit guarantees and debt. Born in 1941, Graf von Korff-Schmising holds law degrees from Frankfurt University and the Senate of Berlin.***

ments alike, which ensures that no one creditor obtains more favourable terms than any other (equality of treatment, burden sharing).

The Paris Club is open to all creditor governments that have claims against the debtor country asking for the rescheduling of its debts and that are willing to adhere to its unwritten rules and practices. This means that major debtors can participate in the capacity of creditors in rescheduling negotiations with countries indebted to them.

(c) Affected debt

Typically the claims dealt with by Paris Club agreements (affected debt) are those arising out of contracts concluded or guaranteed by one of the creditor governments or its appropriate agencies with a public or private entity in the debtor country. Debt relief is generally limited to debts that have a term of more than one year and that were contracted before a given date (cut-off date).

Short-term debts are excluded from the rescheduling negotiations in order to enable creditor governments to continue to provide cover for the kind of transaction which involves a short-term debt and which is vital to the maintenance of a minimum flow of essential imports into the debtor country.

The fixing of a cut-off date, which, as a rule, is not subject to change in subsequent reschedulings, is intended to ensure that the rescheduling does not affect new loans granted by the creditor governments in support of the debtor's adjustment programme.

In consequence of the deterioration of the economic and financial situation in many debtor countries, creditors have increasingly been forced to include arrears and payment obligations derived from previous rescheduling agreements in the scope of the restructuring.

(d) Consolidation period

The extent of debt relief granted is determined by the consolidation period: the rescheduling relates not to the entire stock of outstanding debt but rather to debt service falling due within a particular period. In order to conform to the IMF-conditionality, this period coincides, as a rule, with the term of the credit arrangement with the IMF (normally 12 — 18 months).

(e) Scope of the relief

In addition, the extent of the debt relief obtained depends on the category of debt service covered (principal, interest) as well as on the percentages granted. Unlike commercial banks, official creditors are generally willing to reschedule the payment of both principal and interest. In view of the need to grant comprehensive reschedulings to countries experiencing serious balance-of-payments difficulties, relief is generally provided in respect of 100 percent of both principal and interest.

(f) Repayment period

The amounts rescheduled are normally to be repaid over a period of 10 years, with a grace period varying from four to six years.

(g) Comparability of treatment

As part of the rescheduling agreement the debtor country commits itself to the speedy conclusion of agreements with other groups of creditors (governments not members of the Paris Club, commercial banks, suppliers), with a view to avoiding any inequality of treatment between different categories of creditors.

2. Legal status of the Paris Club Agreed Minutes

The rescheduling terms agreed to as a result of the negotiations are embodied in what is known as an "*Agreed Minute*". The Agreed Minute is signed by representatives of the debtor and of the creditor governments. From the legal point of view, this document is a recommendation inviting all parties concerned to implement it through the signing of bilateral rescheduling agreements.

3. Recent developments

In the early 1980s, shortly after the beginning of what is commonly referred to as the debt crisis, the general belief was that countries experiencing debt service difficulties would gradually grow out of debt and regain creditworthiness.

For a variety of reasons (inadequate adjustment, adverse economic environment, natural disasters etc.) this expectation did not materialize, as is evidenced by the recurrent need to reschedule previously rescheduled debt.

In conformity with recommendations by the Toronto Summit in 1988, creditor governments have agreed to reschedule the service

of the debts by the poorest and heavily indebted countries on concessional terms. According to a "menu of options", debt service is reduced either through a partial cancellation of the debt service due, or through a reduction of the interest rate, or else it is rescheduled over a very long period.

Acting on a recommendation adopted by the 1990 Houston Summit, the Paris Club has decided to extend the repayment periods of debts owed by the so-called lower-middle-income countries (LMICs) and to allow, on a voluntary basis, for the conversion of a certain percentage of the debt (debt-swap).

In April and May 1991, agreements were concluded with two LMICs; Poland and Egypt, providing for a 50 percent reduction of their outstanding debts on a net-present-value basis. This exceptional decision, which is not to be construed as a precedent for the treatment of debts owed by other LMICs, was taken in recognition of these two countries' structural imbalances and the boldness of their adjustment efforts.

The London Summit of 1991 urged Paris Club governments to improve the terms available to the poorest and heavily indebted countries "well beyond" the relief obtainable under the Toronto Scheme.

The first countries to benefit from the Trinidad scheme will approach the Paris Club at the end of 1991 or the beginning of 1992. The extent of debt reduction likely to be granted will be up to 50 percent.

RESCHEDULING OF SOVEREIGN DEBT: THE EXPERIENCE OF TANZANIA AT THE PARIS CLUB

*Contribution by Dr. Chris Maina Peter**

This paper describes the circumstances in which developing countries find themselves constrained to renegotiate their debts owing to foreign creditors and, in the light of Tanzania's experience, discusses the procedure followed in such cases.

Debt rescheduling negotiations have become a common phenomenon because many developing countries, precisely on account of the weakness of their economies, are almost chronically on the verge of defaulting on their external commitments. In the case of debts owing to official creditors, these negotiations are usually carried on in the context of the "Paris Club". Negotiations concerning debts owing to commercial creditors tend to be conducted in the "London Club".

The "Paris Club" is a convenient term for describing a loose (and obviously variable) grouping of creditors whose representatives meet in an informal setting with representatives of countries that are experiencing difficulties in servicing their debt. In consequence of the intensifying debt crisis, as many as 29 countries resorted to Paris Club procedures between 1978 and 1984 for the purpose of negotiating 56 debt rescheduling agreements covering about US$ 27 billion of debt service obligations. While there is no fixed membership of the Paris Club, the participants usually include the members of the Organization for Economic Cooperation and Development (OECD), the European Community (EC), the International Monetary Fund (IMF), the World Bank, the UN Conference on Trade and Development (UNCTAD) and, of course, the debtor country.

Before a debtor country can initiate a rescheduling process in the context of the Paris Club it must produce evidence showing that, in the absence of relief, it will default on its external payments. In addition, creditors are not usually prepared to enter into debt rescheduling negotiations with a

* **Dr. Chris Peter (Tanzania)** — ***From 1986 to the present, Dr. Peter has been a Senior Lecturer in Law at the University of Dar es Salaam. From 1980 to 1981, State Attorney at the Ministry of Justice. From 1983 to 1986, Assistant Lecturer in Law. Born in 1954, Dr. Peter obtained a Ph.D from the University of Konstanz in Germany. Dr. Peter is the author of several books.***

debtor country unless that country has agreed to apply an adjustment programme conforming to terms prescribed by the IMF — the so-called "conditionality". The reasoning of the creditors in insisting on the condition is that by carrying out reforms on the lines supported by the IMF the debtor country's economy may recover sufficiently in the time allowed by the postponement (i.e. rescheduling) of payments on the debt to be able to resume the service of the debt. Almost inevitably, the requisite adjustment programme involves the application of austerity policies, retrenchment of social services and other restrictions that hit the population hard and are not without political risk.

In the Tanzanian experience, the proceedings can be unpleasant and humiliating for the debtor country. However, they have the advantage of being expeditious and relatively cheap. After the representative of the debtor country (usually the Minister of Finance) has presented its case for rescheduling and after observers for the interested international organizations (IMF, World Bank, UNCTAD, EC) have made comments, the creditors ask the debtor country's representative certain questions. The creditors then gather in a meeting, or caucus, of their own to which the IMF representative is customarily invited. During their private deliberations the creditors work out a "package" which is offered to the debtor country. At this point some arduous and critical bargaining may ensue between the two sides. When agreement is eventually reached the terms are set down in an "Agreed Minute" which records the decision of the meeting and essential particulars (the parties in attendance, the size of the debt, the proposition rescheduled, interest rate, the terms of an arrangement with the IMF, etc.). The terms of the "Agreed Minute" are given legal effect as between the debtor country and individual creditor countries by the conclusion of bilateral agreements in the form either of treaties or of an exchange of letters.

At the 1988 summit in Toronto, the industrialized countries proposed a number of options in the case of debts owed by African developing countries to official bilateral creditors. Recognizing that, despite repeated reschedulings, the actual service of the debts was seriously in arrears, the industrial countries agreed that some relief could be offered by bilateral creditors to African debtor countries through three options (the "Toronto terms"), viz:

(a) to write-off or forgive one-third of the debt due by a borrower with the balance outstanding being repaid over 14 years with an 8 year grace period and at market rates;

(b) a rescheduling of all outstanding debt over a 14 year repayment period with an 8 year grace period and the applicable market rate of interest being reduced by the lesser of 3.5 percent or 50 percent;

(c) a rescheduling of all outstanding amounts due over 25 years with a 14 year grace period and with interest payable at market rates.

This formula was applied for the first time at the Paris Club rescheduling in the same year, 1988. This was in respect of rescheduling negotiations by Mali, Central African Republic, Madagascar, Niger and Tanzania. The Toronto terms were also applied in agreements signed by Senegal and Uganda in 1989.

The defect of the Paris Club is that its rules are made by one side only (the creditors) which the debtors have no choice but to accept, owing to their weak position. Furthermore, in any rescheduling negotiation the debtor country is alone and faces a veritable cartel of creditors.

As regards debts owed to banks and other commercial lending institutions, by developing countries and unpaid when due, rescheduling negotiations take place in the so-called "London Club". These negotiations are governed by conditions analogous to those applicable in the Paris Club (e.g. an arrangement with the IMF) but are far more complex because of the large number of creditors (530 banks were involved in the rescheduling of Mexican debt). At the end of the negotiations, if agreement is reached, all the parties sign a model restructuring agreement which, in turn, forms the basis of a separate agreement to be entered into between each creditor bank and the debtor or government.

The vicissitudes of Tanzania's experience are worth describing in its dealings with the IMF and the Paris Club when the country was having difficulty with servicing its debt. Relations with the IMF were strained. In the late 1970s the conditions stipulated by the IMF for the purpose of granting financial relief to the country were considered unacceptable by the government. In 1989 Tanzania succeeded in negotiating a stand-by credit with the IMF and made its first drawing on that credit. This was also the last drawing, for the IMF claimed that Tanzania was not fulfilling the conditions to which the credit was subject. Fresh negotiations between the two sides were beset with acrimony and it was not until August 1986 that an agreement was reached with the IMF which enabled Tanzania to request rescheduling of its debts in the context of the Paris Club. In the course of the first round of negotiations, in September 1986, agreement was reached on the rescheduling of about US$ 637 million of Tanzania's external obligations to official creditors, on specific terms. As the country's economic situation did not improve, its debt burden grew more onerous, its balance of payments worsened and the relief given at the Paris Club's negotiations fell short of the country's needs. There were multiple defaults on many of the provisions of the agreements made with its creditors. Accordingly, a further round of negotiations took place with creditors in Paris in December 1988, after the IMF had approved the disbursement of SDR 32 million to Tanzania (later in the same month the World Bank approved a credit of US$ 135 million in support of the country's recovery programme). As a result of the negotiations, and by selective application of a maximum

of the "Toronto terms", the rescheduling of about US$ 280 million of Tanzania's debts to official creditors took place.

In 1990 Tanzania again requested relief of its external payments obligations, on account of its critical balance of payments situation. After protracted negotiation in the Paris Club, the official creditors agreed selectively to reschedule Tanzania's debts in accordance with the Toronto set of options. The terms of the agreement were expressed in the "Agreed Minute" drawn up at the end of the negotiations.

It was estimated that, when all the bilateral agreements had been signed, the debt relief during the calendar year 1990 would be approximately US$ 270 million.

To implement the 1990 "Agreed Minute", the Government of Tanzania was inter alia required to continue maintaining the Special Account with the Bank of England in which it was required to deposit SDR 1.2 million at the end of each month from April to December 1990. It was also required to seek comparable debt relief from non-Paris Club governments, commercial banks and suppliers. In addition, the government was to effect 80 percent of interest payments due as a result of the 1988 rescheduling before May 1990. This amounts to SDR 12.4 million.

Conclusion

1. The Paris Club proceedings are a humiliation which should be avoided at all costs.
2. The process does not in any way assist the debtor countries. It provides temporary relief but does not solve the problem.
3. The rescheduling actually amounts to postponement of the debts to the future, which in reality amounts to shifting the present generation's sins to the future generations without their consent.
4. In addition, the so-called Toronto terms, through which the creditors agree to cancel the debts in future, tie the debtor countries and curtail their freedom.
5. To avoid embarrassments in future, governments of developing countries should be more careful in negotiating and contracting debts.
6. Being heavily indebted, the developing countries should hold together against the united creditor cartels like the Paris Club. There should be more unity among the debtor countries.

RESCHEDULING OF THE EXTERNAL DEBT: LONDON CLUB

*Contribution by Professor Oluwole Akanle**

The debt crises of the early 1980s which swept through the world left the economies of developing members of the world community severely battered. Remedial measures taken since then have had little or no positive impact on a great majority of the affected economies. In many economies, the measures have even worsened the conditions of these countries. Huge debts have been accumulated to execute non-productive projects and with depleting resources from other sources they could not service these debts. Furthermore, the preceding reason was largely a result of decades of social, economic and political policies in these countries that are greatly antithetic to economic growth and development, the culmination of which was the collapse of several of these economies.

The debt crisis which reached a peak in 1982 actually had its genesis in the mid 1970s. The oil crises of 1973, as a result of the Arab-Israeli war, and that of 1979, meant a windfall in terms of increased income for petroleum producing countries of the third world. Thus, in the face of such massive build up of surplus capital by OPEC countries in Western Banks and in order to avoid recession, OECD countries actively encouraged the recycling of this built up capital through extension of loans to developing countries on very liberal terms, and often without careful credit analysis.

One unfortunate aspect of the borrowing spree was that the borrowed funds went, in most cases, to the purchase of consumer items, obsolete equipment and machinery, or were procured for projects that never took off or later became "white elephants". Reference has to be made to the fact that most third world countries were just emerging from the experience of colonization. This meant that aid and foreign direct investments slowed to a trickle as a result of various political reasons. In the absence of essential capital needed for infrastructural developments, the next resort was borrowing. This resulted in a gradual build-up in the external debt of third

* **Professor Oluwole Akanle (Nigeria)** — ***From 1986 to the present, Professor Akanle has been Coordinator of Research and Acting Director of Studies at the Nigerian Institute of Advanced Legal Studies, University of Lagos. From 1986 to 1988, Special Assistant to the Attorney-General of the Federation and Minister of Justice. From 1976 to 1982, Lecturer at the University of Ife (now Obafemi Awolowo University). Since 1986 he has participated in several negotiations on behalf of the Government of Nigeria, including the London Club rescheduling negotiations. Born in 1949, Professor Akanle obtained an LL.B (Honors) and an LL.M from the University of Ife and a B.L from the Nigerian Law School. He is the author of several books.***

world countries from the 1970s until it reached unmanageable proportions in the early 1980s.

Finally, in the multidimensional genesis of the debt crisis, it is pertinent to mention that a drop in the prices of primary commodities worldwide in the late 1970s and early 1980s were also causative agents.

It is also pertinent to mention the fact that the debt crisis would definitely not have reached its present proportion without lack of foresight and mismanagement exhibited by many developing countries themselves. The level of corruption and political instability present in developing countries is a well known factor. At the same time, most third world loans were applied to the production of non-revenue generating social services like roads, bridges etc. and the purchase of consumer goods. In those instances where loans are applied to revenue generating projects, the endemic problem of lack of governmental managerial expertise played against profitability. In many instances, the revenue generated was often not sufficient to service the loans.

In this short paper, attention is focused on debt rescheduling. Debts owed by developing countries are usually rescheduled in the London Club or the Paris Club. London Club reschedulings involve debts owed to commercial banks while Paris Club rescheduling concerns debts owed to official creditors. The main item of discussion here is London Club Rescheduling.

What is the London Club?

The London Club is an ad-hoc grouping of commercial banks exposed to third world debts. In contrast to the Paris Club there is no formal framework for restructuring commercial bank loans. The name "London Club" came into being since the "Club" sits in London which is regarded as the financial nerve centre of transnational banks. Though referred to as a club, it is not a formal body with fixed membership.

In the absence of a formal framework for rescheduling, the banks with the greatest exposure to a country seeking to reschedule its debts will form a committee to cater to the interest of all commercial banks with loans to that country.

The Committee formed is commonly referred to as a Bank Advisory Committee (BAC) or Steering Committee of Commercial Banks. The Committee frequently establishes close links with the IMF in order to ensure an alignment between a debtors' financial requirements and the maintenance of viable economic programmes.

Preparation of Rescheduling with the London Club

The steps dealt with in this section include;

a. Declaration of Moratorium.
b. Planning in the Restructuring Process.
c. Bank Advisory Committee/Steering Committee.
d. Preparation of an Information Memorandum.

e. Exploratory Meeting.
f. Negotiation of Heads of Terms.

a. Declaration of Moratorium

The restructuring process, in relation to sovereign restructuring, commences following an announcement by the debtor state authorities of a specific cut-off date upon which it proposes to suspend payment of its obligations. This is also accompanied by an announcement of the opening of negotiations to reschedule.

A legal problem that often necessitates the declaration of moratorium by a debtor nation, is that the declaration acts to forestall any attempt on the part of some creditors with minimal exposure to the debtor country to take unilateral legal action that may be ordinarily available to them under the original credit agreement e.g. foreclosure, litigation, set-off, etc. But resort to any unilateral action by a creditor after the declaration of moratorium by the debtor may have a trigger effect as all other creditors would almost invariably resort to taking action to enforce the debt owed. Thus, the usefulness of a declaration of moratorium is that it serves as a notice to all creditors to withhold action they might wish to take against the debtor for the enforcement of their rights under the original agreements while they await further developments.

b. Planning in the Restructuring Process

The preparatory or planning phase is the most important phase in any process. This is no less true in a restructuring process. The problem with most developing countries' restructurings, as in many other areas, is the absence or near absence of proper planning.

The preparatory work in relation to sovereign restructuring includes:

(1) Collation of data on the nature, categories and extent of debts owed by the country. This should not be limited to government contracted debts only but should extend to:
   a. obligations of the Central Bank in respect of private sector debts or commitments;
   b. debts owed by its departments, agencies and parastatals;
   c. private sector debts whether or not guaranteed by the government.

(2) A detailed analysis of these debts should be undertaken. Such an analysis should seek to categorize each creditor by:
   a. amounts outstanding by currency;
   b. principal repayments and interest payments falling due over certain periods;
   c. effects of fluctuation in foreign exchange rates and interest rates;
   d. the extent to which the debt is of a short-term nature.

All these would assist in the forward planning and the mapping-out of restructuring strategies, especially at the level of new funds to be requested as well as the consolidated and repayment periods.

c. Bank Advisory Committee/Steering Committee

Generally, the Bank Advisory Committee (BAC) represents the interest of all commercial bank creditors in the rescheduling process by acting as a channel of communication between the debtor and its creditors and by undertaking the negotiation and documentation of the rescheduling agreements on behalf of all the banks.

The BAC usually comprises between 5 and 15 members. The Chairman represents the bank with the single largest exposure to the affected country. The other members largely represent banks which are major creditors of the country. They are usually from a few countries.

The BAC usually operates through sub-committees. The most common ones are;

(1) The economic sub-committee.
(2) The debt reconciliation and classification sub-committee.

d. Preparation of an Information Memorandum

The Information Memorandum provides creditor banks with pertinent information on the debtor country's situation so as to enable them to come to rational decisions on the restructuring package. A country should exercise great care in the preparation of the Information Memorandum. Exaggerated claims should be avoided in the preparation of the Information Memorandum as claims therein will form the basis of certain representations and covenants in the main agreement or it could be a bottleneck as to how new funds could be obtained or the determination of the extent of the financing gap. Consequently, information should be as realistic as possible.

The contents of an Information Memorandum should include:

- recent economic and financial developments in the country;
- adjustment measures embarked on or to be embarked upon;
- recent trends and forecasts of budgetary operations;
- external trade and balance of payment position;
- outstanding debts as of date of preparation and forecasts of debt service;
- funding requirements and sources of meeting the requirements.

e. Exploratory Meeting

This is the first official contact between the debtor country and the BAC. Here, the case of the debtor country is formally presented before the BAC. Apart from the verbal presentation, the Information Memorandum is also submitted for the BAC to study and disseminate among creditor banks.

It may be noted however that the BAC may not distribute the Information Memorandum at this stage. At times, it is distributed at the same time with the Heads of Terms (HOT).

