



SEAMEO REGIONAL CENTRE FOR HIGHER EDUCATION AND DEVELOPMENT

# **BACKGROUND INFORMATION AND ENABLING INSTRUMENT**

exceptional circumstances when the Centre Director may submit the proposal to the Board one month before the Board meets.

2. Any amendment to this Enabling Instrument shall be made by a two-thirds majority of votes of the members of the Board, and shall come into force upon adoption by the Council.

#### **ARTICLE XIV INTERPRETATION**

Any question or dispute concerning the interpretation of any provision of any provision of this Enabling Instrument shall be settled by the Board, without prejudice to the right of the Council to review the ruling by the Board.

#### **ARTICLE XV TRANSITIONAL PROVISIONS**


1. Anything done or made by the Task Force created by the Ministry of University Affairs of Thailand on behalf of the Centre before the inception of the Board shall be deemed to have been done or made by the Board and shall be binding on the Centre.

2. Anything done or made by the Board on behalf of the Centre before the adoption of this Enabling Instrument by the Council shall be binding on the Centre and the Organization.

#### **ARTICLE XVI ENTRY INTO FORCE**

This Enabling Instrument shall come into force upon adoption by the Council.

Approved and adopted by the Council on this day of 3<sup>rd</sup> February 1994.

  
(Signed) .....  
President of the Council

### **SEAMEO REGIONAL CENTRE FOR HIGHER EDUCATION AND DEVELOPMENT**

#### **Interim Governing Board**

1. Prof. Dr. Wichit Srisa-an  
Permanent Secretary for University Affairs and Chairman of SEAMEO  
RIHED Interim Governing Board  
Thailand
2. Dato Seri Laila Jasa Hj. Abu Bakar bin Hj. Apong  
Vice-Chancellor, University of Brunei Darussalam  
Brunei Darussalam
3. M. Pich Sophoan  
Director, Higher and Professional Education Department  
Cambodia
4. Dr. Harsono Taroepatjeka  
Director of Academic Affairs, Ministry of Education and Culture  
Indonesia
5. Mr. Thammarath Nakhavith  
Deputy Director, Vocational Technical and Higher Education  
Ministry of Education  
Lao People's Democratic Republic
6. Mrs. Nuraizah bt Abdul Hamid  
Deputy Secretary General I, Ministry of Education  
Malaysia
7. Dr. Mona D. Valisno  
Director, Bureau of Higher Education  
Department of Education, Culture and Sports  
Philippines
8. Assoc. Prof. Ernest Chew Chin Tiong  
Dean, Faculty of Arts and Social Sciences  
National University of Singapore  
Singapore



9. Prof. Dr. Lam Quang Thiep  
Director, Higher Education Department  
Ministry of Education and Training  
Socialist Republic of Viet Nam

### **SEAMEO Member States and Associate Member Countries**

SEAMEO's Member States are : Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, the Philippines, Singapore, Thailand and Viet Nam.

SEAMEO's Associate Member Countries are: Australia, Canada, France, Germany, the Netherlands, and New Zealand.

For further information, please contact :  
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Interim Director  
SEAMEO RIHED  
5th Floor, Ministry of University Affairs Building  
328 Si Ayutthaya Road  
Bangkok 10400, Thailand  
Tel: 246-1106 Ext. 518

### **ARTICLE X BUDGET**

In accordance with the requirements of the SEAMEO Financial Operation Manual (hereinafter referred to as the FOM), and within the framework of the five-year plan as approved by the Council, the Centre Director shall prepare budgets for approval by the Board before submission to the Council through SEAMES.

### **ARTICLE XI ACCOUNT AND AUDIT**

1. Funds for the Centre shall be deposited in a reputable bank in the account of "The SEAMEO Regional Centre for Higher Education and Development" (hereinafter referred to as "the Account").
2. The Account shall be operated by the Centre Director under the control of the Board in accordance with the FOM.
3. The Account shall be audited by a firm of auditors to be engaged by the Centre Director with the approval of the Board.

### **ARTICLE XII LEGAL STATUS OF THE CENTRE**

1. The Centre, on behalf of the Organization, derives its juridical personality from the Charter and shall possess full capacity:
  - (a) to contract;
  - (b) to acquire, and dispose of, movable and immovable property; and
  - (c) to institute legal proceedings.
2. The Centre, as a subordinate body of the Organization and on behalf of the Organization, shall enjoy in the territory of each of the Member States such privileges and immunities as are necessary for the fulfillment of its objectives.
3. The Centre, as a subordinate body of the Organization and on behalf of the Organization, shall have the necessary power to carry out activities for the fulfillment of its objectives as required in each of the Member States.

### **ARTICLE XIII AMENDMENT**

1. Any proposal for amendment of this Enabling Instrument shall be submitted by the Centre Director to the Board three months before the Board meets, except in

8. to make by laws, rules and regulations consistent with the provisions of this Enabling Instrument and the Charter of the Organization;

9. to delegate, from time to time, to the Chairperson or the Centre Director such functions, duties, and powers as the Board deems necessary; and

10. to perform other duties necessary or incidental to the proper exercise of the above-mentioned functions.

## ARTICLE IX CENTRE DIRECTOR

1. The Centre Director is the legal representative of the Centre and the chief administrative officer and shall be responsible for carrying out the approved programmes and activities under the direction of the Board.

2. The Centre Director shall be nominated by the Governing Board and approved by the Minister of University Affairs of Thailand, and the Minister of Education of Thailand, and formally appointed by the President of the Council.

3. The Centre Director shall serve a term of three years and will be eligible for reappointment in accordance with the provision in paragraph 2 of this Article.

4. Without prejudice to the right of the Council to act on its own initiative, the release or removal of the Centre Director before the end of his or her term may be made by the President of the Council either at the request of the Minister of Education of Thailand with the endorsement of the Minister of University Affairs of Thailand and the Board, or at the request of the Board with the endorsement of the Ministers of Education and University Affairs of Thailand.

5. The vacancy according to the provision in paragraph 4 of this Article or because of death shall be filled in accordance with the provision in paragraph 2 of this Article.

6. In the event of any interim vacancy of the office of the Centre Director, the Chairperson of the Board, after consultation with the Minister of Education of Thailand and the Minister of University Affairs of Thailand, will designate an officer of the Centre to perform the functions of the Centre Director.

7. In the temporary absence of the Centre Director, he or she may appoint any officer to act on his or her behalf.

8. The Centre Director shall appoint officers and employees according to the procedure and the terms and conditions laid down by the Board.

9. The Centre Director shall prepare an annual report of the Centre for the approval of the Board before submission to the Council through SEAMES.

## Background

Regional Institute of Higher Education and Development (RIHED) was conceived jointly in 1959 by Unesco and International Association of Universities (IAU) in collaboration with the Ford Foundation. It was officially founded in Singapore on July 1970 with 7 Member States namely, Indonesia, the Khmer Republic, Laos, Malaysia, Singapore, Thailand, and Viet Nam.

RIHED's transition was seen when some of the Member Countries could not participate fully in the Institute's activities. Decision was then reached by RIHED Governing Board to reconstitute RIHED under the umbrella of Southeast Asian Ministers of Education Organization (SEAMEO), having its temporary office in Thailand.

Attempts since 1985 to obtain approval of the Thai Government to host RIHED under the umbrella of SEAMEO became a reality on March 17, 1992.

RIHED, on February 1993, was instituted as the newest SEAMEO Centre. It is now known as Regional Centre for Higher Education and Development, retaining its original acronym of RIHED.

## Stages of Development of SEAMEO RIHED

The Ministry of University Affairs has contributed to the growth and development of the Centre by providing office space and other facilities for RIHED. The Ministry also approved the secondment of two staff members of Foreign Relation Division to work at the center, namely Dr. Chantavit Sujatanond in the position of Acting Interim Director and Ms. Pornpip Kanjananiyot as Office-in-Charge. On July 1, 1994, Dr. Tong-In Wongsothorn from Sukhothai Thammathirat Open University was appointed Interim Director.

1 July 1993 - 30 June 1994	Preparation for Interim Period
1 July 1994 - 30 June 1997	Interim Period
1 July 1997 - 30 June 2002	Regular five-year cycle of SEAMEO



**As SEAMEO RIHED, the Centre has the following objectives :**

1. To assist the Member States in fostering efficiency and effectiveness of higher education in their respective countries, with a focus on policy and planning processes, administrative and management systems through professional training and policy-oriented research, taking into consideration the special needs and pressing problems together with the cultural factors of individual Member States for integrated human resource development;

2. To serve as the regional centre and clearing-house for higher education information and documentation, promoting the exchange and dissemination of information and research findings on higher education planning and management, both within and outside the region;

3. To promote collaboration among Member States for establishing institutional linkages, and to assist their co-operation for the strengthening of institution building and development.

Its main activities, in line with other SEAMEO Centres, will include training, research, and information dissemination with special focus on fostering efficiency and effectiveness of higher education policy and planning, management, and administration in SEAMEO Member Countries.

7. Any member of the Board may bring one advisor to the meetings of the Board. Such advisor shall have no voting right. Expenses incidental to his or her attendance shall be borne by his or her government.

8. The Board shall meet annually in ordinary session, and it may meet in extraordinary session at the request of the chairperson of the Board, the Centre Director, one third of its members, or the Director of SEAMES.

9. The meetings of the Board shall be held at the Centre unless the Board decides otherwise.

10. The quorum for any meeting of the Board shall be two-thirds of its Member States.

11. Each member of the Board, including the Chairperson, shall have one vote, and any decision of the Board shall be made by a simple majority of votes of the members present and voting. In the event of tied votes, the chairperson shall have an additional casting vote.

12. Should a decision by the Board be required at any time other than during its meeting, the Centre Director, after prior consultation with the Chairperson of the Board, may submit the matter in writing to all members of the Board, and the approval in writing by a simple majority of the members shall constitute an approval as in the case of a decision made by the Board at a meeting.

13. The Chairperson and Vice-Chairperson of the Board shall be elected by its members in accordance with the rules of procedure to be adopted by the Board.

14. Each Member State is expected to organize a National Committee or similar body to provide counsel to its country representative to the Board.

## **ARTICLE VIII**

### **POWERS AND FUNCTIONS OF THE BOARD**

The Board shall have the following powers and functions:

1. to determine policies for the operation of the Centre;
2. to review and approve budgets and programmes of activities of the Centre within the framework of the five-year plan as approved by the Council;
3. to control the accounts of the Centre;
4. to make annual evaluations and reviews of the Centre's programmes and budgets, and to recommend, for the Council's consideration, appropriate changes in the approved five-year plan as may be necessary;
5. to approve the nomination of the Centre Director;
6. to approve the terms and conditions of service of the staff of the Centre;
7. to review and approve the annual report of the Centre before submission to the Council;

**ARTICLE V**  
**ASSOCIATE AND AFFILIATE MEMBERS**  
**OF THE ORGANIZATION**

1. An Associate and Affiliate Member may participate in the programmes of the Centre subject to the rules and regulations promulgated by the Council; and

2. An Associate and Affiliate Member shall have the right to send representatives to the Governing Board meeting and participate in its proceedings but shall have no voting rights.

**ARTICLE VI**  
**ORGANIZATION OF THE CENTRE**

The Centre shall have a Board, a Centre Director, and such other officers, and professional staff as may be considered necessary by the Board.

**ARTICLE VII**  
**THE BOARD**

1. The Minister of Education of each Member State shall be entitled to nominate a representative who will be appointed by the President of the Council as member of the Board.

2. Each member of the Board shall be appointed to serve for a term of three years, and will be eligible for reappointment.

3. A member of the Board may be released or removed from office before the end of his or her term by the President of the Council only at the request of the Minister of Education of his or her country.

4. The vacancy according to the provision in paragraph 3 of this Article or because of death shall be filled in accordance with the provision in paragraph 1 of this Article, and the successor shall serve for the unexpired term of the predecessor.

5. In place of a member of the Board who is unable to attend a board meeting, the Minister of Education of his or her country may designate any person to attend that meeting by notice in writing to the Director of SEAMES and the Centre Director. Such designated alternate shall have the right to vote and discharge all the duties of the member he or she represents, except that he or she shall not exercise the functions of Chairperson or Vice-Chairperson, as the case may be, unless elected to do so at the meeting of the Board.

6. The Centre Director and the Director of SEAMES or his or her representative shall be ex-officio members of the Board and shall have no voting rights.

**ENABLING INSTRUMENT OF**

**SEAMEO REGIONAL CENTRE FOR**

**HIGHER EDUCATION AND DEVELOPMENT**



**ENABLING INSTRUMENT OF  
THE SOUTHEAST ASIAN MINISTERS OF EDUCATION ORGANIZATION  
REGIONAL CENTRE FOR HIGHER EDUCATION AND DEVELOPMENT**

**PREAMBLE**

WHEREAS, in accordance with Article IV (10) of the Charter of the South-east Asian Ministers of Education Organization (hereinafter referred to as "the Organization"), the Council of the Organization (hereinafter referred to as "the Council"), at its twenty eighth conference in Singapore on 15 February 1993, approved the admission of the Regional Institute of Higher Education and Development (RIHED) as a new SEAMEO Regional Centre to be located in Bangkok, Thailand.

NOW, THEREFORE, the Council has adopted this Enabling Instrument, which is the sole source of the authority and rights of this branch of the Organization.

**ARTICLE I  
DEFINITIONS**

In this Enabling Instrument, unless the context otherwise requires:

1. "Centre" means the SEAMEO Regional Centre for Higher Education and Development;
2. "Board" means the Governing Board of the Centre;
3. "Member State" means any State which is a member of the Organization;
4. "SEAMES" means the Southeast Asian Ministers of Education Organization Secretariat;
5. "Charter" refers to the Charter of the Southeast Asian Ministers of Education Organization;
6. "Associate Member" means Associate Member of the Southeast Asian Ministers of Education Organization;
7. "Affiliate Member" means any organization or agency which has been admitted as such by the Council in accordance with Article II of the Charter.

**ARTICLE II  
OBJECTIVES**

The objectives of the Centre are:

1. To assist the Member States in fostering efficiency and effectiveness of higher education in their respective countries, with a focus on policy and plan-

ning processes, administrative and management systems through professional training and policy-oriented research, taking into consideration the special needs and pressing problems together with the cultural factors of individual Member States for integrated human resource development;

2. To serve as the regional centre and clearing-house for higher education information and documentation, promoting the exchange and dissemination of information and research findings on higher education planning and management both within and outside the region;

3. To promote collaboration among Member States for establishing institutional linkages, and to assist their co-operation for the strengthening of institution building and development.

