The United Nations University

Background

The United Nations University (UNU) functions as an international community of scholars engaged in research, postgraduate training and dissemination of knowledge in furtherance of the purposes and principles of the Charter of the United Nations. The idea for this type of international organization was originally proposed in 1969 by then United Nations Secretary-General U Thant, who suggested the creation of "a United Nations university, truly international in character and devoted to the Charter's objectives of peace and progress."


Objectives and main roles

As the UNU's Charter states, its aim is to foster intellectual cooperation among scholars and scientists in an effort to understand and solve "pressing global problems of human survival, development and welfare." The University has a special mandate to alleviate the intellectual isolation of academics in developing countries by organizing worldwide networks of collaborating scholars and research institutions.

Based on an analysis of the UNU Charter, it is evident that four roles are central to the UNU mission in the coming years. These are that:

- UNU should be an international community of scholars;
- UNU should form a bridge between the United Nations and the international academic community;
- UNU should serve as a think-tank for the United Nations system; and
- UNU should contribute to capacity building, particularly in developing countries.

Organization

The University consists of the UNU Centre in Tokyo, several research and training centres and programmes (RTC/Ps), and a network of associated and cooperating institutions and scholars.

The University Council sets the principles and policies for the University. It has 24 members who are appointed for six-year terms by the Secretary-General of the United Nations and the Director-General of UNESCO. Members serve in their individual capacities, not as representatives of their countries. There are three ex officio members: the Secretary-General of the United Nations, the Director-General of UNESCO and the Executive Director of the United Nations Institute for Training and Research (UNITAR).

The UNU Rector is also a Council member. The Rector is the University's chief academic and administrative officer, with responsibility for the direction, organization and administration of its overall programme.

Research and training directions – towards the next century

The University studies the effects of human activities, which are altering the world on an unprecedented scale. Particular importance is given to those that influence developing countries. The University's academic activities are coordinated and carried out by the UNU Centre and the RTC/Ps as well as through a global network of associated and cooperating institutions and scholars.

UNU Centre, Tokyo, Japan (1975)

The work of the UNU Centre is divided into two thematic areas: Environment and Sustainable Development and Peace and Governance. The Environment and Sustainable Development Programme focuses on the interactions between human activities and the natural environment, in particular the challenges facing developing countries. The aim of the Peace and Governance Programme is to contribute, through research and capacity building, to the promotion of peace and good governance. The UNU Centre also coordinates the training and fellowships programme, providing grants to train young scientists from developing countries.

UNU World Institute for Development Economics Research (UNU/WIDER), Helsinki, Finland (March 1985)

UNU/WIDER, the University's first research and training centre, studies global economic policies that will help improve human lives. Its studies are conducted by an in-house staff of research fellows, economists and scholars. Although there are many economic "think-tanks," UNU/WIDER is one of the few focusing on the problems of developing countries. Its ultimate purpose is to help such countries form economic policies that lead to robust, equitable and environmentally sustainable growth.

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Rector's Message

We live in challenging times. On one hand, the second half of the 20th century has been characterized by broad-scale peace and greater improvements in human livelihood than in any other period of history. On the other, however, for many people on the planet, the United Nations' goals of peace and prosperity seem as elusive as ever. For example, it is estimated that:

- around 3 billion live on less than $2 a day, and 1.3 billion on less than $1 a day;
- 130 million never have an opportunity to go to school;
- 1.3 billion do not have clean water to drink.

The founders of the United Nations University gave it a challenging mission: to develop original, forward-looking solutions to the world's most pressing problems and to help build capacity particularly in developing countries. The value of the UNU – as a university, yet within the UN system – is that it not only seeks responses at a theoretical level, but also concerns itself with the down-to-earth need for practical action.

As highlighted above, the mission of the UNU remains as relevant today as when it was founded. Much has been achieved but much remains to be done. This is particularly the case because there have been major shifts that have made the University’s mission more complex and, at the same time, its role more important.

First, the economic, political and social conditions in the world as a whole have changed dramatically in recent decades. Globalization, rapid technological advances and the shift towards knowledge-based societies offer great opportunities. But they also present challenges, even threats, to many countries. The University will strive to help equip a new generation of decision makers to face these opportunities and challenges. This will require seeking fresh, alternative views on today's problems, a proactive analysis of emerging problems and the formulation of sound policy alternatives.

Second, the functioning of the United Nations itself has changed too. The UN Secretary-General Kofi Annan understands the value of the UNU's capabilities to the UN system. His proposals for reorganization of the United Nations include a challenging invitation to the UNU to play a leading role, in creating synergy within the knowledge infrastructure of the organization. The UNU is prepared and indeed is gearing itself to play such a role.

Sustainable human development is a core theme in our activities. It is widely understood, however, that there will be no such development as long as "human security" is not ensured. Solutions on the local, national, macro-regional and global levels are also mutually linked.

The University focuses its work within two thematic areas – Environment and Sustainable Development, and Peace and Governance. Within these areas the University undertakes research and training on a broad range of issues: from food and nutrition to information technology; from land use and climate change to the freshwater crisis; from managing international financial flows to the challenges of urbanization; and from the legitimacy of international organizations to the causes of complex humanitarian emergencies.

Without weakening its capacity for reflection and fundamental research, which makes the UNU really unique within the UN system, I am particularly concerned with getting useful research about pressing global issues into the hands of policy makers. It is my experience that, too often, very good, extremely relevant research lies unused, gathering dust in forgotten files and library shelves. This means making sure that the UNU provides actual and potential users with a continuous supply of intelligent and suitable options from which to choose. UNU scholars will therefore not just send their articles and papers to relevant journals and interested researchers, but will actively engage in the direct exchange of ideas and research findings with policy makers and practitioners.

This year's Annual Report outlines the type of work that we do and some of our newest ideas and research results. It has been designed to give you a jargon-free snap-shot of our work. I hope that you find the information it contains interesting and useful and that it gives you a better understanding of what UNU is all about. I also invite you to write to me with comments or new ideas on relevant issues and to work with us in achieving the goals of the United Nations.

Hans van Ginkel
Rector
The Year in Review

Introduction

The year 1998 marked the 23rd year of work for the United Nations University (UNU). The University continued to stimulate international academic cooperation through focused research initiatives and capacity-building programmes, and by disseminating the results of this work.

In 1998, the University began to focus its research and training efforts within two thematic programme areas. Within the area of Environment and Sustainable Development, work has focused on the complex interactions between human activities and the natural environment, and on the economic and market development challenges facing developing countries. Within the area of Peace and Governance, the University has sought to contribute to the promotion of peace and good governance, and the mitigation and prevention of humanitarian emergencies. The results of the University’s work are disseminated through conferences and workshops, books, journals, newsletters and the Internet. We have also provided policy inputs based on our research to major international conferences on higher education, climate change and African development.

The year 1998 was also characterized by taking stock of what was done in the past, identifying strengths and weaknesses, re-orienting academic activities and strengthening our capacity to undertake them, and building confidence in the University among our colleagues in the United Nations system and in our main host country, Japan. We have also started strengthening the administrative functions of the UNU system.

Principal Developments in 1998

Governing Council

The University’s Council, our governing body, held its 45th session at UNU Centre in Tokyo, from 7-11 December 1998. Their deliberations focused on four main topics: reviewing the year’s activities; discussing the key recommendations from recent evaluations of the
University; assessing and improving the University’s administrative and financial management system; and discussing a draft Strategic Plan for the University for 1999–2002.

New Senior Management Team
One priority in 1998 was the revitalization of the academic capacity of the United Nations University Centre in Tokyo. Professor Ramesh Thakur was appointed as Vice-Rector for Peace and Governance. Professor Motoyuki Suzuki was appointed as Vice-Rector for Environment and Sustainable Development. Professor Hideo Sato was appointed as Senior Adviser to the Rector. New Academic Programme Officers and Academic Programme Associates were also appointed to strengthen both programme areas.

New UNU Mission Statement
The conference of directors (CONDIR) of UNU research and training centres and programmes (RTC/Ps) has also taken on an enhanced role in University planning. At its 15th Session in June, a reformulated mission statement was agreed upon:

“To contribute, through research and capacity building, to efforts to resolve the pressing global problems that are the concern of the United Nations and its Member States.”

The CONDIR meetings also led to agreement on four key roles for the UNU as it pursues its mission:

- as an “international community of scholars”;
- as a bridge between the UN and the international academic community;
- as a “think-tank” for the UN; and
- as a supporter of capacity building, particularly in developing countries.

The UNU has used its CONDIR meetings as well as the meetings of the advisory boards and committees of its research and training centres and programmes to seek consensus on the strategic directions the University should take in the next few years. The Rector has begun to consult with senior officials of the UN system on specific research and capacity-building needs with a view to enabling the UNU to become more of “a strategic intellectual resource” for UN organizations. The UNU is now poised to expand its output of policy-oriented research, allocate more money for capacity-building activities and incrementally expand its network of strategic partners.

Outcomes of Inspections and Evaluations
In early 1998, the University finalized its own self-assessment based on the comments of the UNU Council at its 44th Session in December 1997. The self-assessment highlighted the areas, such as academic planning, quality assurance, administration and personnel policy, which required improvement, and gave indications of how such improvements were to be achieved. The self-assessment was seen as the first step in evaluating the UNU to feed into and be followed by an external peer review after the first 20 years of academic activity.
The 20-year peer review started in January and was completed in September. In addition to an evaluation by academic peers, the UNU was also reviewed by two oversight units of the UN: the Joint Inspection Unit (JIU) and the Office of the Internal Oversight Services. All three evaluation reports were tabled at the 45th session of the Council in December. While highlighting a number of areas requiring attention, the reviews were generally supportive of the work of the University and the changes being made by the University’s new management.

**Work Areas and Highlights**

**Environment and Sustainable Development**

There were great efforts in 1998 by policy makers and researchers to understand the causes and try to remedy the impacts of the financial crisis in East Asia as well as to understand its impact on the global economy. UNU research on Short-Term Capital Movements and Balance of Payments Crises provides suggestions for managing capital flows and for reshaping the international financial architecture.¹

The UNU has also continued its focus on the particular development challenges of Africa and of Economics in Transition. This work not only looks at the strategies for market development, but also at the outcomes of these processes. The findings of a number of projects indicate that the Washington Consensus understanding of factors affecting performance in both regions is inaccurate and incomplete.