It is at this meeting that broad agreements are reached on maturities to be rescheduled and other administrative issues pertaining to the restructuring exercise. These include fees chargeable by the Agents and reimbursable expenses of the steering committee. Debtor countries are well advised not to publicize the outcome of this exploratory meeting as it may "boomerang" if over publicized.

f. Negotiation of Heads of Terms

This is yet another important phase of the restructuring process. Indeed, if lawyers have not been directly involved before this stage, the damage to the process may not be much. However, the presence of the lawyer becomes absolutely necessary at this stage.

Role of the Lawyer in Rescheduling:

Although most of the issues to be settled here are generally regarded as business or financial issues, the lawyer has responsibility in ensuring that;

a. Whatever business term is accepted is properly understood and would be such that would not encumber future documentation.
b. He/she should also ensure that all the issues are related to each other, i.e. seen in light of the overall objective. Consequently, he/she should constantly bear in mind the debtors capacity to implement without technical default.
c. He/she should also be on the look-out for possible legal bottlenecks that certain demands of the creditors might create, and if necessary suggest alternative ways out. In this way, protracted negotiations at the documentation stage could be avoided.

Functions of the Lawyer in Rescheduling:

a. To ensure that his/her client does not have to pay more than necessary through the drafting of the Agreement.
b. To minimize administration cost of the Agreement to what is necessary e.g. information requirements.
c. To avoid technical defaults that do not affect servicing capability of debtor.
d. To ensure that penalty is payable only when there is wilful refusal or neglect to pay.

Conclusion

The debt rescheduling terrain is a slippery one and many third world countries have continuously lost their footing on it. They must quickly regain it or else face the alternative, which is to remain perpetually within the debt trap.

ARBITRATION

*Contribution by Mr. Jan Paulsson**

The debts of developing countries are commonly contracted in connection with the execution of industrial or infrastructural projects. Where the quality of goods and services supplied by the investor or supplier is defective, that developing country may be able to recover damages or restitution, or obtain the reduction or even elimination of the debt, by having recourse to legal review, typically international arbitration. Accordingly, the effective management of debt includes the effective use of the machinery of arbitration.

The topic of arbitration can be considered under three headings; why the process of international arbitration works — how it may be put into effect — and the requirements of success when a party actually participates in an international arbitration.

The international arbitral process works because awards may be enforced throughout the world in a much more effective manner than national court judgments. International treaties for the enforcement abroad of judicial decisions tend to be bilateral and can hardly be said to cover the globe. By contrast, mainly as a result of the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards prepared under the auspices of the United Nations and ratified by about 80 countries, the courts of signatory States are bound to enforce awards rendered abroad. The only grounds on which the enforcement of such awards must be refused are grave violations of procedure, jurisdiction, or public policy (art. V. of the 1958 Convention).

Most of the signatories to the 1958 Convention have expressed the so-called reciprocity reservation, limiting the scope of the Convention's application to awards rendered in other countries which also are parties to the Convention. As a consequence, it is quite difficult for any party to

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propose a place of arbitration located in a country which is not a party to the Convention.

The second theme — how the arbitral process may be put into effect — concerns the contract drafting techniques which should be used to obtain the most appropriate forum for the settlement of disputes.

Whereas in many international contracts the great majority of the clauses are carefully and intelligently negotiated and drafted, the jurisdictional clause is often shockingly inadequate. Obviously, rights under a contract are ultimately only as secure as the competent jurisdiction will make them, and hence a party which allows reference to a jurisdiction which is incapable of properly understanding the contract and its context, or worse will not act impartially, has in fact undermined the entirety of the contract.

Arbitration clauses are a subcategory of jurisdiction clauses. There are two kinds; *institutional* arbitration clauses, and *ad hoc* arbitration clauses. The former refers to a permanent institution which will: set the arbitral process in motion, principally by nominating arbitrators wherever necessary; monitor their performance and replace them if they fail to carry out their tasks or if they are legitimately challenged on grounds of bias or impropriety; establish and collect the arbitrators' fees; and issue the award with an institutional imprimatur. *Ad hoc* arbitration clauses do not refer to such a permanent institution, but purport to be self-executing, either by setting forth in detail a full set of rules for the conduct of the arbitration, or else by referring to a preexisting body of rules such as the UNCITRAL Arbitration Rules of 1976. The disadvantage of *ad hoc* arbitration clauses is that they rely to a great extent on the voluntary cooperation of both sides, and tend to break down if the respondent acts obstreperously. Consequently, it is generally preferable to insert an institutional arbitration clause in the contract.

For the purpose of the settlement of disputes in which African developing countries are involved, three arbitration institutions are those commonly referred to in their international contracts. First and foremost is the International Court of Arbitration of the International Chamber of Commerce (ICC), which handles the greatest number of cases by far. The settlement of commercial disputes is only one of a great variety of activities of the ICC. The methods offered by the ICC for settling such disputes are various, including conciliation and expert opinions and so-called referee decisions. But by far the most important mechanism is arbitration, conducted by the International Court of Arbitration. This Court does not actually decide disputes, but nominates tribunals to deal with arbitrators (two of whom are generally party nominated) or of a sole arbitrator. Once the final award has been rendered, the tribunal disappears. The Court has nearly 50 members, most of them non-Europeans. Well over 300 cases are brought to ICC arbitration every year, most of them involving stakes of over a million US dollars, often tens of millions.

The next most active institution, although having less than one-fifth of the ICC's caseload, is the London Court of International Arbitration (LCIA). The LCIA has no activity other than arbitration. As in the case of ICC arbitration, parties referring a dispute to the LCIA may select a venue for the proceedings in any country of their choice. Having been until recently a predominantly English institution, the LCIA now, under its revised statutes, is composed of lawyers from all over the world; from Nigeria to Australia and Argentina, and also from the USSR and China.

The third institution is the International Centre for the Settlement of Investment Disputes (ICSID), established under the auspices of the World Bank pursuant to the 1965 Washington Convention on the Settlement of Investment Disputes between States and Nationals of other States. References to ICSID are often seen, not only in contracts but also in investment promotion laws as well as in bilateral treaties. However, only a few cases are actually submitted to ICSID. The reason may be an inherent restriction on ICSID's jurisdiction, namely the requirement that one of the parties must be a State. No State agency or parastatal company may validly refer a case to ICSID arbitration unless the State formally notifies ICSID that the agency or parastatal body concerned is to be deemed, for the purposes of the 1965 Convention, to have the same identity as the State. This notification is rarely given. As regards disputes directly implicating States, these are generally settled by negotiation, and hence resorting to the ICSID arbitral mechanism has remained rare. Nevertheless, the institution's potential importance is considerable, and negotiators of international contracts should be aware of it.

Other arbitral institutions to which international contracts may refer are either of a national character, hence unacceptable to one of the parties, or deal with a special industry only (i.e. shipping or the grain trade) and therefore outside the scope of the workshop's discussion. Nevertheless, it is inexcusable for the negotiator to accept reference to an arbitral institution about which he is insufficiently informed, as lazy negotiators sometimes do by simply copying a provision from an old contract.

As regards the theme; how does a developing country prevail as a participant in the international arbitral process? Five principles of conduct must be considered that enhance the country's chances of successfully defending its interests in international arbitration. The first three of these principles in fact come into play *before* the existence of any dispute.

1. *Active and informed participation in the drafting and negotiation of the contract.*

   It often happens that the drafting of contracts is so defective as to be prejudicial to the developing country concerned. Even in cases where the conduct of the other party seems clearly

substandard, the contract may be so favourable to the other party that it is difficult to obtain an effective legal remedy. An obvious illustration would be a contract containing a limitation-of-liability clause that reduces a supplier's exposure to next to nothing.

"*Active participation*" means that the developing country's negotiator should not always be reacting to the other side's drafts, but should take the initiative to propose contractual provisions. "*Informed participation*" means that he should seek to understand all legally significant aspects of the text, and should not merely rely on the fact that the proposed clause has often been used elsewhere, or is allegedly recommended by some international organization as a model clause. For these reasons, lawyers should be consulted when deemed necessary.

2. *Unified responsibility for related contracts.*

Large projects often require a number of contracts with several foreign parties; a management contract, a joint-venture shareholders' agreement, supply contracts, loan agreements, and often a government guarantee. If too many different persons are asked to handle disparate areas, there is a constant danger that they will see their responsibility in a very narrow way and that no one will accept the duty to ensure, as incidental aspects are modified, that the whole picture continues to make sense.

3. *Diligent monitoring during the life of the contract.*

This task is so important that many institutions insist, when financing major construction projects, that expatriate consultants be engaged to act as supervising engineers. This stipulation is justified, for unless the supervising governmental authority concerned has competent and experienced personnel available to devote the required time to verifying the performance of a complex job, the absence of such a consultant is tantamount to an invitation to steal. The rigorous monitoring of contractual performance is not to be viewed as aggressive conduct, but as a matter of prudent management.

4. *Active pursuit of legal remedies.*

The third world is littered with industrial "White Elephants", projects which have failed and stand as abandoned monuments to incompetence, negligence, or indeed dishonesty. Sometimes these failures may be attributable to bad luck, sometimes to

the inexperience and failings of nationals of the host country. But it also happens that the blame for the failure attaches entirely or at least partly to over promising and under performing foreign managers, investors, or suppliers. It is astonishing that only rarely does a developing country make a serious attempt to determine whether there is a legal case to be made against such parties. Obviously, a developing country which considered that it had suffered prejudice through the non-performance or negligent performance of a foreign contractor would have to weigh the chances of succeeding in a suit for damages against the risk of failing to obtain satisfaction. In such circumstances the decisive element would not only be the *de facto* situation (e.g. the quality of the equipment or services supplied) but also the terms of the contract, which might be heavily weighted in favour of the foreign party. In addition the developing country has to take the expense of litigation (arbitration) into account.

5. *Getting expert assistance.*

A developing country which decides to resort into international arbitration involving high stakes must be determined to spare no effort. Where large amounts are at stake, experienced counsel should be retained not only for advocacy, but also to provide an efficient team to conduct evidentiary research and to give informed advice with respect to the complex procedural issues which inevitably arise in international arbitration, not least that of the composition of the arbitral tribunal. In addition to specialist lawyers, it is frequently necessary to retain technical experts to give their analysis of the nature and causes of failures.

For some third world parties, the cost of international arbitration seems prohibitive. It is true that large amounts of hard currency are required to participate effectively in a major international case, but it would appear even more costly to abandon much larger legitimate grievances on account of the expense involved. Many such disputes arise out of projects which are financed by international institutions, and a reasoned application to include the expenses of a justified arbitration within the overall project cost has never been rejected. After all, it is very much in the interest of the donor or the lender that all means of recovering losses are explored, as they may lead to an improvement in the overall financial situation of the project.

ARBITRATION

*Contribution by Dr. Joseph Oloka-Onyango**

This paper outlines the history of the evolution of foreign direct investment in developing countries and of the contractual relationship between investors and these companies.

In many, if not most cases, particularly in Africa, the territories which became sovereign independent States after the colonial period had previously been tied to the legal and trading system of the metropolitan Power. The flow of investments into these territories had followed the interests of that Power, and the investors' rights and duties were defined essentially by the law of their home countries. In effect, the investor was not a foreigner dealing with foreign authorities, rather he was a citizen dealing with his own government that was administering a territory abroad.

After the achievement of independence, some vestiges of the traditional relationship between newly independent developing countries and former administering Powers lingered on. Inspired by the ideal of development the newly sovereign governments believed that investment by foreigners in ambitious projects would be the key to economic advancement and did not look too cortically at the nature of the projects to be undertaken or at the contractual stipulations entered into with the foreign investors. Predictably, many of the investment schemes proved to be disappointing failures, and in many instances the governments of the developing countries concerned that, under the contracts they had concluded, they had little or no remedy or recourse against their contractual partners. There was usually no provision for the settlement of disputes by arbitration, and in many cases the governments concerned tended to be mistrustful or even unaware of the possibilities offered by non-national arbitration or adjudication. Nor was nationalization or indigenization an easy way of escaping from contractual obligations. In cases where governments of developing countries resorted

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to arbitrary methods of repudiating obligations, their creditworthiness suffered and inward investment diced up.

In this contributor's opinion the questions now calling for careful thinking are: what kind of investments should be directed towards the developing countries; how these countries can protect themselves against bad investments; and what remedy is available to them if an investment should turn out to be bad. It is in this connection that attention is drawn to the potential usefulness of arbitration and to the function of the lawyer in the preparation of the contractual instruments relating to a particular project. It is for the lawyer to draft the vitally important arbitration clause on which the parties will eventually rely if a dispute should arise concerning the performance of their respective obligations.

Because historically governments of developing countries have usually been in a weaker negotiating position vis-a-vis foreign investors and have learned some bitter lessons from past experience, they now tend to be wary in dealings with these investors. At the same time they are beginning to appreciate the valued standard international rules and procedures, including arbitration procedures, for the settlement of disputes concerning e.g. alleged low performance by a foreign investor of commitments entered into by contract. It is in their interest, moreover, for them to be associated with any review or reformulation of these rules and procedures in the light of developments. The form and nature of the arbitration machinery should, of course, be acceptable to them, and arbitral awards in cases arising between developing countries and foreign investors should be given maximum publicity.

SOVEREIGN BORROWING AND THE PRINCIPLES OF BUDGETARY LAW

*Contribution by Professor Rolf Knieper**

There is now unanimous agreement in principle within the international community that there is a common responsibility for the development of mankind. Even though the meaning of the term "development" is vague and even though it is not universally agreed that there is a "right" to development, nevertheless it may justly be said that the development efforts of the developing countries and the support given to these efforts by bilateral, regional and multilateral agencies are not based on merely moral or ethical considerations. They correspond to what may fairly be described as legal standards and obligations — virtual "law of development".

Secondly, one can agree that the World Bank's view (as stated in its report on Sub-Saharan Africa, 1989) is correct and that responsibility for Africa's economic crisis is shared by donor agencies and foreign advisers, along with the African governments themselves.

Thirdly, the State has certain inalienable functions in the matter of public expenditure and public revenue which must be exercised for the sake of the common good. However, in the modern interdependent world economy the common good can no longer be defined in purely national terms.

It is to the light of these considerations that public expenditure, public revenue and public debt in developing countries have to be discussed.

Let us now elaborate on the laws of public expenditure, public revenue, public debts or budgetary deficits in the developing countries.

Public expenditure "constitutes the dispensation by the State on non-market criteria of economic resources which it has acquired from firms and households" (D. Heald, Public Expenditure, Its Defence and Reform,

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1987, p. 10). It includes such recurrent operating costs to the Government as provisions for police, judiciary, military, diplomatic services, central banks or statistical services, the bulk of expenditure being wages and salaries. It further includes the costs of social and economic infrastructures like schools, clinics, posts, highways, bridges, power stations and water supply. To this is to be added, from time to time, investment in productive activities, or as the World Bank likes to say parastatals, which can range from mining companies to state banks and agro-industrial firms (cf. A. Seidman, An Economics Textbook for Africa, 1980 p. 290 s; K. Griffin, Alternative Strategies for Economic Development, 1987, p. 236 ss.) and we have to add of course the costs of reimbursement of existing debt that for the time being cripples any state policy.

Apparently, neither lawyers nor economists have succeeded so far in developing objective criteria justifying all these activities. It has been equally impossible to draw an objective line between public and private expenditure. Both questions have been the subject of political controversy and have opposed political parties and moral philosophers as basic issues of principle. For the same reason, categorizations have changed over time. What was private yesterday can become public today; what was deemed of highest necessity yesterday might be considered superfluous tomorrow. However, this is only true for specific expenditures. No one would dispute the fact that modern societies could not survive without public expenditure, without any state activity at all.

The following quotation of Adam Smith — which best summarizes the essential points — will help us grasp the problem in its essence and link it to the next point: "The third and last duty of the sovereign or commonwealth is that of erecting and maintaining those public institutions and those public works which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature, that the profit could never repay the expenses to any individual or small number of individuals, and which it therefore cannot be expected that any individual or small number of individuals should erect or maintain. The performance of this duty requires very different degrees of expense in the different periods of society" (A. Smith, the Wealth of Nations, Book V. Chp. I. Part Three). Smith goes on to give the examples of roads, bridges, harbours and the like — all expenditures which can be found in any project list of any development agency. At the end he adds a "certain expense which is requisite for the support of the dignity of the sovereign".

We find here two decisive criteria for public expenditure, advantageous to the society and not profitable to individuals. From there, Smith concludes and we cannot but agree, that these expenditures have to be "defrayed by the general contribution of the whole society, all the different members

contributing, as nearly as possible, in proportion to their respective abilities" (Book V Chp I. Conclusion).

These observations and reflections, written some two hundred years ago, are of more than historical interest. In fact, they give a clue to a better understanding of the ongoing debt crisis of developing countries which goes far beyond current allegations of bad management or corruption, although these facts cannot be denied. They even justify the prediction that the mere forgiving of the existing debt would not solve the problem, which is of a structural nature.

In order to explain what is meant, the following example will be used, which might seem to be far fetched. When the Security Council decided that Iraq should be driven out of Kuwait and when it authorized allied forces to do so, the United States found that they could not finance this unforeseen military venture through their tax revenues or by increasing the budget deficit, which is already the highest in the world. The US budgetary legislation stood against the contracting of further (foreign) debt. The US argued that what they did was deemed necessary by the international community, that it was under all aspects a public expenditure, that it could not be financed by one national budget for structural reasons, so that other national public revenues should contribute to finance their expenses. That was accepted by several countries like Japan, Saudi-Arabia and Germany, which in turn used tax and other public revenues to do so. It did not occur to anyone that these contributions, to a task that was defined as being in the common interest in an interdependent world, should be made in the form of loans. It was paid as grants to the US budget, stirring later and almost inevitably, discussions as to the justification of cost estimates.

Does this example apply to the debt problem of African countries and how?

A crucial point in the reasoning of Adam Smith is that certain expenditures are by definition public because they will not generate profits on private capital and will not generate funds which could be used to reimburse credits. By definition, reimbursement from the proceeds of this specific expenditure is excluded. It has to be financed by general contributions, by public revenues accrued from taxes, duties and the like, which are defined by their compulsory nature, outside any individual consideration. If in a given period of time public revenues are not sufficient to meet all public expenditures which have been judged necessary, the gap might be bridged by deficit spending, by credits. These are contracted in the expectation of a future rise in public revenues.

Most national budgetary laws set ceilings as to the percentage of debt against tax revenue. They might vary from zero to thirty percent, but they never allow for a total financing of public investment, let alone recurrent administrative costs, with borrowed money. Experience as well as theoretical

considerations tell that a 100 percent debt-financing strategy must lead to a failure of reimbursement. Some states such as the US have even introduced legislation which ask for a balanced budget although this has not led to any significant success. Nonetheless, such laws have been the basis for the demand by the US Government to have the Gulf War co-financed by other States.

To a growing extent, public investment in developing countries is financed by international public funds, coming from development agencies. In some countries, even a part of recurrent costs is financed in this way. The picture gets even bleaker when technical assistance is added to recurrent costs. Equally growing is the recourse to credit as opposed to grants to meet such costs, these credits being often extended on concessional terms.

It is worth noting that the World Bank had modified its criteria of acceptability of credit financing with changing circumstances. While suggesting in 1962 that a maximum prudent debt service ratio would be 7%, it stepped up this ratio to 10% in the late 1960s and now uses 30%. And lending still goes on.

Going back to Adam Smith and to the above conclusions, it seems obvious that there are third world debts that cannot be paid, even if loans were managed in the most effective way and corruption did not exist. This is partly due to the fact that development has not taken place the way its actors expected it to happen, one of several consequences being that public revenue in developing States rose much less than anyone expected. As was stated above, responsibility for this state of affairs is shared.

This is the situation today. Now what can be done to remedy it?

Austerity programmes encourage cuts in expenditures in order to increase revenues and the introduction of ceilings to debt/revenue ratios. This is the normal procedure of stand-by arrangements and structural adjustments. These approaches have to be looked at in the context of development requirements. If it is accepted that there is an international obligation to enhance the well-being and development of all human beings as it is expressed in the Declaration on the Right to Development, and if it is admitted that developing countries have to effect public expenditure which is out of proportion with their potential to raise public revenue, and if the gap is too wide to be bridged by loans, which are not going to be reimbursed, then the international community should finance this gap through grants at least to the same extent to which it financed the Gulf War. Apparently, there are many questions open to debate: What is an indispensable public expenditure? Is it only physical infrastructure like roads and posts? Does it equally include social infrastructure like access to health, clean water, public education? What type of infrastructure has to be developed? What is a tolerable proportion of recurrent costs, public investment and military spending?