**ARTICLE III  
RELATIONSHIP WITH THE COUNCIL**

1. The Centre is a subordinate body of the Organization.
2. Authority is hereby given by the Council to the Centre to carry out its objectives as stated in Article II.
3. Anything done or made by the Centre shall be deemed to have been done or made on behalf of the Organization.
4. Notwithstanding the provision in paragraph 2 of this Article, the Council reserves the right:
  - (a) To control the policy and administration of the Centre;
  - (b) To alter, amend, or modify this Enabling Instrument;
  - (c) To review the decisions of the Board; and
  - (d) To denounce or ratify any *ultra vires* decisions or transactions made by the Board or the Centre.

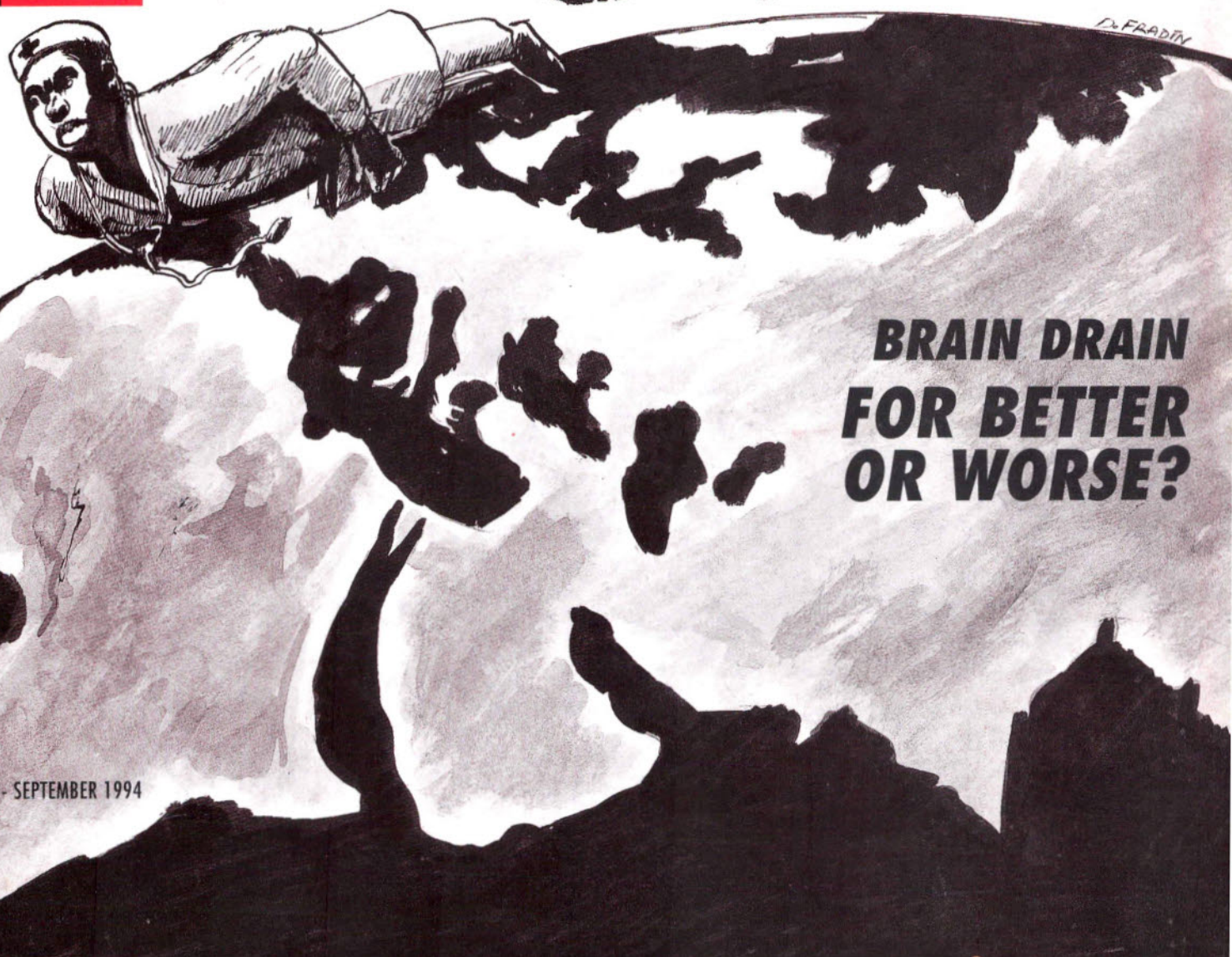
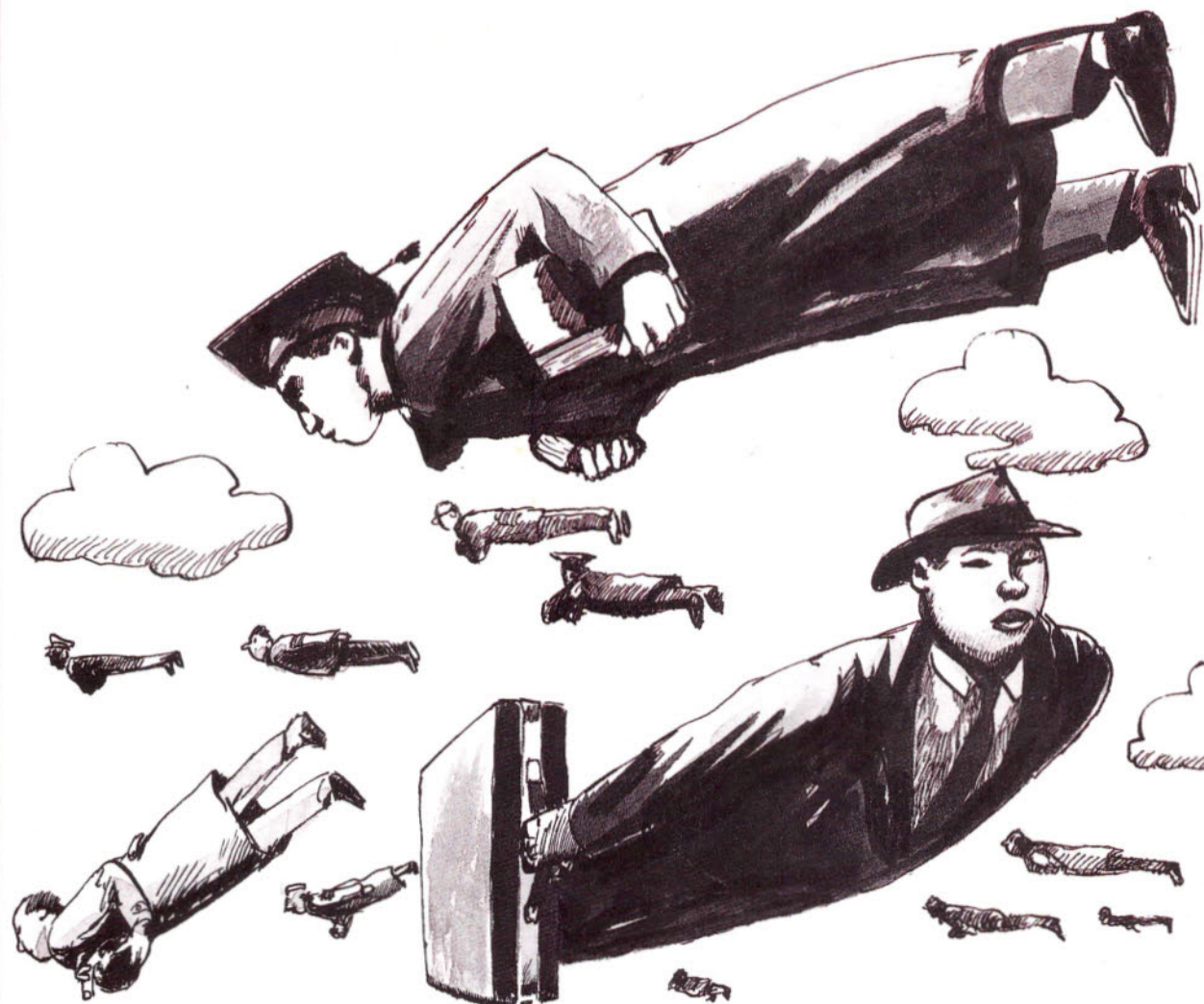
**ARTICLE IV  
RELATIONSHIP WITH SEAMES  
AND OTHER CENTRES**

1. The Centre shall co-operate closely with SEAMES in fund-raising efforts and other matters as stipulated in the Charter; and
2. The Centre may initiate inter-Centre programmes and activities, with the co-operation of SEAMES when necessary.



UNESCO

SOURCES



**BRAIN DRAIN  
FOR BETTER  
OR WORSE?**



## RECOGNISE THE LIMITS

Nancy Holman  
Retired School Principal  
Kurmond, NSW (Australia)

☒ ☒ ☒ Drawing on 35 years of experience as a teacher and school principal, I would like to make a number of personal comments on your dossier "Special Needs in the Classroom" (Sources No. 59).

Some children, e.g. those with Down's Syndrome, may cope best in the Early Childhood classes, but may need special classes as they get older. On the other hand, physically handicapped children who have had special training in managing away from home during early years will probably cope better in primary, secondary and tertiary classes.

Authorities will need to recognise that there are limits of how many children can be integrated into each school - a piece of timely advice given to me by a school inspector in the late 1970s.

Staff experience, resources, access to buildings, toilet modifications and the school community's "readiness" must all be carefully considered.

In New South Wales, Australia, special school counsellors are appointed to process applications and then monitor the integration and progress of each "special" child.

Having an independent person to make informed and impartial decisions, considerably reduces the stress and emotional aspects associated with integration for school staff and parents.

## TO KNOW MORE

K. Thiruvengadasamy  
Engineer  
Madras (India)

☒ ☒ ☒ Having learned that UNESCO is involved in a very wide number of activities of global importance, such as literacy, the eradication of poverty, the development of science and technology, etc., *UNESCO Sources* gives me inspiration and the desire to know more.

## DRASTIC REMEDIES

M.S. Patel  
Teacher  
Piparia, Hoshangabad (India)

☒ ☒ ☒ Many thanks for dealing, in your issue No. 57, with the subject of preventive education and for presenting the problems involved and possible solutions from a global point of view.

In the face of worldwide dangers, preventive education is applying drastic remedies to cure the oozing wounds of the time.

It is making it possible to control such menaces as drug addiction, the population bomb, global pollution and natural catastrophes. It is also changing the way people think.

## A DOSSIER ON TOLERANCE PLEASE

Margaret Quass  
UK Friends of UNESCO  
United Nations Association of Great Britain  
and Northern Ireland

☒ ☒ ☒ Your publication is much appreciated, particularly the editorial entitled "Neo-Racism" in your June issue. A propos, may I ask you please to produce a dossier on United Nations Year for Tolerance 1995 as soon as possible.

## FRUSTRATION

Marta Virguez  
Journalist  
Stockholm (Sweden)

☒ ☒ ☒ The subject of your article on the media in Latin America (Sources No. 59) was very interesting. But after reading it, I was overtaken by a deep feeling of frustration.

It seems to me that the journalist who wrote the article failed to take into account the different positions of participants who contributed to the debate.

So many questions were left answered: how does the "small" journalist deal with information on a daily basis if he or she has only rudimentary equipment? What did these journalists propose and what did they expect from the seminar? What was the reaction of the "big" media? From what guarantees do Latin American journalists benefit in the exercise of their profession?

I also ask myself - nonetheless hoping I am mistaken - if the meeting was not limited to satisfying the narcissism of a certain number of journalists absorbed by the difficult job of defining the concepts of pluralism and plurality. I fear that, in this way, these journalists purely and simply made sure they could continue to use grandiloquent words like liberty and democracy with very little concern for the actual meaning of these words.



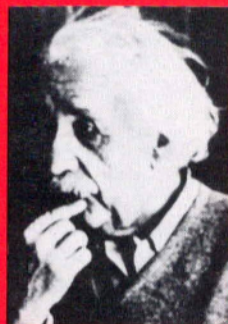
# EDUCATION AND FREE CHOICE

The United Nation's big international conferences rarely get good press. Too often their form masks their content. Yet, even before the opening speeches are made it has become clear that the World Conference on Population and Development (Cairo, September 5-13) has crystallised one of those essential debates that has an impact on almost every human community, whether from the North, South, East or West. This debate on our future has galvanized the supporters of two extremes - the Malthusians and the adepts of scientism. The former predict that uncontrolled demographic growth will lead to cataclysm. The latter argue that humanity has enough material and intellectual resources to more than adequately ensure the livelihoods of the eight and a half billion people who, according to the UN, will populate the planet in 2025.

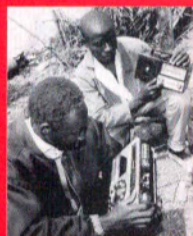
However, it is also an ethical debate. Where do the rights of individuals - and those of the community - begin and end? In other words, to what extent should individual choices be limited by a morality that, in this case, is based essentially on religion?

In a domain that touches our most intimate behaviour, the rule can only be that of free choice. Free choice for the woman concerned, her partner, and eventually those closest to them. But free choice based on full knowledge of the facts. Couples must know first and foremost that a choice exists and how to exercise it. They must also understand its full implications, not only for themselves but for their children, the community in which they live and beyond that, the world of which they are now citizens. Achieving this demands a gigantic effort in educating women. Some 65 percent of the world's 900 million illiterates are women, 29 percent of girls don't go to primary school. Whether it be aimed at directing demographic growth, or promoting sustainable development and a culture of peace, investing in education pays the highest dividends.

René LEFORT



Einstein: from Nazi Germany to the USA.



Humanitarian radio for Rwanda's refugees.



Artists under threat.

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## UNESCO SOURCES

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## BOOKS

### THE SILK AND SPICE ROUTES: Inventions and Trade

History is built on series of technological innovations and inventions - from the horsebit to the microchip - and their



exchange. It is through trade that much of this exchange has taken place. Across Asia, the paths of the Silk and Spice Routes brought together many peoples to trade and so gather knowledge of each others's science and inventions. In this way, some of the most fundamental technologies have evolved. Richly illustrated, this volume in the "Silk and Spice Routes" series, published under UNESCO's Integral Study of the Silk Roads: Roads of Dialogue project, explores this process. It traces revolutionary developments such as the introduction of the foot-stirrup. It looks at innovations in ship design, map-making, the invention of paper, the evolution of metalwork, textiles, astronomy and mathematics.

Finally, a chapter on the "Shift from East to West" explains that after nearly 1000 years during which the flow of ideas was largely from Asia to Europe, the balance around the year 1000 began to change as Europe emerged from its "dark ages" and the ancient trade patterns gradually eroded.