Implementation commenced in 1998 for the new four-year phase of the flagship project People, Land Management and Environmental Change (PLEC) with US$6 million funding from the Global Environment Facility (GEF). By working with farmers and other stakeholders at demonstration sites in participating developing countries, PLEC aims to develop multiple replicable models of agrodiversity management in a variety of ecosystems, landscapes and regions.²

**Peace and Governance**

The conflicts in the Balkans and Central Africa are a constant reminder of the massive human suffering caused by civil wars. The UNU work on The Wave of Emergencies of the Last Decade is the first extensive analysis of the economic and political roots of vulnerability to humanitarian disasters and the political economy of the prevention of humanitarian emergencies.³

The UNU is undertaking work linked to the process of UN Reform. UNU work on The Legitimacy of International Organizations outlines some of the comparative advantages of and niches for international organizations. The work on The Corporate Culture of the UN Secretariat suggests practical adjustments aimed at improving the utilization of the Secretariat’s human resources.

The nuclear tests by Pakistan and India in 1998, in contrast to the widespread signing of the non-proliferation treaty, have put the nuclear issue back on the international agenda.⁴ This will be an important avenue for future UNU work.

**Capacity Building**

The University provided 226 fellowships and internships to young scientists, of which 177 were from developing countries, thus helping to strengthen institutional capacity. In addition the University carried out 44 short training courses, of which 33 were in developing countries, on issues ranging from software technology to water management to sustainable use of natural resources.

Implementation also began on a large, multi-year programme to develop a “National Capacity-Building Framework for the Mexican Water Sector” through a partnership between UNU/INWEH and the Mexican Water Commission. The framework will be an integrated remediation plan that identifies gaps in existing national and state capacity for effective urban water management.

Preparations are nearing completion to launch the UNU International Courses (UNU/IC) for a select group of postgraduate students and professionals who are seeking jobs in international fields. The first set of courses will be held in spring 1999 at the UNU Centre in Tokyo.

**Dissemination and Public Lectures**

Thirty-four new books based on the work of the University were printed in 1998. In addition, we continued to expand and update the UNU’s homepage and the websites of RTC/Ps.⁵ The University had 95 articles in scholarly and popular journals and 102 articles printed in the press.

The University also produced a promotional video on Global Challenges, Global Visions, which includes a general overview of the mission of the UNU as well as concrete examples of our work.
The University hosted lectures by such distinguished speakers as: Astrid Neklebye Heiberg, President of the International Federation of Red Cross and Red Crescent Societies; Thabo Mbeki, Deputy President of the Republic of South Africa; Olara Otunnu, Special Representative of the UN Secretary-General for Children in Armed Conflict; Sadako Ogata, UN High Commissioner for Refugees; Mary Robinson, UN High Commissioner for Human Rights; and Joseph Stiglitz, Senior Vice President and Chief Economist of the World Bank.

International Conferences

The University made contributions to a number of major international conferences in 1998. In particular, the UNU:

- contributed to the UN Commission for Sustainable Development Meeting on Strategic Approaches to Freshwater Management in Harare, Zimbabwe, in January;
- played an important role in organizing, and made significant contributions at, the UNESCO World Conference on Higher Education in Paris in October;
- contributed to the Second Tokyo International Conference on African Development (TICAD II) held from 19-21 October in Tokyo;
- contributed to the discussions and carried out training workshops at the UN Framework Convention on Climate Change (UNFCCC) COP4 in Argentina in November.

Institutional Developments

UNU/INTECH moved. In January 1998, the Institute moved into a new site in the centre of Maastricht. The new premises were generously made available by the City of Maastricht and the Government of the Province of Limburg.

UNU/INRA expanded. The tissue culture facility at the University of Ghana was expanded to enable it to conduct more research and training on conservation, genetic improvement and evaluation of plant genetic resources. The facility has already been used for a three-week postgraduate training course in Tissue Culture Technology.

Links to Iceland strengthened. This year marks the 20th anniversary of collaboration between the UNU and Iceland.

The long history of collaboration on the Geothermal Training Programme between the UNU and the National Energy Authority has made it possible for 213 young scientists and engineers from 35 developing countries to receive high-level training over the last 20 years. The University is very grateful to the Government and institutions of Iceland for this particularly successful example of sustained support for capacity building. The UNU and the Government of Iceland also launched a new Fisheries Training Programme at the Marine Research Institute in Reykjavik.
Links to INCORE strengthened. The Peace and Governance Programme is revitalizing its academic cooperation with the Initiative on Conflict Resolution and Ethnicity (INCORE), Ulster, Northern Ireland, UK. To this end the Agreement of Cooperation between the UNU and INCORE was reached in August 1998. As a first step, UNU will support a comparative study of the peace process in up to eight conflicts where significant settlements have been attempted.

New urban issues RTC/P. A feasibility study recommended the establishment of a new RTC/P in Luzern, Switzerland, focusing on urban issues. The study was favourably discussed at the Council Session in December.

New initiative related to “Nature and Human Security.” Preliminary discussion continued on a possible feasibility study to set up a new RTC/P focusing on environmental hazards, climate change and food security.

New social science initiative. Discussions commenced with Belgian officials, the College d’Europe and the Fondation Salvador Madariaga concerning possible joint research activities related to “opening the social sciences,” and for a possible research and capacity-building initiative on inter- and intra-regional cooperation.

New Agreements

The UNU entered into the following agreements during 1998:

- A Memorandum of Cooperation with the Regional Centre for Water Supply and Sanitation (CREPA) in Burkina Faso regarding capacity building in the water supply and sanitation sector.
- A Memorandum of Understanding with the Lake Victoria Fisheries Organization (LVFO) to collaborate on training, research and management advice for Lake Victoria, East Africa.

Finance and Administration

In April, the Rector established four task forces to assist him in analysing and improving four key administrative areas: financial management, personnel policy, information and communications technology, and building and facilities management. Each of these task forces presented its basic findings to the CONDIR and to the governing Council in December. It is expected that new policies covering these areas will be further developed in the first half of 1999.

Future Directions and New Initiatives

The University is in the process of drafting a strategic plan to help guide the period 1999-2002. The strategic plan will establish a set of institutional goals in order to assess our performance and to help us assure the quality of UNU research and capacity building. A draft was discussed at the Council meeting in December. Following the discussions by the Council, consultations with the UNU’s main partners and stakeholders will continue through the first half of 1999.

This report does not provide an exhaustive account of all the UNU’s academic work. Instead, it provides greater detail on some of the University’s main initiatives and work areas in 1998. First, it highlights some of the University’s research activities within the two thematic areas: Environment and Sustainable Development and Peace and Governance. Second, it describes the UNU’s efforts in post-graduate training and dissemination of research. And third, it outlines ways in which the UNU tries to fulfill the main roles outlined for it in the Charter.
The University’s Research: Issues and Key Findings

Environment and Sustainable Development

“The research programmes of the institutions of the University shall include, among other subjects … economic and social change and development; the environment and the proper use of resources; basic scientific research and the application of the results of science and technology in the interests of development…” [UNU Charter Article I.3]

Globalization

The forces of globalization are perhaps the most important factors that affect the environment for human development and welfare, in both developed and developing countries. In particular, participating in the global economy provides immense opportunities for developing countries to access world markets, finance and technology. But, participating in the global economy also poses significant challenges for economic management and can lead to massive threats as shown by recent Asian experiences.

Thus, investigating the (i) forces driving globalization, (ii) economic, social, environmental and political impacts of globalization, (iii) appropriate policy approaches to maximize opportunities and minimize risks, and (iv) necessary global institutional set-up required to deal with the evolving international context, form particularly important multi-disciplinary research agendas for the United Nations University. In 1998, issues associated with globalization were at the heart of a variety of research projects undertaken by the University. Outlined in this Annual Report are some of the findings of University work on the Asian financial crisis (p. 8), reversing Africa’s marginalization (p. 8), and the impact of globalization on cities (p. 11).

The Asian Crisis

The financial crisis in East Asia has had a profound impact on welfare in the region as well as impacts throughout the global economy. This has led to discussion regarding the most appropriate approach to managing capital inflows into developing countries. It has also led to proposals for re-orienting the global financial architecture.

The results of UNU/WIDER work on Short-Term Capital Movements and Balance of Payments Crises stand up very well in the context of the Asian economic crisis. The project particularly highlighted the importance of resisting unsustainable capital inflows, insulating the domestic financial system from short-term capital movements, and prudently supervising banks during periods of expansion. The findings of the research were presented at a seminar in Kuala Lumpur comprising senior staff of central banks in the Asian region.

The current international discussion in the light of the Asian crisis on the “architecture” of the international financial system should be able to draw on the following propositions developed in the project: (i) the appropriateness of controls on capital inflows; (ii) the potential role that source countries can play in helping emerging economies reduce the pressure of capital inflows; (iii) the importance of monitoring real sector effects of capital inflows and not getting distracted by the seeming abundance of external financing; and (iv) the need to maintain sustainable macroeconomic balances and to face the difficulties associated with exchange rate appreciation or domestic inflation.

Reversing Africa’s Marginalization

The extended economic stagnation and increasing economic marginalization of Africa have had severe implications for the livelihoods of people on the continent. The UNU has undertaken a number of projects assessing the recent economic reform efforts and trying to identify ways of strengthening Africa’s integration into the global economy. While African states’ interventions in the economy were largely unhelpful, all the UNU projects identify concerns about the Bretton Woods Institutions’ (BWIs) approach to economic policy, and particularly about their approach towards African states. This work enabled the UNU to make a significant policy contribution to the Second Tokyo International Conference on African Development (TICAD II) held from 19-21 October 1998.

The UNU/WIDER project on The Impact of Liberalization on Key Markets in Sub-Saharan Africa
looked at the liberalization of markets implemented within the framework of the Washington Consensus. It concluded that liberalization has not attained a balance of payments equilibrium and improvements in allocative efficiency nor provided a coherent linkage between the short-term objective of stabilization and the long-term objective of growth and poverty reduction.9

Since most producers in Africa are in rural areas and the urban informal sector, current policies of financial liberalization have not improved their prospects of accessing credit and financial services. Mobilizing domestic saving and providing funds to profitable projects and capable entrepreneurs will require the establishment and development of an appropriate institutional framework. This requires a proper understanding and promotion of complementarity of the state and the private sector. The bashing of the state that characterized the policy thrust of the Washington Consensus misunderstood African realities and the development experience in other parts of the world.