What activity can be left to the private sector and what does privatization mean?

All these questions need answers. Since there are no fixed or objective criteria, they can only be found through trial and error and by introducing procedures which allow for an open discussion, where all opinions can be voiced. Answers should not be the monopoly of any single monolithic power. The authority to negotiate and sign credit and expenditure agreements should be checked by independent political bodies and the power to ratify them should not belong to the same entity. These procedural considerations apply, of course, to the national borrower.

It would be unrealistic and counter productive not to add an international dimension to these procedures under the pretext of national sovereignty, since the latter has de facto become more and more obsolete. Orderly procedures should be introduced, that allow for interaction among different actors, national and international, which cooperate in the definition and financing of development policies. The ongoing distinction between traditional budgetary policies on the national level and negotiations in the framework of international law with multilateral agencies is questionable. The dialogue concerning indispensable expenditure needs, the rate of coverage by public revenues and the tolerable rate of credit financing has to be carried on in a more complex setting which has to be worked out. Once all actors have agreed upon the facts and figures and if, as a result of agreements, there remains a financing gap, then this gap has to be bridged by grants since loans could not be reimbursed anyway. Existing debt should be treated the same way: If, following, ex-post-evaluation it becomes apparent that it has been contracted under unrealistic assumptions, it should be forgiven for structural adjustment reasons.

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UNITAR European Office conducts a wide range of training programmes in multilateral diplomacy and international cooperation as well as social and economic development along with research programmes on specific aspects of training methods and techniques.

UNITAR's training programme in the field of debt management seeks to provide training in legal aspects of debt management in countries of sub-Saharan Africa, Asia and the Pacific and West Asia. A range of sensitization workshops, sub-regional seminars and national follow-up workshops have already been held, and further activities will be continued in the participating countries to sensitize and/or train senior officers, middle-level managers, economists, law professors and lawyers in the legal aspects of debt management. This programme is implemented with a view to establishing facilities in selected countries for providing training on a continuing basis, nationally and sub-regionally.

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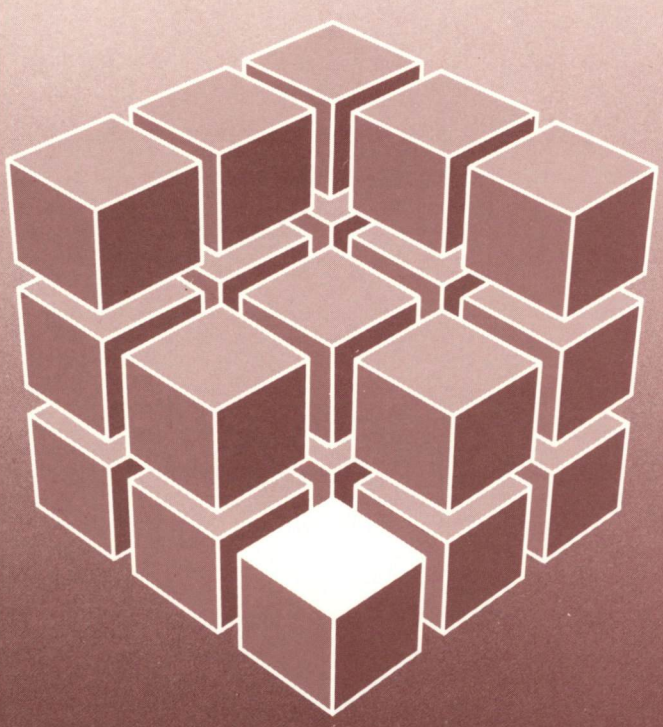
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UNITAR TRAINING PROGRAMMES
IN THE LEGAL ASPECTS OF DEBT MANAGEMENT

RECOMMENDATIONS OF PARTICIPANTS



Document No. 2

THE CASE OF AFRICA SOUTH OF THE SAHARA

RECOMMENDATIONS OF PARTICIPANTS

UNITAR EUROPEAN OFFICE:
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GENEVA, March 1992

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Document No. 1: Debt Re-structuring.

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PREFACE

UNITAR's training programme in debt management has provided training with special emphasis on the legal aspects in the least developed countries (LDCs) of sub-Saharan Africa. A range of training programmes, seminars and workshops were implemented to sensitize and/or train senior officers, middle-level managers, law professors and lawyers in the legal aspects of debt management in both East and West Africa. In light of recent developments, as of 1992, UNITAR's European Office will receive financial assistance from the Division for Global and Inter-regional Programmes (DGIP) of the United Nations Development Programme (UNDP). These funds will be in addition to those provided by the Swiss Directorate for Development Cooperation. They will be used to develop training activities in Southern Africa and in Asia and the Pacific.

Recommendations were generated as a concrete output for each of the seminars and workshops. These recommendations were made by the trainees, to the attention of their respective national authorities. These recommendations are not official and do not necessarily reflect the views of UNITAR or any other body of the United Nations system.

This document is the second in a series of papers due to be printed and circulated at various intervals, whenever deemed useful. It is neither the intention nor the task of UNITAR to publish general studies about various aspects of the external debt and debt management. The main role of the Institute is training. However, some well targeted and short texts will be produced, which should be of interest not only to the participants and resource persons, but also to decision-makers working in the field of development, whether on a national or on an international level.

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A.

UNITAR/EADB AWARENESS SEMINAR FOR SENIOR OFFICERS ON EXTERNAL DEBT MANAGEMENT

(Dar es Salaam, TANZANIA)

15 January — 17 January 1990

RECOMMENDATIONS

The Participants in the Seminar,

☐ Having noted that their meeting was in the nature of an awareness seminar in the course of which the following issues:

(a) External debt and the development process;
(b) Debt management: Policies and techniques;
(c) External debt, public finance and the balance of payments;
(d) Debt re-organization;
(e) Personnel policies;
(f) Legal aspects;

were dealt with;

☐ Having developed a consensus regarding Tanzanian training needs and institutional changes in the field of debt management;

☐ Having agreed that the satisfaction of these training needs and the implementation of these institutional changes would contribute to more efficient management of Tanzania's external debt with concurrent substantial savings in the debt service;

recommend the following:

1. *DEBT OFFICE:* Exchange of External Debt information and consultations should be qualitatively and quantitatively improved between debtor entities and bodies responsible for the recording, monitoring and payment of external obligations. To this end, the establishment of a high-level body such as a National Debt Office is recommended, to formulate and coordinate debt management policies and strategies as well as set up rules and procedures for effective control of all foreign borrowings. (For example, calculations made for a sub-Saharan African country have pointed to potential savings from skilled debt management of at least 1% of the debt outstanding and disbursed or 20% of the annual debt service).

2. *EXCHANGE RISK:* The massive depreciation of the Shilling since 1986 has compounded the debt burden especially for non-exporting enterprises whose products sell at government-controlled prices. Where the prices are controlled, the burden should be shared with the Government.
3. *LEGAL FRAMEWORK:* Government domestic and foreign borrowing in Tanzania is governed by the Government Loans, Guarantees and Grants Act of 1974 whose Part II Section 3 sets annual target limits with regard to both local and foreign loan service costs. To date, this provision continues to be ignored. The legal framework on debt management should be reviewed and adhered to.
4. *TRAINING:* With regard to training of available human resources, the priority areas appear to be the following:
   (a) Further development of skills in collecting, compiling and disseminating data required by decision-makers;
   (b) Improved mastery in the use of information systems and computer software;
   (c) Familiarization with loan operations;
   (d) Further training in financial analysis with a view to measuring the impact of debt levels on overall macroeconomic performance and the performance of individual enterprises;
   (e) Familiarization with new, not yet applied debt management techniques: debt rescheduling, debt relief, debt reduction and transformation, cash management and evaluation of risks caused by variations in earnings and exchange rates;
   (f) Development of awareness among borrowing entities of the importance and relevance of taking the legal aspects and advice more fully into consideration in negotiations.

In considering expanded training programmes, due consideration should be given to target groups too often neglected in implementing programmes, namely commercial banks and their parastatal clients. In the formulation and implementation of these programmes, Tanzania could collaborate with existing national and sub-regional institutions of higher learning.

Another consideration should be that the acquisition of additional skills should be accompanied by commensurate increase in remuneration to prevent further brain drain out of those entities where those skills are most needed to reduce costs in debt management.

South-South co-operation with other countries in the same region or in other regions should be encouraged through exchange of information and experience in negotiation and debt portfolio management.

UNITAR, jointly with the East African Development Bank (EADB) and multilateral agencies of the United Nations system, should be called upon to finance elements of the proposed training, together with other multilateral and bilateral development agencies.

B.

UNITAR/EADB SUB-REGIONAL TRAINING SEMINAR ON LEGAL ASPECTS OF EXTERNAL DEBT MANAGEMENT

(Nairobi, KENYA)

19 February — 02 March 1990

RECOMMENDATIONS

1. THE ROLE OF THE LAWYER IN DEBT MANAGEMENT

In order to achieve successful debt management, the lawyer should be involved in an effective and efficient manner. Decision-makers must realize that the lawyer forms an integral part in the debt management process and, as a consequence thereof, he/she must be involved at the initial stages of each loan negotiation. This deserves to be emphasized, as the role of the lawyer is usually confined to signing loan agreements within a very short time notice. Consequently, he/she will not be in a position to thoroughly examine the legal provisions contained in loan agreements, which seldom are beneficiary to the borrower.

Although, legal analysis may take time and may be generally considered by economists and financial analysts as a source of delay as far as the signing of loan documents is concerned, it is essential to the improvement of loan agreements.

In this endeavour, therefore, the lawyer has a very important role to play, which can be summarized in terms of the following three levels:

(a) Improving legal provisions generally contained in loan agreements;
(b) Reviewing prevailing international financial laws and rules, and elaborate new legal principles; as well as, on a concerted basis,
(c) Moving towards the elaboration of a Standard Debtors' Loan Agreement and General Conditions as the basis of negotiations, in order to counter the Creditors Standard Loan Conditions.

(a) Improvement of the Legal Provisions of a Loan Agreement

In addition to the attached recommendations regarding five major legal clauses, i.e. (1) conditions precedent and covenants, (2) applicable law, (3) financial obligations, (4) default clauses, as well as (5) clauses impinging on the debtors' sovereignty, the following needs to be asserted.

In order for the lawyer to be in a position to effectively enhance the above mentioned recommendations, his role must be strengthened and recognized by all involved governmental entities. In effect, the lawyer should be viewed as an available resource person whose role is complementary to that of the economist and financial analyst, and therefore not be brought into negotiations at the last instance when a decision has already been taken. Faced with a *fait accompli* his contribution can only be minimal. If lawyers are involved from the beginning of negotiations, unfavourable terms and conditions that result, for example, in an impingement of sovereignty, could be avoided. Furthermore, the early participation of lawyers could contribute to more balanced and equitable discussions between borrowers and lenders, as the latter tend to include a lawyer in their team at the outset of negotiations.

It is therefore suggested that, each Government Ministry has its own in-house legal department, staffed with senior lawyers, of which one or two should belong to the decision-making group. The ministerial lawyers must be involved from the conception of the project to its end, and liaise with the Attorney General's Chambers, which, in turn, should play a consultancy role.

The role of the lawyer should be extended to daily, concrete follow-up of each project financed through external loans. In that way, he will be in a position to assess whether or not both parties are subscribing to their obligations and gain first-hand knowledge and practical experience on terms and conditions that can protect debtors from real-life situations. By way of example, if a supplier does not fulfil his commercial obligations, a clause should provide for the revision of the debtor's reimbursement obligations.

Finally, given the need to keep a register of all signed loan agreements, it is suggested that the Attorney General's Chambers be utilized for this task, for two reasons. First, most if not all, loan agreements go through the Attorney General's Chambers for legal opinion, and second, disputes arising out of loan agreements would need his participation.

(b) Review of Prevailing International Financial Laws and Rules, and Elaboration of New Legal Principles

Legal activities are essential at the national, regional and international levels through appropriate fora and organizations, such as National Bar Associations, Law Societies, Faculties, etc., where the debt issue should be articulated. Once awareness is raised in these various fora, legal innovations can begin to reflect, for instance, more equitable international financial rules, which, until now, are mainly the product of the major lending institutions. The recommendations on the five above mentioned clauses constitute a first attempt towards legal innovation.

Along these lines, on the regional and international levels, lawyers should start reflecting jointly on possible amendments to the multilateral credit agencies of which they are members and thus entitled to a say in this respect. The amendments in question regard mainly the Standard Loan provisions as well as the General Conditions governing loans. Such changes should be brought about through the African representatives in, for example, the World Bank, so that these matters are brought to the attention of the Board. This should particularly be the case within the African Development Bank as well as Regional Development Banks, given their vocation to promote African development.

The passiveness of African debtor lawyers and negotiators must end, particularly as they have never really advocated changes in this field.

(c) Elaboration of Common Guidelines to Debtors

Two main efforts must be undertaken in this direction, namely;

a) to draft an International Charter of Debtors Rights, based on a thorough comparative study of national legislations regarding the protection of individual and corporate debtors,
b) to draft Standard Loan documents reflecting equitable obligations shared both by creditors and debtors alike.

In order to achieve these goals, there should be unity among debtors, which implies sharing of information on the magnitude of the debt problem and experience on the legal conditions in Loan Agreements. Internal mechanisms are also essential in order to minimize the high degree of failure that has characterized projects in the past, as the blame is not only due to the harsh terms imposed by the lenders. By way of example, compliance with the national loan approval procedures must be ensured on the one hand, as well as a possible revision of these in order to limit the number of entities entitled to incur external debt, on the other hand.

Conclusion:

In order to help achieve these goals, various forms of training activities need to be undertaken. In effect, to be an efficient member of the Debt Management Team, lawyers must understand the context within which they operate, such as the political, social, economic and cultural context of their working environment. Not only must lawyers be well trained in domestic law, but also in international law. They should also be familiar with the major national systems. There is thus a great need for continuous training of lawyers through workshops, seminars and short courses at both the regional and inter-regional levels. This can be achieved by establishing a Debt Management Institute in one of the three EADB Member Countries, and by introducing the topic of debt management -legal aspects- in the curriculum of law faculties.

2. "CONDITIONS PRECEDENT AND COVENANTS"

A. Definition

(1) Condition Precedent:

"Condition Precedent" clauses in Loan Agreements lay down factors and/or events which determine the effectiveness of the Agreement. These are of two types: a) conditions precedent to the effectiveness of the Agreement, and b) conditions precedent to disbursement. Both types of conditions must be fulfilled before the loan can be utilized. By way of example, a condition precedent can consist of an undertaking by the Borrower to give a tax exemption at a given time.

(2) Covenants:

Covenant Clauses, on the other hand, stipulate what the parties undertake to do or avoid from doing, in the process of performing the agreement after it has become effective. These unilateral promises by the Borrower cover different areas, such as financial or administrative matters.

B. Pitfalls

Conditions precedent are costly as they delay the entry into force of the loan agreement, in particular those whose implementation require long procedures. Typically, these are often contained in World Bank and African Development Bank Loan Agreements, and General Conditions applicable to these loans.

Covenants on the other hand, if not observed because of the difficulty of their performance, can result into the repudiation of the agreement, which obviously constitutes one of the worst consequences which need to be avoided.

C. Guidelines for Negotiations

A thorough examination of conditions precedent and covenants (hereinafter Clauses) must be undertaken in order to;

(a) analyze the compatibility of the Clause with government policy,
(b) distinguish the negotiable clauses from the non-negotiable ones,
(c) identify those which can be implemented without delay,
(d) reduce the scope of the clauses formulated too broadly and determine specifically and concretely the obligations in question,
(e) consider whether a particular clause can be traded off as a bargaining tool or simply be excluded from the agreement.

3. LAW APPLICABLE IN INTERNATIONAL LOAN AGREEMENTS

A. Subject and Nature

The following issues are very important features of loan agreements: (a) law to be applied in respect of loans procured from external sources

— be they multilateral lending agencies, donor organizations within sovereign states or commercial banks, as well as of (b) jurisdictional matters.

Every agreement must be governed by a particular law or a set of laws for purposes of determining its (a) validity, (b) formation, (c) execution, and (d) interpretation. Although it is not mandatory as a matter of principle to state this in the agreement, in practice negotiators and drafters expressly set it out in the agreement to facilitate the resolution of disputes or controversies which would otherwise be protracted and difficult to resolve in the absence of a clause to that effect.

In order to avoid uncertainties, confusion and unnecessary expenses etc., it is always prudent for the counsels to the parties to ensure the inclusion into the agreement of clauses on applicable law and jurisdiction. There is no single and uniform heading or drafting style for these clauses . In some cases it is referred to as (1) "Applicable Law and Jurisdiction", (2) "Applicable Law and Place of Jurisdiction", (3) "Law Jurisdiction and Waiver", (4) "Enforceability," etc.

B. Pitfalls and Recommendations

(1) Where parties to a loan agreement omit to set out the law to be applied or the institutions to which disputes or controversies are to be submitted, separate negotiations will have to be undertaken. If the negotiations fail, the institutions with jurisdiction over the subject matter are faced with the onerous task of determining the intentions of the parties as embodied in the agreement.

The general position of judicial or arbitral courts in many Common Law countries is that where the intention of the parties cannot be ascertained, the court would unilaterally choose the system of law with which the agreement is most closely connected, by applying various presumptions such as the law of the place where the agreement is concluded, or the law of the place of performance.

(2) Parties to a loan agreement have a number of alternatives available. Depending on leverages, negotiating abilities and the source of financing, it is possible to choose either the law (a) of the lender, (b) of the borrower, or that of (c) a third country. General principles of public international law may also be applicable. However, counsel for the borrower must exercise care and proper judgment in choosing the law and forum, as practice has shown that lenders prefer to choose either their municipal law or one or several legal systems and forums with which the borrower may not be conversant. Moreover, this may lead to further and unnecessary costs being incurred by the Borrower, as he may require legal advice by national law firms in case of dispute.

(3) Along these lines, if a loan agreement is drafted in both English and a language not understood by the Borrower, the English version should prevail in case of conflict.

(4) Regarding the possibility to insulate the agreement from changes in the Borrower State, adversely affecting the lender's rights or interests, counsel for the Borrower should be able to assure the Lender that even where the law and forum chosen is that of the Borrower State, the waiver of immunity clause is sufficient as it complements the choice of law and jurisdiction clauses.

C. Guidelines for negotiations

It is always advisable and it is a good negotiating stance to inquire from the Lender the reason for chosing a particular law or legal system. In case there are several laws chosen by the Lender, the Borrower should propose his own laws and courts in an attempt to reach a win-win position. This could spark off proposals from the Lender until they are settled on a legal system and forum in which they both have confidence and trust.

In the case of the three EADB Member States, the choice of English law and the submission to English Courts presents a number of advantages, particularly when the Lender, other than English, wishes his law to be applicable.

(1) Firstly, the three countries are familiar with the English System of law and well versed in English;
(2) Secondly, English law is predictable on various crucial commercial issues;
(3) Thirdly, London being a prestigious international financial centre, there is no valid reason for the Lenders to object to the applicability of English Law.

Finally, in order to show possible innovations, the case of Loan Agreements under the Kuwait Fund deserves to be mentioned. In case of arbitration, the arbitrator is to apply, among others, the principles common under the current laws of the Borrower and the State of Kuwait.

4. FINANCIAL OBLIGATIONS

A. Definition and Nature

Although not legal by character, the financial clauses have been, to some extent, subject to examination. The clauses pertain mainly to interest rates, commitment fees, repayment obligations, prepayments and penalty fees.

B. Pitfalls and Recommendations

In addition to a recommendation of a very general nature, consisting in an attempt to reduce all costs of the loan - including interest rates and penalty fees, the following have been proposed:

(a) *Interest rates:* The borrower must carefully choose between fixed and floating interest rates, to the extent that the market conditions enable the possibility of such a choice. Furthermore, if a Lender states that the loan that he proposes to the Borrower is of a soft nature, the latter should refuse an interest rate linked to LIBOR, given its commercial nature. Regarding the computation in the calculation of yearly interest, it must definitely be based on 365 days and not 360 days as some agreements tend to do. The five-day difference results in an unnecessary incremental cost to the Borrower.