● **The Silk and Spice Routes: Inventions and Trade**, Struan Reid, Unesco/Beliitha Press 1994, illus., 48 pp., 72FF.

### HISTORY OF HUMANITY Prehistory and the Beginning of Civilization.

Forty internationally renowned experts from 31 countries present different cultures and positions in this landmark publication, the first of seven volumes. (See article on p. 23).

● **History of Humanity, Vol. I: Prehistory and the beginning of Civilization**, S. J. De Laet, ed., UNESCO/Routledge 1994, 750 pp., illus., 800 FF.

### FROM ANTICIPATION TO ACTION: A Handbook of Strategic Prospective

Published in UNESCO's *Future-oriented studies* series, this manual recognizes a range of alternatives to help planners reconcile intuition and reason and move from anticipation to action. The author, Michel Godet, a board member of *Futures* and *Futuribles*, is Professor of Strategic Prospective at the Conservatoire National des Arts et Métiers in Paris and a consultant for major European companies and international organizations. His work, cross-national in approach and using many case-studies, integrates theory, the historical evolution of management and planning techniques and the practical tools of the trade.

● **From Anticipation to Action: A Handbook of Strategic Prospective**, by Michel Godet, UNESCO 1994, *Future-oriented studies*, 283 pp., 180 FF.

## PERIODICALS

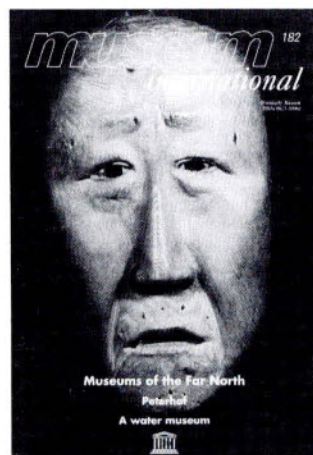
### INTERNATIONAL SOCIAL SCIENCE JOURNAL: Sociology: State of the Art II.

This issue, like the previous one, is devoted to a review of the state of the art in sociology. While the previous issue (No. 139) focused on fundamental questions of theory and methodology, together with the sociology of institutions and cultural processes, the present issue (No. 140) of the *Journal*

takes an overview of the sociology of the state, the economy and work, and also consumption, welfare, population and religion. This is the first of a series. In the coming years, the ISSJ will carry "state of the art" surveys in a number of other disciplines of the social sciences.

### MUSEUM INTERNATIONAL Museums of the Far North.

Northern peoples are becoming increasingly conscious of the unity of the circumpolar world and forging links to enable them to assert their common values and interests. The museum is now seen as a primary force in recovering the tangible and intangible aspects of collective memory, re-defining itself as an institution larger than the sum of its parts. This issue (No. 182) presents a selection of museums in Alaska, Russia, the Canadian Arctic, Greenland, Finland and Norway which are actively participating in the revival of what may be termed the "northern spirit".



### THE UNESCO COURIER

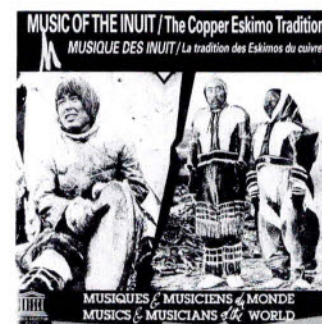
Introduced by an interview with Noëlle Lenoir, President of UNESCO's International Bioethics Committee, the *Courier* devotes its September issue to **BIOETHICS**. Articles by leading specialists report progress in the mapping of the human genome and explore the tremendous advances in genetic engineering and the vast possibilities opening up to humanity. But they also address the ethical dilemmas to be faced. The

magazine's **GREENWATCH** section, focused on MAB and Mountains, includes a report on "Greenpeace: the Rainbow Warriors".

## RECORDS

### CANADA: Music of the Inuit The Copper Eskimo Tradition.

This music of the Canadian Inuit



represents a coherent unity within the larger North American musical family and presents the same basic characteristics. Making widespread use of a pentatonic framework while not excluding the use of more complex systems and bi or tritone scales, it is essentially vocal with little melodic development. If accompanied, singers are joined by several drums or rattles. This recording is the first to present the musical expression of the Copper Eskimos, so called because of their use of the copper found in surface deposits in Canada's Northwest Territories. It thus preserves the now disappearing traditions of a culture wherein every person was a born composer and performer, giving and receiving songs and dances.

● **Canada: Music of the Inuit - The Copper Eskimo Tradition**, *Music & Musicians of the World* series, UNESCO/AUVIDIS 1994, Cassette 85FF, CD 145FF.

Publications and periodicals are on sale at the UNESCO Bookshop, or by order from UNESCO Publishing, 7 place de Fontenay, 75352 Paris 07 SP, and in Member States through national distributors. Catalogue on request.



## NARCIZA SARIJLIC: A SURVIVOR

**Y**ou must survive." This is the bottom line says psychiatrist Dr. Narciza Sarijlic; one she applies not only to herself but tries to instill into the minds of her



NARCIZA SARIJLIC  
(Photo UNESCO/Michel Claude).

patients - the women and girls raped and sexually tortured during the war in ex-Yugoslavia.

Dr. Sarijlic, 54, was one of a dozen doctors, psychiatrists, psychologists, social workers and legal experts with first hand knowledge of the situation who attended a meeting at UNESCO Headquarters on June 23rd and 24th on rape as a weapon of war.

Despite many years in the field of psychotherapy, a strong character and evident courage, she has obviously been deeply marked by her experience with these women. *"It is terrible work. We were not prepared for such things,"* she says.

A Moslem from Bosnia who has spent much of her career in Croatia, she now works with a non-governmental organization known as "Ruke" which provides therapy for rape victims and their families. *"Rape was carried out*

*systematically and often publicly, to terrorize communities, divide families and to humiliate. I am very sure it was used as a tool for ethnic cleansing"* she says. During the two day meeting she and her colleagues described camps in which women were raped until they appeared to be pregnant. Other women were kept in brothel camps where they were made available for soldiers.

*"Sexual trauma is a source of terrible shame, which is further compounded by the status of refugee."* Dr. Sarijlic tells of a young woman who *"didn't realize she was pregnant until eight months, and then would not accept that the child would be born. She described her labour pains as a kidney infection. The child was not real for her."*

Therapy encourages the women to open up, to talk of their experiences, to empty their wounds. It is also important for them to know that the international community acknowledges that a crime has been committed against them that must not go unpunished says Dr. Sarijlic. Thus she and her organization are amongst those collecting the testimonies needed to prosecute the perpetrators before the international court created to judge war crimes in ex-Yugoslavia.

*"It is essential for these women to renew their self-esteem"* she affirms. *"They are fighting to stay 'human' - not only for themselves, but also for their families. A 35 year old mother who has been raped for example, and who does not receive help, can make her adolescent daughters victims for life."*

Sue WILLIAMS

## JOSEPH NEEDHAM: CROSSING FRONTIERS

**T**he man who put the 'S' into UNESCO, Dr. Joseph Needham received one of the Organization's highest accolades on July 7, when Director-General Federico Mayor presented him the Einstein gold medal at a ceremony in Cambridge (UK).

The medal, awarded at the Director-General's discretion, was attributed to the British biochemist for his *"outstanding contributions both to international scientific research and co-operation and to the understanding of Chinese science and civilization"*.

Dr. Needham began campaigning for international scientific cooperation in 1943 from his *"outpost in China"* where he served as head of the British Scientific Mission. He succeeded in placing the issue high on the

*"In a world in which the specialist has been defined as one who knows more and more about less and less, Joseph Needham went to the frontiers not only of his scientific interests in biochemistry, notably in the field of embryology, but also across the formidable frontiers that threatened to separate science from society, from culture, from communication and from education"* said Federico Mayor.

In late 1946 Dr. Needham became Head of the Natural Sciences Section of UNESCO's new Secretariat and still holds the title of Honorary Counsellor to UNESCO conferred in 1949. He also promoted UNESCO's role in transferring knowledge from the industrialized world to the developing countries and, most importantly, learning from them as well.



JOSEPH NEEDHAM: NEVER TOO OLD TO LEARN.  
(Photo Kenneth Robinson/Needham Research Institute, Cambridge).

agenda of the nascent United Nations and by 1945 had roused the scientific community, educators, cultural thinkers and politicians to place science within the structure of the planned United Nations Educational and Cultural Organization. Thus UNECO became UNESCO.

An eminent sinologue and prolific author of scientific and philosophical works, decorated many times over, Joseph Needham remains today an eager student despite his 94 years. His latest conquest: virtual reality!

S. W.

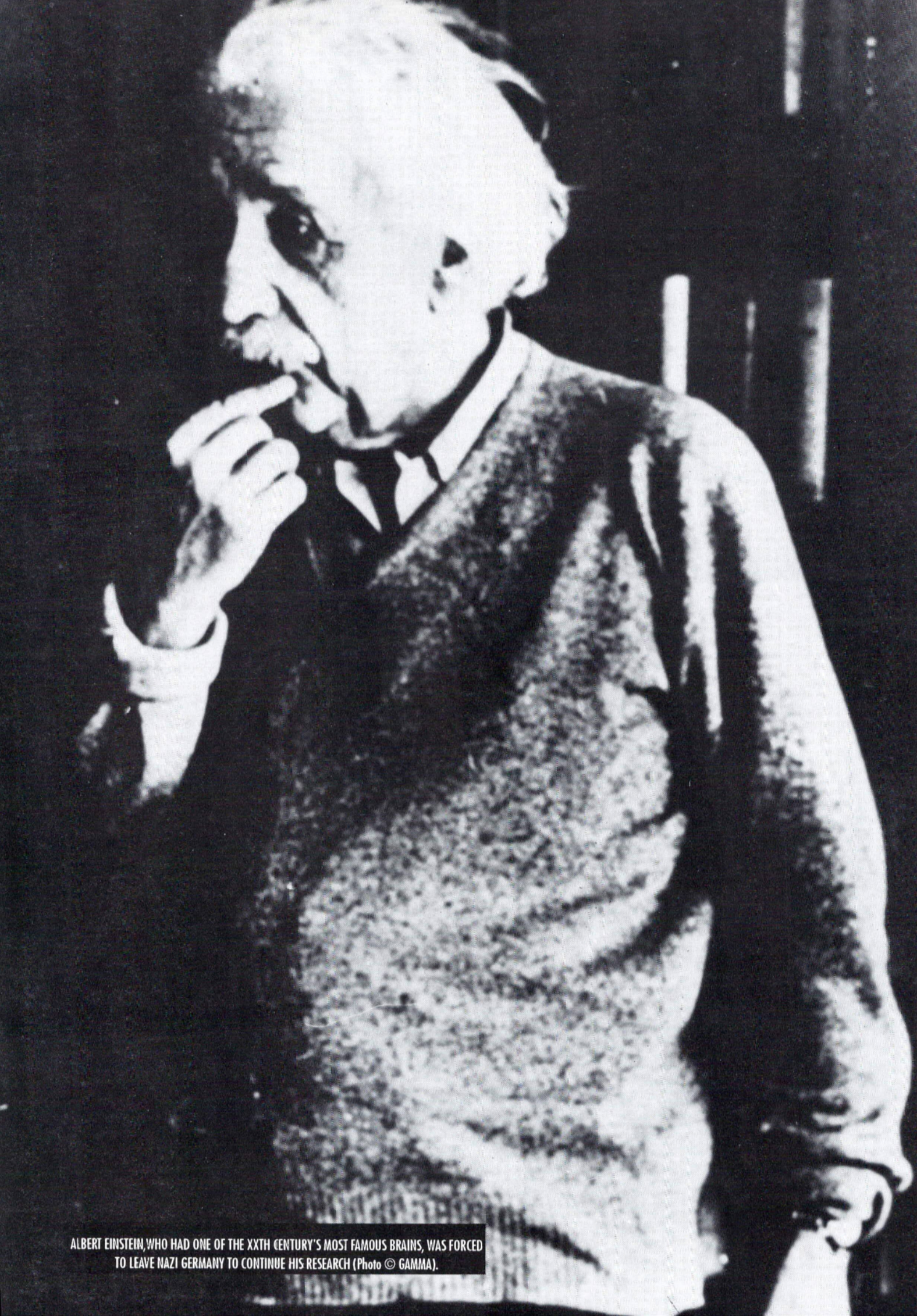
● *"Will we be capable, thanks to our authentic culture, of overcoming our economic and political 'inauthenticity'?"* This was the question posed with regard to Latin America, by Mexican writer

**CARLOS FUENTES** during a lecture given at the invitation of UNESCO's Spanish Language Committee at Headquarters on July 8. Referring to the recent insurrection in the Chiapas region in southwest Mexico, he

said *"The Chiapas forces us to understand a culture that exists beside us but is of a different time...yet very modern, because it speaks for millions of workers around the world."* *"Carlos Fuentes has the courage to say*

*his truth,"* said Director-General Federico Mayor, presenting the writer with UNESCO's Picasso Medal for his *"extraordinary contribution to literature in the Spanish language and the diffusion of Latin American."*





ALBERT EINSTEIN, WHO HAD ONE OF THE XXTH CENTURY'S MOST FAMOUS BRAINS, WAS FORCED TO LEAVE NAZI GERMANY TO CONTINUE HIS RESEARCH (Photo © GAMMA).



# BRAIN DRAIN: FOR BETTER OR WORSE ?

***With the massive emigration of scientists from Eastern Europe, beginning with the most promising and talented among them, the "brain drain" is once again a global concern. Today, however, the actually age-old phenomenon is mainly affecting developing countries. Since its consequences, in the short or the long term, at national or international level, are complex and often opposed (see below), it draws contradictory reactions. Our dossier first of all addresses three major aspects of the exodus using the examples of three, very different but all profoundly affected, countries: Benin (p.9), India (p.10), and Russia (p.11), then presents a case in point, that of a Chilean novelist, now living and teaching in Paris (p.8). To tackle the problem, the UNITWIN/UNESCO Chairs programme, is helping students and scientists find the working conditions which offer alternatives to emigration (pp.12 to 16).***

The term "brain drain" was invented around 1960 at the time of the first big exodus of British scientists - including some of the best - to the United States.

The wish, the duty, the need of an intellectual to work in the most favourable and welcoming atmosphere is as old as time itself. A thousand years ago, basic skills such as forging iron or making pottery spread across the world from their place of origin because the scientists of the day had itchy feet.

Throughout history, traders and soldiers travelling the globe have rubbed shoulders with scientists and scholars. The most respected academic centres have always drawn immigrants thirsty for knowledge whose brilliance has spread the influence of these places of learning far and wide.