The UNU Centre project on Asia and Africa in the Global Economy, undertaken in collaboration with the African Economic Research Consortium (AERC), compared the external performances of Africa and South-East Asia in order to identify key lessons that could be adapted to African contexts.10 The lessons stem both from East Asia’s experiences of rapid integration with the global economy as well as from the ongoing economic crisis. The project produced a policy brief that was distributed to the African delegations and donor representatives who participated in TICAD II.11

The key findings were that African countries will need to take a strategic approach towards the forces of globalization, based on the following propositions:

- **First**, integration is multidimensional, involving among others the aspects of trade, investment, capital flows and technology. The optimal level of openness and optimal policy mix to achieve integration will differ for each aspect depending on the development in each particular market.

- **Second**, international economic interactions are currently characterized by a “fractured globalization” — in particular, trade is concentrated in regional blocs instead of being fully global. Therefore, countries should take an approach that is regional and strategic rather than global and uniform.

- **Third**, policy reform is not enough. The research highlighted the importance of institutional factors such as political commitment, administrative competence, and secure property and contract rights. As well as being important in their own right, institutional factors have implications for the pace, timing and sequencing of policy reform.

- **Finally**, it is clear that benefits from globalization can be unevenly distributed at the national level. There is a need to take measures to prevent increasing inequalities as integration proceeds.

### Economies in Transition

The group of economies in transition face distinct development challenges. The UNU/WIDER project on Economic Theories and Strategies and the Economics of the Transition looked at the economic policies and patterns of development of European and Asian economies in transition. The emphasis of this project is not only on strategies of transition (shock therapy versus gradual reforms), but also on the outcomes of the process: aiming to establish what market stereotypes are emerging in the post-socialist world (income and asset distribution, the role of the state, industrial structure and international trade specialization) and what patterns of long-term development will prevail in these countries in the future.

The major conclusion of the project is that the Washington Consensus understanding of factors affecting performance during transition is inaccurate and incomplete.12 After factoring in initial conditions (pre-transition distortions in industrial structure and trade patterns), it turns out that the speed of liberalization does not really matter for performance, whereas the institutional capacity of the state and the rates of inflation matter a great deal.

Work from the UNU/WIDER project on Well-being in Asia During the Transition demonstrates that: (i) economic growth or the lack of it has been a decisive factor in the changes in basic welfare conditions; (ii) economic performance, however, has not represented a clear dividing line as many social indicators are showing trends which do not entirely depend on economic growth; and (iii) in terms of social cohesion, relative economic performance appears to be even less relevant.13 The studies conclude that neither the establishment of a market economy nor economic
An unprecedented mortality crisis over the last nine years in most nations of Central and Eastern Europe and the former Soviet Union is one of the most striking results of the transition. A shortage of credible analyses has not helped mobilize adequate political attention and suitable policy responses. The UNU/WIDER project on Economic Shocks, Social Stress and the Demographic Impact examines what policies can reduce such sharp rises in mortality in economies undergoing rapid economic and social change.

The project has provided strong new evidence that the main sources of the increased mortality in Russia are not to be found in ecological degradation, poverty and malnutrition, deterioration in lifestyles, or alcohol consumption, but instead in anxiety and stress-raising events, for which adverse changes in the labour market play a dominant role. The project has also shown that there are concrete policies (such as those followed in the Czech Republic) which can substantially reduce transition-related mortality increases and lead to a major improvement in life expectancy over the long term.14

**Urbanization and Mega-cities**

As we move into the 21st century, almost half of the world’s population will reside in dense urban agglomerations. The challenge for the UNU and the international community is to develop informed responses to the unprecedented population, economic, environmental and technological changes in human settlements. Ongoing research at UNU/IAS builds upon past studies of economic structural changes and population movements as they pertain to global integration, environmental stress and increased poverty in urban centres around the world.

The trend towards urbanization is particularly pronounced in the Asia-Pacific region, and the most dramatic changes are yet to come. The UN predicts that there will be 1.3 billion more people living in Asia-Pacific cities in 2025, an increase of over 90 per cent from 1995. China alone will account for the rural to urban movement of over 400 million people during this period.

A workshop on Globalization and the Sustainability of Cities in the Asia-Pacific Region was held in June in Vancouver. Participants of the workshop came to a consensus on four main points: (i) that each city is undergoing physical changes that can be attributed to global economic forces; (ii) that these forces are holding the “functional city system” in the region together despite the current crisis; (iii) that the roles of cities differ and, therefore, that globalization has varied impacts on the cities in the group as well as varied impacts on the urban landscape within the cities; and (iv) that city management is crucial to understanding current urbanization trends, and therefore that globalization does not mean that cities are “homogenizing.”

**Land and Biodiversity**

The UNU Centre project on People, Land Management and Environmental Change (UNU/PLEC), initiated in 1992, is one of the University’s flagship projects. The overarching goal of the project is to develop sustainable and participatory approaches to biodiversity conservation within agricultural systems. The project focuses on how to address biodiversity loss in agricultural lands located at the margins of forests, semi-arid regions, mountains, wetlands, and land corridors. Very little work has been done in these areas, where plants and crops are under threat from commercial and intensified production. The project is designed so that its outputs will have strong practical utility, influencing policy-making in these areas.

The PLEC approach is to collaborate with farmers and local communities at demonstration sites in identifying appropriate conservation strategies that are environmentally, socially and financially sustainable, and which maintain biodiversity. By integrating locally developed knowledge of soil, climate, and other physical factors with scientific assessments of their quality in relation to crop production, a set of sustainable agricultural technologies can be devised so that crop diversity and management diversity are maintained. The project is organized into country-based clusters in Brazil, China, Ghana, Guinea, Jamaica, Kenya, Mexico, Papua New Guinea, Peru, Tanzania, Thailand and Uganda. The PLEC network also provides for South-South cooperation and South-North twinning arrangements.

Implementation commenced in 1998 for the new four-year phase of the project with US$6 million funding from the Global Environment Facility (GEF). The new phase of PLEC aims to develop multiple replicable models of
agrodiversity management in collaboration with farmers in the demonstration sites. The specific objectives are to: (i) establish historical and baseline comparative information on agrodiversity and biodiversity at the landscape level in representative diverse regions; (ii) develop participatory and sustainable models of biodiversity management based on farmers' technologies and knowledge within agricultural systems at the community and landscape levels; (iii) recommend approaches and policies for sustainable agrodiversity management to key government decision makers, farmers, and field practitioners; and (iv) establish national and regional networks for capacity strengthening within participating institutions.

This year PLEC held management group meetings to set a framework for the future management of the project, an International Workshop in Mbarara, Uganda, and various regional workshops. In addition to these major meetings and workshops, group training courses and workshops in ecology and research methodology have been organized in...
participating countries for more than 100 stakeholders, including farmers, non-governmental organizations (NGOs), teachers, local officials, students and researchers. Eleven postgraduate and junior researchers under training have joined PLEC to enhance their research capacity and to strengthen PLEC teams. Presentations on PLEC were made at the Fourth Conference of Parties of the Convention on Biological Diversity in Bratislava, Slovakia, in May and at the Second Conference of Parties of the Desertification Convention in Dakar, Senegal, in December.

**Water, Environment and Health**

The multi-faceted issue of the global water crisis, especially in the developing world, is one of the priority areas of work for the UNU. Today, over one billion people lack access to clean drinking water and 1.7 billion lack adequate sanitation facilities. Contaminated water causes 80 per cent of disease in developing countries, affecting 2.3 billion people annually, with 9 million deaths.

During 1998, UNU/INWEH initiated network research and capacity-building activities with an initial “portfolio” of projects that balance national and community-level engagement, global- and basin-scale issues, freshwater and marine ecosystems and water quality activities. The initial geographical focus is on Africa, Latin America and the Middle East.

In East Africa, UNU/INWEH will provide research, training and management advice to the newly created Lake Victoria Fisheries Organization (LVFO) in support of the Lake Victoria Environmental Management Programme (LVEMP), currently under implementation by Kenya, Uganda and Tanzania. UNU/INWEH is also assisting LVFO to organize an international conference in late 1999 on the state of the Lake Victoria ecosystem, entitled “Lake Victoria 2000: A New Beginning.”

**Sustainable Development in China**

Rapid economic growth in China over the past few years has led to major environmental stress, illustrating the trade-offs needed to develop sustainably as well as the need to develop “win-win” solutions. In order for China to follow a sustainable growth path in its industrialization and avoid clean-up costs in the future, it is crucial that China follow measures for environmental protection and resource
Smallholder farm couple incorporating crop residues in the soil to improve soil fertility. This work must be done soon after harvest to enable timely decomposition. (FAO photo)

Scientists engaged in growing adapted cassava varieties in a greenhouse (FAO photo)

preservation in the current industrialization stage.

Using the Sustainable Development for Developing Countries Framework produced in prior research, UNU-IAS is now undertaking a specific case-study of China involving a large network of Chinese scholars and institutions. The project will study economic and environmental policies that will maintain the momentum of China's economic growth while maintaining equity, promoting the efficient use of natural resources and improving environmental quality. In coming years, these methodologies will be applied in studies on other developing countries.

**Sustainable Management of Natural Resources in Africa**

Most Africans live in rural areas and depend on natural resources, particularly land for crop production, for their livelihood. Improving food security through more efficient
and sustainable management of natural resources is a vital way to reduce rural poverty. The goal of UNU/INRA is to assist institutions in Africa in producing well-trained, well-equipped and motivated individuals capable of developing, adapting and disseminating technologies that promote sustainable use of the continent’s natural resources.

A UNU/INRA meeting in March discussed the findings of a survey of experts on the conservation and management of Africa’s natural resources. Some of the major areas for immediate action include the need to:

- sensitize stakeholders to the consequences of the continued erosion of Africa’s genetic resources;
- document Africa’s rich plant resources, in view of the requirements and implications of international agreements;
- fill gaps in knowledge on the nutritional status of indigenous African food crops; and
- incorporate the findings in curricula and textbooks used in educational institutions.

Zero Emissions

The UNU Zero Emissions Research Initiative (ZERI) promotes a development model in which all industrial inputs can be converted into final products, or what is treated as waste is converted into value-added inputs in another chain of production. At the end, the manufacturing line becomes a series of production cycles and recycling systems. In this way, industries may be organized into “clusters” within one single corporation, or in interdependent sets of industries, such that the whole discharges no waste in the air, soil or water.