(b) *Repayment obligations:* In this regard, the Borrower should try to negotiate as long a repayment period as possible. He should particularly assess the time that will elapse until the project to be financed will generate funds, enabling him to meet his reimbursement requirements. Furthermore, similar to some major Latin American debtors, a clause providing for the Lender to signal to the Borrower when payment is due, five days in advance, should be included as this considerably assists the debt management team in performing their daily work.

(c) *Penalty Clauses:* The above mentioned proposal would also help avoid the payment of unnecessary penalty fees.

(d) *Prepayment Clauses:* As prepayment usually is not in the interest of the Lender, the loan agreements often provide for a long notice on the part of the Borrower, at least 30 days, and, in some cases, up to 6 months. Furthermore, some agreements will consider the Borrower's request for voluntary prepayment as irrevocable. In light of these imposed conditions, the Borrower must successfully negotiate: (a) a short prepayment notice, not longer than 30 days, and (b) its revocable character.

5. DEFAULT CLAUSES

A. Definition and Nature

The default clause is a principal clause contained in loan agreements. It examines all covenants and gives the Lender the right to : a) Terminate the agreement and/or; b) Accelerate the loan by requiring the Borrower to render all amounts due.

The events of default and the conditions that constitute default are usually listed in the loan agreement, heavily and widely drafted in favour of the creditors. The main events usually cover:

(a) Failure to pay sums due on principal and interest;
(b) Failure to comply with specified provisions of the loan agreement;
(c) Breach of warranty or representation;
(d) A cross-default clause which protects all Creditors in the case where the Borrower fails to meet his obligations towards one of them, that he will be considered in default towards all others. The justification of this clause lies in the strong concern among the Lenders not to be discriminated between each other by the debtor.

B. Pitfalls for the Borrower

(a) One of the main negative consequences for the Borrower to be in default, is the cost factor, as he will usually be required to pay interest on delayed payments, which amounts to payment of interest on interest.
(b) Default clauses are often very generally drafted and cover such wide events of default, that may not always be predictable to the Borrower.
(c) In the specific case of Export Credits the Borrower is considered to be in default if he does not meet his financial obligations as specified in the loan agreement, even though this *de jure* default has been caused by a failure on the part of the supplier to provide material necessary for a given commercial project.
(d) The cross-default clause leads to additional costs to the Borrower as penalty fees will be multiplied. Furthermore, the creditors may take an act of acceleration by requiring all sums due.
(e) Finally, it should be noted that while the loan agreements contain long provisions regarding events of default for the Borrower, no such clause is included on the Lender side. This absence reflects an unbalanced situation, where the parties to the agreement are not on equal level.

C. Negotiation Guidelines and Recommendations

(a) As a basic rule, given the general terms in which default clauses are drafted, the Borrower must reduce the events of defaults as much as possible and clearly specify these events as to cover concrete and predictable situations.
(b) In order to avoid unnecessary defaults, the Borrower should require a clause whereby the Lender gives prior notice to any disbursements (see Recommendations for Financial Obligations).
(c) A reasonable grace period should be given to the Borrower in case of default.

(d) Use should be made of the materiality test in order to determine whether or not a breach should amount to default. In other words, only a fundamental breach, going into the core of the Agreement should lead to default.
(e) Ensure that all unilateral decision or action which the Lenders are entitled to, are reasonable and proportionate to the breach.
(f) In the specific case of Export Credits, the Borrower should not bear the financial responsibility when the supplier fails to meet his obligations towards the Borrower under the Supply Contract. A clause providing for revision of the Borrower's financial obligations towards the Lender — in a separate loan agreement — should be included, and thus ensure a link between these two agreements.
(g) The cross-default clause should, to the greatest extent possible, be narrowed to manageable proportions by excluding local indebtedness as opposed to external indebtedness. It should exclude the indebtedness of governmental entities and their respective defaults. Finally, a threshold, i.e. a ceiling under which no event of default can be operative, should be negotiated.

C.

UNITAR/EADB NATIONAL FOLLOW-UP WORKSHOP ON LEGAL ASPECTS OF EXTERNAL DEBT MANAGEMENT

(Dar es Salaam, TANZANIA)

08 July — 12 July 1991

RECOMMENDATIONS

This workshop which had as its objective the introduction of lawyers to the intricacies of international financing especially aspects relating to debt management concentrated on the following sub-themes: International Arbitration, Principles of Budgetary Law and the Restructuring of Sovereign Debts.

1. INTERNATIONAL ARBITRATION

The international arbitral process can be a useful tool for the resolution of disputes in the area of international commercial transactions. It seeks to avoid the technicalities and complexities of subjecting parties to national jurisdictions and therefore also assists in the enforcement process. Consequently, Governments are enjoined as a matter of priority, to take steps to accede to the necessary international treaties and conventions that would make it possible for them and their nationals to take advantage of the facilities of these international arbitral institutions. Similarly, private sector organizations are urged to join such international bodies which offer facilities for the settlement of international commercial disputes at a non-governmental level.

Governments and their agencies are called upon to employ the process of arbitration more often when they contest the validity of certain transactions or pursue their rights/claims in respect of projects that have been poorly conceived/executed by international agencies, lending institutions or multinational corporations. Through an active pursuit of rights/claims in international arbitral tribunals, governments are able to reduce their debt burden. A high proportion of their debt stocks can be attributed to projects that have been poorly conceived or executed by these international donor agencies for which they should be partly held responsible.

It has been observed that the prospect of successful arbitration (or any dispute resolution method) is determined not only by the amount of work that goes into advocacy once a dispute has arisen, but also by the amount

of preparatory work and expertise employed right from the time an agreement is being drawn. Consequently;

(a) domestic parties to any international agreement should involve lawyers in the negotiation of drafting of such agreements right from inception, and the practice of calling lawyers in as fire fighters when the project is in trouble or litigation/arbitration has commenced should be discontinued,
(b) lawyers on their part, should be very careful in the negotiation and drafting of agreements especially the arbitration and related clauses or applicable laws and venue, so as to imaginatively avoid future costly complications, disappointments and frustrations.

2. PRINCIPLES OF BUDGETARY LAW

The time has come when African Governments should pursue compensation from the North (i.e. Europe and North America) for the devastation and exploitation of African human and natural resources in the last three centuries as these have immensely contributed to the current imbalance in international trade and investment with the resultant deficits and debts of African countries.

Governments must respect the principles of budgetary law of appropriation not to engage in borrowing without constitutional authorization in due deference to the separation of powers in a particular state.

Although the traditional functions of government are the maintenance of law and order, protection of the territorial integrity of the State through secured borders, maintenance of services that cannot be operated individually or through private enterprise, modern governance also calls for the involvement of the Government in the provision of goods and services which act as a catalyst to development, in order to avoid unnecessary pressures on a nation's balance of payment. Such services should be financed through normal government revenues such as taxes, duties and charges where Governments must resort to borrowing. This should be met as far as possible from internal resources.

As far as possible, external borrowing to finance public projects should be restricted to projects that have the capacity to generate foreign exchange earnings or conserve foreign exchange for the country.

However, in light of historical developments, and on a common evaluation at both national and international levels, certain expenditures are deemed indispensable for the development of a given society which cannot be met by revenues. The international community has to agree that these expenses have to be financed through injections of external financing that are not to be reimbursed.

Governments are called upon to establish an independent agency which would coordinate all external borrowings by both the public and private sectors of the economy with a view to ensuring that external borrowings are resorted to only for those projects which meet with national development priorities and for which local (domestic) financing is not available. Consequently, such an agency should be vested with powers to authorize all external borrowings in line with national priorities and make regulations setting the criteria to be employed for granting such approval.

In the pursuit of national economic development objectives, the procurement of loans for projects should take into account the socio-economic, cultural and human rights of the people.

It has been observed that a majority of projects initiated, funded and executed in African countries through the assistance of multilateral financial/monetary institutions such as the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD) failed largely because of the rigid ideological approach to economic development issues by functionaries of these institutions. Thus it has been observed that most functionaries of these institutions come from certain geographical areas of the world or have had their educational qualifications and training from clearly identifiable institutions in a few member states of these bodies. The dynamics of modern economic development call for an integrated approach rather than an exclusionary one to economic theories and policies through the involvement and (harmonization) of various schools of thought and also through diversified representation in these bodies. Towards this end, there is a need for urgent democratization of the recruitment of staff in these institutions to the extent that their technocrats and field officers should reflect the various geographical regions as well as a diversified educational background.

3. RESCHEDULING OF EXTERNAL DEBT

Debt rescheduling or restructuring per se is not and cannot be a solution to the debt problem as it merely postpones and in most cases increases the debt service burden of African States. Consequently, there is need for the adoption of more realistic solutions to the problem. In this regard it must be recognized that a greater percentage of the debts were incurred on projects which never worked, nor could pay or be expected to pay for themselves; for which both the debtor countries and the creditors must accept responsibility. Consequently, African Governments are called upon to collectively pursue the subject of debt cancellation and actively explore the possibility of compensation for some of these non-performing projects, or "white elephants."

The importance of knowledge and information in any undertaking cannot be over emphasized. Consequently, there is an urgent need for African states to establish national State banks or debt management units.

The world community is growing smaller every day and people with common problems or objectives are coming together more often for the common good. It is in this light that African countries are called upon to establish a consultative forum through which they can share experiences on their debt and economic development issues, exchange information on their dealings with the creditors and work out common strategies for the resolution of their debt problems.

While recent initiatives by creditor countries, especially the Trinidad Options, are welcome, it is obvious that they will fundamentally alter the existing disequilibrium in the world economy. Consequently, greater efforts should be made by these creditor countries to evolve better options along the lines earlier suggested in these recommendations. Furthermore, the Creditor Banks which are yet to respond positively to the dynamics of the debt crisis, are urged not to view the debt situation purely from the creditor/debtor relationship perspective but as a problem of development and a sharing of responsibilities.

D.

UNITAR/EADB NATIONAL FOLLOW-UP WORKSHOP ON LEGAL ASPECTS OF EXTERNAL DEBT MANAGEMENT

(Nairobi, KENYA)

08 July — 12 July 1991

RECOMMENDATIONS

Among the specific topics discussed at the Workshop were:

A. Debt Rescheduling through the Paris Club;
B. Loan Negotiations and Arbitration Clauses;
C. Sovereign Debt and Budgetary Laws.

After the week-long deliberations, the workshop participants made the following recommendations:

1. There is a need for open discussion during negotiations leading to the procurement of a loan. This is necessary whether the debt to be incurred is sovereign or a private-sector debt. In order that legal issues are adequately handled, lawyers must be involved in negotiations for loans right from the beginning.

2. There is a need to train the managers themselves so that they might appreciate the crucial role of the lawyer in debt management issues. Such training should address heads of parastatals and senior officers in government departments as well as Permanent Secretaries.

3. There is a need to develop cadres of lawyers in government and parastatal entities specializing in the area of debt management. Once such lawyers are sufficiently specialized and trained, the significance of their role should be emphasized.

4. It was noted that Kenya has a committee on debt management in the Ministry of Finance. The participants commended this move and recommended that this committee be expanded to cover most parastatals.

5. The Attorney-General's Chambers need to be expanded so as to accommodate the large amount of increasingly complex negotiations. Other government departments also should be encouraged to employ the services of lawyers. Such a move would allow for specialization.

6. The participants also urged the government to set up an Inter-Ministerial Committee comprising lawyers and nonlawyers which would have the task of reviewing debt problems periodically.
7. Whenever regional seminars are held, UNITAR should try to involve people from other regions as much as possible. It was thought that two participants from each region would suffice.
8. Because of the biased nature of most of the loan agreements imposed by the lending countries, the participants recommended the formation of a task force in each ministry to study all past loan agreements with a view to identifying those with unfair clauses so that the government or the parastatals could seek to terminate such agreements.
9. During the discussion, it became apparent that parastatals are subjected to forced borrowing through the purchase of treasury bills. The participants were of the view that the government must honour its obligations and pay upon maturity of such bills. The workshop also recommended that local borrowing should be conducted under normal market conditions and within the established legal and financial rules.
10. If there are to be future seminars, participation should not be restricted to lawyers. Some non-lawyers from relevant ministries should be invited to broaden the perspective on debt management. They should be considered as resource persons.
11. Each country must set its priorities in terms of the needs of that country. After priorities are set, there should be an assessment of how these priorities are to be met. If they cannot be financed locally, the government should seek to have them financed through "compensatory financing" from donor countries.
12. The Kenyan Government should take immediate steps to negotiate debt relief.

If these issues were adequately dealt with, the participants believed that this would greatly help resolve many debt management problems in the country.

E.

SUB-REGIONAL AWARENESS/TRAINING SEMINAR ON LEGAL ASPECTS OF EXTERNAL DEBT MANAGEMENT

(Accra, GHANA)

07 October — 16 October 1991

RECOMMENDATIONS

I. MAIN ECONOMIC AND LEGAL ISSUES

1. A Common African Front (CAF) towards the debt crisis should be formed.
2. Borrowers should not underestimate their bargaining power.
3. The Borrower should not be afraid to canvass novel international legal principles in support of its position.
4. Borrowers should insist on the removal of discriminatory and double-standard approaches by the North in dealings with the South as opposed to its approaches in dealing with other parties in the North. There should be a fair application of general principles of law to all parties.
5. Lawyers should, in the negotiation and drafting of loan agreements, concern themselves with the distribution of risks and benefits arising under the loan agreements.
6. Borrowers should learn to distinguish clearly between concessional aid and grants so as to avoid compounding the debt crisis over a period of time.
7. The study of macro and micro economics should be made an integral and compulsory aspect of undergraduate study by Lawyers in Africa, to enable them to understand the economic implications and basis of legal provisions in international development agreements.
8. Lawyers in specialized institutions and parastatals such as post and telecommunications, power generation, shipping, aviation, etc. should be given in-service training, and should be involved in all aspects of the operations of their institutions, in order to enable them to have a clear and full understanding of the

scientific and economic basis of their operations, so as to enhance their ability in the negotiation of loans.

9. Courts and legal personnel should be equipped and trained to handle international commercial transactions.

10. Efforts should be geared towards the setting up of an Afrodollar Market. This is desirable to reverse the trend of flow of excess SSA funds to Europe which then come back as Eurodollar loans.

II. PARTIES TO AGREEMENT

11. While the lender will wish to use a number of standard operational clauses under the many headings usually found in loan agreements, the borrower is advised to consider each clause separately in relation to its real needs.

12. The borrower should put a cap on legal fees and other expenses because these escalate the cost of loans.

13. The borrower should endeavour to negotiate a comfortable grace period and written notice in order to give itself leeway to adjust in case of any difficulty in meeting its obligations.

14. Lawyers should be involved at an early stage in the negotiation of any loan agreement. They should study warranties, ascertain that they are correct and should not assume that warranties are standard form and need not be negotiated.

15. Wherever possible, it is better to clearly define the applicable law rather than adopt general principles of law, since this may create a conflict in an agreement e.g. between a Western bank and an Islamic State which operates under Islamic Law.

16. Borrowers should not accept clauses which are contrary to overriding principles of public policy in their country.

17. Where the borrower can prove sufficiently the stability of its legal system with adequate safeguards to protect the lender, it should negotiate that the laws of its country will be the governing law of the contract.

18. In view of the fact that the two most prominent laws in commercial bank lending are the laws of New York and the United Kingdom, lawyers from borrowing countries are advised to familiarize themselves with these laws.

19. In the event that the lender has to enforce against the borrower, the agreement should be restricted to the assets of the particular agency which is the defendant and not to other assets of the state within the lender's jurisdiction.

20. Borrowers should negotiate covenants which ensure the continued existence of the lender to fulfil its obligations under the loan agreements, especially in agreements where there is a long disbursement period.

21. The borrower's lawyer should not hesitate to qualify draft letters of opinion sent to him by the lenders as such letters are subject to negotiation like the loan agreement itself.

III. LOAN AND GUARANTEE APPROVAL PROCEDURE

22. Sovereign borrowers should have clear-cut and comprehensive loan/guarantee approval procedures.

23. The procedure should be based on the principles of efficiency, expeditiousness and minimum cost of project financing and implementation.

24. Procedures should be established under law which would expressly provide that non-compliance with the procedures would render the agreement in question not valid and not binding on the government.

25. In order to allow the borrower time to reflect on the draft text, credit agreements should never be signed immediately after negotiation.

26. Governments should not introduce policies of privatization if they are not prepared to guarantee private loans.

27. There should be compulsory public registration of all foreign exchange credit agreements (both public and private).

IV. DEFAULT CLAUSES

28. The harshness of default clauses should be attenuated by adding notice/grace periods and including materiality tests to the events which trigger off the default.

29. The impact of cross-default clauses should be limited by (i) requiring that only a formal declaration of default under the extraneous contract would trigger off the cross default clause and (ii) limiting the default to external indebtedness only.

30. The power to decide whether default has occurred and the course of action to take, should not be given solely to the agent bank but should be shared with the majority of the banks. Majority here should be numerical majority of the banks which must also have at least a 75 per cent exposure.

V. FORCE MAJEURE

31. Borrowers should protect themselves against clauses which relieve the lender of its obligations to continue with the disbursement under the contract in the event of it becoming illegal under the laws of the lender country. This could be done by providing that the lender should in such a case seek funding from other jurisdictions to honour its obligations by, for example, directing another bank to pay.

32. Borrowers should resist the inclusion of increased cost clauses which protect the lender against future cost increases to the lenders in providing the funds, since on the Euromarket the movement of LIBOR takes care of this and there is no reason why the borrower should bear unanticipated increases in costs occasioned by activities in the lender's country.

VI. EXPORT CREDIT

33. Availability of export credit or "soft" finance should not lead to economically unviable projects being undertaken.

34. Possibility of repayment of export credits must be examined independent of the projects under investigation. So that "good" projects do not lead into a debt trap if there is insufficient foreign exchange in the economy.

35. Export credit finance should be subject to international competitive bidding.

36. Borrowers should carefully assess the value of technology being imported in order to avoid obsolete technology being dumped on them.

VII. CO-FINANCING

37. It is observed that a co-finance agreement can turn out to be more expensive because of the nationality requirement contained in all procurement guidelines of export credit agencies where goods from a creditor country are more expensive. Consequently, it is recommended that African countries first seek and obtain international biddings on a project before arranging for co-financing.

38. Efforts should be made by African borrowing countries to ensure an equitable distribution of benefits to them under the procurement guidelines of co-financing agreements.

VIII. JURISDICTION/ARBITRATION

39. Borrowers should have the right to apply to any jurisdiction for remedy and jurisdiction clauses should be drafted on the basis of mutuality and reciprocity.

40. Third World countries should endeavour to strengthen and avail themselves of regional arbitration centres by negotiating for arbitration clauses which appoint such centres.

41. Lawyers should know and understand the rules and procedures of the arbitration they choose to apply through arbitration clauses.

IX. GENERAL

42. UNITAR should arrange internship or exchange programmes for debt managers and allied professionals from LDCs with relevant organizations in developed countries.

43. Borrowers should monitor closely movements of interest rates and other currencies in the Euromoney market.

44. Borrowers should negotiate that the agent bank also act as a trustee in favour of the borrower in situations in which the agent bank holds excess funds from the agreement.

45. Borrowers should budget for the maintenance of infrastructure in every sector of the national economy in order to avoid unnecessary external borrowing.

46. In negotiating floating interest rates, borrowers are advised to negotiate for a ceiling just as the lenders impose a bottom line.

F.

UNITAR/EADB NATIONAL FOLLOW-UP WORKSHOP ON LEGAL ASPECTS OF EXTERNAL DEBT MANAGEMENT

(Kampala, UGANDA)

20 January — 24 January 1992

RECOMMENDATIONS

The participants in the workshop adopted the following recommendations for consideration by the entities and persons concerned:

1. There is an urgent need to upgrade the teaching of the Legal Aspects of Debt Management at the Law Faculty. This may be done by way of introducing a fully fledged course in International Economic Law. In this regard, UNITAR's support through their data base centre in the form of materials, journals, the reproduction of a catalogue and the updating of current trends in the area would be most appreciated.
2. UNITAR should fund local research into the question of Uganda's specific debt problems, in a bid to generate greater awareness and expertise about the issue.
3. UNITAR should consider ways of funding (through the Faculty of Law, for example) regular, local workshops.
4. It is necessary to develop a cadre of knowledgeable people in the field of debt management, and in this respect, those who have attended UNITAR workshops should be kept informed of debt management issues and other related seminars and similar activities.