Today, science and technology is the key to economic power or, at least, opens the door to development. But the "brain drain" has reached unprecedented levels. It affects rich countries - Britain has recently expressed its concern once again - not to mention the ever-swelling tide of westbound scientists from Eastern Europe whose flight, according to experts at one seminar could "lead to erosion of the intellectual potential" of some of these countries, and even "jeopardise the process of socio-economic development". Worst hit

though are the developing nations. Between 50,000 and 100,000 top scientific researchers, engineers, technicians and doctors leave the Third World every year to work in industrialised countries.

These centres of excellence draw more and more of the best brains from those parts of the world which need them most. The trend corresponds to, and aggravates, the divisions of the world in other, especially economic, domains.

How to judge this trend? A look at history shows that the blending of knowledge, which goes hand in hand with the mobility of those who have it, has always been a powerful factor in scientific progress. And then again, there is the question of rights: the Universal Declaration of Human Rights states that "Everyone has the right to leave any country, including his own..."

How then do you tell young research scientists that they cannot go abroad to complete their training and make use of facilities there to bring out the best in them, or simply to earn a better living (which is the main reason for such migration)? And would it not be better for science - and in the end for everyone, even if unequally - to approve of it rather than have researchers fail in their work for lack of key resources, or even give up for want of a suitable-level job or at the whim of some dictatorship?

At the same time, the experts all agree that once a certain threshold has been reached, this type of exodus becomes extremely prejudicial for the country left behind. The anger of those running these countries is understandable. Their populations have often made substantial sacrifices, paying high taxes to educate this elite. In the short term at least, there is absolutely no return on these investments. In the longer term, however, this same community will benefit from the knowledge gained by its emigrés either indirectly, by tapping into the knowledge available on a global scale, or directly, if these people agree to return - permanently or even temporarily - to work in their native land. Certainly, there is no simple or effective answer to this complex problem.

UNESCO is supporting inter-university cooperation through its UNITWIN and UNESCO Chairs programmes, which tackle one of the roots of the brain drain without preventing freedom of movement. Centres of excellence are created in the Third World where students can get first-class training and eventually do research in fields important to the countries concerned. The enthusiasm with which the academics have reacted to this programme is proof that it is on the right track.

René LEFORT



# A MAN OF TWO WORLDS

**Professor Jorge Rossi fled Chile after the military took power in 1973. His students in Paris are now the ones to profit from his experience.**

**H**is first name (Jorge) is Spanish. His surname (Rossi) is Italian. He was born in Chile and has taken French nationality. Jorge's father was 38 when he left Genoa, in Italy. He had a good life there and no-one ever understood why he went off to Argentina and later Chile.

Was it the adventure? In Santiago, he married a half-caste (meztizo) woman. "People called her and her people 'Indian' with faint disgust," said Jorge. "There were many Indians all over South America, but few in the 'southern cone' of Chile, Argentina and Uruguay when the Spanish conquerors came. Chile has 10 percent Indians and 60 percent mixed race, but the 30 percent who are whites run the show."

Jorge is in his fifties, slim, fair, with brown eyes and curly grey hair - and no sign of his mixed blood. After high school in Santiago, he went to the Catholic University where he was a Catholic student activist. From 1964-69, he taught at a Jesuit school in the northern port of Antofagasta. Eduardo Frei was president and his Christian Democrats were pushing social and agrarian reforms to benefit the poor.

## REVOLUTION

When Salvador Allende was elected to succeed him in September 1970, a wind of revolution gusted across the continent. Allende, a "democratic marxist," founded the Popular Unity Party, embracing communists, socialists, radicals and leftwing Christians.

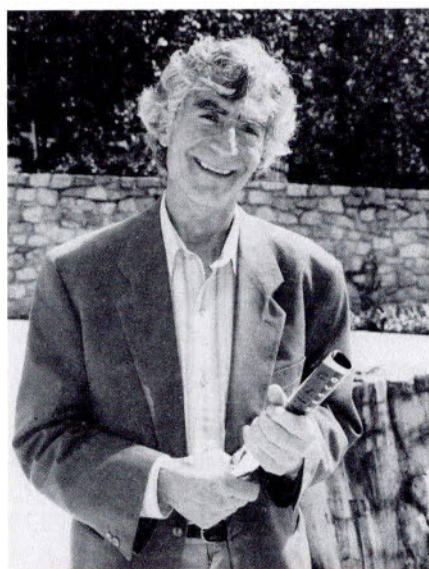
Jorge, by then teaching Spanish in a private school, liked the party's programme and joined up. He chose the field of adult education. Working people who had never been to school could not catch up on 12 years of missed education by going to evening classes, so the teachers put together a basic reading, writing and arithmetic course to educate them as quickly as possible.

In September 1973, General Augusto Pinochet and the army seized power, Allende killed himself and the parties in the Popular Unity coalition were dissolved. The new government said it arrested 30,000 people and that 4,000 people were killed and more than 6,000 fled the country, 1,000 of them to France. But independent figures

put the toll much higher, at 10,000 dead in the first six months, 90,000 jailed over 18 months and 163,000 forced into exile. Torture was rampant.

Jorge met Huguette, a Chilean with a French father. She left first, by boat, and settled in Paris, as she had French nationality. Six months later, in August 1974, Jorge escaped from Chile.

He had had several close shaves with the police but had stayed out of their grasp largely thanks to his teacher colleagues. "Although I was on their files as a leftist, the secret police, the DINA, were careless and let me get on the plane," he said. Jorge went to Paris, where he had once been as a tourist and which he has since made his home, but not without difficulty or regret.



JORGE ROSSI  
(Photo UNESCO/F. Bequette).

"I missed my own language the most. When I wrote my latest novel, *1492*, I noticed I was writing more in 'Chilean' than Spanish, probably out of nostalgia for the way we speak back home. After 20 years, I don't feel I've really fitted in here and I'm not sure I ever can. But I've come to terms with life here.

"I became French, which made for a lot of bother getting into university as I had to take all the tests I wouldn't have had to do if I'd stayed Chilean. It's irritating to have so much rigid tradition in France. In

Latin America, things can change very quickly. But I like the real democracy, freedom of expression and rule of law here."

Jorge is now a senior lecturer at the University of Paris. He teaches the ethnic history of Latin America from the Spanish Conquest to the 17th century, as well as literature and civilisation, and says he feels a bit like an "interpreter".

"I try to get the students to think critically. I explain the values of that era in Latin America and compare them with those in Europe of the time. The Aztec War wasn't to kill people, for example. Those who took prisoners were honoured for it. Human sacrifice was something for the gods. The idea of private property or competition hardly existed."

## A DUTY TO REMEMBER

In Chile, Jorge taught at high schools, at university and then taught workers. He wanted to pass on ideas which would change society and fight injustice. If he could, he would have continued on this path. He sees his departure from Chile as a failure of the left wing ideal that he had held so dear - a failure confirmed by a visit he made to Eastern Europe before the fall of the Berlin Wall.

He doesn't believe he could pick up where he left off in Chile today, despite the change in the country's political regime.

"When I went back, after the change, I found a ruthless pursuit of profit and an aggressive desire to forget the past," he said. "I wasn't tempted to go back for good, because I believe very strongly that you have a 'duty to remember'." He also has a 16-year old daughter in France who was born there and wants to stay.

What does he miss most? His mother's house, which has now been sold, and the wilderness and beauty of the Llanquihue region of southern Chile where he taught for two years amid the forests and lakes.

His happiest memory? The big street demonstrations which took place each month when Allende was in power. "It was a special moment of communication and sharing which genuinely helped people to become aware," he said.

France BEQUETTE



# IN SEARCH OF NEW HORIZONS

**Over the past five centuries Benin has "exported" its people - first as slaves and then as Africa's administrators and educated elite.**

**B**enin (formerly Dahomey), a small country of 112,622 sq. km, with a population in 1993 of about 5 million, has never had great mineral or natural wealth and so has never received one of those flattering names given by the first European explorers of the west coast of sub-Saharan Africa, such as Gold Coast (for Ghana) and Côte d'Ivoire. Its main asset has, in fact, always been its people. Thus it was first known as the Slave Coast and then the Latin Quarter of Africa.

The colony of Dahomey gave its people to most of the world. From 1505, when an edict of the King of Spain authorized the conquistadors to sell slaves in the Americas, it furnished a substantial diaspora to Salvador de Bahia in Brazil, Haiti, Cuba and eventually the United States.

In 1893, with French colonization and the establishment of the first Catholic and secular schools, the Dahomeans made excellent use of "white education" and shone academically. There were soon too many educated Dahomeans for local employment possibilities, thus the country became a supplier of doctors, primary-school teachers, midwives, clerks and accountants to the other French colonies.

## INCENTIVES

From 1910 onwards the Ecole Victor Ballo in Porto-Novo and the Ecole William Ponty in Gorée (Senegal) were the two main centres for forming the educators and administrators of the French colonies of west and equatorial Africa while the Jules Carde School of Medicine trained doctors for the two federations - French West Africa (AOF) and French Equatorial Africa (AEF). Since the Dahomeans were particularly assiduous, and because they made up the largest groups in the schools, a considerable number of them were posted throughout the colonies of the AOF and AEF.

Eustache Prudencio, a former pupil at William Ponty who is now a retired inspector of primary education, and a well-known poet and writer in Benin remembers this period well. He chose to "serve" in Senegal, which was one of the most developed countries of French West Africa. "The French colonizers facilitated and encouraged voluntary expatriation for the best

native professionals. They got an allowance for living away from home and index-linked salaries" he points out. Furthermore, "they could enjoy paid holidays with their families in Paris, in metropolitan France - a privilege few Africans would have rejected at the time".

THE CLASS OF  
1936 AT THE  
ECOLE VICTOR  
BALLOT.  
IN THE 2ND  
ROW, 4TH FROM  
THE RIGHT,  
HUBERT MAGA,  
THE FIRST  
PRESIDENT OF  
INDEPENDENT  
DAHOMY (Photo  
© All rights  
reserved).



The administration's incentives for expatriates, the taste for travel that has always motivated Dahomeans and the desire to put some distance between their large and demanding polygamous families, perhaps explains why they chose what was frequently permanent exile.

The period 1954-1972, just after independence and before the experience of the Marxist-Leninist regime in Benin, saw little change. The best students were sent off with a grant either to the University of Dakar or to a French university to continue their education. It might have been expected that the brain drain would have eased off during the 17 years of revolutionary experiment in Benin that followed, but if anything it got worse.

Although Benin had a university, for political reasons (lack of pluralism, restriction of individual freedom and so forth) many Beninese intellectuals chose voluntary exile, even though they had little chance of being fully accepted abroad because of Europe's security and anti-immigration policies. Many ended up in the new African Eldorados - Senegal, Côte d'Ivoire and Gabon experienced a considerable increase in their Beninese colonies during these years.

In 1986 the United Nations Development Programme (UNDP) launched one of its projects in Benin that had been successful in Turkey and Egypt - the TOKTEN project - whose aim was to invite expatriate science and technology graduates from developing countries to contribute their

knowledge to their country of origin. Its initial goal was to carry out a census of expatriate Beninese graduates, with the support of the State authorities. Despite the availability of UNDP funding to the tune of \$128,000, by 1993 not even the groundwork for the census had begun, at which point, battle-weary, the UNDP withdrew the funds and bade farewell to the TOKTEN project in Benin.

This failure is symptomatic of the little interest shown by the Beninese State in the brain drain, and maybe too, the lack of enthusiasm shown by Benin's voluntary exiles for returning to their roots for even a short time. It would not be an exaggeration to say that with rising unemployment and the problems involved in integrating young graduates, the tendency is still to encourage departure.

Admittedly, France and the other European countries are less and less welcoming, and the African Eldorados are currently facing huge problems as well. Conscious of this, but undaunted, some Beninese are now looking to South Africa. The abolition of apartheid may mean a new door of opportunity.

Pascal ADISSODA, Cotonou



# A LONGING TO BELONG

***For Indian scientists and high-level technicians, higher living standards and better working conditions abroad are not the only factors influencing migration.***

**A**lthough reliable statistical data is relatively scarce, a recent study indicates that about 540,000 Indian scientists and high-level technicians will be working abroad by the turn of the century, as compared with about 410,000 in 1990.

Thirty percent of this work force is in the U. S., 23 percent in West Asia and about 11 percent in Western Europe. The current annual brain drain from India to all countries is estimated at between 5,500 and 6,500, about 90 percent to the U.S.

There is no consensus on the magnitude of economic loss through brain drain or on its implication for the nation's intellectual capital. One estimate suggests that India has lost \$13 billion to the developed countries. Another puts loss at \$10 billion due to migration of 21,094 engineers alone to the U. S. from 1966 to 1986.

While brain drain has adversely affected the nation's intellectual capital, policy makers and political leaders view the problem in various ways. Many focus on the need to minimise the outflow. Others

9000 scientists have availed of this facility since it was set up in 1958.

India also participates in the UN Programme of Transfer of Know-how Through Expatriate Nationals (TOKTEN). Experts of Indian origin settled abroad are invited for short periods of 4 to 8 weeks, to assist in the country's R&D efforts.

One of the primary reasons for brain drain has been better opportunities abroad and not necessarily the absence of facilities in India. Highly qualified scientific personnel are attracted by better working conditions, higher standards of living and greater research opportunities abroad.

Those who return, do so because of family ties and other socio-cultural factors such as a sense of belonging, of responsibility toward parents, or just plain homesickness. The influence of teachers, research supervisors and professional friends, food or climate, a desire to serve the mother land and prove that excellent science can be produced in India, may also play a decisive role.

during the 1980s. Nonetheless, a detailed examination of these efforts indicates that it is only in areas where effective sub-communities of scientists exist that brain drain is minimised.

These sub-communities play an essential role in providing an intellectual climate, a set of shared values, a pattern of communication both formal and informal, leadership and direction, mediated through "invisible" colleges, and a system of academic reward and recognition.

It is, therefore, not simply an issue of increasing financial investments in research, higher salaries and better equipment. An equally important measure for minimising brain drain is to improve the "social" and "cognitive" context for production of scientific and technical knowledge. Mobility across universities, research institutions, industry and other work places, and greater opportunities for interaction with fellow researchers generate sub-communities essential for retaining highly motivated scientists.