The work in the UNU/ZERI project is now concentrated in three areas. First, scientific research is seeking ways to increase biomass utilization and developing a computer system for industrial modelling and design. Second, a network is being established, mainly in developing countries, for implementation of the ZERI concepts. Third, networks to provide further outreach are taking shape.

The third Japan Zero Emissions Network Conference took place at the UNU Centre on 12 and 13 November. This conference focused on extending zero emissions strategies to include Japanese communities as well as industries. The keynote sessions featured speeches by Keizo Yamaji, Chairman of Nihon Tetra Pak, and Tokyo’s Governor, Yukio Aoshima, and a panel discussion between representatives of Japan’s Environment Agency, Ministry of International Trade and Industry, and Ministry of Construction. Further sessions focused on academic research on zero emissions issues and the ISO 14001 environmental management system standard.

Technological Innovation

The concept of the National Systems of Innovation has influenced thinking and policy research in industrialized countries. Although developing countries have very different technological histories from developed countries, particularly regarding their heavy reliance on imported technologies, there is very little specific discussion of the main features of such National Systems of Innovation in the developing countries. In addition, as developing countries like the Newly Industrializing Countries (NICs) and the so-called “second tier” Newly Industrializing Economies (NIEs) have gone through industrial processes of technological upgrading, there have been distinct changes in the form of the institutions making up their national systems of innovation.

The UNU/INTECH project on Characteristics of National Systems of Innovation in Developing Countries concentrates on conceptual development for the adaptation of the National Systems of Innovation approach to developing countries. Case-studies of selected countries and economic regions, including the Republic of Korea and Thailand, provide empirical guidance to the literature survey.

The Less Favoured Regions (LFRs) in Europe face special difficulties in restructuring their industries to confront Europe-wide competition. The UNU/INTECH project on National Systems of Innovation in Less Favoured European Regions examines the development of technological capabilities in Southern Europe, with particular emphasis on the role of technology policy in industrialization. In addition, it explores the relevance of the Southern European experience to other industrializing countries.

Women and Technology

The Asia-Pacific region contains two-thirds of the world’s female industrial workforce. The UNU/INTECH project on
Monitoring the Impact of New Technologies on Women's Industrial Work in Asia explores the impact of information-intensive modes of production on the quantity and quality of women's employment in the region. The research initiatives are especially geared to highlighting the factors that make it difficult for women to obtain relevant technical and business skills, and thus exclude them from the benefits of the emerging information society.

Besides gathering quantitative and qualitative data, the project initiated a dialogue on technology policy between two major stakeholders: relevant governmental bodies and NGOs committed to the cause of women industrial workers. The aim is to facilitate, on the basis of a consensus among the stakeholders, human resource development plans that will benefit the countries and women alike.

Software Technology

Given the rapid increase in the use of computers in developing countries, there is a need for education and training of software specialists and educators. The mission of UNU/IIST, located in Macau, is to assist developing countries to strengthen their capability in the application and development of software technology. Through projects, UNU/IIST assists developing countries to build up their research, development and education capabilities in the area of software technology. In 1998, UNU/IIST continued to pursue its applied research programme, which consists of one research project and six advanced development projects.

The current research project focuses on real-time hybrid systems. Real-time hybrid systems form an important class of today's computer-controlled systems, such as lifts, robots and assembly lines. Typically they are computer-embedded systems, in which computers interface with and control physical equipment. Such systems are often required to respond to externally generated stimuli with specified real-time constraints. System safety and reliability are extremely critical. This project's achievements in 1998, covering real-time model checking and real-time programming, have been presented by staff, fellows and former fellows at 19 conferences and published in conference proceedings or
international journals.

The advanced development projects apply advanced software technology in designing practical software systems to meet the needs of developing countries. The six projects in 1998 concern airline business computing (with Viet Nam), sea port management (with India), multi-lingual document processing (with Mongolia), manufacturing industry management (with Brazil and China), system integration (with Poland, Argentina and China), and also software tools (with China). All these projects are established according to the needs of partner countries and involve joint research with them on applying advanced software technology in these projects and, hence, in software systems for actual infrastructures. The achievements in 1998 are the design of the software systems above, including domain modelling, requirement capture, system design and prototyping, as well as seven conference presentations/publications. With these projects, UNU/IIST trained 17 fellows from eight countries in 1998.

**Towards an International Networking Language**

The Internet potentially offers access to information to all people, but the evolution of English as the de facto standard language of the Internet limits access to the percentage of the world’s population that reads and writes English. The UNU/IAS project on a Universal Networking Language (UNL) hopes to reduce some of the language barriers that limit worldwide communication by developing an Internet plug-in that, along with its companion software, will allow anyone with Internet access to convert text from a United Nations Member State language into UNL, or to convert text from UNL into another language.

The UNL research network embraces 17 research institutes and universities, and includes R&D groups in each country. In 1998 new functions were added to the software that enables conversion from UNL into a UN language and vice versa. The speed of conversion was also increased. The project developed a prototype UNL Viewer, UNL Editor and UNL Word Processor. In November, the UNL'98 symposium was held at United Nations Headquarters in New York. In this symposium the project demonstrated the use of these outputs using soccer articles in 15 languages from the last World Cup competition.
"The research programmes of the institutions of the University shall include, among other subjects, coexistence between peoples having different cultures, languages and social systems; peaceful relations between States and the maintenance of peace and security; human rights; ... and universal human values related to the improvement of the quality of life." [UNU Charter Article I.3]

Civil Wars and Humanitarian Emergencies

Major civil wars are the most important source of human suffering in the world today, leaving millions of people dead, maimed, undernourished or displaced. Since the end of the cold war, major civil wars in developing countries have increased in number and in the magnitude of their effects. While there are many political analyses of these emergencies, the UNU/WIDER project on The Wave of Emergencies of the Last Decade: Causes, Extent, Predictability and Response is the first extensive analysis of the economic and political roots of vulnerability to humanitarian disasters and the political economy of the prevention of humanitarian emergencies. The key findings concern the level of wealth and the role of the state.

First, wealth makes a huge difference; wealthy countries rarely experience humanitarian disaster. Poverty and economic disparity produce feelings of relative deprivation and unfulfilled expectations, which can be channelled into ethnic violence. This is particularly associated with countries that have experienced protracted economic decline (and especially a decline in food output). Second, humanitarian emergencies are caused mostly by the actions of the state. This was true in Rwanda, where the then-government organized, and used the media to publicize, genocide. This was also the case for the former Yugoslavia. Governments tend to act in this way when the economy is declining. Often, the problem comes from the struggle between rival governing groups for scarce resources, such as revenue allocation.

These two factors - poverty and governmental action - explain why Africa has suffered more than its share of humanitarian disasters since 1980. African political leaders faced increasing pressure from declining income. External pressure by the World Bank, International Monetary Fund and Western donors to cut the size of the state in order to encourage economic stability in practice triggered increased competition for governmental resources and ended up contributing to greater instability.

An analysis of the root causes of humanitarian crises indicates that the mechanisms for preventing them are primarily macroeconomic. Prevention requires greater international support for income stabilization and adjustment planned by the developing countries themselves, a reduction in trade barriers against Africa and Asia, compensatory financing to cushion external economic shocks, and rescheduling and writing down the debt of poor countries. It would also help to reduce the international trade in arms.

For their part, low-income countries need to provide safety nets for the poor and universal basic education, emphasize agricultural development, and improve the capacity of the state to collect taxes and provide services.
All these things are worth doing for other reasons, but reducing humanitarian emergencies would be a great side benefit. Unless it is done, the world will continue to spend vast sums on food aid, peace-keeping and diplomacy to cope with humanitarian emergencies.

**Rising and Fading Powers**

A global economy in turmoil, the rise of an integrated Europe, and strengthening geopolitical ambition in developing countries like China are early signs of emerging counterweights to American power. While America currently provides a degree of geopolitical stability, unipolarity will gradually give way to a world of multiple centres of power as the next century progresses. Such a situation presents scholars and policy makers alike with a critical question: Can the impending transition to multipolarity be managed peacefully? In order to inform the discussion the UNU Centre project on Rising and Fading Powers: International Order in Transition focuses on a second question: Under what conditions and through what causal mechanisms have past power transitions occurred peacefully?

The existing literature on power transition is curiously silent on the question of peaceful change. First, because peaceful transitions are quite rare and, second, precisely because they were non-events (war did not break out). The project thus seeks to fill an important gap in the field of international relations. We identify past cases of peaceful transition, seek to understand what variables enable major power shifts to occur peacefully, and draw lessons for how the international community can best manage the coming transition to multipolarity.

**The Legitimacy of International Organizations**

It is also important to explore the contribution of international organizations to the international community, especially since recent events have put international organizations in a rather paradoxical situation. On the one hand, they have been side-lined both in the fields of security and economics. In the area of security, United Nations peace-keeping operations in the early 1990s, in spite of certain successes, were largely disappointing, if not counter-productive. Major Member States and regional organizations (namely NATO) have challenged the credibility of the UN in many areas. In the area of global economics and development, the prime importance ascribed by market actors has challenged the ability of the Bretton
Woods Institutions to remain key players. On the other hand, beyond the boom-and-bust cycles that international organizations go through, almost everybody recognizes that it is impossible to do without them; they are a key feature of the multilateral, consultative and consensual culture of international politics.

The UNU Centre project on the Legitimacy of International Organizations takes stock of the specificities, weaknesses and strengths of international organizations as a way to assess what is likely to be a valuable niche for international organizations in the coming years. This is all the more needed considering that a reflection on the legitimacy of international organizations fills up a gap from a scholarly point of view. Indeed, while a substantial literature exists on international organizations, it is largely a mere descriptive body of work and rarely examines international organizations from the point of view of their legitimacy.

A weak sense of legitimacy stems from the situation that whilst organizations of governance are created to help manage a community, the sense of a global community remains weak. International organizations are also in a position of dependency since they were created by, and to a significant degree their functioning remains dependent upon, States. However, the project aims to demonstrate that certain functions at the international level can only be performed by international organizations, and to develop a set of arguments able to challenge the criticisms directed towards international organizations by states and certain civil society actors. The increasing extent of global interrelations demonstrates the unavoidable need for multilateral arrangements. A particularly important niche stems from the fact that international public goods – of benefit to global society – are not and will not be sufficiently provided by market forces.