CONCLUSION

Many of the developing countries have large debts, relative to their economies, which have become a constraint on development. The world community is now launched on a new phase of the response to the debt problem. Measures available to reduce the debt burden will be expanded as new recommendations and proposals are taken up in various fora.

Many of the issues covered in this document are ones which have been and continue to be priority concerns for the respective governments. These issues might seem uncomplicated at the beginning, but become quite complex if viewed from a regional perspective. This is why there is also a need for a wider discussion and explanation of how some of these recommendations could eventually be implemented.

The recommendations contained in this document have been spontaneously put forward by participants to UNITAR's seminars and workshops. They express concern of government officers dealing concretely with legal issues of debt management. They might not have a universal value or impact, but presumably reflect, mutatis mutandis, similar worries among lawyers in other developing regions of the world. They will serve as a set of guidelines to UNITAR for the coming surveys of training needs and assessments of results obtained so far.

Moreover, this document is being circulated with a view to pointing out what those concerned in the field of debt management think and believe needs to be done.

Publications of this sort will also help create greater awareness among the concerned parties at all levels and at least give them an idea as to what problems they are faced with and how to approach such problems.

UNITAR

The United Nations Institute for Training and Research (UNITAR) was established in 1965 as an autonomous body within the United Nations with the purpose of enhancing the effectiveness of the UN through appropriate training and research programmes. UNITAR works under the policy direction of a Board of Trustees and is headed by an Executive Director. The Institute is supported by voluntary contributions from governments, inter-governmental organizations, foundations and other non-governmental sources.

The Institute provides training at various levels to persons, particularly from developing countries, for assignment with the United Nations or the specialized agencies or for assignment with their national services which are connected with the work of the United Nations, related organizations or institutions. The programmes may include training for staff members of the UN and of the specialized agencies as well as training for special UN field assignments.

UNITAR European Office conducts a wide range of training programmes in multilateral diplomacy and international cooperation as well as social and economic development along with research programmes on specific aspects of training methods and techniques.

UNITAR's training programme in the field of debt management seeks to provide training in legal aspects of debt management in countries of sub-Saharan Africa, Asia and the Pacific and West Asia. A range of sensitization workshops, sub-regional seminars and national follow-up workshops have already been held, and further activities will be continued in the participating countries to sensitize and/or train senior officers, middle-level managers, economists, law professors and lawyers in the legal aspects of debt management. This programme is implemented with a view to establishing facilities in selected countries for providing training on a continuing basis, nationally and sub-regionally.

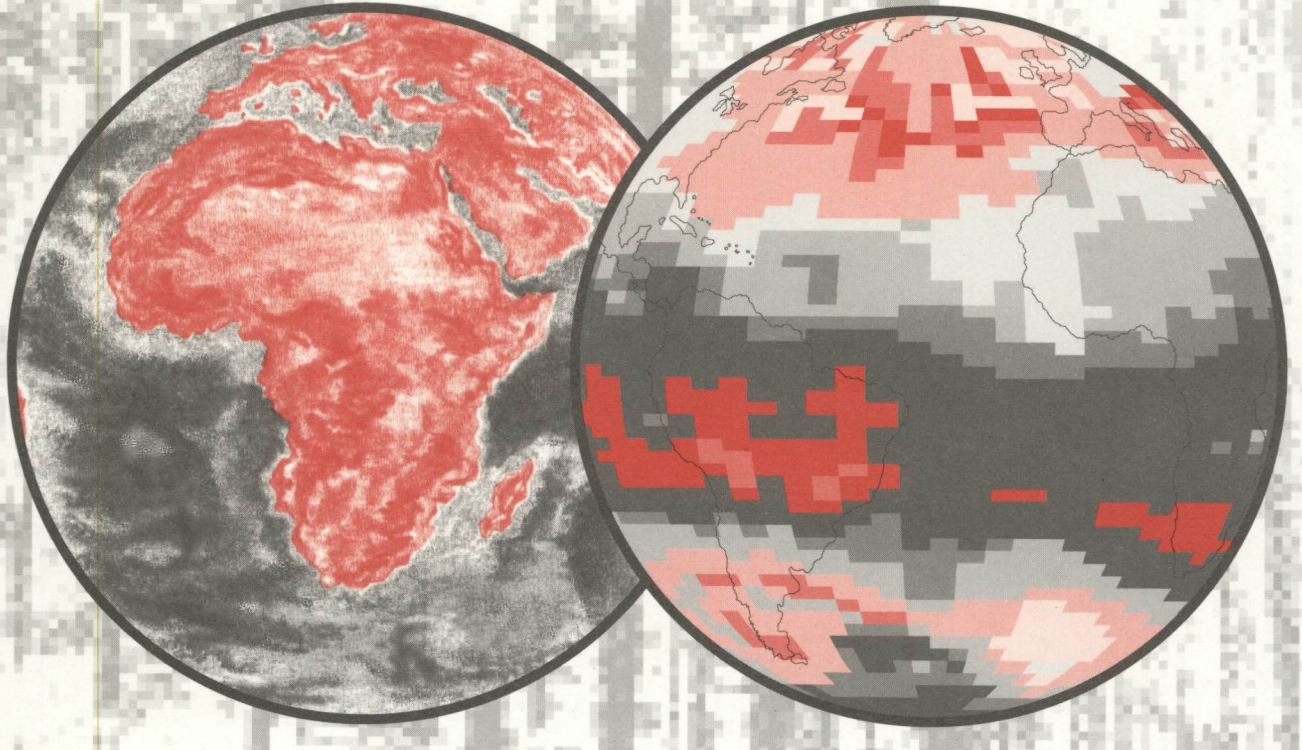
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Training in Geographic Information Systems for Environmental Management



United Nations Institute for Training and Research

The UNEP/UNITAR Programme

A Contribution to the Global Environment Monitoring System

UNEP

UNITAR

The aims of the UNEP/UNITAR training programme

The UNEP/UNITAR training programme in environment management is designed to help scientists and managers of natural resources from developing countries acquire the ability to use geographic information systems (GIS).

The programme results from the United Nations Environment Programme's mandate to monitor and make periodic assessments of the health of the world environment. This part of UNEP's job is carried out by the Global Environment Monitoring System, GEMS. One of GEMS' major new initiatives has been to set up one of the world's most important geographic information systems—the Global Resource Information Database, GRID.

GRID technology uses computer systems to analyse and model geographically-referenced environmental and socio-economic data. It is proving an immensely powerful tool for environmental management and for investigating the potential for developing natural resources on a sustainable basis. The GRID network has centres in Geneva, Nairobi, Bangkok and Sioux Falls (United States). GRID aims to provide scientists and planners world-wide with access to a new and important environmental management aid.

While geographic information systems are beginning to be widely used in developed countries, the developing countries have few people who are trained in GIS technology. The United Nations Institute for Training and Research (UNITAR) therefore undertakes regular GIS training programmes on behalf of UNEP. These programmes are carried out in conjunction with educational establishments and GRID centres in different regions of the world.

The training programme has four principal aims:

- to train scientists and planners from developing countries to operate and benefit from GIS technology;
- to guide trainees through their first GIS application project;
- to encourage and assist trainees to set up GIS in their own countries which can benefit from GRID technology and datasets; and
- to enable trainees to train others in GIS technology when they return to their own countries.

UNITAR training courses have been held in Lausanne, Switzerland, and Nairobi, Kenya. Since 1990, sub-regional GIS application programmes have been developed in Kathmandu, Nepal, in Bangkok, Thailand, and in Split, Yugoslavia. A UNEP-sponsored.programme for Environmental Monitoring Assessment is due to commence in the South Pacific in 1992. Shorter training seminars and workshops will also be organized throughout 1992 and subsequent years in Latin America and central and eastern Europe.

The UNEP/UNITAR training programme is dedicated to increasing the pool of trained people in developing countries who can benefit from GIS technology in general and GRID technology in particular. These people will become the environment managers of tomorrow. Ultimately, it is to them that we must look for safe guidance into the age of sustainable development.

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UNITAR activities in Geneva

The United Nations Institute for Training and Research (UNITAR) is an autonomous institute established in 1965 within the framework of the United Nations to increase the effectiveness of the UN, particularly in maintaining peace and security, and promoting economic and social development. UNITAR's contribution is made in terms of its two main functions: training and research.

With its headquarters in New York, UNITAR has established a European Office in Geneva, which each year organizes between 10 and 15 training seminars and workshops. These are held either in Geneva or in developing countries, and are attended by about 350 people. The participants are mostly diplomats accredited to the United Nations, and government officials from developing countries involved in economic development and international cooperation programmes.

Since 1985 UNITAR has offered training programmes in economic and social development, including the programme on the Management of Natural Resources and the Environment described in this brochure.

In 1991, UNITAR and UNEP-IRPTC joined forces to present a training programme on implementing the London Guidelines and establishing a national register of potentially toxic chemicals. UNITAR has also begun a cooperative venture with the CITES Secretariat on international trade in endangered species of wild fauna and flora.

UNITAR has, for many years, run a training programme on foreign debt management. In conjunction with the East African Development Bank, two different types of seminar have been developed: an 'awareness workshop' aimed at national-level decision makers; and a training programme on the legal aspects of debt management for lawyers of the three East African countries. Similar programmes are being devised for French- and English-speaking West African states.

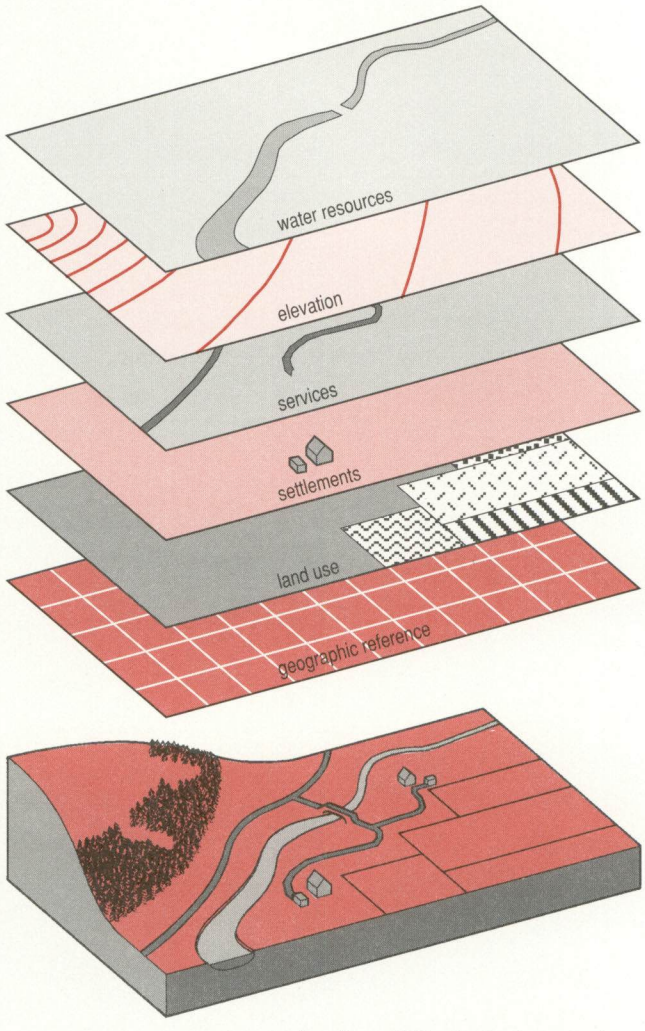
A new programme is being developed to provide training for disaster relief managers, particularly for those working in the disaster-prone countries of Africa. A mission from Geneva was sent to the Sahel to examine how training could improve the planning and management of emergency relief, and a training programme based on their recommendations will be implemented soon.

Why use a GIS?

The Global Environment Monitoring System (GEMS), which is coordinated by UNEP, is a world-wide system for monitoring environmental data. The data are made available to public bodies and to planners and scientists who are involved in environment management and the development of natural resources. Some of these data—and other relevant data from other sources—are now stored on the GRID geographic information system (GIS) which has been developed specifically to handle geographically-referenced environmental information.

One of the most important features of a GIS is its ability to store spatial data in tabular form, and automatically convert this information into maps or other outputs on request. For instance, the data from a census could be processed by the computer and then output as a map of population densities for the country or region concerned. As population dynamics change, the datasets involved can be updated and the subsequent population density maps printed out to reflect changing conditions.

A GIS can also be used to convert incompatible datasets to the same scale so that they can be more easily compared. Once this is done, a GIS can be used to superimpose or overlay several different datasets to produce a composite map (*see illustration*). The resulting map enables users to visualize the interaction of many



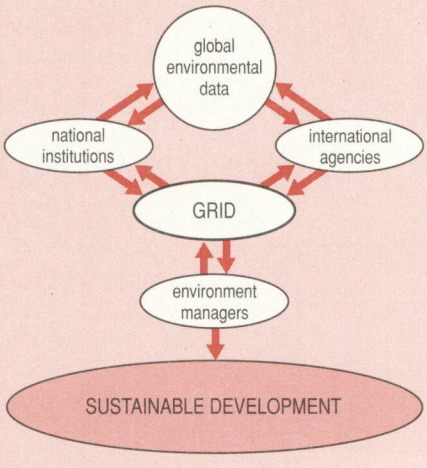
Overlaying in a GIS: the basic technique

The role of UNEP, GEMS and GRID

Within the United Nations Environment Programme (UNEP), GEMS is responsible for coordinating the collection of global environmental data, harmonizing the information and making it accessible to organizations world-wide.

Over the past five years, GEMS has developed its own environmental GIS—the Global Resource Information Database (GRID). The datasets held by GRID include political and natural boundaries, rainfall, soils, temperature, vegetation, cultivation intensity, watersheds, albedo, ozone distribution, and human and animal population densities.

The datasets are accessible to users through GRID's four centres in Nairobi, Geneva, Arendal in Norway, and Bangkok. In return, users are encouraged to provide national, or other datasets which they have compiled, for inclusion in the GRID network. GRID is still in the early stages of development; new GRID centres are planned in other areas of the world during the coming decade. Although GRID centres rely on powerful mainframe computers, many of the essential elements of the system can now be replicated on a regional or national basis using only powerful micro-computers.





World soil map created using a geographic information system

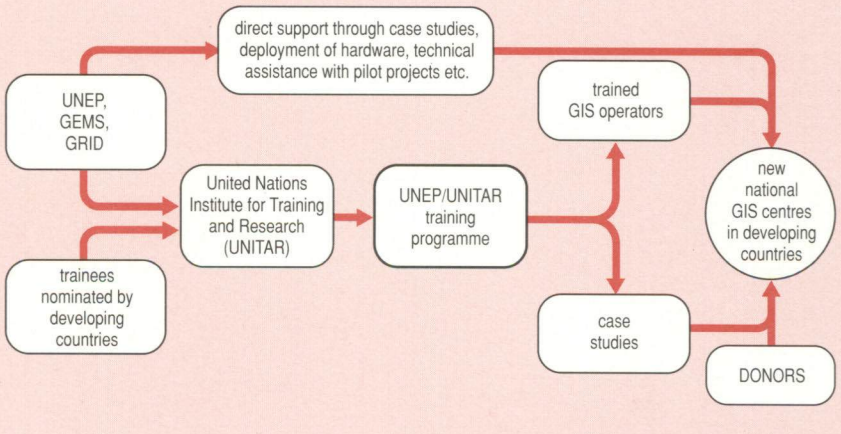
different environmental parameters—such as topography, water distribution, soil and weather patterns—over the same geographical area. By this means it is possible to assess how different aspects of the environment interact with one another, and thus make projections about future developments on the basis of current trends.

This type of information is vital to many kinds of development project, and maps can be produced to tackle a range of specific problems. An agronomist, for instance, might need to create a map showing the combination of factors likely to affect the success of a project to introduce new crops into an area. He might wish to see the location of suitable soil types in relation to transport systems and sources of labour, and he could refine the picture further by changing the data to mimic future events, such as droughts, and thus assess their potential impact.

GIS technology can also be used to study larger-scale, regional or global problems. Some of the information supplied to GIS systems is collected via earth-monitoring satellites, and these data can be used to study national or global patterns of change over time. Land-use patterns, desertification and deforestation are typical subject areas where the combination of GIS technology and satellite data are particularly effective. As an example, action on deforestation in the Amazon basin results partly from evidence collected by satellite monitoring.

GIS technology is thus enabling planners to visualize and, most importantly, to model the complex interaction of environmental parameters in new and sometimes dramatic ways. The technology is likely to prove of particular importance to developing countries, where issues of natural resource availability underlie most plans for economic development.

To facilitate the distribution of GRID data UNEP helps institutions and countries to acquire GRID technology. UNITAR, the UN Institute for Training and Research, plays the key role in this process by training people to use GIS technology. The scholarships for the training programme are available only to students from developing countries.



The story so far ...

In 1986, UNITAR wrote to Resident Representatives of the United Nations Development Programme (UNDP) in all developing countries asking for nominations for a new UNEP/UNITAR training programme. Each nominated candidate was asked to outline an application project which he or she would conduct during training. More than 140 nominations were received.

The first course started in September 1986 and lasted three months. It was aimed at mid-level government officials, and four candidates—from China, Indonesia, Kenya and the Sudan—were selected. The majority of their time was spent at GRID premises in Geneva, though study visits were also made to a number of other agencies in Europe.

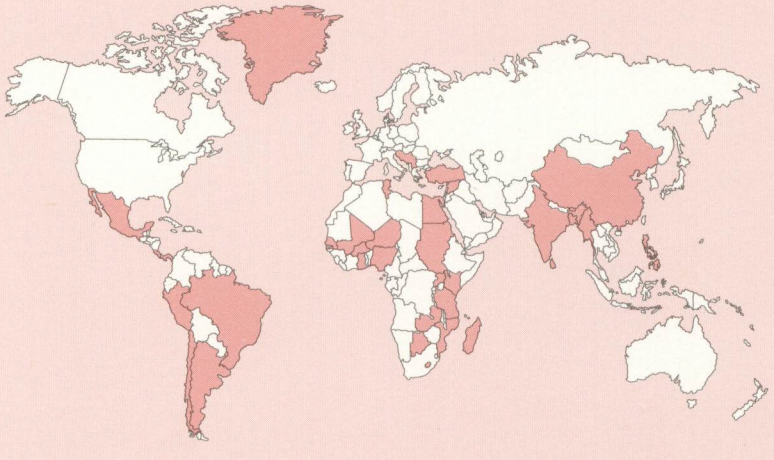
The second course, in 1987, included six participants. The trainees spent the first four months at the Ecole Polytechnique Fédérale de Lausanne (EPFL) on an intensive 200-hour course to improve their knowledge of environmental science and methods of data evaluation. The following two months were spent at GRID premises in Geneva. The first month involved theoretical training in the use of GIS technology, and the trainees worked for the rest of the time on their GIS-application projects and visited a number of other European agencies involved in the collection and processing of environmental data.

The Ecole Polytechnique Fédérale de Lausanne

The UNEP/UNITAR Swiss training programme is run in partnership with the Ecole Polytechnique Fédérale de Lausanne (EPFL). The part of the course on GIS technology was jointly developed by UNEP, UNITAR and the EPFL, and is run by the EPFL Department for Agricultural, Environmental and Survey Engineering (AESE).

The two courses in 1987/88 built on these first experiences. Each trained five participants and lasted nearly six months. The courses comprised a 14-week instruction course at EPFL, followed by seven weeks at GRID Geneva for project work. The final two weeks were spent visiting agencies. A fifth course held in 1989/90 trained 10 people, a number on which future Swiss courses will now be based.

In August 1989 the programme was extended to Kenya, where training facilities were made available for a three-month course based at the Regional Centre for Services in Surveying, Mapping and Remote Sensing in Nairobi. By June 1991, 45 people from 18 African nations and a total of 87 trainees from 40 countries had completed the training courses in Switzerland and Kenya.