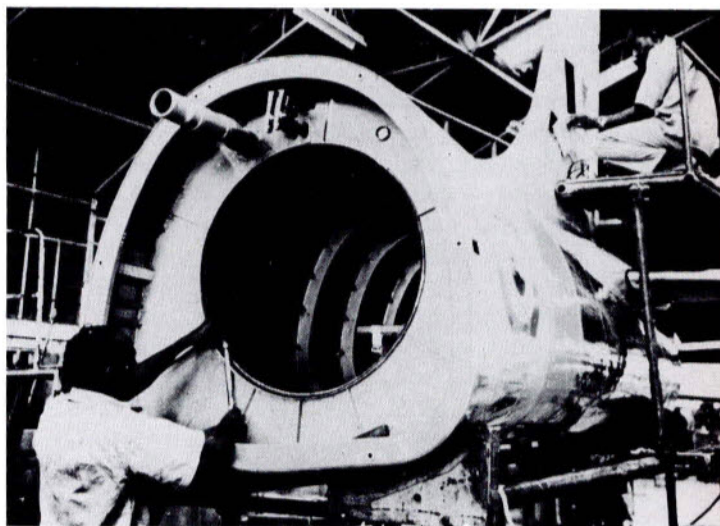
## INTERNAL BRAIN DRAIN

Also connected with endogenous production of scientific and technical knowledge is internal brain drain of which two dimensions are emerging in India. One relates to migration of highly educated scientific and technical personnel to professions that do not require such specialised training. For example, Ph.D.s taking up administrative and management jobs.

The other, even more serious, macro feature is the declining number of post graduates in science, a trend that is likely to continue during the 1990s and one which appears common even to countries like Japan, Germany, the U. K. and the U. S.

Studies across countries are essential to determine whether the world pool of qualified scientific and technical personnel will diminish or increase, date on which any future debates on brain drain must be based. This is a global issue and in a sense one that reflects changing public perceptions of science.

**Ashok JAIN, Director  
National Institute of Science, Technology &  
Development Studies, New Delhi**



AN ASSEMBLY PLANT AT HINDUSTAN AERONAUTICS LTD. IN BANGALORE (Photo Courtesy of the Indian Embassy, Paris).

contend that Indian professionals abroad should be viewed as brain bank rather than as brain drain.

The Government of India has taken a number of measures to attract Indian scientists residing in foreign countries. One is the "Scientists' Pool Scheme". Run by the Council of Scientific and Industrial Research (CSIR), it assists Indian scientists abroad in getting temporary placements in Indian institutions of their choice. Over

The lack of contacts with foreign colleagues is viewed as a strong driving force for emigration. Scientists working in areas of highly specialised disciplines often feel isolated; no one understands their language or is able to evaluate their work.

One key issue related to brain drain is the presence or absence of effective scientific community, especially for those doing research. In India, research facilities in several emerging disciplines were created



# BRAINS THAT CAME IN FROM THE COLD

***In the West, Russian scientists find working conditions their own country can often no longer provide, to satisfy their passion for research.***

**I**f you look at the figures, the situation in Russia is not catastrophic. The problem is that the people who are going are heads of laboratories, department chiefs and institute directors, leaving younger staff to fend for themselves." Valentin Valiukov, head of a programme at the Russian Ministry of Science and Technology to study the emigration of high-level staff, does not hide his concern. The departure of specialists at the height of their careers is upsetting the Federation's whole scientific structure.

According to Valiukov, Russian scientists began to leave around 1989 or 1990, before the demise of the Soviet Union. As there are no statistics prior to 1993, it is hard to judge how the phenomenon has evolved. We do know that last year 13,000 university graduates left. Among them were 3,640 engineers, 409 researchers and 194 teachers, an elite representing 20 percent of total Russian emigration (644,500 people in 1993). They mainly go to Israel, the U.S. and Germany, signing a two or three-year contract with a foreign company, then often extending their stay with new contracts.

The opening-up of frontiers does not explain everything. In the host countries, Russian scientists find working conditions their own country can often no longer provide. Russia, in transition to a market economy, no longer cultivates its intellectual resources as it once did. As a result of the economic crisis, funding for research has dwindled to almost nothing.

## EMERGING PRIVATE SECTOR

The military-industrial complex, which was a major provider of research programmes during the heyday of the Soviet Union, is now a shadow of its former self. Numerous scientific agencies associated with it have been dismantled, and the newly emerging private sector still lacks the means to take over. For Russian businesses, struggling to survive, R&D is still a remote prospect. In this context of deprivation, scientific and technological research is generally considered to be the poor relation of the Russian economy. Of 11 industrial sectors, it ranks only tenth, representing one percent of GNP. As a result, salaries in the sector are paltry. According to a Ministry estimate, half of

all Russian scientists earn less than the minimum wage. In December 1993, their average salary was 95,000 roubles (about \$50), compared to the average Russian salary of 141,000 roubles! In such circumstances, working in any branch of science calls for rock-hard dedication. It is difficult to resist offers of high-income positions and renewed scientific prestige from western firms. Russian specialists emigrate to earn better salaries, to be sure, but also to pursue more rewarding careers.

Others, unable to find employment in their field, simply change course. In 1994, this 'domestic brain drain' affected a quarter of all professionals in the sector.

In order to keep the scientific élite in the fold, officials at the Ministry of Science are starting to offer incentives in the form of scholarships, Academy of Science prizes, research funding, and the establishment of 40 top-level centres, aimed at providing professionals with favourable working conditions in their own country. This

LAST YEAR  
13,000  
UNIVERSITY  
GRADUATES  
EMIGRATED.  
HERE,  
UNIVERSITY  
LOMONOSSOV  
IN MOSCOW  
(Photo ©  
Novosti).



Financial gain is, in fact, not the sole motivation of these intellectual émigrés. According to several surveys conducted among emigration applicants, salary appeared in only fifth position on the list of reasons given for wishing to work abroad. "The majority of people questioned complained above all that they were unable to use their professional skills to the fullest," explains Valiukov. With neither public nor private funding, it is impossible to replace old equipment with new systems, the result being that experiments are at a standstill, and even the most enthusiastic scientists are running out of patience.

Emigration thus means being able to work as one wishes - and devoting oneself entirely to one's work. This is further aggravated by the low salaries which force many highly qualified Russians to supplement their income by doing odd jobs - generally to the detriment of their research.

It is not to say that those who leave are "traitors" since their departure has positive aspects as well. "We are making great efforts to develop scientific co-operation with western countries," stresses Valiukov. "With the new political situation, scientists who go abroad maintain close ties with their colleagues in Russia, serving as contacts for scientific exchange with the West".

One final problem concerns protection of collective research. How can emigrants be prevented from taking the results of team work with them when they go? For the moment, there is no law regulating these practices. Some institutes are already operating under contracts guaranteeing good salaries while at the same time making staff responsible for the safeguard of scientific property. Not many people leave these jobs.

Judith RUEFF, Moscow



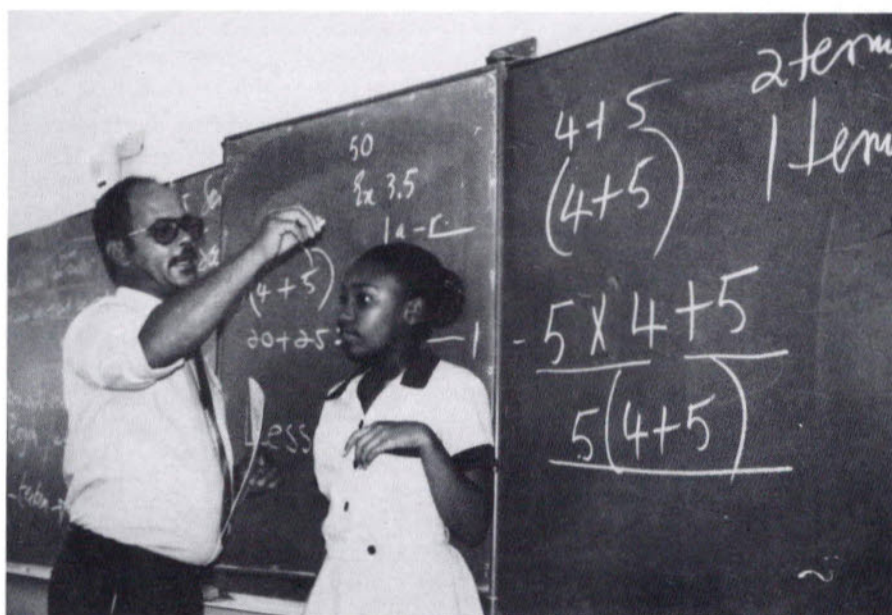
## A TYPICAL UNITWIN DAY

*Aad Goddijn and George Schoemaker, professors of mathematics at the University of Utrecht's Freudenthal Institute, keep a daily record, written, photographic (below) and videotaped, of workshops they lead in South Africa. Rather than bring with them a "ready-made" mathematics education package, their approach is to create a collaborative situation.*



When students complained that problems were too abstract, Goddijn and Schoemaker pulled out the "lion test": "k lions are given m kilos of meat. How much does each lion get?" Intended to measure how students do context-sums, the test is more subtle than it first appears, when multiple variables, such as the respective appetites of the big cats, their size, age, etc., are taken into consideration.

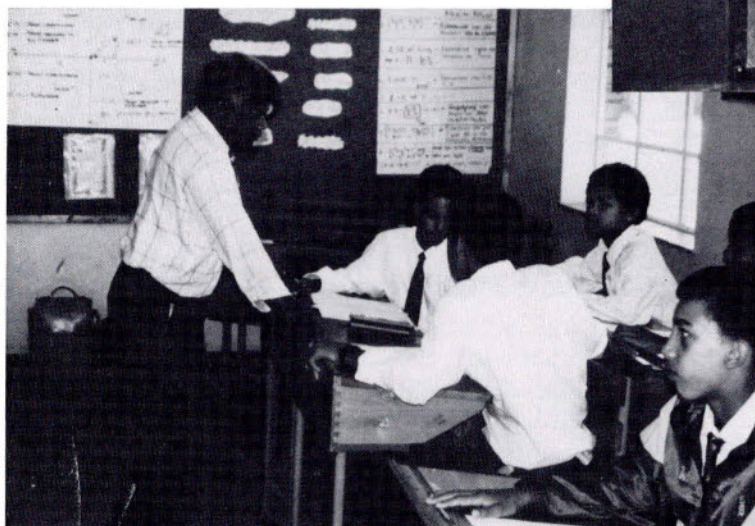
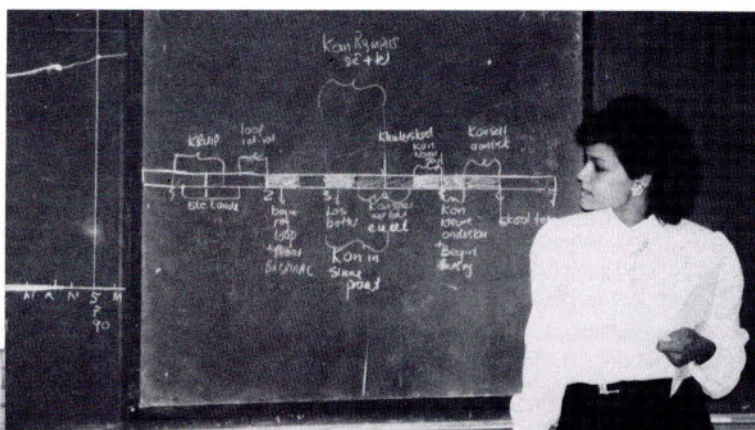
The UNITWIN "experts" leave the blackboard to master student Jerome Eventzen for a discussion with a pupil on the best way, moving from concrete to abstract, to represent length (distance/time). All of the seminar sessions were filmed on video.





***At the University of the Western Cape (UWC), master students (also secondary school teachers), professors from the UWC Math Department and high school students all pitch in to "develop their own math curriculum". Workshop topics include: global graphs, estimation and data representation.***

Another master student, Shirley Pensent, is also a secondary school teacher. The exercise she is leading consists in marking important events on a "collected data lifeline", which, with its different coloured segments, becomes a "measuring instrument". Pensent conducts the lesson in Afrikaans which the Dutchmen understand.



*Taking an active part in the workshop, Cyril Julie, Head of the Department of Education at UWC, Mathematics section, teaches a class of 7th graders at St Andrews High School.*



*At the last afternoon session, math teachers Jerome Eventzen and Monde Mbweka collect notes taken by the participants to be used as part of a teaching manual.*

*One sketch sets them laughing: to represent a horizontal and a vertical axis, Aad Goddjin has injected a touch of local colour by drawing a giraffe that has swallowed a telephone.*



# UNITWIN: A WORLD BANK FOR BRAINS

**To combat brain drain, the UNITWIN/UNESCO Chairs programme is helping set up a world network for the development of universities and research centres.**

**T**he UNITWIN concept seemed very complex, a bit fuzzy at first," recalls Prof. Jan van Ginkel, Rector of Utrecht University (Netherlands), now a staunch participant in the programme.

"This may be because UNITWIN was a project, before it became a programme," explains Marco Antonio Dias, Head of UNESCO's Higher Education Division, adding that today, two years after it was set up, this plan for twinning universities and research centres around UNESCO Chairs, has benefitted over 6,000 people.

Ever since knowledge has been shared, wise men have travelled to spread and seek more of it. In the 16th century, the Dutch humanist Erasmus moved through France, England and Italy, teaching in universities. The UNITWIN/UNESCO Chairs scheme is a direct descendant of Erasmus and his work. Set up in 1991, the programme aims to strengthen cooperation between universities and render staff more mobile through twinning agreements and other forms of association. Those taking part get financial help, and encouragement from UNESCO.

## SOUTH-SOUTH RELATIONS

Apart from traditional North-South ties, the programme aims at developing South-South and East-West relations by providing the necessary criteria and standards; it also seeks to reinforce existing networks for sub-regional, regional and interregional cooperation between higher learning institutions and research centres, and to create new networks where needed; and it fosters the creation or development, with international backing, of specialized study and advanced research centres through agreements between institutions in the South.

The main component of UNITWIN, the UNESCO Chairs scheme, offers students from developing countries training on-the-spot or in a neighbouring country. The Chairs, which are not financed by UNESCO, may be set up around a new research or educational programme, based on the appointment to a Chair of a specialist with an internationally-angled programme, or on a visiting professor. There are currently 61 Chairs with another 79 planned in fields ranging from biotechnology to genetics and human rights.

Linking the Chairs with UNITWIN networks has many advantages. In the North, a university and the surrounding region, has everything to gain from international exchanges of this kind. Also, every student from the South who is trained there gets to know the host country and is likely to maintain intellectual and economic contact with it. For the North, this is an important return on the investment. For example, a plan to move the University of

most. But if the best teachers go, who will look after their students at home? We've linked up with the universities of Bochum (Germany) and Lund (Sweden) to enlist more teachers."