**Ethics and Democracy**

Different points of view on human rights, including respect for diversity and democratic participation, are creating sources of contention and diplomatic clashes between states. The overarching theme of the project on Ethics and International Affairs will be to find normative aspects within the political environment and to see both their universality and cultural specificity. Specifically, the project will assess and try to argue in favour of an understanding of ethics that will be as integrating and inclusive as possible while being respectful of cultural differences perceived as legitimate or acceptable.

UNU Centre work on the Changing Nature of Democracy addresses the issue of the diversity of democracy, reevaluates the processes of democratization, and explores the roles of democratic institutions in promoting fundamental human values such as peace, human rights, and development. A regional workshop on Democracy in Eastern Europe focused on the social and economic consequences of transformation. The non-transparent nature of democratic transitions has led to
resentment in the short term and may have a high cost in terms of long-term credibility of the emerging democracies. In 1998 a regional workshop on Democracy in Africa was organized in Dakar, Senegal, from 9 to 10 October, in coordination with the Council for the Development of Social Science Research in Africa (CODESRIA). The workshop highlighted that the national dimension is still problematic, with a lack of belonging or commitment by both elites and local actors. This has led to problems in key functioning of states, in the raising of resources through taxation as well as in the allocation of scarce resources. The workshop also highlighted that there remains an incompatibility between integrating traditional and imported logics and political structures. This is compounded by the gap in capability to produce knowledge from within, and therefore African political systems were misunderstood.

The Barcelona Governance Programme continued to concentrate in 1998 on activities related to the institutional implications of development, with particular reference to economic change in Latin America. In 1998 the main activities were the design and establishment of a UNDP-funded Latin American Governance Network, with its own website and electronic and printed Review “Instituciones y Desarrollo.” An annual report on Governance in Latin America, three country studies and a database are under preparation. Staff participated actively in conferences and seminars, published several papers, and undertook a series of evaluation missions in Central America on behalf of, and with funding from, the European Economic Community (EEC).

Environmental Governance

Perpetuated by a growing awareness of the fragility of the planet and the realization that human actions have consequences for the earth’s sustainability, environmental issues have gained increasing prominence on the international agenda. Likewise, the conduct of diplomacy on environmental issues has in many ways shown itself to be different from the traditional global power and security paradigms. A key dimension to this debate concerns the political-scientific interface; diplomatic issues are becoming knowledge-intensive. Diplomats must learn to effectively utilize complex scientific data and the advice of experts. On the other hand, scientists and experts must pragmatically channel their knowledge towards the formulation of better, more informed decisions. However, the political-scientific interface is exacerbated particularly for developing countries, which may be at a disadvantage when dealing with multilateral diplomatic issues due to a lack of well established organizational and academic infrastructures.

Within this context, the project Future Scenarios for Global Climate Governance, jointly carried out by the Centre, the Global Environment Information Centre (GEIC) and UNU/IAS, has been actively contributing to activities associated with the UN Framework Convention on Climate Change (UNFCCC). The project provided input on several climate change scenarios to the Third Meeting of the Parties to the Climate Change Convention (COP3) based on an expert advisory meeting. Moreover, the UNU/IAS project on Environment and Multilateral Diplomacy also conducted surveys at COP3 and COP4 on the disparity between delegation capabilities and the interface of science and politics. Based on the survey at COP3, a primer was prepared by UNU/IAS for use in the training of diplomats in Kuala Lumpur in July 1998 and New York in October 1998. The findings from this survey will be published by the UNU in 1999.

With respect to the project on Future Scenarios for Global Climate Governance, UNU/IAS in cooperation with UNU Centre and GEIC hosted a workshop on 17 and 18 September 1998 focusing on the legal, economic and social implications of the 1997 Kyoto Protocol to the UN Climate Change Convention. The meeting developed policy recommendations for governments prior to COP4. The resulting report was distributed at COP4 in Buenos Aires on 2–13 November 1998.

The UNU is also progressing well in creating a dynamic and close network of scientists and laboratories in environmental monitoring and governance in the East Asia region. The present phase of the sub-project focuses on air pollution and air quality monitoring by collecting and analysing the data from participating laboratories and by preparing for governance research. The key issues were discussed at the International Symposium on Environmental Governance and Analytical Techniques: Air Pollution and Air Quality Monitoring, which was held in Kyoto, Japan, in February. A Training Workshop was also organized to support the work.
Capacity Building

As in the past, capacity-building activities during the year were carried out in the following ways: providing fellowships for advanced training in specialized areas and for research attachments at UNU associated and cooperating institutions, and organizing short-term training workshops in the priority programme areas of the UNU. Effort is being made to expand the training activities of the UNU.

Fellowships and Ph.D. Internships

Fellowships Programme
The total number of fellows trained by the UNU since 1976 is 1,684. During the year, a total of 122 new fellowships were awarded for studies in several fields, as follows:

- 16 fellowships in geothermal energy at the National Energy Authority (NEA) in Iceland;
- 5 fellowships in solar energy utilization at the Anna University in Chennai, India;
- 6 fellowships in fisheries training at the Marine Research Institute (MRI) in Iceland;
- 7 fellowships in remote sensing technology at the Instituto Nacional de Pesquisas Espaciais (INPE) in Brazil;
- 5 fellowships for seismic risk assessments and seismic design of structures at the School of Engineering, Asian Institute of Technology, in Thailand;
- 21 fellowships for biotechnology at various Latin American institutions and at an institution in the Netherlands;
- 5 fellowships in food science and technology under the UNU-Kirin fellowship programme at the National Food Research Institute (NFRI) in Japan;
- 5 fellowship in food and nutrition at the Central Food Technological Research Institute (CFTRI) in India;
- 8 fellowships for the course on production and use of food composition databases at the Wageningen Agricultural University in the Netherlands; and
- 44 fellowships in software technology at UNU/IIST in Macau.

Ph.D. Internships at UNU Institutes
A number of UNU institutes offer Ph.D. internships in issue areas relevant to their work. UNU/IAS offers 10 fellowships annually to carry out research related to the theme of eco-restructuring. UNU/INTECH collaborates with MERIT (a division of the University of Maastricht) to jointly offer a Ph.D. programme on the policy and economic dimensions of technical change. UNU/WIDER offers six-month internships on topics in development economics related to the Institute’s research programme.

Table 1. Fellowships and Internships in 1998

<table>
<thead>
<tr>
<th>Functional Unit</th>
<th>Cost (US$000)</th>
<th>Recipients</th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>from LDCs</td>
<td>Women</td>
<td></td>
</tr>
<tr>
<td>ESD (UNU Centre)</td>
<td>292</td>
<td>57</td>
<td>57</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>PG (UNU Centre)</td>
<td>15</td>
<td>27</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Geothermal Energy Prog. (NEA)</td>
<td>196</td>
<td>16</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Fisheries Prog. (MRI)</td>
<td>100</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td></td>
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<tr>
<td>UNU/WIDER</td>
<td>67</td>
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<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>UNU/INTECH</td>
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<td>6</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>182</td>
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<td>42</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>UNU/INRA</td>
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<tr>
<td>UNU/IAS</td>
<td>324</td>
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<td>9</td>
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<tr>
<td>UNU/BIOFAC</td>
<td>146</td>
<td>21</td>
<td>21</td>
<td>14</td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>1,599</td>
<td>226</td>
<td>177</td>
<td>56</td>
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</table>

[Note: ESD – Environment and Sustainable Development Programme; PG – Peace and Governance Programme.]
Environment and Sustainable Development: Training and Capacity Building

Geothermal Energy
This year marked the 20th Anniversary of the Geothermal Training Programme, which was commemorated by a workshop held in Reykjavik, Iceland, 13 to 14 October 1998. The workshop was opened by addresses from Mr. Halldor Asgrimsson, Foreign Minister of Iceland, and Professor Hans van Ginkel, Rector of the UNU. A total of 29 papers were presented at the two-day workshop, which was chaired by Dr. Ingvar B. Fridleifsson, Director of the UNU Geothermal Training Programme.

The impact of the programme was demonstrated by the fact that about 80% of the 213 individuals trained in Iceland are still involved in geothermal work. Many of the former fellows are now in high-level positions of responsibility in their countries. Successful public and private-sector geothermal initiatives in such countries as China, El Salvador, Kenya and the Philippines have relied heavily on the UNU programme for the training of their expert man-

power. The UNU will provide support for the World Geothermal Congress that will be held in Japan in 2000.

Natural Resources and Health
During 1998, its second year of operation, UNU/INWEH focused on the development of integrated, “demand-driven” capacity building in developing countries. UNU/INWEH began implementation of a three-year, $3.5 million capacity-building programme on Wastewater Biosolids Management in Ciudad Juarez, Northern Mexico. The project will put in place a comprehensive, self-sustaining system for the collection, transport and application of sewage biosolids as an agricultural fertilizer. The first phase was completed this year with the development of a master implementation plan. Other projects under way or well advanced by year’s end included: solar-powered water supply development in peri-urban areas of the West African Sahel; sustainable marine nearshore management along the Central American Caribbean coast; and several Middle East activities, including a groundwater remediation initiative in Doha, Qatar.
UNU/INRA organized a training course on Application

Need to Strengthen the Academic Infrastructure in Africa

Our understanding of the development process no longer focuses only on the accumulation of capital but also increasingly highlights the importance of knowledge. This indicates a valuable role for research and training institutions. However, research institutions in many African countries are in poor condition, making the region a priority area for UNU work. Many universities are characterized by deteriorating physical infrastructure, low staff morale, woefully inadequate research materials and inadequate funds for research. There is a significant need for greater support of the academic infrastructure in Africa. Key issues raised at a symposium in Tokyo in February 1998 were: (i) the need to strengthen the universities in Africa; (ii) that problems of universities are linked to the problems of the State; and (iii) there is a valuable role for regional centres of excellence and research networks on key development issues.

of Computer Technology to Management of Natural Resources. There is a dearth of skilled personnel capable of applying computing skills to the management of natural resources in Africa. To help overcome this deficiency, UNU/INRA's training course equipped potential trainers from universities and government technical agencies responsible for natural resource management with quantitative and qualitative analytical skills that can be applied to scientifically inform public policy and opinion. Course participants received instructions in database design and management, and software applications. Case-studies were used to illustrate practical applications of software and statistical analytical methods.

The UNU Fisheries Training Programme started operating in Iceland in 1998 with six UNU Fellows: two each from Gambia, Mozambique and Uganda. The Programme is based on an Agreement of Cooperation between the UNU, the Government of Iceland and the Marine Research Institute (MRI). Parts of the specialized training take place at the Icelandic Fisheries Laboratories, the University of Akureyri and the University of Iceland.