Trainees 1986-91

Argentina	2	Mozambique	2
Bangladesh	1	Niger	3
Bhutan	1	Nigeria	1
Botswana	4	Panama	1
Brazil	2	Peru	2
Burkina Faso	4	Philippines	2
Burma	1	Senegal	3
Chile	2	Sri Lanka	3
China	2	Syria	1
Costa Rica	1	Sudan	1
Egypt	2	Tanzania	2
Ghana	5	Tunisia	1
Greenland	1	Turkey	1
India	3	W. Samoa	2
Kenya	1	Uganda	5
Lesotho	3	Uruguay	1
Madagascar	1	Yugoslavia	2
Mali	4	Zambia	4
Mexico	1	**TOTAL**	87

Application projects undertaken 1987–91

October 1987–April 1988

- Creation of a GIS oriented database for soil erosion assessment in Northwestern Argentina to monitor the change in land cover, particularly in the Vipos Basin
- GIS application to implement a database on land capability for agricultural potential in Boriziny area, Madagascar
- GIS application on the study of deforestation in the Peruvian lowland jungles, mountains and coastal areas through remote sensing systems using LANDSAT MSS images
- GIS application to a land-cover analysis of Eastern Bohol Province in the Philippines to determine the potential of the Province for economic development
- The study of the possibilities of GIS application to improve the capabilities of a regional research centre in forestry and coastal conservation in an area of high tourist development—project to be developed by Brazilian, Argentinian and Uruguayan researchers

February 1988–July 1988

- The application of remote sensing and GIS analysis to the urban environment in Porto Alegre, Brazil
- Upper Yewa watershed research: study of gully erosion hazards, Nigeria
- The establishment of a GIS for the storage, analysis and data handling related to the Panama Canal watershed and its management
- Evaluation of the impact of water availability on pastoral ecosystems and land-use patterns in the Ferlo region, Northern Senegal
- The reassessment of the location/distribution of Wetlands in Uganda and multi-temporal analysis to map changes in wetland size or dominant vegetation

October 1988–April 1989

- Use of remote sensing and GIS to evaluate the effects of environmental factors on pelagic fish captures in Arauco Gulf, Chile
- Use of GIS for monitoring forest changes, and forecasting soil erosion hazards and land suitability in the Indian Himalaya
- GIS applications for land suitability (agricultural), and potential soil erosion in Phewa Tal Watershed, Nepal
- Use of GIS for land suitability evaluation for rice in Ratnapura District, Sri Lanka
- Use of GIS technology to determine potential soil erosion in a pediment of Mendoza, Argentina

February 1989–August 1989

- Environmental assessment of northern coast of São Paulo State (Brazil), giving priority attention to the slopes' sensitivity to erosion
- Application of remote sensing and GIS to soil erosion hazard assessment in Miyun reservoir, China
- Land suitability for general agriculture in Wadi Allaqi region, Egypt
- Operational use of GIS and digital RS techniques to identify and assess the severity and risk of land degradation through soil erosion in the eastern region of Ghana
- Monitoring agricultural lands around Missira, in the south-eastern part of Senegal

30 October 1989–27 April 1990

- Climatic potentialities and hazards for the rural development of two semi-arid valleys in the north of Chile
- GIS applications for a coastal zone management in Western Samoa
- Application of GIS for assessment of area change of Mabira Central Forest Reserve in Uganda
- Inventory of renewable natural resources in Greenland
- Present land use: land and land capability in the Mopti region, Mali
- The effect of marine parameters measured in Izmir Bay, Turkey, on ecosystems : the determination of polluting sources
- Establishment of a GIS for the Cetina River Basin and Castella Bay,Yugoslavia
- Application of remote sensing and GIS for land resources survey, northwestern coastal zone of Egypt

7 January1991–10 May 1991

- Methodology for bushfire classification using NOAA/AVHRR imagery and GIS application, Senegal
- Cartography of land use in Sfax, Tunisia, using Landsat 5–TM satellite images
- Model of millet yield forecasting using vegetation index and rainfall data (NDVI) in Niger—a GIS application
- Retrospective analysis of land cover changes in Mexico Valley

Thanks to a donation from IBM (*see page 10*), a number of African trainees were able to carry home with them more than academic learning: they took back an IBM PS2/80, with appropriate software, on which to set up the nucleus of a national GIS centre. This powerful microcomputer can replicate many of the essential features of a fully-fledged GIS, and can be used to carry out many of the application projects. These systems will form the basis of the national GRID-compatible nodes of the future.

The role of Swiss aid

The UNEP/UNITAR training programme has been mainly supported by the Directorate for Development Co-operation (DCA) of the Swiss Federal Department of Foreign Affairs, which initially agreed to provide $400 000 per annum for two years. This money was used to sponsor 20 students for the course, and the DCA has now extended its funding to five years. This is one of a number of Swiss government-funded projects that are concentrated on environmental issues in Africa, Asia and Latin America.

Smaller contributions have been received from many other donors—including the City of Geneva, the Federal Republic of Germany, NASA, The Netherlands, a Danish foundation and the UNEP Environment Fund. UNITAR is investigating the prospect of involving additional donors to finance future programmes.

IDRISI—a GIS and image processing package

One of the many software systems used by UNEP/UNITAR in its GIS training programme is IDRISI—a microcomputer GIS and image processing system developed at Clark University in the United States. The system is distributed by Clark on a non-profit basis and has been specially designed to suit the needs of development planning and environmental research.

A product of the Graduate School of Geography, developed in close collaboration with the Program for International Development and Social Change, the IDRISI system continues to evolve in direct response to the needs of UNEP/UNITAR trainees. To that end, Clark has developed close links with UNEP, GRID, UNITAR and EPFL to tailor the system to meet the needs and hardware characteristics of the UNEP/UNITAR training programmes. Students are given a copy of IDRISI at the end of their training.

Course details

No two UNEP/UNITAR training courses are identical. Not only do the courses evolve to meet changing needs, but each course is, to some extent, tailored to the requirements of the trainees. All courses provide trainees with the knowledge required to operate a GIS, the ability to locate needed environmental data both within and outside the UN system, and the opportunity to apply these skills in an application project.

The curriculum

A substantial portion of the first few days of the course held in Switzerland is usually spent at the GRID centre in Geneva discussing the trainees' GIS-application projects with GRID analysts, and establishing a list of datasets that the projects will require. Trainees then return to the EPFL in Lausanne for a four-month study period after which they pursue their application projects. Typically the four-month course, taught by about a dozen lecturers, involves:

- *environmental overview*: 36 hours of lectures on water, air, soils, toxicology and related environmental subjects including case histories to demonstrate the relevance of GIS technology;
- *photo-interpretation*: 21 hours, including a ground truthing exercise;
- *computer basics*: 21 hours, hardware, software and operating systems;
- *the management of numerical data*: 27 hours, statistics, data types, regression, interpolation, regionalized variables theory and error handling;
- *remote sensing*: 15 hours, remote sensing platforms and their sensors, detection of electromagnetic radiation;
- *image interpretation*: 18 hours, image processing and pre-processing, enhancement, and digital interpretation;
- *GIS technology*: 33 hours, data collection, storage and transformation.

In addition trainees construct the datasets necessary for the final part of the course in which the GIS-application projects are completed. This is partly based in Geneva where students gain practical experience in using GRID technology and are supervised by GRID specialists. Both the course work and the project are assessed, and if they are of a satisfactory standard, the trainee is awarded a certificate. The second part of the course also involves field trips to relevant institutions working in related areas in Europe (*see box below*).

Qualifications

The course is suitable for post-graduate students with interests in environmental issues and natural resource management. Candidates need a good command of either English or French as the course is conducted solely in

Training programme study visits

The programme includes field trips involving practical instruction as well as visits to UN and other European institutes specializing in GIS technology, remote sensing and related environmental issues.

The section on photo-interpretation, for instance, involves an assessment of the effects of air pollution on forested areas in the Rhône valley, carried out through the interpretation of aerial photographs. The trainees then visit the area to gather field data with which to check their assessment of the extent of damage.

In order to familiarize trainees with organizations that store environmental datasets, and with the means of accessing them, visits are made to institutions such as the World Wildlife Fund and the World Conservation Union in Gland, Switzerland, and to UN agencies such as the World Meteorological Organization, the International Register of Potentially Toxic Chemicals in Geneva and the remote sensing unit of the Food and Agriculture Organization in Rome, Italy. Visits are also made to the European Community remote sensing centre in Italy and the GIS facilities of the University of Zurich in Switzerland. Satellite companies such as EOSAT and SPOT present their activities in one- or two-day sessions in Switzerland.

A visit was made to Zurich and Bern during the 1986/7 course: day one was spent at a forestry research unit where hydrology and erosion control projects were explained; day two was at the University of Zurich examining GIS computer graphic facilities; day three was spent at the Remote Sensing Unit discussing satellite images and environmental monitoring; and the last day was at the government office for the Protection of the Environment where legal experts discussed environmental legislation.

The GEMS/UNITAR Africa programme

In Africa, GRID-compatible monitoring and assessment centres are being set up through a programme carried out for GEMS by UNITAR. The first step is a country mission to compile information on national needs for resource monitoring and assessment capabilities. Resource managers are then trained in GIS techniques, image processing and related subjects. On return to their national institutions, the participants are provided, on long-term loan, with the hardware and software needed to establish the nucleus of a national GRID-compatible monitoring and assessment centre. Follow-up missions from GRID analysts provide further assistance, and help implement the first national pilot project. In 1991, this scheme was operating only in Africa but it is intended to enlarge it to cover Asia and the Pacific, and Latin America. Major funding for GEMS/UNITAR Africa Programme comes from UNEP's Environment fund.

these languages. French-speaking candidates must also have a working knowledge of English for computer-based work. Computer literacy is also desirable.

Candidates should be nominated by their national governments, and must apply to the European Office of UNITAR through the Resident Representatives of the United Nations Development Programme in their country, at least three months before the start of the programme. Viable candidates remain on an active roster so that if not selected for the course for which they originally applied, they may have further chances for selection in the future.

Applications must include details of the project that the candidates intend to carry out. The project must address a specific problem in the candidate's country, and be suitable for GIS application.

Administration

Trainees are provided with accommodation in Lausanne on their arrival (or in Nairobi or Bangkok during the African or Asian courses) and are allocated sufficient funds—in line with UN regulations—to pay for their own transport and meals, and meet normal daily expenditures. Flights to and from the trainees' home country are also provided, as is medical insurance for illness or accidents occurring while training abroad.

A typical GIS training course (Nairobi, June-August 1990)

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 (June 4-8)	welcome: tours of UNEP/GRID and RCSSMRS facilities	introduction to GIS: ARC/INFO and IDRISI systems demo.	software concepts/ inventory	hardware concepts/ inventory	introduction to DOS operating system
Week 2 (June 11-15)	DOS file management	computer data types/ structure	display and plotting protocol	maps and GIS analogies	projection, scale, information limits
Week 3 (June 18-22)	raster and vector usefulness	imperfect spatial presentation	unique GIS capabilities	spatial query (position/value)	review of weeks 1-3
	Week 3 includes Field Trip 1 (Monday June 18): Kijabe Escarpment and Kijabe Hill				
Week 4 (June 25-30)	introduction to satellite imagery	EM spectrum/ type reflectances	effects of orbital platforms	resolutions (space, time, band)	multispectral data processing
	Week 4 includes Field Trip 2 (Saturday June 30): Kithoito forest, Susua range sites				
Week 5 (July 2-6)	single map enhancement	colour manipulation, histograms	transforms, resizing, masking	analysis between map files	map arithmetic and Boolean mix
Week 6 (July 9-15)	statistics and GIS	spatial sampling schemes	map data regression/ correlation	display combination/ compositing	stratification and area frames
	Week 6 includes Field Trip 3 (Sat/Sun July 14-15): Gilgil, Menengai, Bahati, Nakuru N. P.				
Week 7 (July 16-20)	crosstabs of key attributes	neighbourhood functions	cartography vs. data integrity	surface/ proximity/ path analyses	change and modelling strategies
Week 8 (July 23-27)	relational database structures	access, subsetting, management	vector preparation/ digitization	rasterization, smoothing	cleaning, edits and updates
Week 9 (July 30-Aug 5)	image rectification and nesting	remote sensing noise reduction	contrast enhancement (scene/feature)	classification (supervised/ unsupervised/ verify)	vegetation indices
	Week 9 includes Field Trip 4 (Sat/Sun August 4-5): Kericho-Kano (tea, cotton gradient)				
Week 10 (Aug 6-10)	summary of data contributions	Kericho stratification lessons	elephant population application	EOSAT data availability	SPOT-Image data availability
Week 11 (Aug 13-17)	project design (quantification problem)	rank, collect and convert data	data integration and archiving	error propagation/ control	minimize analytical complexity
Week 12 (Aug 20-24)	no lectures	FAO forestry applications	FAO forestry tutorial	no lectures	floppy, fixed and optical disks
Week 13 (Aug 27-31)	checklist for data integration	ensure budget/labour sufficiency	project management roundtable	presentation of workplans	final queries and closing remarks

Follow-up activities

It is the goal of the UNEP/UNITAR training programme that trainees leave with sufficient knowledge to help their institution set up a national GIS centre and to assist in training staff to use GIS technology. They also return with an application project which is sufficiently developed to merit further study and, eventually, practical action.

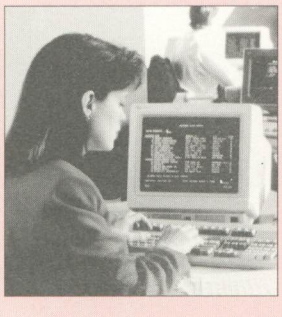
However, trainees still have much to learn. To help them share the practical knowledge they acquire through work experience and keep in touch with GIS experts world-wide, UNITAR arranges occasional attendance at GIS meetings, and conducts an informal GIS information network comprising all past trainees, GIS experts and GRID personnel. As part of this effort, the *GRID Newsletter* added a 'Trainee Supplement' in 1990 which describes projects undertaken by former trainees, the 'real-life' problems encountered, describes new datasets as they become available and, finally, highlights conferences and new developments in the field of GIS.

Action in Africa

Regional workshops designed to disseminate the practical experience of former trainees presently working on a GIS are part of the UNITAR follow-up service. The first workshop of this type was held in Ghana in November 1989, followed in September 1990 by a workshop in Dakar, Senegal, for countries belonging to the Interstate Committee for Drought Control in the Sahel (CILSS). These workshops provide a general introduction to GIS technology and concepts, and their use to scientists, resource managers and decision makers in West Africa (*see box*). They also serve as a follow-up for UNITAR trainees, who get the chance to meet and establish contacts with former trainees and other specialists.

African trainees have available to them 15 PS2/80 personal computers—a donation by IBM for use in 15 African countries. Some of these computers were already in place in early 1990, and they provide a powerful first step in the establishment of a national GRID-compatible GIS centre. UNEP and UNITAR are assisting these

The role of IBM



GRID's computer requirements grew rapidly as demands for global and regional data increased. A hardware and software donation by IBM in 1988, worth US$6.5 million, made it possible to enhance the scope and scale of GRID operations significantly. This was the largest industrial donation ever received by UNEP. The donation included two mainframe computers which were installed in the Geneva and Nairobi nodes and greatly increased the potential of their operations.

IBM also donated 15 PS2/80s for use in African countries. These personal computers can run many of the basic elements of GIS technology and they can become the core of the African national GRID-compatible centres of the future. Some are already installed in African countries where they are being used as the nucleus of a national GIS capability. The others will be made available to the countries of African trainees on the successful completion of their training courses.

The 1990 Dakar workshop on GIS

The second regional and subregional series of workshops on Geographical Information Systems for Environmental Resource Management took place in Dakar, Senegal, in September 1990. The UNITAR workshop was held in conjunction with the Inter-State Committee on Drought Control in the Sahel (CILSS) and the United Nations Sudano-Sahelian Office (UNSO). It was hosted by the Centre de Suivi Ecologique (CSE).

More than 70 professionals attended the workshop, representing in total nine CILSS member countries. Training sessions were conducted by experts from Cameroon, Canada, Denmark, France, Kenya, The Netherlands, Sweden, Switzerland and the United States.

A series of background lectures and regional project presentations were interspersed with hands-on computer exercises, which gave participants practical experience in using various GIS software packages. In addition to the workshop, two one-and-a-half day specialized training sessions were offered, one concentrating on GIS and global climate-related change, the other exploring concepts of GIS analysis using the software packages IDRISI and ARC/INFO. The GIS network established as a result of this workshop has continued to grow, providing a foundation for GIS research activities in the region.

African governments to approach donors for long-term support and enhancements to these new national centres.

GIS Educational Workbooks

UNITAR has undertaken the development of a series of educational workbooks called *Explorations in GIS Technology*. Each workbook attempts to summarize the current status of GIS techniques and application areas for specific environmental management problems. The titles currently being developed include *Change and Time Series Analysis in GIS*, *GIS and Mountain Ecosystems*, *GIS and Coastal Zone Management* and *GIS and Forestry*. The workbooks are being researched and prepared by the IDRISI Project, Graduate School of Geography, Clark University, Worcester, Massachusetts.

The workbooks are being designed to accommodate flexible educational needs. They are divided into two primary sections. The first reviews current techniques for addressing specific topics. The second presents a set of exercises that allows each technique to be explored. The exercises are accompanied by a set of computer diskettes that contain sample imagery and digital map data sets. These data sets range from local to global in scope. Although the data sets are presented in an IDRISI format on MS-DOS media, they can easily be converted to a wide variety of formats for analysis using other GIS software.

The workbooks will be used in long- and short-term training courses in Europe, Asia, Africa and Latin America, as well as at GIS centres cooperating with UNITAR such as CSE in Dakar, Senegal; AGRHYMET, Niger; RCSSMRS, Nairobi; ICIMOD in Kathmandu, Nepal; and PAP-RAC/Split, Yugoslavia. In addition, the workbooks will be made available to past trainees as a means of continuing education.

Environmental Systems Research Institute (ESRI)

The Environmental Systems Research Institute (ESRI) of Redlands, California, has long had close ties with UNEP/GRID and indirectly with UNITAR. Since September 1990, ESRI has provided its ARC/INFO software to the UNITAR programme and sent an ESRI training officer to UNITAR sponsored and co-sponsored workshops in Dakar, Senegal; Split, Yugoslavia; Lausanne, Switzerland; and Kathmandu, Nepal. In the summer of 1991, ESRI and UNITAR drafted a Memorandum of Understanding which covers ESRI's assistance in providing training support for various UNITAR activities.

National Aeronautical and Space Administration (NASA)

NASA, in coordination with the United States Geological Survey (UGS) and the Space Applications Programme of the United Nations, is preparing activities to celebrate the 1992 International Space Year (ISU). Through contacts established with NASA's Office of Space Science and Applications, UNITAR's European Office has proposed that some of its long-term activities should be coordinated with ISY-related events.

In addition, NASA—as one of the founders and main supporters of GRID—has agreed to work closely with UNITAR to help disseminate expertise and data amongst scientists, and to help support training and research institutions in developing countries. NASA is therefore funding the secondment of a senior scientific advisor to UNITAR's European Office. He will assist UNITAR staff in the conduct of the training and follow-up programmes in GIS, remote sensing and image processing for natural resources and the environment, and act as a focal point for US–based research institutions in the field.

Application projects

Research forms an important part of the UNEP/UNITAR training course. Hands-on experience with a GIS, tackling real environmental issues while surrounded by GIS experts, is probably the best way to learn. And while the research is not intended primarily to solve problems, it often does—or at least leads to new approaches that can be adapted and improved on by other students, refined in the trainee's home country, and eventually presented to decision makers as a contribution to environment management. Three typical projects, from three different regions, are described below. A list of completed application projects appears on page 9.

Assessing land degradation in Ghana

A Ghanaian research project[1] began during the training course of 1986/87 shows how useful such research can be. The research was taken up by a second Ghanaian student during the following year's course, and is to be developed in Ghana by the Environmental Protection Council in the hope of reducing future levels of land degradation in the east of the country.

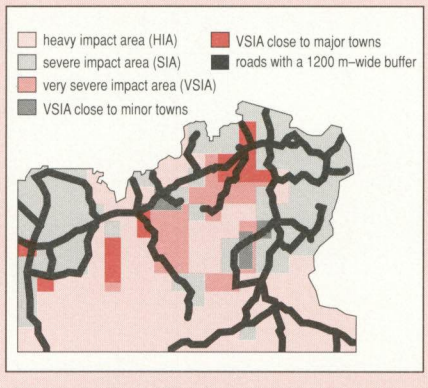
Land in eastern Ghana is subject to erosion as a result of its shallow, sandy soils. Yet this savanna region is important agriculturally because it lies near two large cities. The research at the EPFL has provided a technique for predicting which areas are most likely to be degraded in the future, and has demonstrated the advantages of GIS and remote sensing techniques over traditional methods of environmental assessment.