Each university in the South chooses a priority area. Eduardo Mondlane University (Maputo, Mozambique) for example, chose veterinary training. Utrecht sends a teacher, adds to the library and helps with administration. In South Africa, the

JOSÉ MARIA UREÑA (LEFT), PRESIDENT OF THE SANTANDER GROUP AND FEDERICO MAYOR CONFIRM THE GROUP'S ADHESION TO UNESCO/UNITWIN (Photo UNESCO/M. Claude).



Namibia some 10 miles out of Windhoek, is, at the request of returning students, opening up the market for Dutch bicycles.

Still, training students in the North is expensive. It may also have negative results, especially if they decide to stay on in the host country, thus worsening the brain drain. In the South, UNITWIN should help in overcoming the development crisis, linked with a scarcity of trained people - due mainly to the brain drain - and contribute to a resolution of the crisis in higher education and research stemming largely from a lack of money.

But there are practical problems notes Prof. van Ginkel. "For instance, we had already linked up with universities in Mozambique and Zimbabwe, when we realized we were following airline routes. It was very much easier to fly from Africa to Europe than to another African country. So we had to find a way to move students between Harare and Maputo without their having to travel via Utrecht".

"Sending teachers to the South is the most suitable solution," he says. "Teachers go for a few weeks - three months at

emphasis is on human rights and mathematics teaching. In Zimbabwe, it is child care. In each African university over 20% of students are from neighbouring countries, which matches UNITWIN's goals.

In Europe, 31 universities in 1988 formed the Santander Group aimed at forging academic, cultural and socio-economic ties, encouraging joint projects with public and private bodies in education, food technology, engineering, business and the environment.

Now a member of UNITWIN, the group brings its experience in Latin America to the programme, and is currently forming an African network, with special attention to countries in political transition, like South Africa and Namibia.

The 21 existing networks (soon to be 33) linked with Chairs shows that the UNITWIN idea has taken root - even if the problem of "airline routes" raised by Prof. van Ginkel remains to be solved, along with the tricky task of making South-South exchange a reality.

France BEQUETTE



# THE COMING OF THE ANTI-SPECIALISTS

**The principal merit of the Ecotechie concept is to remind ecologists of the necessity for a global approach to nature.**

A gleaming white floating hotel lazily crosses the wide branch of the Danube delta with 60 teachers and students from seven European countries on board. It is not an excursion; it is a working session organized by the Bucharest UNESCO-Cousteau Chair of Ecotechnie.

Ecotechnie is a new word made up of the Greek *oikos*, home, and *tekhne*, the craft of useful beauty. It is at the same time a discipline that combines ecology, economics, technology and the social sciences, a system of ethics and a plan of action. Its aim is to formulate new management strategies that take into consideration the long-term effects on nature of economic development. This is precisely the programme of the passengers on the floating hotel as it crosses the temperate world's biggest and richest delta, where 11,000 people live in an outstanding setting.

"If you watch the students interested in the reed beds where thousands of birds settle," says François Sarano, oceanographer and diver with the Cousteau Society, who is taking part in the trip, "you won't see them studying the reeds or taking samples of the water for analysis. They are all observing the current state of the delta and thinking about its future."

Admittedly, he says, the river is polluted, but "we mustn't concentrate on that. Rivers have a tremendous capacity for self-purification. In any case, we can always do something about the source of pollution. What is more worrying is the physical impact of human beings on nature."

## CZECH DAM

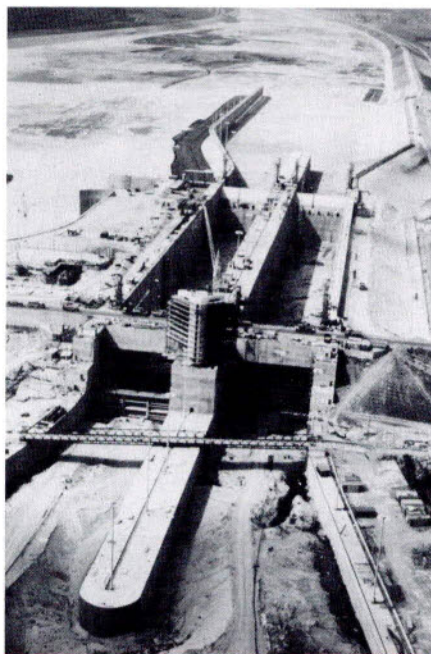
Sarano is alluding to the dam built by the Czechs at Gabčíkovo. He also points out that building work has started again on the Cernavoda nuclear power station, with the help of Canadian capital.

The students, who are working from documents and videos, raise questions such as whether it is appropriate to encourage tourism in the delta.

They suggest that it would be dangerous to encourage the construction of hotels or thalassotherapy centres with foreign capital that would bring no benefit to the local community. Why not develop tourism in people's homes?

"The impact of human beings on nature is too important for us not to think about its long-term implications," says Sarano. "Take the International Commission that controls navigation along the Danube for example. Do we need more dams and dikes? Will the costs be higher than the gains for navigation? And what harmful effects will there be?"

No models or solutions are imposed during the session. "The students found it disconcerting the first time they met at the Free University of Brussels. They're not used to this method, which deliberately attempts to shake-up well established habits."



THE GABČIKOVO DAM SITE:  
DO WE NEED MORE?  
(Photo © F. Sarano/Cousteau Society).

Jacques-Yves Cousteau, inaugurating the first chair of ecotechnie in Brussels in 1990, stressed the need for "a new kind of decision-maker, educated to understand the connections between humanity and nature, who are concerned about the future and acknowledge value beyond simple economics. This new way of thinking, that we call ecotechnie, must become a university discipline and an applied science."

It was in March 1993 that the first agreement setting up an ecotechnie chair

was signed between UNESCO, the Cousteau Society, the Université Libre de Bruxelles and the Universitatea Bucuresti. Since then further agreements have been reached with the Friedrich-Schiller Universität of Jena in Germany, the József Attila Tudományegyetem in Szeged, Hungary, the Universidad Complutense de Madrid in Spain and the Università degli studi di Firenze in Italy. Talks are underway with Egypt and with the Universidade de São Paulo in Brazil.

The curriculum includes a set of courses common to all the universities, made up of ecology, economics, social sciences and technology; optional courses specific to each university; interdisciplinary seminars and an intensive inter-university course involving experts, teachers and students, like the field trip to the Danube delta.

At this stage the chairs are all European, but others are on the drawing board for America, Africa and Asia.

## FIRST LINK

Already, the University of São Paulo, in Brazil, is setting up a UNESCO-Cousteau Chair. This university of 45,000 students will be the first link in a South American university network. The Chair is due to begin functioning in February 1995. To this effect, an agreement was signed last June 1 by Commandant Cousteau and Pierre Lasserre, Director of UNESCO's Division of Ecological Sciences.

Technology that respects the environment, together with the sustainable management of resources, must become part of the capital of the least industrialized countries. Exchanges between nations - and disciplines - are therefore essential.

As Pierre Lasserre has pointed out: "We must move away from over-specialization and re-establish a general culture and open up minds in very different fields."

The principal merit of ecotechnie is that it does not yet exist as such.

Researchers, teachers, specialists and students will have to formulate it step by step by comparing theoretical problems with specific cases.

France BEQUETTE



# NGOS JOIN IN TO STEM THE FLOW

*Twenty-five NGOs, specialized in higher education, help elaborate and carry out UNESCO's programme, including the development of UNITWIN/UNESCO Chairs.*

All over the world, governments are being forced to cut their spending for modernising institutions and systems, even as more and more people are seeking higher education. Universities are the first victims.

Since the UNITWIN/UNESCO Chairs Programme was launched in 1989, non-governmental organisations (NGOs) working in higher education have grasped its advantages. UNESCO, the catalyst, provides intellectual help and, for poor countries, "seed money" as well. This has a snowball effect, drawing additional funds from Member States, UN agencies, development banks, foundations, NGOs, individuals, public and private institutions.

The higher education community can profit from the programme's contacts and experience. UNITWIN is also backed by the Collective consultation with UNESCO of 25 NGOs. Set up in 1988 it includes regional associations specialising in higher education.

## 350 MEMBERS

These include the African Universities Association, the Association of Commonwealth Universities (ACU), the Standing Conference of Rectors, Presidents and Vice-Chancellors of European Universities (CRE), and the Inter American Organization for Higher Education (IOHE -which alone has 350 members).

Teachers are grouped into Education International (EI), the World Federation of Teachers Unions and the International Association of University Professors and Lecturers.

Students are organised in the International Association of Students in Economics and Management or in the International Movement of Catholic Students.

These 25 ONGs discuss what policies are best and act as partners in their various fields. Examples are the International Association for Educational Assessment (IAEA) and the International Federation of University Women (IFUW).

The Collective consultation's job is to advise on and help execute UNESCO's programme, including UNITWIN, training and research. More than 20 round tables have been organised with the NGOs.

In this time of crisis, drastic changes must be made in universities and other institutes of higher education. They have to be managed better. Teachers must be ready for a broad range of students with different educational needs. Research budgets are always being cut and institutions are forced more and more to seek money from industry or increase tuition fees.

The UNITWIN/UNESCO Chairs Programme can help here too. The Columbus Network, for example, ties in with the CRE which links 500 universities or colleges in more than 30 countries. The network itself comprises 70 universities in 11 countries in Europe and 13 in Latin America. It is headed by the rector of the University of Salamanca. Its main source of funds is the European Union (\$3.5 million over five years), along with UNESCO (\$50,000 to establish two Chairs), the CRE (\$80,000), Spain, Italy, Brazil and Venezuela.

Columbus has two aims in university administration: to improve educational quality and relations between universities and industry.

Another example is the Association of Partially or Wholly French-Language Universities, which links France, Canada and Belgium to three universities in Lebanon, each for a different religious community.

Jesuits, Shiites and Maronites can thus work in peace and provide advanced training in agronomy, which is especially important in reconstructing Lebanon.

## WOMEN

Another gap is women, who are badly under-represented in higher education. In poor countries, they have great trouble getting access to it. But their number is growing significantly, rising between 1980 and 1990 from 0.8% to 2.8% in Botswana, 2.4% to 4.1% in Sri Lanka and in Turkey jumping from 2.9% to 16.4%.

Nonetheless; in some countries, they play little part in running universities. Only 2% of rectors in Indonesia are women, as opposed to 6% in Finland. The lower the rank, the more you find. Wherever a university has no equal opportunity policy, women candidates are automatically at a disadvantage.

To boost women's representation, the ACU and the IOHE have launched two networks with the help of the UNESCO/UNITWIN Chairs Programme. Seminars have been held in Africa, Asia and the Caribbean. Between 1985 and 1990, more than 140 women from 50 universities were trained.

From this starting point, a UNITWIN network was founded by universities in Australia, Pakistan, Swaziland, Nigeria, the University of the West Indies and the University of the South Pacific.

In 1992, Canada, Puerto Rico, Colombia and the American Council on Education founded a similar group. The Fourth World Conference on Women next year in Beijing will be a chance to assess progress so far.

Mary-Louise KEARNEY

## TO FIND OUT MORE ...

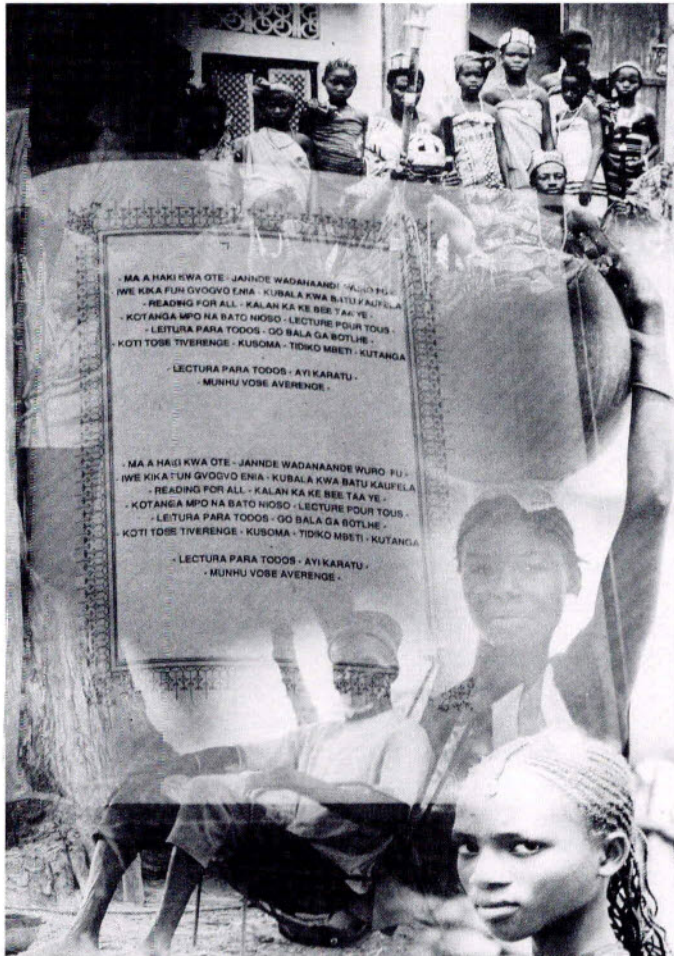
**"BRAIN DRAIN ISSUES IN EUROPE,"** Proceedings of an International Seminar organized by UNESCO in Venice (April 1993) as well as technical reports and other preparatory documents. Available from UNESCO Regional Office for Science & Technology for Europe, 1262/A Dorsoduro, Venice, Italy 30123.

**UNITWIN/ UNESCO CHAIRS:** A number of General Conference and Executive Board documents and reports as well as practical information on the programme and how to join, present a project proposal, create a network or a Chair. Available from the Director, Division of Higher Education, UNESCO.

**KEY UNESCO DATA ON EDUCATION.** The first CD-Rom on Education, usable on most microcomputers. Supplied with a brochure "UNESCO - Worldwide action in Education," includes data on UNITWIN. Trilingual Fr/Eng/Sp, colour graphics and photos. Contact the Documentation & Information Service, Education Sector, UNESCO.



# *Reading for all: a right, an asset*



● The right to read  
is one of the fundamental rights  
of every citizen.

● Illiteracy  
leads to wastage  
of available resources.

● Reading prepares  
the citizen to exercise democracy  
in a spirit of tolerance.

The **READING FOR ALL** campaign  
will benefit 27 African countries which need additional means.  
UNESCO's Book Division is collecting funds to:

- set up rural reading centres and mobile libraries,
- produce reading materials specifically aimed at rural readers,
- promote awareness among schools, families,  
youth and the media.