Software Technology
In addition to capacity building, UNU/IIST through its research and advanced development projects, introduced in 1996 a curriculum development project to assist the teaching of software technology in universities in developing countries and particularly the use of design calculi in software development. This is a common feature of computer science curricula in developed countries, but much rarer in developing ones. With this project, in 1998 UNU/IIST trained eight fellows from six countries. At UNU/IIST, they prepared course materials and case-studies, which can be shared among fellows for use in teaching in home universities. From January 1999, the curriculum development project will be complemented by a project to strengthen computer science teaching in universities in developing countries. This project aims to expand and update teaching curricula by training lecturers of these universities in new courses at UNU/IIST's partner universities in developed countries. New course materials will be developed under this project and widely disseminated.

Microprocessors and Informatics
The Project on Microelectronics and Related Fields has been carried out since 1983 in cooperation with the International Centre for Theoretical Physics (ICTP), Trieste, Italy. It is concerned with scientific and technological capacity building in developing countries by providing opportunities to selected scientists for carrying out basic and applied research in microprocessors and by organizing postgraduate training workshops. The project activities have been supported by financial contributions from the Government of Italy. As many as 200 scientists participate in the four-week training workshops each year. The research outputs of the project include development of prototypes of microprocessor-based instrumentation, publications in technical journals and manuals.

Since 1992 the UNU has supported a major biannual Conference on Research in Computer Science (CARI) in collaboration with Institut national de recherche en informatique et en automatique (INRIA) and the French Ministry of Cooperation. The fourth conference (CARI'98) was held at the Universite Cheikh Anta Diop in Dakar, Senegal, from 12 to 15 October 1998. A total of 74 papers were presented, and six special lectures were given at the conference. There were over 300 participants, mostly from 32 African countries.

Application of Biotechnology
The UNU's biotechnology programme addresses pressing human, animal and plant health problems. Projects are coordinated by the UNU Centre and are administered through UNU/Biolac in Caracas, Venezuela. As in the past, the major focus of the programme this year was in promoting academic exchanges by providing fellowships for research attachments at the leading biotechnology laboratories primarily based in the region and in organizing courses in different topics at the leading biotechnology institutions in Latin America. A total of 77 young scientists and researchers participated in the courses. Work in 1998 concentrated on supporting two programmes: a Brucellosis Research Network and a Tuberculosis Research Network.

The Scientific Advisory Committee which met in Caracas in November 1998 recognized that the Programme had made significant contributions in strengthening the scientific skills of young researchers and scientists in the region by organizing courses, granting fellowships and supporting research networks. At the same time the committee recommended a new organizational structure involving a panel of scientific coordinators. In the future the Programme will also be more widely advertised and
have an even geographical and institutional distribution of courses.

**Food and Nutrition**

Despite substantial progress on many fronts, chronic hunger and malnutrition remain a challenge to the survival and welfare of humankind. The UNU’s Food and Nutrition programme has several projects working to solve human nutrition problems. During 1998, the programme maintained five major global projects as well as a number of minor ones and provided 15 fellowships for advanced training. It also published quarterly issues of two journals: *Food and Nutrition Bulletin* and *The Journal of Food Composition and Analysis*.

From its inception the programme has been directed by Dr. Nevin Scrimshaw, Professor Emeritus, Massachusetts Institute of Technology and 1991 World Food Prize Laureate. On 1 January 1998, the directorship was transferred to Dr. Cuberto Garza, Vice Provost of Cornell University. Dr. Scrimshaw serves as the Senior Adviser of the UNU Food and Nutrition Programme and Editor of the *Food and Nutrition Bulletin*.

In addition to ongoing projects, the programme started, with the WHO, a new US$4 million project on International Growth Reference for Infants. Support has been obtained for the project from the Governments of Brazil, Canada, the Netherlands, Norway, Oman, and the United States and from the Arab Gulf Fund and the Vatican. A number of institutions have been selected as sites for the study, and plans also are underway to develop regional action plans for high-level capacity building for research and training in food and nutrition.

**Peace and Governance: Training and Capacity Building**

**Leadership**

The United Nations University International Leadership Academy (UNU/ILA) aims to train potential leaders by direct interaction with present leaders and through a series of seminars and group training activities related to pressing global issues. UNU/ILA seeks to provide training in leadership skills and attitudes while fostering commitment to sustainable development, sustainable democracy, civil society institutions, and peaceful resolution of disputes. Through leadership training it seeks to develop and strengthen responsibility, self-reliance, and commitment to service.

UNU/ILA launched its second Leadership Programme in July. The programme consisted of three weeks of lectures by prominent leaders in government, international organizations, academic institutions, business and non-governmental organizations. Some 50 leaders gave lectures as well as interacted with the participants in discussion sessions. About 60 participants from 42 different countries participated in the programme. The programme in Amman, Jordan, was followed by three 4- to 5-day study tours to Japan and China, the Middle East, and Turkey and Cyprus.

**Human Rights**

Since the year 1998 marked the 50th Anniversary of the Universal Declaration of Human Rights by the United Nations, the theme of the Global Seminar 1998 Shonan Session was The United Nations and Human Rights: Assessing the Past and Looking toward the Future. It highlighted the complexity of contemporary human rights issues in the context of the post Cold War era, and examined intertwined relations between conventional actors such as nation-states and the United Nations together with the new actors in the civil society of the world. A Global Seminar was also held in Kobe, Japan.

The UNU supported the organization of the 17th Annual Conference of the International Peace Research Association (IPRA), which took place from 23 to 26 June 1998 in Durban, South Africa, in the form of covering the participation costs for young scholars from developing countries.

**UNU International Courses to Debut in 1999**

Preparations have been made to launch the UNU International Courses (UNU/IC) for a selected group of postgraduate students and professionals who are seeking jobs in international fields. The first set of courses will be held next spring at the UNU Centre in Tokyo and organized in close cooperation with the UNU’s RTC/Ps and other United Nations agencies. The UNU/IC will offer an initial set of six-week modular courses on the following topics: The United Nations System: Structure and Activities, Environment and Sustainable Development, International Trade and Dispute Settlement, and Human Rights: Concept and Issues. Participants will receive a certificate for successfully completing a course.
Dissemination

In order to enhance the impact of our work, the University disseminates its findings to academics, policy makers and the public. It aims particularly to promote the dissemination of scientific information and best practice to the developing world. The main mode for dissemination of research is through books, articles in journals, policy briefs and articles in the press.


Another 24 books stemming from UNU research projects were published by other publishers during the year.

The UNU Press sold over 14,000 books, resulting in revenue of more than US$200,000. The UNU Press also promotes and encourages the production of inexpensive local reprint editions by indigenous publishers. During 1998, this was done for eight UNU Press books, mostly for the South Asia region.

Table 2. Publications in 1998

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Published Books</th>
<th>Books in production</th>
<th>Articles in Journals</th>
<th>Policy Briefs</th>
<th>Articles in the Press</th>
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<tbody>
<tr>
<td>ESD (UNU Centre)</td>
<td>9</td>
<td>12</td>
<td>34</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>PG (UNU Centre)</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>7</td>
<td>27</td>
<td>16</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UNU/IST</td>
<td>0</td>
<td>2</td>
<td>29*</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>61</td>
<td>95</td>
<td>13</td>
<td>102</td>
</tr>
</tbody>
</table>

[Note: ESD – Environment and Sustainable Development Programme; PG – Peace and Governance Programme; * Includes papers published in conference proceedings.]
In keeping with the University’s dissemination mandate, however, free distribution of its publications remained an important aspect of UNU Press activities. The UNU Press distributed about 1,000 new and recently published books to depository libraries and other institutions primarily in developing countries.

In addition, a grant from the Nippon Foundation for US$36,300 made it possible for the UNU Press to launch a Book Aid Programme for China by donating and shipping over 11,000 books to 38 Chinese institutions of higher learning. The Press also donated 14,000 copies of other publications to the Nippon Foundation for free dissemination in developing countries.

The UNU was involved with the publication of several journals during the year, namely:

- *Food and Nutrition Bulletin;*
- *Journal of Food Composition and Analysis;*
- *Global Environmental Change – Human and Policy Dimensions;*
- *Mountain Research and Development; and*
- *Global Governance.*

Policy Briefs are of increasing importance in the dissemination portfolio of the UNU. They aim at presenting research findings of a project in a clear and concise manner. They offer concrete indications about policy measures and programmes, intending to make the findings of UNU research more accessible for policy makers and to shorten the time taken to disseminate key findings.

**Electronic Dissemination**

The most significant progress with regard to dissemination activities has been in the field of electronic dissemination. The UNU homepage (http://www.unu.edu/) was further developed and fine-tuned into an effective information tool. Institutional news, information about academic activities, and announcements of forthcoming events can easily be found. Links to other organizations provide a larger context. Reports, public lectures and occasional papers are uploaded routinely onto the “Publications” section of the homepage, as are news-letters, bulletins, and press releases.

With many books available in full text to download from the UNU website, the United Nations University has already entered the multimedia age. However, in 1998 the UNU Press issued its first CD-ROM, the Collection on Critical Global Issues, which holds the full texts of 137 separate publications on the environment, development, and nutritional issues. These include titles on agriculture and land management, the environment and sustainability issues, food and nutrition, and natural resource utilization, as well as 68 issues of the journal *Food and Nutrition Bulletin.* The UNU Press is distributing this educational tool at no charge to institutions in developing countries.

**Public Information**

The other main channels of informing potential users about the UNU’s work research are brochures, newsletters, publications catalogues, public events and other promotion materials.

There were a number of major public lectures at the UNU Centre and Institutes in 1998. UNU/WIDER’s 1998 Annual Lecture was by Joseph Stiglitz, Senior Vice President and Chief Economist of the World Bank, on Moving toward the post-Washington Consensus.

In January, Mary Robinson, United Nations High Commissioner for Human Rights, gave a keynote address at UNU Centre at the symposium on Human Rights in the Asia-Pacific Region.

In April, Thabo Mbeki, the Deputy President of the Republic of South Africa and the President of the African National Congress (ANC), gave a lecture on The African Renaissance at UNU Headquarters.

In June, there was a Public Lecture on Governing Globalization at UNU/WIDER. The keynote speakers were Jorma Ollila, CEO of Nokia Corporation, Hans van Ginkel, Rector of the UNU, and Deepak Nayyar of Jawaharlal Nehru University, Delhi.