Preliminary data were obtained from LANDSAT images, topographic and soil maps, and from the literature. The data were referenced to a base map with a scale of 1:125 000, and a database created containing information on towns and settlements, roads, forests, goat, sheep and cattle populations, and land cover.

One of the main causes of land degradation is the removal of vegetative cover by humans and livestock. Data on sheep, goat and cattle densities were therefore weighted for their relevance to loss of vegetative cover and combined to form a map showing the threat to vegetation from livestock.

Data on towns, roads and settlements—which included information on land use and fuelwood extraction—were then similarly weighted for their potentially harmful effects on vegetative cover, and a map created which showed risks to land cover from these causes. A composite map showing the effects on vegetative cover of total human and animal activity could then be made.

This was then combined with the soil map, and data on the susceptibility of different types of soil to erosion. The result showed which areas were most likely to loose their vegetative cover and suffer degradation as a result. The study showed that 37 percent of the region is exposed to the threat of severe erosion.



Map resulting from an assessment of the impact of human activity on land cover

Investigating the Chilean fisheries

In 1989 a Chilean trainee succeeded in using GIS and remote sensing technology to investigate the relationship between fish catches and environmental factors[2] such as the nutrient-rich upwellings of cold water that occur off the Chilean coast. These upwellings produce intense phytoplankton growth, which provides abundant food for pelagic fish.

The study area chosen was a prolific fishing area in the Gulf of Arauco. Datasets on water depths, fish catches, zooplankton (from oceanographic studies), and rainfall and wind patterns were built up on the GIS. Coastal Zone Color Scanner imagery from the Nimbus-7 satellite was used to investigate the presence of phytoplankton. These images are based on measurements of radiation by the satellite at wavelengths that are strongly absorbed by chlorophyll, and which therefore reveal the presence of phytoplankton. These data were combined using the GIS to investigate the relation between ocean conditions, plankton distribution and the species of fish which were prevalent. The Gulf area was found to be most suitable for jack mackerel fishing.

Studying deforestation and soil erosion in the Himalayas

An Indian trainee used GIS and remote sensing technology to investigate the relationship between land use, deforestation and soil erosion in the Himalayas during the 1988/87 course.[3] The study area chosen was Chakrate Tahsil in Uttar Pradesh—a mountainous and largely forested area with shallow dry soils, some agricultural land and a sparse population.

To create the database, nine maps—including soil, vegetation, forest cover, drainage and population distribution—were digitized and converted to a common scale. LANDSAT images were used to plot land cover in the region. The database files were then overlayed onto the LANDSAT images and other files to build up a composite map of the region.

The GIS was then used to model the effects of changing patterns of land use, agricultural practices and population distribution on the removal of forest cover and the rate of soil erosion, and to identify areas most at risk from degradation. The database will be used in the future to monitor the effects of the changing environmental situation, and to plan land use for sustainable development.

1. *Use of GIS and remote sensing to assess land degradation hazards in eastern Ghana,* Charles K. O. Asare and J. Giamfi-Aidoo, Environmental Protection Council, Ghana.

2. *Effects of environmental factors on the fish catch in the Gulf of Arauco,* Denise Bore, Instituto de Fomento Pesquero, Chile.

3. *Monitoring forest change and forecasting soil erosion in the Himalayas,* R. B. Singh, University of Delhi, India.

Training in 1991

GIS workshops in Czechoslovakia, 1991

Two intensive one-week workshops were held Czechoslovakia in May 1991, covering practical aspects of GIS and image-processing technologies for environmental resource management. The first took place in Liblice, near Prague, and was attended by 20 professionals representing 13 Czech institutes, ministries and universities in Bohemia and Moravia; the second, held in Banska Stiavnica, a small town east of Bratislava, was attended by 18 professionals from 14 institutes, ministries and universities in Slovakia.

Issues covered included raster and vector data structures and analytical techniques, database management systems, fundamentals of remote sensing and image processing, and data entry and transformation. Lectures and demonstrations were interspersed with computer laboratory exercises illustrating a variety of analytical techniques. Among the highlights of the course were the image-processing exercises which used local Landsat TM satellite images centred over the workshop site, making it possible to verify satellite data on the spot.

Participants acquired a technical foundation for establishing regional GIS networks capable of continuing project collaboration, education and establishing technical support groups. UNITAR is exploring the possibilities of conducting advanced training sessions and developing proposals for future GIS activities in Czechoslovakia, and elsewhere in central and eastern Europe.

Training activities in Asia

Late in 1989, the International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, Nepal, requested UNITAR's assistance in developing its training expertise in GIS. Training for nine participants from the staff of MENRIS (Mountain Environment and Natural Resources Information Systems) at ICIMOD was designed and implemented by UNITAR, with the logistical support of UNEP/GRID, Bangkok, and a four-month training course was held in 1990 at the Asian Institute of Technology (AIT) in Bangkok.

A typical short and intensive GIS training workshop

Monday	LECTURE introduction to GIS	LECTURE fundamentals of GIS	LECTURE raster data structures	LABORATORY EXERCISE introduction to IDRISI	LECTURE analysis in GIS
Tuesday	LABORATORY EXERCISE database query	LABORATORY EXERCISE map algebra	LABORATORY EXERCISE distance-neighbourhood operators I	LABORATORY EXERCISE distance-neighbourhood operators II	
Wednesday	LECTURE overview of remote sensing	LECTURE digital image processing I	LECTURE digital image processing II	LABORATORY EXERCISE digital image processing	
Thursday	LABORATORY EXERCISE unsupervised classification: local case study	LABORATORY EXERCISE supervised classification: local case study	LECTURE vector data structures/analysis	LABORATORY EXERCISE vector/database management systems	
Friday	LECTURE data entry	LECTURE data transformation	DEMONSTRATION digitizing/ data transfer	LECTURE AND DEMONSTRATION change and time series analysis	

Since then, working relations with ICIMOD have continued. UNITAR has reviewed and improved ICIMOD training manuals, provided training material and software, helped fund further ICIMOD staff training, and advised on the development of mountain-specific training curricula and exercises.

In July 1991, UNITAR and ICIMOD drafted a Memorandum of Understanding which should cover joint activities over a five-year period for each of the four countries—Bangladesh, Bhutan, China and Nepal —identified by ICIMOD as priority areas. In July 1991, UNITAR provided a two-week training workshop at ICIMOD as a first phase of this activity. Two more UNITAR trainers were sent in September and October 1991 to conduct a professional-level training workshop and oversee resulting applications development. Conducted in close cooperation with UNEP/GRID Geneva and MENRIS staff, this cycle of training was reserved for scientists and managers of natural resources and the environment from Nepal.

The future of the programme

The 1990s will see an increasing demand for scientists and planners trained in the use of GIS technology in general and GRID technology in particular. To cater for this demand, the UNEP/UNITAR training programme will need to be expanded.

As the programme evolves, the course in Switzerland is likely to become more specialized, and to be increasingly geared towards high-level resource managers from developing countries. The main training courses in GIS technology will be increasingly taught at training sites at regional centres in Africa, Asia and Latin America. 'Follow-up' programmes will also be expanded, and the informal network of trainees, lecturers and institutions involved in the training programme will be expanded and strengthened.

The course now provided in Switzerland by EPFL will in the future benefit from the participation of staff from many other institutions which specialize in GIS technology and remote sensing. Many European universities are keen to participate in the training programme. Close ties are being developed with research centres such as the National Centre for Geographic Information Analysis and Clark University in the United States.

Similarly, cooperation is being sought from relevant institutions in other regions. Many academic and governments bodies, which are already involved in the development of GRID technology, have expressed a willingness to become more closely involved in the training programme.

As its contribution to the International Space Year (ISY) celebrations in 1992—which is also UNEP's 20th anniversary—UNITAR has suggested coordinating some of its long-term activities with ISY-related events. It aims to place trainees in a number of ISY training programmes and to encourage trainers and GIS experts to participate in the UNITAR training programme.

Since the establishment in 1989 of a plan of cooperation with the Priority Actions Programme (PAP)-Regional Action Centre (RAC) in Split, Yugoslavia, UNITAR has trained six trainers from five Mediterranean countries. UNITAR has agreed to assist Split in developing its training expertise with the region. This will include curriculum development and preparation of exercises and case studies in GIS for coastal zone management.

UNITAR is planning to conduct an advanced GIS training workshop/seminar in January 1992 in Chile. The workshop will be attended by UNITAR's former Latin America trainees and will focus on regional applications being developed by the workshop participants.

There are an increasing number of donors supporting the training programme, reflecting a widespread recognition of its importance. In the long term the training programme will broaden in scope and embrace additional environment and natural resource management techniques. The wider aim of the programme is to ensure that the developing countries have scientists and planners with the proper qualifications to develop their natural resources in a sustainable manner. UNEP and UNITAR intend to cooperate closely to ensure that the training programmes required by the developing countries are always appropriate and available.

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UNITAR

Training Programme on Environmental Negotiations and Dispute Resolution

The United Nations Institute for Training and Research

The National Institute for Dispute Resolution

The World Foundation for Environment and Development

UNITAR Training Programme on Environmental Negotiations and Dispute Resolution

With the support and collaboration of the National Institute for Dispute Resolution (NIDR) and the World Foundation for Environment and Development (WFED), the United Nations Institute for Training and Research (UNITAR) is pleased to announce a new training programme on environmental negotiations and dispute resolution.

The world community faces unprecedented challenges concerning the balance between environmental protection and economic development at local, regional and global levels. Experience indicates that environmental problems complicate conventional international negotiations for many reasons, including scientific uncertainty, complex linkages with economic, political and social issues, and solutions that require the committed participation of many countries and interest groups.

Against such a background, training can help generate mutually-beneficial solutions that encourage cooperation and open up unexplored commonalities.

UNITAR's Training Programme on Environmental Negotiations and Dispute Resolution offers non-partisan settings where new ideas and approaches can be openly explored. Linked to negotiations, the programme's workshops offer participants the opportunity to generate alternative solutions to complex environment/development problems and disputes. The programme also provides opportunities to improve the information base of participants, especially those from developing countries that may not otherwise have ready access to pertinent materials.

Goals and Objectives

The goal of the programme is to address the needs of governments and communities – particularly those in developing and recovering countries – to improve their capacity to negotiate and resolve environment/development disputes effectively. The programme aims to promote cooperation and sustainable development by focusing on:

- facilitating international environment/development negotiations and related intergovernmental dispute resolution initiatives
- assisting, as necessary, negotiation and implementation of regional/subregional arrangements on shared natural resources or hazards, transboundary pollution, and related environmental conflicts
- improving negotiation techniques and public participation at local and national levels relating to formulation and implementation of environment/development policies and plans
- providing assistance to help resolve disputes relating to environmental impact assessments, public participation procedures, and implementation of environmental laws

Programme Plans

Plans call for conducting training workshops in connection with major international environmental negotiations and conflict resolution initiatives. Workshops also will be convened on regional as well as national bases. A core curriculum for the workshops is being developed jointly with NIDR and WFED. Programme curricula will be modified depending on the specific needs of target participants. The first workshop under the new programme is being organized for nationals of the Czech and Slovak Federal Republic and neighboring countries.

There are also discussions for related training activities in conjunction with INC-FCCC, UNEP, UNDP, and UNCTAD. It is expected that work with INC-FCCC and UNEP will focus on multilateral environmental negotiations. When concluded, cooperation with UNDP would relate to issues relevant to preparation of country and project programmes under UNDP's Guidelines for Environmental Management and Sustainable Development. Work with UNCTAD would focus on economic principles and mechanisms relevant to environmental negotiations.

Target Audiences

Programme participants will include officials and negotiators from governments and intergovernmental organizations who deal with environment and development issues and disputes. The programme seeks to improve such persons' skills and capabilities as they relate to:

- improving international environmental negotiations
- implementing mechanisms that promote sustainable development
- preventing or resolving environmental conflicts
- negotiating a broad range of environmental/development issues at national and international levels
- training others in negotiation and dispute resolution processes

About UNITAR, NIDR, and WFED

UNITAR, with its international audience and network of resources, will be the executing agent of the programme. UNITAR is an autonomous training institute within the United Nations system mandated to enhance the effectiveness of the United Nations in maintaining peace and security and promoting economic and social development – an institutional platform that is particularly suited to address the needs of governments and intergovernmental institutions.

NIDR is a non-profit, non-governmental think tank based in Washington, D.C. It promotes the use of creative, collaborative methods to resolve conflicts through grant making, publishing, convening conferences and seminars, and providing technical assistance. NIDR's programmes focus on: public policy and governance, courts, community justice, education, and global information exchange.

WFED is an independent non-profit organization in Oslo, Norway and Washington, D.C., that has been established to promote international cooperation and conflict resolution in the field of environment and development. Through applied research, education, and conflict management assistance, WFED's programmes are designed to improve international understanding of critical environment and development issues and to contribute to the peaceful resolution of related international conflicts. A joint WFED/UNITAR/NIDR publication, entitled *International Environmental Conflict Resolution: The Role of the United Nations,* is scheduled for publication in late 1992.

Governments, intergovernmental organizations and other communities interested in learning more about the new training programme on Environmental Negotiations and Dispute Resolution are urged to contact UNITAR at the following address:

UNITAR European Office, Palais des Nations,
CH-1211 Geneva 10, Switzerland
(Tel: [41-22] 798-5850, Fax: [41-22] 733-1383).

Programa de UNITAR de Adiestramiento en Negociaciones Del Ambiente y Resolucion de Disputas

Con el apoyo y colaboración del National Institute for Dispute Resolution (NIDR) y la World Foundation for Environment and Development (WFED), el United Nations Institute for Training and Research (UNITAR) tiene el placer de anunciar su nuevo programa de capacitación en negociaciones del ambiente y resolución de disputas.

La comunidad mundial enfrenta un número sin precedentes de exigencias para alcanzar el equilibrio entre la protección ambiental y el desarrollo económico a niveles local, regional y mundial. La experiencia indica que los problemas ambientales complican las negociaciones convencionales internacionales por muchas razones, incluídas incertidumbre científica, complejos vínculos con temas económicos, políticos y sociales, y soluciones que requieren la participación comprometida de muchos países y grupos de interés.

Ante estos antecedentes, la capacitación puede generar soluciones de beneficio mutuo, que fomenten la cooperación y revelen perspectivas comunes no exploradas.

El UNITAR Training Programme on Environmental Negotiations and Dispute Resolution ofrece un marco apolítico adonde se pueden explorar a fondo nuevas ideas y acercamientos. Los talleres de trabajo del programa, ligados a la negociación, ofrecen a los participantes la oportunidad de generar nuevas soluciones a complejos problemas y disputas sobre el medio ambiente y el desarrollo. El programa también ofrece oportunidades para mejorar la base de información de los participantes, especialmente de aquellos que vienen de países en desarrollo, quienes pueden no tener acceso inmediato a materiales pertinentes.

Metas y Objetivos

La meta del programa es analizar las necesidades del gobierno y la comunidad – particularmente de aquellos países en vías de desarrollo y recuperación – a fin de mejorar su capacidad para negociar con efectividad y resolver disputas del ambiente y desarrollo. El propósito del programa es promover la cooperación y el desarrollo sostenibles, concentrando sus esfuerzos en:

- facilitar negociaciones internacionales sobre el medio ambiente y el desarrollo, así como iniciativas de resolución de disputas entre gobiernos
- asistir, en la medida de lo necesario, en negociaciones y cumplimiento de acuerdos regionales y subregionales sobre recursos naturales o peligros compartidos, contaminación transfronteriza y conflictos ambientales
- mejorar técnicas de negociación y participación pública a nivel local y nacional relativas a la formulación o implementación de políticas y planes de desarrollo y medio ambiente
- suministrar ayuda para resolver las disputas que puedan surgir a raíz de evaluaciones de impacto ambiental, procedimientos de participación pública y puesta en práctica de leyes ambientales

Plan del Programa

El plan del programa contempla la realización de talleres de capacitación en unión con iniciativas internacionales de envergadura para la negociación sobre temas ambientales y la resolución de conflictos. Se convocará también a talleres regionales o nacionales. En conjunto con NIDR y WFED se está elaborando un curriculum central para los talleres. El curriculum del programa se modificará según las necesidades específicas de los participantes. Se está organizando el primer taller del nuevo programa, destinado a participantes de la República Federal Checa y Eslovaca y de países vecinos.

También se estudian actividades de capacitación relacionadas, en unión con INC-FCCC, UNEP, UNDP y UNCTAD. Se prevé que el trabajo con INC-FCCC y UNEP enfocará negociaciones ambientales multilaterales, mientras que el trabajo con UNDP tratará temas pertinentes a la preparación de programas y proyectos a nivel de país bajo las directrices de la UNDP para Gestión Ambiental y Desarrollo Sostenible. El trabajo con UNCTAD se concentraría en principios económicos y mecanismos pertinentes a negociaciones ambientales.

Audiencias Designadas

Los participantes del programa incluirán funcionarios y negociadores de organizaciones gubernamentales e intergubernam entales encargados de temas y disputas del ambiente y desarrollo. El programa busca mejorar las habilidades y capacidades de estas personas en los siguientes aspectos:

- mejorar las negociaciones ambientales a nivel internacional
- poner en marcha mecanismos que promuevan el desarrollo sostenible
- anticipar o resolver conflictos ambientales
- negociar un amplio espectro de temas sobre el medio ambiente y el desarrollo, a nivel nacional e internacional
- capacitar a otros en la negociación y resolución de disputas

Datos Sobre UNITAR, NIDR, y WFED

UNITAR, con su audiencia internacional y su red de recursos, será el agente ejecutor del programa. UNITAR es un instituto autónomo de capacitación dentro del Sistema de las Naciones Unidas, al cual se le ha asignado el mandato de fortalecer la efectividad de las Naciones Unidas en el mantenimiento de la paz y la seguridad, así como promover el desarrollo social y económico – una plataforma institucional muy idónea para enfrentarse con las necesidades de instituciones gubernamentales e intergubernamentales.

NIDR es una institución no gubernamental de investigación, sin fines de lucro, con sede en Washington, D.C. Mediante becas, publicaciones, conferencias, seminarios y asistencia técnica, NIDR promueve el uso de métodos colaborativos para resolver conflictos. Los programas de NIDR abarcan: política pública y gobierno, tribunales, justicia comunitaria, educación e intercambio mundial de información.

WFED es una organización independiente sin fines de lucro con sedes en Oslo, Noruega y Washington, D.C., establecida para promover la cooperación internacional y la resolución de conflictos en el área ambiental y del desarrollo. Por medio de la investigación aplicada, educación y asistencia en manejo de conflictos, los programas de WFED promueven un mayor entendimiento internacional de los fundamentales temas del medio ambiente y el desarrollo, y contribuyen a la solución pacífica de conflictos internacionales relacionados. Para fines de 1992 se proyecta una publicación conjunta de WFED/UNITAR/NIDR llamada *International Environmental Conflict Resolution: The Role of the United Nations.*

Los gobiernos, organizaciones intergubernamentales y otros grupos que deseen obtener mayor información sobre el Training Programme on Environmental Negotiations and Dispute Resolution pueden dirigirse a:
UNITAR Oficina Europea, Palais des Nations, CH-1211 Ginebra 10, Suiza (Tel: (41-22) 798-5850, Fax: (41-22) 733-1383).

Programme de Formation UNITAR aux Negociations sur L'environnement et au Reglement des Conflits

L'Institut des Nations Unies pour la Formation et la Recherche (UNITAR) a le plaisir de communiquer qu'un nouveau programme de formation aux négociations sur l'environnement et au règlement des conflits vient d'être créé, avec l'aide et la collaboration de l'Institut National pour le Règlement des Conflits (NIDR) et la Fondation Mondiale pour l'Environnement et le Développement (WFED).

La communauté mondiale se trouve de plus en plus souvent confrontée à un nombre sans précédent de négociations sur l'équilibre entre la protection de l'environnement et le développement économique aux niveaux local, régional et planétaire. L'expérience montre que les problèmes d'environnement compliquent les négociations internationales conventionnelles pour plusieurs raisons.