Send your contribution to: Campaign for Africa "**Reading for All**"  
Division of Books and Copyright, Sector for Culture,  
UNESCO, 1 rue Miollis, 75732 Paris cedex 15, France.

*Contributions go entirely to the project. All administrative costs are covered by UNESCO.*



## "THE SWALLOW OF HOPE"

### The first ever humanitarian radio station goes on the air for Rwandan refugees in Zaire.

"You're listening to Radio Gatashya, the humanitarian radio". The station's jingle boomed out over the airwaves for the first time at five o'clock on the evening of Friday, August fifth. In the makeshift studio set up in the basement of the bank serving as headquarters of the UN High Commissioner for Refugees (UNHCR), the journalists and sound technicians held their breath.

Only 10 minutes before the start of transmission, the electricity still wasn't working. And without the help of an airforce generator the launch date - already delayed several times - would have to have been put back yet again.

But, this time everything went without a hitch and Radio Gatashya - the "swallow of hope" - was able to begin broadcasting to the one and a half million Rwandan refugees who had sought relief and shelter at the Goma camp set up at the northern end of Lake Kivu in neighbouring Zaire. It's first, hour-long programme gave advice on the prevention of cholera, and presented an interview with the head of the UNHCR in Kivu Province, Filippo Grandi, as well as series of newsbriefs on the humanitarian services available in the camp. Thus one week after its arrival there, the team from the Reporters Sans Frontières (RSF) had fulfilled the first phase of its mission: to establish an emergency radio service for the Goma refugees.

The following day another RSF team from the Swiss section of the non-govern-

mental organization started a sister radio station at the Bukuvu camp at the southern end of Lake Kivu.

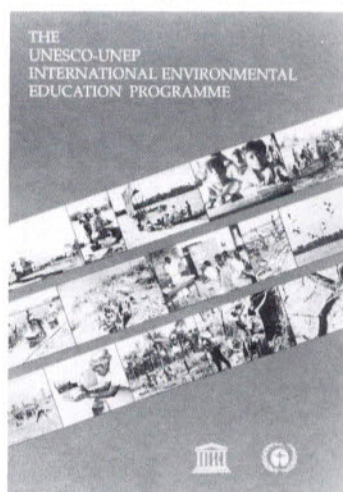
UNESCO's Director-General, Federico Mayor, signalled the need for action in the area of communications back in mid-May, amongst other things, to counter the murderous broadcasts of Radio Libre des Mille Collines. The station, run by supporters of Rwanda's defeated government was urging people to "kill even the children" and regretting "that the graveyards are not yet full".

Funds were blocked and the project to launch Radio Gatashya was then stitched together in concert with RSF. An initial contribution of \$20,000 from UNESCO was bolstered by funds from the UNHCR and the Fondation de France. French public radio and television provided the equipment and the technicians and RSF the journalists. It's the first ever "humanitarian radio" to be established in a refugee camp and made available to the relief organizations working there.

"Food, medicine and shelter are obviously priorities in a situation like this but so is information," says RSF's Robert Menard, a member of the team that put Radio Gatashya on the air in Goma.

The station, which is on air from eight a.m. to eight p.m., transmits "urgent information" on behalf of the NGOs and the international organizations. Calls such as "don't drink the water in Lake Kivu" or "boil your food" and "get your children

The goals, principles and mechanisms for action of the UNESCO-UNEP INTERNATIONAL ENVIRONMENTAL EDUCATION PROGRAMME (IEEP) are presented in a new booklet, richly illustrated with photos, eloquent figures and examples of projects on all continents. Describing IEEP's role in creating environment-friendly behaviour patterns and lifestyles as reiterated at the Rio Earth Summit (UNCED 1992), the booklet outlines the programme's action in



building awareness, the exchange of information, research and experimentation, curriculum and materials development, and the training of personnel.

Environmental Education Unit

UNESCO has tested and is currently distributing a **MINE AWARENESS KIT** in refugee camps and mined areas in Kenya and Somalia, seeded with an estimated 1.5 to 3 million mines. The kit, developed with financial backing from UNHCR, contains two cloth charts, illustrating the types of mines commonly found in the area and explaining how to approach them safely. Background material for teachers, two lesson plans and brochures are included in the package.

### UNESCO SOURCES

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### "Basic Education for Survival and Peace"

Director-General Federico Mayor released \$500,000 from UNESCO's budget at the end of July for refugee relief in Rwanda. In particular this money is being used for emergency education programmes for Rwandan refugee children. Some 300 Teacher Emergency Packages (TEP) - a classroom in a box that was first devised and used by UNESCO in Somalia - have been translated into Kinyarwanda and are being used in the Ngara camp in Tanzania for example. Each kit contains slates and chalk, pencils, rubbers and exercise books for 40 children (80 when the teachers work double shifts), cloth charts of the alphabet and multiplication tables, a teachers' guide with daily lessons, an activity book, a set of story books, scrabble sets and marker pens, chalkboard paint and a brush and tape-measure, a record book, attendance books and a pencil sharpener. UNICEF, working closely with UNESCO, has agreed to finance the production of more of these kits for the big camps in the Goma region of Zaire. The programme also provides for lessons in survival techniques, hygiene, AIDS prevention nutrition and how to deal with trauma caused by violence.





LISTENING IN  
TO RADIO  
GATASHYA AT  
THE KIBUMBA  
CAMP IN GOMA  
(Photo © Jean-  
Paul Pélissier/  
Reuter/  
MAXPPP).

vaccinated in the health centres", repeated several times daily on the air, are eventually heard. The Kivu and Bukuvu stations also offer programmes aimed at helping the refugees adapt to their new living conditions. One such broadcast was devoted to road accidents, after large numbers of children coming to the camps from the countryside had been injured. In a similar vein, the stations, with the help of the Red Cross, will transmit personal messages to help separated families and friends find each other, as well as educational programmes for children.

The information is gathered and prepared by the journalists from Reporters San Frontières. To this end, the Goma station's installation at UNHCR headquarters is a major plus, as coordination of all humanitarian activities in the camp is carried out from this base. Texts are checked by the UNHCR and translated into Kinyarwanda and Swahili by locally employed interpreters. The memory of Radio Libre des Mille Collines remains vivid, hence the decision not to risk using local journalists for the moment. "One of our biggest problems is credibility - convincing the refugees that our information is valid and given in good faith" explains Menard. "These people have had so much propaganda fed to them that they mistrust everything they hear. At the same time they have a real thirst for information and they all listen in. This means we have to be very careful." In the longer term though, the stations will be handed over to a team of independent Rwandan journalists from both the Hutu and Tutsi ethnic groups.

Many of the refugees have their own radios with them. More than 10,000 have been distributed throughout the camps for those who don't. "This might not sound like much, but one radio serves hundreds of people at a time," Menard points out. Stocks of batteries are also being gathered and distributed.

A new team of journalists has now replaced those who put the station on the air, and RSF is calling for more volunteers - journalists and technicians - to pick up the relay. And of course, more money is also required. According to Robert Menard "communications are extremely difficult in these regions and we have to use satellite telephones, which are obviously very expensive. All up, running the two radio stations will cost about \$100,000 a month".

UNESCO and the UNHCR have promised their continuing support, and RSF is confident the evident success of the project will bring in other sponsors. "The NGOs and other organizations are more than enthusiastic. Everybody is asking why this hasn't been done before."

Plans are now on the drawing board to establish another station in Kigali, the capital of Rwanda, to provide viable information to the populations who have stayed and to help those who return. "You can't calm people down, or reassure them, unless they know and understand what's going on" stresses Menard. "Good information is vital to help people survive, and to restore peace."

S. W. and  
Chantal de CASABLANCA (RSF).

Winners of UNESCO's three **INTERNATIONAL LITERACY PRIZES** were announced at Headquarters on August 10. The \$15,000 International Reading Prize will go to the National Centre for Literacy and Adult Education of Malawi which has taught 646,000 people, 85% of them women, to read in 2,500 specialized centres; the Noma Prize, also for \$15,000, to the Loreto Day School in Sealdah, part of a network to educate slum and street children in India; and the \$30,000 King Sejong Literacy Prize to the National Union of Tunisian Women for its work in lowering the drop-out rate among girls, and its literacy programmes for women in poor urban and rural areas. The Prizes will be presented on International Literacy Day September 8.

A strategy for the **WISE USE OF TROPICAL FORESTS** using a "critical mass" - the sum of sustainable development components needed to surpass in profits those from unsustainable land uses - approach, is set forth in "Tropical Forests, Integrated Conservation Strategies and the Concept of Critical Mass," No. 15 in the MAB Digest Series. The 84-page, illustrated document includes a report on field testing of one component of a critical mass strategy (nature tourism) in Kinabalu Park, Sabah, Malaysia.

The Italian Government has just contributed \$300,000 under a Fund-in-Trust agreement with UNESCO a **PALESTINIAN CURRICULUM CENTRE** to help unify curricula used in the West Bank and the Gaza Strip and prepare new curricula for Palestinian students. A major donor to UNESCO's extra-budgetary operational projects, Italy contributed \$500,000 earlier this year for Basic Education in Eritrea, as well as \$650,000 (in addition to the same amount in 1993) for training of high level personnel, notably from East Africa, at UNESCO's International Institute for Educational Planning.



## THE PLIGHT OF AFRICA'S ARTISTS

**Once honoured in traditional societies, the African artist now struggles to survive.**

Maria, Carlos and 30 others who form the **ECUADORIAN CHILDREN'S POLYPHONIC CHOIR** gave a concert at Headquarters on June 30 after a tour of several European capitals. Aged 7 to 16, they are among children in the care of



(Photo UNESCO/Inez Forbes).

the Organization for the Promotion of Literacy in the World (OPAM). The centre "Corazones Felices" (happy hearts) created in Quito by the Foundation OPAM-ECUADOR, combats all forms of child abuse. The Polyphonic Choir is one activity aimed at rehabilitation of street children who devote their mornings to singing and their afternoons to classroom study.

The Indonesian **MADE BANDEM** and **THE INTERNATIONAL BACH ACADEMY** are winners of the International Music Prize 1994 awarded by the International Music Council (IMC) and UNESCO. Director of the Indonesian College of Arts, Made Bandem, 49, has devoted his career to transmitting the rich cultural heritage of Bali and has become an ambassador throughout the world. Based in Stuttgart (Germany), the International Bach Academy organizes courses and workshops for orchestra conductors, singers and instrumentalists. Its professors and ensembles perform worldwide. The Prize will be awarded in Aachen (Germany) on September 24.

### UNESCO SOURCES

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Bernardine Alouna is 34, Congolese and a graduate of the famous Poto-Poto painting school in the centre of Brazzaville, the Congolese capital.

Since the school was founded in 1951 by a Frenchman, Pierre Lods, it has helped train several generations of African painters whose work is world-renowned.

Hengo Michel, 42, is also Congolese and a former student at Poto-Poto. Both he and Ms Alouna, like other painters and sculptors in Brazzaville, Kinshasa and elsewhere, agree they could not make a living just by selling their art.

"Once," said another painter, Louemba, who has eight children, "I could sell 10 to 15 paintings a year for about \$500-600 each." This was enough to keep his family. In recent years, he does well to sell three or four a year. To survive, he designs postage stamps and is trying out pottery and cartoons. His wife has a little business selling food. In Africa, artists can't live by art alone.

About a hundred of them from all over Africa - painters, musicians, writers, filmmakers, sculptors, actors and model-makers - gathered in Brazzaville from July 18-23 for a pan-African conference organised by UNESCO. They described bluntly what it was like to live and work as an artist in Africa.

### CONTRADICTIONS

The artist was honoured in traditional African societies and had a special role in economic and social development. These days, he or she is less and less important. This clashes with the official statements of African governments who have understood that quantitative economic growth by itself is not enough and have stressed for the past decade the unshakeable ties between culture and development.

Africa's economic crisis has become the main excuse that political decision-makers hide behind. Each year, culture gets a smaller and smaller share of national budgets. Many countries may have a minister of culture, but the trend is for the state to pull out of cultural projects and leave things to the private sector. This means artists have to fend for themselves. Even in Senegal, where the state has always

encouraged cultural and artistic production (prizes, festivals, biennials), there are signs that all is not well. The Daniel Sorano Theatre, until recently a beacon of cultural energy, has had its annual subsidy cut from \$720,000 in 1984 to just over \$100,000 this year. Over the same period, its staff has been cut by more than half, from 214 to 98. To encourage artistic creation, the Senegalese government had set up an aid fund from which it handed out some \$300,000 to artists each year for creative activities. That sum has now shrunk to \$80,000. In Côte d'Ivoire, government help to a total of 40,000 artists has only been \$10,000 a year up to now. An increase to \$300,000 has been suggested.

### A HAZARDOUS LIFE

The situation is not much better in other African countries. Culture is always seen as important but, in practice, never given priority. "The daily life of an artist is a hazardous one, with impossible financial obstacles like taxes and such," says Guédé Zouzoua, secretary-general of the Côte d'Ivoire's National union of musicians, and 90 percent have great trouble finding jobs.

In the 1970s, he explains, all big or medium-sized Ivorian towns had one or two local bands. Today most of them have been driven out of existence by taxes or fled to the capital, Abidjan, where many do nothing. The lucky ones play in hotels for the equivalent of \$400-500 a month. But many make do with \$5-10 a day. The components in locally-made audio cassettes carry a 103 percent tax while pre-recorded tapes from abroad are only taxed 55 percent, which penalises local musicians.

Importing musical instruments runs into the same problems. With a few exceptions, such as Zaire, most African countries tax them so heavily that buying them is almost out of the question. All African musicians point to the acute lack of performing equipment. Consequently most have signed contracts with recording studios in France, Belgium, Britain and the United States.

The small market discourages artists. The battle to earn daily bread takes up most Africans' energies and cultural things take



second place. A rough poll in Dakar showed that only one white-collar worker in 65 bought a general cultural book each year. Lecturers at Dakar University said they had not read a single book outside their speciality over the past six years. According to the head of a Dakar publishing firm, lack of money does not explain everything. *"You need a certain awareness to understand that acquiring culture is very important,"* she said. *"The educational system is also at fault because it doesn't include an introduction to different kinds of artistic and cultural expression."*

A Dakar bookseller notes that *"many so-called intellectuals have never bought a painting or a sculpture in their lives. Their taste is so dubious that it says a lot about their sensibility."* Cultural products, with the frequent exception of music, are sought after by foreigners rather than Africans. This is what the painters and

difficult movement of cultural work around Africa. Everyone at the Brazzaville conference - Ethiopians, Namibians, Camerounians, Guineans, South Africans or Togolese - all had the same complaints.