On 23 June, there was the International Symposium on
<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Regular Documents and Newsletters</th>
<th>Promotions in 1998</th>
<th>Mentions in the Press</th>
<th>Major Public Events</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per Year</td>
<td>Circulation</td>
<td>Number</td>
</tr>
<tr>
<td>UNU Centre</td>
<td>9</td>
<td>2-3</td>
<td>5,000–50,000</td>
<td>6</td>
</tr>
<tr>
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<td>2</td>
<td>7,500</td>
<td>1</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>1</td>
<td>4</td>
<td>200</td>
<td>1</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>1</td>
<td>2</td>
<td>1,200</td>
<td>6</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>1</td>
<td>3–4</td>
<td>1,000</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Development Cooperation held at UNU Centre. The speakers included Ambassador Hisashi Owada, Japan’s former permanent representative to the UN, Joseph Stiglitz, Senior Vice President of the World Bank, Patrizio Civili, UN Assistant Secretary-General for Policy Coordination and Inter-Agency Affairs and Carol Bellamy, Executive Director of UNICEF.

Just prior to TICAD II, the UNU and the African Economic Research Consortium (AERC) held a public forum on African Development in the 21st Century. The keynote speeches were given by Cassim Chilumpha, Minister of Finance of the Republic of Malawi and Delphin Rwegasira, Executive Director of the AERC. The meeting attracted a high-level group of panellists, including senior representatives from African governments, the World Bank, African Development Bank, UNDP and United Nations Research Institute for Social Development (UNRISD).

In October, the UNU hosted a UN Day Symposium in commemoration of the 50th anniversary of the Universal Declaration of Human Rights. It was opened by a special videotaped message from Secretary-General Kofi Annan; Sadako Ogata, UN High Commissioner for Refugees, gave the keynote speech. This was followed by a panel discussion that included high-level diplomats, UN officials and scholars. The event was filmed and broadcast in Japan.

From 29 October to 2 November, the UNU, the Ocean Research Institute of the University of Tokyo, and Iwate Prefecture held an international conference on Man and the

Global Challenges, Global Visions – a new UNU promotional video

The University produced a new 20-minute promotional video Global Challenges, Global Visions, which provides a general overview and shows concrete examples of its research, training, and outreach activities. Produced by NHK Educational Corporation, the video combines newly filmed footage at UNU Centre, computer graphics, and material from UNU’s field work to portray the character of the institution and diverse nature of the University’s academic activities.
Ocean in order to commemorate that 1998 is the Year of the Ocean. A series of symposia was held at the UNU Centre, and Morioka and Kamaishi Cities, Iwate Prefecture.

In early November, Astrid Nøklebye Heiberg, President of the International Federation of Red Cross and Red Crescent Societies, gave the Fridtjof Nansen Memorial Lecture 1998 at the UNU Centre on The Humanitarian Challenge in a World of Conflict: The Plight of Land-mine Victims.23

On 16 November, Edward Barbier delivered a series of lectures on The Economics of Land Degradation and Rural Poverty Linkages in Accra, Ghana, to an audience of African senior policy makers, research managers and academics. This was the first in the UNU/INRA Annual Lecture Series on the Conservation and Management of Natural Resources in Africa.

On 20 November, Olara Otunnu, the UN Secretary-General’s Special Representative for Children and African

Conflict, gave a lecture on Children in Armed Conflict at the UNU Centre.

**Activities in New York**

The United Nations University Office in North America (UNUONA) carries out a variety of liaison, programmatic, financial, representational and informational functions. These include maintaining close relationships with Ambassadors/senior officials of the Permanent Missions to the United Nations and strengthening relations with the departmental heads and senior colleagues of the United Nations. In 1998, three training seminars on the theme of “sustainable development in practice” were organized in collaboration with the United Nations Institute for Training and Research (UNITAR). Also, arrangements were made with the Department of Public Information so that UNU Press and UNU/WIDER publications are made available to all United Nations Information Centres and with the Sales Section of the United Nations, which has led to increased sales of UNU Press books.
Examples of Fulfilling Key Roles

An "International Community of Scholars"

The Charter enjoins the University to be an "international community of scholars"—a community that brings together people, scientists, scholars and policy makers to confront persistent and emerging problems of concern to the United Nations. For example, UNU/IIST staff were invited to participate in programme committees of 19 International Scientific Conferences in 1998.

The University is always striving to become increasingly international in nature. The Headquarters and Institutes of the UNU are located in eight countries. Of the 196 members of staff at UNU, 61 are from developing countries.

A Bridge between the UN and the International Academic Community

The nature and mandate of the UNU ensure that the University has one foot in the academic world and one foot in the UN system. This provides significant opportunities as well as challenges. Although UNU meetings usually consist of researchers and professionals, many officials from other UN agencies or the Bretton Woods Institutions participated in UNU meetings in 1998. For example, over 30 experts from many agencies such as World Bank, IMF, UNDP, UNICEF, Food and Agriculture Organization of the United Nations (FAO), Economic Commission for Africa (ECA), African Economic Research Consortium (AERC) and OECD participated in the work of UNU/WIDER alone in 1998.

The way the UNU contributed to TICAD II provides another example of the University's role as a bridge between the international academic community and the UN system. The University undertook research that fed into the Agenda for Action, the output of TICAD II, and also used its network of researchers to comment on early drafts of the Agenda for Action. The Rector then made a presentation at the TICAD II plenary on behalf of the researchers the UNU worked with up to TICAD II. The University was also instrumental in ensuring that the AERC, a network of economists that is one of the UNU's key African partners, was invited to TICAD II.

Strengthening working links with various UN organizations is a central policy of the management of the University, and the UNU intends to include more UN officials in its work in the coming years.

<table>
<thead>
<tr>
<th>Functional Unit</th>
<th>Number of Projects</th>
<th>Number of Meetings*</th>
<th>Project Expenditure* (US$000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Of which in Host</td>
<td>Of which in LDCs</td>
</tr>
<tr>
<td>ESD (UNU Centre)</td>
<td>14</td>
<td>76</td>
<td>11</td>
</tr>
<tr>
<td>PG (UNU Centre)</td>
<td>19</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>11</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>18</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>13</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>17</td>
<td>58</td>
<td>12</td>
</tr>
<tr>
<td>UNU/BIOLAC</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>109</td>
<td>188</td>
<td>52</td>
</tr>
</tbody>
</table>

[Note: ESD – Environment and Sustainable Development Programme; PG – Peace and Governance Programme; * Estimated based on information available as of 30 September 1998.]
Think-tank for the UN

The University is trying to strengthen its role as “a strategic intellectual resource for the multilateral system of cooperation.” The Rector participates in the meetings of the Administrative Committee on Coordination (ACC) of the UN, and other UNU staff serve on subsidiary ACC bodies. The University is involved in numerous ways with agencies of the UN system in its project work. This section provides four further examples on ways the UNU tried to achieve its role as a “think-tank for the UN” in 1998.

First, the UNU made important contributions to the UNESCO-organized World Conference on Higher Education that was held in Paris in early October. The Conference was attended by education ministers from 115 nations as well as over 4,000 other participants. The main theme was Higher Education in the Twenty-first Century: Vision and Action. The conference unanimously adopted the World Declaration and a Framework for Priority Action for Change and Development of Higher Education, which set the fundamental principles for an in-depth reform of higher education around the world.

In addition to playing a role in the steering committee of the conference, the Rector chaired the session on Higher Education and Sustainable Human Development. The aim was to discuss strategies to reorient research programmes and curricula toward the larger goal of reconciling economic and social progress with the safeguarding of global life support systems. Key issues included the importance of new course content; universities and their associations becoming more involved in participatory approaches to environmental action planning; Open University systems; and promoting knowledge transfer. The session ended with a discussion that highlighted the important roles of the UNU and UNESCO in accelerating the rate of change and in bringing universities around the world together.

The UNU/IAS also played an active role. It provided extensive live coverage of the conference over the Internet as part of the Virtual Universities project. It also organized a special panel session, “From the Traditional to the Virtual: New Information Technologies,” which discussed the limits and potentials of new educational media. During the panel, the UNU/IAS provided a multipoint videoconference that connected sites in Brazil, Morocco, Japan, the United States and the UNESCO conference hall in a five-way exchange.

Table 5. Project Consultants and Meeting Participants in 1998*

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Project Directors</th>
<th>Consultants</th>
<th>Meeting Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Of which from LDCs</td>
<td>Of which Women</td>
</tr>
<tr>
<td>ESD (UNU Centre)</td>
<td>39</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>PG (UNU Centre)</td>
<td>17</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>12</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>13</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>UNU/BIOLAC</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>37</td>
<td>18</td>
</tr>
</tbody>
</table>

[Note: ESD – Environment and Sustainable Development Programme; PG – Peace and Governance Programme; * Estimated based on information available as of 30 September 1998.]
Second, the UNU has been actively contributing to activities associated with the UN Framework Convention on Climate Change (UNFCCC). As a follow-up to its work at COP3, the University prepared a number of activities to feed into COP4, which was held in Buenos Aires on 2-13 November 1998. During the COP4 negotiations, the UNU/IAS and the GEIC brought together experts on trade and environmental issues on 7 November. A follow-up event on 11 November focused on the UNU report on the linkages between the Kyoto Protocol and other multilateral agreements; 1,500 copies of a UNU report on the topic were distributed to COP4 delegates. Also distributed were 5,000 copies of CC: Train, a CD-ROM compiling training materials on Climate Change. As with COP3, the UNU conducted a survey of delegates from over 70 countries on the disparity between delegation capabilities and the interface of science and politics.

Third, the UNU collaborated closely with the UN (UNDP and Office of the Special Coordinator for Africa and Least Developed Countries (OSCAL)) and the Government of Japan with regard to the Second Tokyo International Conference on African Development (TICAD II). This was a summit-level meeting co-organized by Japan, the United Nations, and the Global Coalition for Africa held in Tokyo from 19 to 21 October 1998. It was attended by delegations from 80 countries including fifteen heads of state or government from Africa and Asia. In addition, 22 NGOs and a number of African regional organizations, donor agencies and international organizations also participated. The conference was opened by the Japanese Prime Minister, Keizo Obuchi, and UN Secretary-General Kofi Annan presided over the closing ceremony.