Une formation peut aider à trouver des solutions nouvelles pour le bénéfice de tous, encourageant la coopération et révélant des convergences d'intérêts non encore explorées.

Le Programme de formation UNITAR aux Négociations sur l'Environnement et au Règlement des Conflits offrira un cadre neutre où les idées et les approches peuvent être examinées ouvertement. Lié aux négociations, le programme des ateliers offrira aux participants la possibilité de trouver des solutions de rechange aux problèmes et différends complexes portant sur la problématique de l'environnement et du développement. Le programme offrira également aux participants la possibilité d'améliorer leur connaissance des informations de base (plus spécialement pour ceux venant de pays en voie de développement qui n'ont peut-être pas d'autres occasions d'avoir accès à des informations pertinentes).

Objectif du Programme

L'objectif du programme est de répondre aux besoins des gouvernements et communautés – en particulier de ceux des pays les moins avancés et de ceux en voie de développement – afin de leur permettre d'améliorer leur capacité de négocier et de résoudre d'une manière efficace les différends environnement/développement. Le programme vise à promouvoir la coopération et le développement durable en:

- facilitant les négociations internationales environnement/développement et en suscitant des initiatives intergouvernementales en vue du règlement des différends qui y sont liés
- en fournissant, si nécessaire, une assistance à la négociation et à la mise en place de mesures régionales/sous-régionales quant aux ressources naturelles communes ou aux risques communs, à la pollution transfrontière et aux conflits liés à l'environnement
- en améliorant les techniques de négociation et la participation publique aux niveaux local et national quant à la formulation et la mise en place des politiques et des plans liés à l'environnement/développement
- en apportant une assistance à la résolution des différends liés aux évaluations d'impact sur l'environnement, aux procédures de participation publique et à la mise en place de lois relatives à l'environnement

Organisation du Programme

Dans le cadre de ce programme il est prévu d'organiser des ateliers de formation en collaboration avec les principales instances internationales en matière de négociations sur l'environnement et de règlement de conflits. Des ateliers peuvent être organisés aussi bien au niveau régional que national. Un tronc commun au programme des différents ateliers est actuellement élaboré conjointement par NIDR et WFED. Les programmes de formation seront adaptés aux besoins spécifiques du groupe cible de participants. Il est prévu que le premier atelier de ce nouveau programme sera organisé à l'automne 1992 et destiné aux ressortissants de la République tchèque et slovaque et des Etats voisins. Des discussions sont également en cours avec le CIN/CCCC, le PNUE, le PNUD et la CNUCED.

Participants Cibles

Les participants comprendraient des fonctionnaires et des négociateurs des gouvernements et des organisations intergouvernementales s'occupant des problèmes et des différends liés à l'environnement et au développement. Le programme vise à accroître les connaissances et capacités des participants en ce qui concerne:

- l'amélioration des négociations internationales sur l'environnement
- la mise en place des mécanismes servant à promouvoir un développement durable
- la prévention et le règlement des conflits liés à l'environnement
- la négociation d'un large éventail de problèmes liés à l'environnement et au développement aux niveaux international et national
- la formation d'autre personnes aux procédures de négociation et de règlement des différends

Au sujet d'UNITAR, NIDR et WFED

UNITAR sera chargé de la réalisation du programme et mettra à la disposition de ce programme son audience internationale et son réseau de ressources provenant du Système des Nations Unies. UNITAR est un organisme autonome créé par le Secrétaire général dans le cadre de l'Organisation des Nations Unies à l'effet d'aider l'Organisation à atteindre plus efficacement ses objectifs principaux, en particulier pour ce qui est de maintenir la paix et la sécurité et de favoriser le développement économique et social – plateforme institutionnelle particulièrement appropriée pour répondre aux besoins des gouvernements et des institutions intergouvernementales.

NIDR est un centre de recherche non gouvernemental à but non lucratif situé à Washington. Il s'occupe de promouvoir l'utilisation de méthodes créatives de collaboration dans le règlement des différends au moyen de subventions, publications, organisation de conférences et de séminaires et assistance technique. Les programmes de NIDR portent sur les politiques et directives publiques, les cours de justice, la justice communautaire, l'éducation et l'échange d'information au niveau mondial.

WFED est une organisation indépendante à but non lucratif située à Oslo, Norvège et Washington, Etats-Unis qui a été créée pour promouvoir la coopération internationale et le règlement des conflits dans le domaine de l'environnement et du développement. Au moyen de la recherche appliquée, de l'éducation et de l'assistance à la gestion des conflits, les programmes de WFED sont destinés à améliorer la compréhension internationale des problèmes critiques d'environnement et de développement et à contribuer au règlement pacifique des conflits internationaux qui y sont liés.

Les gouvernements, organisations intergouvernementales et les autres communautés désireux d'en savoir plus sur les nouveaux programmes de formation sur les négociations internationales et le règlement des différends sont priés de contacter l'UNITAR à l'adresse suivante: UNITAR, Bureau européen, Palais des Nations, CH-1211 Genève 10, Suisse (Tel: (41-22) 798.58.50, Fax: (41-22) 733.13.83).

Programa de Treinamento em Negociações Sobre Meio Ambiente e Resolução de Conflitos do UNITAR

Com o apoio e a colaboração do National Institute for Dispute Resolution (NIDR) e a World Foundation for Environment and Development (WFED), o United Nations Institute for Training and Research (UNITAR) tem o prazer de anunciar um novo programa de treinamento em negociações sobre meio ambiente e resolução de conflitos.

A comunidade mundial enfrenta desafios sem precedente que envolvem o equilíbrio entre a proteção ao meio ambiente e o desenvolvimento econômico a níveis local, regional e global. A experiência indica que os problemas ambientais complicam as negociações internacionais convencionais por várias razões, entre elas a incerteza científica, complexas conexões com questões de ordem econômica, política e social e soluções que requerem a participação determinada de muitos países e grupos de interesse.

Contra esse pano de fundo, o treinamento pode ajudar a gerar soluções mutuamente benéficas que encorajem a cooperação e revelem pontos em comum inexplorados.

O Programa de Treinamento em Negociações sobre Meio Ambiente e Resolução de Conflitos da UNITAR proporciona um foro não partidário onde novas idéias e abordagens podem ser exploradas abertamente. Os seminários, ligados a negociações, oferecem aos participantes a oportunidade de engendrar soluções alternativas para problemas e conflitos complexos relativos ao meio ambiente e ao desenvolvimento. O programa propicia também ocasião para aprimorar a base de informação dos participantes (especialmente dos que vêm de países em desenvolvimento e que, de outro modo, podem não ter acesso imediato aos materiais pertinentes).

Metas e Objetivos

A meta do programa é tratar das necessidades de governos e comunidades – especialmente os de países em desenvolvimento e em processo de recuperação – para aperfeiçoar sua capacidade de negociar e resolver com eficácia conflitos ambientais e de desenvolvimento. O programa destina-se a promover a cooperação e o desenvolvimento sustentável, focalizando os seguintes itens:

- facilitar as negociações internacionais sobre meio ambiente/desenvolvimento e iniciativas intergovernamentais afins de resolução de conflitos
- assessorar na negociação e implementação de acordos regionais e sub-regionais relativos a recursos naturais ou perigos, poluição transfronteiriça e conflitos ambientais afins
- aprimorar as negociações e a participação pública a níveis local e nacional quanto à formulação e implementação de políticas e planos ambientais/de desenvolvimento
- proporcionar assistência para ajudar a resolver conflitos relativos à avaliação de impactos sobre o meio ambiente, a procedimentos de participação pública e à implementação de leis ambientais

Planos do Programa

Os planos compreendem seminários de treinamento em conexão com as principais negociações internacionais sobre meio ambiente e as iniciativas de resolução de conflitos. Os seminários também serão convocados tanto em base regional quanto nacional. Um currículo básico para os seminários está sendo desenvolvido em conjunto com o NIDR e a WFED. Os currículos do programa serão modificados de acordo com as necessidades específicas dos participantes visados. O primeiro seminário sob o novo programa está sendo organizado para os cidadãos da República Federal Tcheca e Eslovaca e países vizinhos.

Estão também em discussão atividades de treinamento afins, em conjunto com o INC-FCCC, UNEP, UNDP e UNCTAD.

Público Visado

Os participantes do programa incluirão representantes e negociadores de organizações governamentais e intergovernamentais responsáveis por temas e conflitos ambientais e de desenvolvimento. O objetivo do programa é aperfeiçoar a habilidade e a capacidade dessas pessoas no que se refere a:

- melhorar as negociações internacionais sobre meio ambiente
- implementar mecanismos que promovam o desenvolvimento sustentável
- prevenir ou resolver conflitos ambientais
- negociar uma ampla gama de questões ambientais e de desenvolvimento a níveis nacional e/ou internacional
- treinar outros em negociação e processos de resolução de conflitos

O que São o UNITAR, o NIDR e a WFED

O UNITAR, com sua audiência e rede internacionais de recursos, será o órgão executor do programa. O UNITAR é um instituto autônomo de treinamento dentro do sistema das Nações Unidas, encarregado de reforçar a eficácia da ONU na manutenção da paz e da segurança e promover o desenvolvimento econômico e social – uma plataforma institucional que é particularmente apropriada para responder às necessidades de instituições governamentais e intergovernamentais.

O NIDR é um grupo privado (*think tank*), sem fins lucrativos, sediado em Washington, D.C. Promove o uso de métodos criativos de colaboração para resolver conflitos através da concessão de subvenções, publicações, realização de conferências e seminários e fornecimento de assistência técnica. Os programas do Instituto concentram-se em: políticas públicas e governo, tribunais, justiça comunitária, educação e intercâmbio global de informação.

A WFED é uma organização independente, sem fins lucrativos, de Oslo, Noruega, e Washington, D.C., criada para promover a cooperação internacional e a resolução de conflitos na área ambiental e de desenvolvimento. Através de pesquisa aplicada, educação e assistência à administração de conflitos, os programas da WFED destinam-se a melhorar a compreensão internacional de questões cruciais do meio ambiente e do desenvolvimento e contribuir para a resolução pacífica de conflitos internacionais afins. Uma publicação conjunta do UNITAR/NIDR/WFED, intitulada *International Environmental Conflict Resolution: The Role of the United Nations*, está programada para ser lançada no final de 1992.

Governos, organizações intergovernamentais e outras comunidades interessadas em saber mais sobre o novo programa de treinamento em Negociações sobre Meio Ambiente e Resolução de Conflitos devem contactar o UNITAR no seguinte endereço:
Escritório Europeu do UNITAR, Palais des Nations,
CH-1211, Genebra 10, Suíça
(Tel: [41-22] 798-5850, Fax: [41-22] 733-1383).



UNITAR

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WFED

World Foundation for Environment and Development

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Tel +47 (0)2 29 42 70
Fax +47 (0)2 74 44 63

NIDR

National Institute for Dispute Resolution

1901 L Street, NW
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World Foundation for Environment and Development

3027 Arizona Avenue, NW
Washington, DC 20016 USA

Please send me more information about the upcoming publication *International Environmental Conflict Resolution: The Role of the United Nations.*

Name/Title _____

Organization _____

Street Address _____

City/State/Province _____

Country _____

Telephone/Fax _____

I am interested in learning more about UNITAR's Training Programme on Environmental Negotiations and Dispute Resolution.

Name/Title _____

Organization _____

Street Address _____

City/State/Province _____

Country _____

Telephone/Fax _____

1992 UNITAR PROGRAMMES CONDUCTED OUT OF NEW YORK

(Release: April 1992)

Note: TBA = To Be Announced.

TRAINING EVENTS	DATE	VENUE
Workshop on the Structure, Retrieval and Use of UN documentation	24-28 February	New York, USA
Orientation Course for New Members of Permanent Missions to the UN on the work of the UN	16-20 March	New York, USA
Orientation Course for New Members of Permanent Missions to the UN on the work of the UN	23-27 March	New York, USA
Training Workshop on Peace-Keeping	23-27 March	New York, USA
UNITAR Open Lecture Series for Delegates, Members of UN Secretariat and Related Organizations	8 April	New York, USA
UNITAR/ACIC Round Table on Peace-Keeping	April	Manhattan-ville, New York, USA
Workshop on the Structure, Retrieval and Use of UN documentation	18-22 May	New York, USA
UNITAR Symposium on Innovative Trends in the Field of Communication Technologies	27-28 May	New York, USA
Joint UNITAR/EDI (World Bank) Seminar on International Development Issues for Senior Members of Permanent Missions to the UN	15-16 June	New York and Washington, D.C., USA
Joint UNITAR/EDI (World Bank) Seminar on International Development Issues for Senior Members of Permanent Missions to the UN	September - December	New York and Washington, D.C., USA
Joint UNITAR/EDI (World Bank) Seminar on International Development Issues for Senior Members of Permanent Missions to the UN	September - December	New York and Washington, D.C., USA
Annual Briefing for New Delegates in the Work of the Forty-Seventh Session of the General Assembly	16-17 September	New York, USA
Annual Briefing for New Delegates in the Work of the Forty-Seventh Session of the General Assembly	18 September	New York, USA
Special Briefing for New Delegates on the Work of the Fifth Committee of the General Assembly	18 September	New York, USA
Special Briefing on Peace-Keeping Issues for Delegates attending the Forty-Seventh Session of the General Assembly	18 September	New York, USA

TRAINING EVENTS	DATE	VENUE
Joint UNITAR/Clark Atlanta University Cecil Ram UN Semester (Open Also to Selected Members of Permanent Missions and Staff Members of the UN)	September - December	New York, USA
Occidental College at Los Angeles/United Nations Programme in: 1) The Political, Diplomatic and Peace-Keeping Functions of the UN; and 2) The Political Economy of International Institutions (Open Also to Qualified UN Staff Members)	September - December	New York, USA
Special Briefing for New Delegates on the Work of the Fifth Committee of the General Assembly	16-27 November	New York, USA
Regional Refresher Course in International Law for Senior Government Legal Advisors of Countries of Asia and the Pacific	16-27 November	New York, USA, and New Delhi, India
Orientation Course on the Security Council for Members of the Council	7-11 December	New York, USA
Seminar on the Establishment of Peace-Keeping Training Centres	TBA	New York, USA
UNDP/UNITAR Training of Angolan Diplomats and Government Officials	TBA	Angola

1992 UNITAR PROGRAMMES CONDUCTED BY GENEVA OFFICE

(Release: April 1992)

TRAINING EVENTS	DATE	VENUE
Geographic Information Systems (GIS)/IPS Training Programme at EPFL for Latin American Trainees	11 January - 15 May	Lausanne, Switzerland
National Follow-up Workshop on Legal Aspects of External Debt Management (EDM)	20-24 January	Kampala, Uganda
GIS: Planning Meeting for SADCC Sub-Regional Workshop	January	Harare, Zimbabwe
GIS: National Seminar	January	Dar es Salaam, Tanzania
GIS: National Seminar	February	Gabarone, Botswana
GIS: Technical Backstopping to the Environment Information Unit, Environment Division	February	Maputo, Mozambique
Training in Multilateral Diplomacy for Vietnamese Government Officials	*10-21 February*	*Hanoi, Vietnam*
GIS: UNITAR/UNSO/AGRHYMET Sub-Regional Training	March	Niamey, Niger
GIS: National Seminar	March	Niamey, Niger
GIS: National Seminar	March	Maputo, Mozambique
GIS: National Seminar	March	Maseru, Lesotho
Introduction to International Economics (French)	*9-13 March*	*Geneva, Switzerland*
GIS: Advanced Workshop for Environmental Management	9-15 March	Santiago & Puerto Montt, Chile
UNITAR / FASID Training Course on International Organizations	*9-20 March*	*Geneva, Switzerland*
IRPTC/UNITAR Regional Workshop on the Establishment of National Registers of Potentially Toxic Chemicals	30 March - 10 April	Bangkok, Thailand
GIS: SADCC Regional Workshop for Natural Resource Management	April	Harare, Zimbabwe
GIS: National Seminar	April	Ouagadougou, Burkina Faso
GIS: National Seminar	April	Accra, Ghana

Note: 1) Events in Italics refer to activities under the Multilateral Diplomacy Training Programmes; TBA = To Be Announced.

TRAINING EVENTS	DATE	VENUE
INC-FCCC/IPCC/UNITAR Pre-Session Workshop on Negotiation	April	New York, USA
IRPTC/UNITAR Participation in Regional Workshop - "La Problemática de los Plaguicidas de la Región de las Américas"	April	Bogota, Colombia
Introduction to International Economics	*6-10 April*	*Geneva, Switzerland*
Seminar on the Structure and Functioning of the Principal Organs of the United Nations	*27 April - 1 May*	*Geneva, Switzerland*
National Follow-up Workshop on Legal Aspects of Debt Management	27 April - 1 May	Lagos, Nigeria
National Follow-up Workshop on Legal Aspects of Debt Management	27 April - 1 May	Accra, Ghana
Seminar on the Structures and Functioning of the Principal Organs of the United Nations (French)	*4-8 May*	*Geneva, Switzerland*
Seminar on the Structure, Retrieval and Use of UN Documentation	*11-13 May*	*Geneva, Switzerland*
Procedures for the Settlement of Commercial Disputes at GATT	*19-20 May*	*Geneva, Switzerland*
Workshop on the Implementation of Global Environmental Treaties with Focus on CITES	*20-22 May*	*Geneva, Switzerland*
Procedures for the Settlement of Commercial Disputes at GATT (French)	*26-27 May*	*Geneva, Switzerland*
African Development Bank/UNITAR Seminar on Legal Aspects of Debt Management	May-June	Rabat, Morocco
GIS: Introductory Workshop for Environmental Management	June	Vilnius, Lithuania
GIS: Advanced Workshop for Environmental Management for Nepalese Nationals	June	Kathmandu, Nepal
Seminar on International Environment / Development Negotiations	*TBA*	*Geneva, Switzerland*
The Setting, Issues and Techniques of Multilateral Economic Negotiations (French)	*1-5 June*	*Geneva, Switzerland*
International Law Programme (French / English)	*1-19 June*	*Geneva, Switzerland*
Practices and Procedures of some Geneva-based UN Organizations and Bodies	*15-19 June*	*Geneva, Switzerland*

Note: 1) Events in Italics refer to activities under the Multilateral Diplomacy Training Programmes; TBA = To Be Announced.

TRAINING EVENTS	DATE	VENUE
Sub-Regional Awareness Seminar on Legal Aspects of External Debt Management	TBA	Harare, Zimbabwe
Disaster Management Seminar for Senior Provincial Managers	TBA	Ouagadougou, Burkina Faso
UN / UNITAR Fellowship Programme in International Law (French / English)	*6 July - 14 August*	*The Hague, Netherlands*
GIS: GUAP/GTZ Training Course for SADCC Member States	July-August	Harare, Zimbabwe
Disaster Management Awareness Workshop for Decision Makers	August	Mali, Selingue
India National Workshop on the Implementation of the London Guidelines	August	New Delhi, India
The Setting, Issues and Techniques of Multilateral Economic Negotiations	*14-18 September*	*Geneva, Switzerland*
Orientation Seminar for Newly Accredited Members to Permanent Missions in Geneva	*28-30 September*	*Geneva, Switzerland*
Disaster Management Awareness Workshop for Decision Makers	September - November	Mauritania
Basic Communication Skills	*21-23 October*	*Geneva*
Law and Procedures of Multilateral Negotiations in the UN (French)	*26-28 October*	*Geneva, Switzerland*
Law and Procedures of Multilateral Negotiations in the UN	*28-30 October*	*Geneva, Switzerland*
African Development Bank/UNITAR Seminar on Legal Aspects of Debt Management	October - November	Harare, Zimbabwe
Effective Time Management	*November*	*Geneva*
UNEP/UNITAR Sub-regional Workshop on the Implementation of PIC in Latin America	November	TBA
Training Workshop on Public Speaking	*November*	*Geneva*
GIS: Introductory Workshop for Human Settlements and Environmental Management	September	Cairo, Egypt
GIS: Introductory Workshop for Health Care and Environmental Management	November	Sao Paolo, Brazil
GIS: Introductory Workshop for Environmental Management for Bangladesh Nationals	December	Kathmandu, Nepal
Inter-Agency Seminar on the International Civil Service	*7-11 December*	*Geneva, Switzerland*

Note: 1) Events in Italics refer to activities under the Multilateral Diplomacy Training Programmes; TBA = To Be Announced.