## PIRATING

There is also little or no legislation about cultural products and the laws that do exist are not respected. Copyright law is virtually non-existent, and too often youn artists are forced to pay their own production costs. Senegal is an exception and the country's copyright office (BSDA) has been trying since it was set up in 1972 to protect artists' property. Each year, the equivalent of \$80,000, the amount of copyright fees collected, is distributed among about 1,000 artists, musicians and writers. *"If everyone in Senegal paid copyright fees for each cultural work they made use of, culture would develop very quickly,"* notes the head of the BSDA, Amine A. Dabo.

Not only are copyright fees rarely paid, but works of art, music, films, books and other things are plundered wholesale. According to ACOP (the African Association Against Pirating), such pirating deprives African artists of more than \$600 million a year. The great priority, all African artists say, is to organise sales and fight piracy, which one Gabonese artist, Aziz Izanga, compared to murder. *"It's like a knife in your back,"* she said. *"Piracy kills the artist's work and makes him starve to death. It slows down creativity and discourages artists and producers."*

Things are just as gloomy in the world of film. No African country has a real film laboratory and all editing is done abroad. Most well-known African filmmakers, such as Mali's Souleymane Cissé or Burkina Faso's Idrissa Ouédraogo, are forced to get foreign promoters to have any chance of their work being distributed. these partners demand in return the right to vet the film and to put their own technicians on the production team.

All the artists and creators at the conference agreed that the answer could only come by tackling their own problems themselves. They called for strong professional bodies and trade unions since, they said, governments could not solve such matters.

**Diomansi BOMBOTE**  
Brazzaville

• An agreement between UNESCO and the French National Centre for Scientific Research (CNRS) was signed on July 5 by Federico Mayor, Director-General of UNESCO, Jean Sirinelli, President of the French National Commission for UNESCO, and François Kourilsky, Director-General of the CNRS.

• The agreement provides for two **TRAINING PROGRAMMES IN THE BASIC SCIENCES**. The first will make it possible for young scientists in developing countries, mainly in Africa, to train in France; the second, will enable French scientists to travel to these countries to share their knowledge and know-how with local research teams.

▼ UNESCO's 6th Summer School on **SOLAR ELECTRICITY FOR RURAL AND REMOTE AREAS** was held at Headquarters from July 4 to 29. It enabled 35 specialists from 10 countries, notably African, to recall the basic principles of photovoltaic conversion of solar energy and to familiarize themselves with the latest technological developments in the field.

• The financial resources and autonomy of the **INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)** were at the centre of debates at the IOC Executive Council meeting at Headquarters from July 5 to 13. Although about a dozen countries announced their contributions in the form of meetings, staff training sessions, publications, etc., the IOC budget is still insufficient, particularly for the implementation of priority programmes, notably the Global Ocean Observing System (GOOS), and Agenda 21, the follow-up Action Plan to the 1992 Rio "Earth Summit".

• As for autonomy, participants endorsed the Council proposal that IOC administrative status be similar to that of UNESCO's International Bureau of Education (IBE) and the International Institute for Educational Planning (IIEP).



IN AFRICA, ARTISTS CANNOT LIVE  
BY ART ALONE  
(Photo UNESCO).

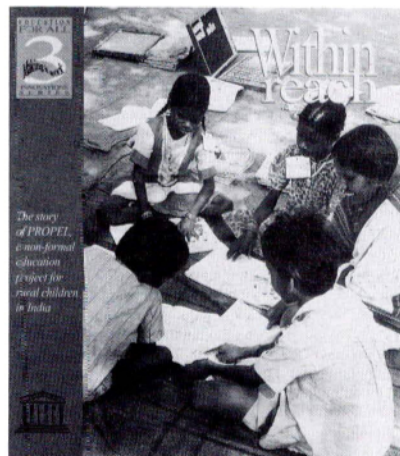
sculptors of Brazzaville and Kinshasa say. They are finding it harder than ever to sell their work since the crises in Congo and Zaire have forced a lot of Europeans to flee.

The lack of organised, working structures are the biggest obstacles - no galleries, not enough training schools, no specialised art critics, no meetings between professionals, no travelling exhibitions,



# AGATHA'S IN AND LENIN'S OUT !

Savita and Sunita are among some 3,000 out-of-school girls in Pune district (Maharashtra state, India) who are



discovering a new way of living and learning by following evening classes in their villages thanks to a project for **PROMOTING PRIMARY AND ELEMENTARY EDUCATION (PROPEL)**. Under the heading "Within Reach", No. 3 in the series of brochures "Education for All - Making it Work" reports on the project which has succeeded in mobilizing community support in favour of non-formal schooling for 4,500 children in 137 villages.

After a timid start two years ago with the **UNESCO CLUBS OF MONGOLIA** movement now boasts 19 clubs and a national coordinating body, and plans are going ahead for creation of several dozen more. In the short term, the clubs will play an important role in non-formal education, promoting educational innovation in an out-of-school context, as well as protection of the environment and reinforcement of a sense of cultural identity, particularly through a revival of ancient Mongolian script after 50 years of neglect.

## UNESCO SOURCES

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## UNESCO's Index Translationum is back, and now available on CD-ROM.

British crime queen Agatha Christie now also wears the crown of the world's most translated author topping Walt Disney's cartoon illustrated stories from the number one spot. According to UNESCO's Index Translationum, which appears this year after a three year break, and for the first time on CD-ROM, Christie's books were translated 196 times in 18 countries in 1992. The Disney publications were translated 168 times.

The Index is the world's only universal guide to books which have been translated in UNESCO's Member States. It was created in 1932 by the International Institute of Intellectual Cooperation, but at that time only contained data from six countries. Its publication was halted during World War II and then resumed under UNESCO's auspices in 1949 with 8,570 entries from 26 countries.

Librarians, researchers, students, editors, journalist and translators use this tool to learn if authors have been translated, in which languages and by which translators. The Index is also a reference that indicates a country's influence through books that have an international appeal, the most translated authors, and subjects of current interest. For example, Vladimir Lenin, one of the most translated authors of our times, slipped to only 13 translations 1992, down from 370 in 1981.

The newly released CD-ROM replaces the cumbersome tome that the Index had become. It contains all of the data published in the Index over the past 15 years: more than 600,000 bibliographic references to works by some 150,000 authors, from about 100 countries from Albania to Zimbabwe.

## CHILDREN'S FAVORITES

Looking over the 15 years it becomes clear that more and more children's books are being translated. Among the favorite authors in this category are Jules Verne, who has been translated 2,206 times since 1979, Enid Blyton with 1,764 translations and Hans Christian Andersen with 1,243.

Apart from Disney's cartoon characters, Charles Monroe Schul's "Peanuts" - the hero of newspaper comic strips - has been translated 401 times while 1,070 translations have been made of Rene

Goscinnny's stories on the antics of heroes Asterix and Lucky Luke. Hergé's "Tintin" has been translated 433 times.

The Bible has held steady as another of the world's most frequently translated publications, with 2,517 translations made since 1979. Pope John Paul II also figures high on the list with 844 translations of his writings, as well as another 39 translations



(Photo UNESCO/Michel Claude).

of works on theatre and poetry that he published when he was simply Karol Wojtyla.

Most books, or 45 percent, were translated from English. A growing number of works are also being translated from and to the languages of the world's indigenous peoples, including the Australian aborigines, the American Indians (both North and South) or the Melanesians and Polynesians of the Pacific.

Germany tops the bill as the country that has published the most translated works, with 98,421 'foreign' books produced since 1979, followed by Russia with 79,478, Spain with 74,332 and France with 49,013.

S. W. and C. M.

Available from the UNESCO Publishing Office or UNESCO sales agents for \$200 or 1,100 French francs.



# FROM LUCY TO LASER

## UNESCO begins publication of a new "History of Humanity".

Spanning events from the appearance of the first being in the hominid family classified in the genus *HOMO* to the invention of writing and the first city-states, some 5000 years ago, just-published Volume I of UNESCO's new 7-Volume "History of Humanity" covers 2 to 3 million years.

"This is so long that few people can imagine it," writes Belgian historian S. J. De Laet, editor of Volume I, suggesting the reader "compare the total duration of humankind to a 24-hour day. The invention of writing and the first city-states would then be under 3 minutes from midnight and Columbus's voyage to America just over 17 seconds before the end of the day."

Thus Vol. I: "Prehistory and the Beginnings of Civilization", condenses 99.5 percent of our history into 750 pages.

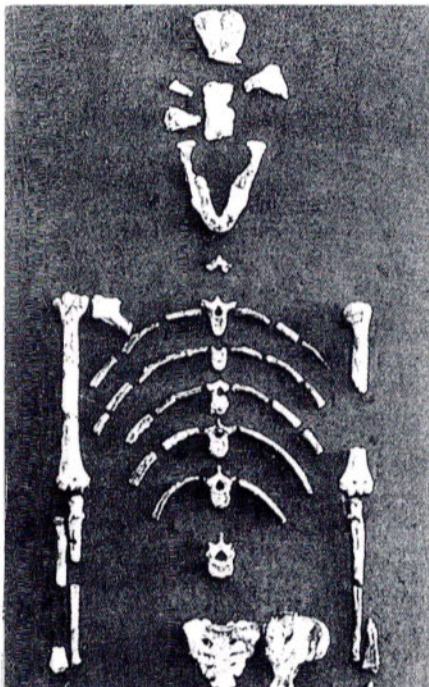
Diverging from the great apes with the help of French paleontologists Yves Coppens and Denis Geraads, we make the acquaintance of "Lucy". Indeed, if she and her family had not achieved bipedalism, climbing down from trees in the East African savannah - a small step for a simian, but a leap for humanity - we never would have made it to the moon.

### FAMILY ALBUM

The adaptations, achievements, and migrations of *Homo habilis*, *Homo erectus* and *Homo sapiens neanderthalensis*, often spiced with contradictory hypotheses, make exciting reading. And although manipulating 5.5 lbs (2.5 K) of past requires more muscle than leafing through the average family album, once you're into this fascinating work, it's hard to put down.

Especially when you arrive at the Upper Palaeolithic (c 40,000 to about 12,000 years ago) when we (*Homo sapiens sapiens*) finally emerge, penetrating all continents. The description of this "period of accelerated evolution for humanity" by Czech historian Bohuslav Klima makes our Renaissance look pale by contrast.

A first "History of the Scientific and Cultural Development of Mankind", one of UNESCO's earliest projects, begun in 1952 and completed in 1968, was widely praised, but also criticized as too "eurocentric". For instance Africa, although recognized as the cradle of humanity, was almost totally forgotten.



LUCY (BUST), 3 MILLION YEARS OLD, WAS NAMED AFTER A BEATLES SONG WHEN SHE WAS FOUND IN 1974 IN ETHIOPIA. (NATIONAL MUSEUM, ADDIS-ABABA)

The current "History" does its best to correct discrepancies. More than anything, it reflects the huge advance of knowledge and research methods over the past 30 years, not least in the prehistoric sciences and supporting disciplines like linguistics and the study of oral traditions. But the "History", written by some 450 specialists from all geocultural backgrounds under a 31-member International Commission, also records the enormous strides in science and technology and the emergence of new nations.

In 1969, Paulo de Berredo Carneiro, President of the first International Commission, predicted that "The day will come when what we have written will, in turn, have to be replaced. I like to think that our successors will attend to this and that a revised edition of the work may be published at the dawn of a new millenium".

That day has come although, says De Laet, the new "History" is "not a revision of the first edition, but an entirely new work" which, in fact, UNESCO Director-General Federico Mayor in his Preface calls "a radical recasting of its predecessor."

Betty WERTHER

At ceremonies in Beijing on July 6, UNESCO and Mondial Assistance donated one million yuan (\$115,000) for restoration of **PEKING MAN** site at Zhoukoudian, some 50 km southwest of the Chinese capital. The event marked the 65th anniversary of the discovery on the site, now on UNESCO's World Heritage List, of the first complete skull of Peking Man (*Homo erectus pekinensis*) which back-dated our origins 700,000 to 200,000 years ago. The karst cave which forms the site is endangered by erosion and collapse of strata which still contain unique archaeological material.

For the Cambodian Vysoth, "the survival of **ANGKOR** is in the hands of those who manage the cultural and natural environment of the region." Vysoth is one of 100 students of environmental protection at the University of Fine Arts in Phnom Penh, as reported in the dossier on "Angkor and the Environment" in the bulletin *Save Angkor* (July). Proper management of this World Heritage site, rich in natural resources, is essential to the well-being of the Cambodian people and the sustainable development of the region. The dossier addresses the subject from economic, touristic, training and sociological viewpoints.

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A **COLLECTIVE CONSULTATION OF NGOs ON EDUCATION FOR ALL** will be attended by about 80 specialists in Nairobi (Kenya) from October 14 to 18. *International Days, for the **ERADICATION OF POVERTY** on October 17, **UNITED NATIONS DAY** on October 24, and **WORLD DEVELOPMENT INFORMATION DAY**, also on October 24, will be celebrated throughout the UN system. The **600TH ANNIVERSARY OF THE BIRTH OF ULUGH BEG** (1394 - 1449), philosopher, astronomer and poet in what is now Uzbekistan, will be celebrated with an exhibition from October 24 to 28, a concert on October 24 and a symposium on October 25. The next regional workshop on **WOMEN AND THE MEDIA** will be held in Tunis (Tunisia) from November 2 to 4, to prepare an International Symposium on the subject in Toronto (Canada) next year. An International Symposium on **ENVIRONMENTAL ETHICS** will take place at Bosphorus University in Istanbul (Turkey) from November 7 to 12. An International Seminar on the activities of **ASSOCIATED LIBRARIES AND UNESCO CLUBS** for the World Heritage is planned with the Italian Federation of UNESCO Clubs in Florence from November 10 to 14. On November 14 and 15 in Bonn, an International Workshop on **DISCRIMINATION AGAINST FOREIGN MIGRANTS** will be held in collaboration with the German National Commission for UNESCO and the Center for Turkish Studies at the University of Essen. The 2nd **INTERNATIONAL CONFERENCE ON OCEANOGRAPHY - "LISBON '94": Towards Sustainable Use of Ocean and Coastal Zones**, will be attended by some 500 specialists in Lisbon (Portugal) from November 14 to 19. Finally, the 15th session of the Intergovernmental Council of the **INTERNATIONAL PROGRAMME FOR THE DEVELOPMENT OF COMMUNICATION** (IPDC) will be attended by about 300 specialists at Headquarters November 14 to 21.*

**OUR NEXT DOSSIER** is devoted to **UNESCO'S CULTURE OF PEACE PROGRAMME**: if conflict is an inevitable part of the human condition, war is not. Preventing conflicts or resolving them without resorting to violence is possible.