The research project on Asia and Africa in the Global Economy was very relevant to one of the main issues at TICAD (how to integrate African economies more closely into the global economy) as well as a key theme of the TICAD process, namely Asia-Africa cooperation. The key findings fed into the Agenda for Action, the output of TICAD II. The University also commented on early drafts of the Agenda. The Rector made a presentation on Knowledge and Development in Africa at the TICAD II plenary. In contrast to past policies of the World Bank, the UNU highlighted the importance of a more balanced approach to education policy, noting that African countries will remain in a dangerously dependent position unless they develop sustainable, strong knowledge sectors.

Fourth, senior staff at UNU/WIDER along with external experts reviewed the flagship reports of the United Nations on behalf of UNU, as requested by the Executive Committee on Economic and Social Affairs (EC-ESA). Overall the review found that the flagship reports generate considerable value added, including new statistical and analytical material of help to policy makers. It concluded that the current debate in the UN will help to clarify the policy framework for the flagship reports and will improve
the division of labour among them. The Executive Committee accepted the UNU/WIDER recommendation that the UN should speak with a more “united voice” when discussing the World Bank and IMF, but resisted most of its recommendations for closer collaboration among organizations.

Finally, in its latest session the UN General Assembly designated the year 2002 as the International Year of the Mountains. In proposing this initiative the Secretary-General drew on longstanding UNU work on Mountain Development.27

A Capacity Builder, Particularly in Developing Countries

The University has a particular mandate to build capacities, individual and institutional, in developing countries. The work of five of the UNU’s eight research and training centres and programmes concentrates on capacity building in developing countries.

First, the mission of UNU/IIST, located in Macau, is to assist developing countries in strengthening their capability in software technology.

Second, the goal of UNU/INRA, located in Accra, Ghana, and with a mineral resources unit in Lusaka, Zambia, is to produce well-trained, well-equipped and motivated individuals capable of developing, adapting and disseminating technologies that promote sustainable use of Africa’s natural resources.

Third, UNU/INWEH, located in Hamilton, Canada, was created to strengthen capacity in water science, education and management, particularly in developing countries, through integrated, “demand-driven” capacity-building programmes.

Fourth, UNU/ILA, located in Amman, Jordan, seeks to provide training in leadership skills and attitudes while fostering commitment to sustainable development, sustainable democracy, civil society institutions, and peaceful resolution of disputes.

Fifth, UNU/BIOLAC, located in Caracas, Venezuela, is oriented towards the promotion, support and development of research areas that have the potential to produce a high impact in scientific and technological development in Latin America and the Caribbean. The Programme supports and promotes the formation of human resources covering the areas of (i) diagnostics and vaccines of human and animal diseases; (ii) plant genetic engineering with emphasis on the improvement of nutritional quality and resistance to pests and adverse environmental conditions; and (iii) microbial fermentations of industrial interest.

The other RTC/Ps, UNU/WIDER, UNU/INTECH and UNU/IAS work with a significant number of scholars from developing countries in their research projects and all provide Ph.D. internships. UNU/WIDER staff also teach
courses in development and transition economies at Finnish universities, which are attended by a number of developing country students. They have also lectured at the UN Staff College in Turin.

In addition, the University undertakes capacity-building activities with various partners. One of the most successful examples of collaboration for capacity building is the Geothermal Training Programme, organized by the National Energy Authority of Iceland and the UNU. The Programme has provided training for 213 young scientists and engineers from 35 developing countries. A Fisheries Training Programme started in 1998, organized by the MRI in Iceland and the UNU.

The UNU Centre runs a fellowships programme, providing grants to train young scientists from developing countries. The total number of fellows trained by the UNU since 1976 is 1,684. In addition, various aspects of the UNU system run short training courses in a number of issue areas. A summary of these is provided in the chart below.

Finally, the University involved 317 researchers from developing countries in its projects in 1998. It held 123 research meetings in developing countries.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Cost (Unit: US$000)</th>
<th>Courses in 1998</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total in LDCs</td>
<td>Total from LDCs</td>
</tr>
<tr>
<td>Geothermal Prog.</td>
<td>652</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Fisheries Prog.</td>
<td>350</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>ESD (UNU Centre)</td>
<td>109</td>
<td>15</td>
<td>695</td>
</tr>
<tr>
<td>PG (UNU Centre)</td>
<td>26</td>
<td>3</td>
<td>154</td>
</tr>
<tr>
<td>UNU/WIDER</td>
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<td>115</td>
</tr>
<tr>
<td>UNU/IIST</td>
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<td>9</td>
<td>205</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>36</td>
<td>3</td>
<td>38</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>55</td>
<td>3</td>
<td>68</td>
</tr>
<tr>
<td>UNU/ILA</td>
<td>315</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>UNU/BIOLAC</td>
<td>122</td>
<td>5</td>
<td>77</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,725</td>
<td>44</td>
<td>1,432</td>
</tr>
</tbody>
</table>

[Note: ESD – Environment and Sustainable Development Programme; PG – Peace and Governance Programme.]
Income, Expenditure and Staff

In 1998, the University received pledges to the Endowment Fund as well as operating and specific programme contributions. The University also benefited during the year from counterpart and other support, including cost-sharing support for the fellowships and other activities. In 1998, the approved budget of the University was just under US$36 million. The following tables provide provisional estimates of actual income and expenditures as of 30 September 1998.

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Core Funds</th>
<th>SPC (2)</th>
<th>Total (Gross)</th>
<th>Less (3)</th>
<th>Total (Net)</th>
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<tbody>
<tr>
<td></td>
<td>from Endowment</td>
<td>Operating Contributions</td>
<td>Misc. income (1)</td>
<td>Sub-total</td>
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</tr>
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<td>1,678</td>
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<td>UNU/INRA</td>
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<td>1,519</td>
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<tr>
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<td>406</td>
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</tr>
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<td>UNU/ILA</td>
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<td>612</td>
<td>612</td>
<td>16</td>
</tr>
<tr>
<td>UNU/BIOLAC</td>
<td>383</td>
<td>0</td>
<td>0</td>
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<tr>
<td>TOTAL</td>
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<td>1,821</td>
<td>7,622</td>
<td>21,647</td>
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</tr>
</tbody>
</table>

Definitions: (1) Includes contributions for UNU HQ building, income from publications and funds carried forward; (2) SPC – Specific Programme Contributions – including those to be received in 1998 and carried forward. (3) Sum of reinvestment and investment management fees.

[Note: These figures have not been audited.]

The table on the next page provides a list of the contributions of US$100,000 and higher received during 1998.
Table 8. Financial Contributions in 1998

<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Environment Facility</td>
<td>UNU Centre’s PLEC project</td>
<td>1,286,349</td>
</tr>
<tr>
<td>Government of Canada</td>
<td>UNU/INWEH</td>
<td>733,015</td>
</tr>
<tr>
<td>Government of Iceland</td>
<td>Geothermal Training Programme</td>
<td>554,000*</td>
</tr>
<tr>
<td>ASCII (Japan)</td>
<td>UNU/IAS UNL project</td>
<td>525,154</td>
</tr>
<tr>
<td>Government of Iceland</td>
<td>Fisheries Training Programme</td>
<td>430,000*</td>
</tr>
<tr>
<td>Government of the Netherlands</td>
<td>UNU/INTECH</td>
<td>391,516</td>
</tr>
<tr>
<td>UNDP (Malaysia)</td>
<td>UNU/INTECH’s Teleworking project</td>
<td>218,700</td>
</tr>
<tr>
<td>Ishikawa Foundation for International Exchange (Japan)</td>
<td>UNU/IAS Eco-restructuring project</td>
<td>106,992</td>
</tr>
</tbody>
</table>

[Note: * Counterpart funding made available for UNU Programmes.]

The following table provides a provisional estimate of actual expenditure.

Table 9. Expenditure in 1998

Estimated expenditure in 1998 (includes obligations and unliquidated obligations)

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Academic Activities</th>
<th>(UNU) Personnel Costs</th>
<th>General Costs (3)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core Funded</td>
<td>Specific Funded</td>
<td>Subtotal</td>
<td>Prog. Staff (1)</td>
</tr>
<tr>
<td>UNU Centre</td>
<td>1,935</td>
<td>2,540</td>
<td>4,475</td>
<td>2,045</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>376</td>
<td>49</td>
<td>425</td>
<td>1,027</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>12</td>
<td>558</td>
<td>570</td>
<td>492</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>286</td>
<td>16</td>
<td>302</td>
<td>535</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>61</td>
<td>79</td>
<td>140</td>
<td>327</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>1,720</td>
<td>1,230</td>
<td>2,950</td>
<td>494</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>356</td>
<td>9</td>
<td>365</td>
<td>207</td>
</tr>
<tr>
<td>UNU/ILA</td>
<td>222</td>
<td>16</td>
<td>238</td>
<td>179</td>
</tr>
<tr>
<td>UNU/BIOLAC</td>
<td>406</td>
<td>0</td>
<td>406</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,374</td>
<td>4,497</td>
<td>9,871</td>
<td>5,306</td>
</tr>
</tbody>
</table>

Definitions: (1) Total costs of staff working on research and capacity building, whether Professional, GS or PSA. (2) Total costs of all other staff. (3) Includes HQ building [Note: These figures have not been audited.]
Table 10. Expenditure within and outside Host Country

Actual expenditure (cash base, includes expenditure of 1998 obligations as well as obligations of previous years liquidated in 1998) (Unit: US$000)

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Total</th>
<th>Within Host Country (1)</th>
<th>Outside Host Country (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNU Centre</td>
<td>10,272</td>
<td>5,988</td>
<td>4,284</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>1,624</td>
<td>860</td>
<td>764</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>1,740</td>
<td>1,215</td>
<td>525</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>1,077</td>
<td>672</td>
<td>405</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>525</td>
<td>31</td>
<td>494</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>2,948</td>
<td>2,214</td>
<td>734</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>400</td>
<td>319</td>
<td>81</td>
</tr>
<tr>
<td>UNU/ILA</td>
<td>243</td>
<td>67</td>
<td>176</td>
</tr>
<tr>
<td>UNU/BIOLOC</td>
<td>241</td>
<td>13</td>
<td>228</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19,070</strong></td>
<td><strong>11,379</strong></td>
<td><strong>7,691</strong></td>
</tr>
</tbody>
</table>

Definitions:
(1) Within host country – proxied by amount in local currency.
(2) Outside host country – proxied by amount in US dollars.

[Note: These figures have not been audited.]

The UNU has a total staff of 196, of which 61 are from developing countries. The staff working at the UNU Centre in Tokyo and at the RTC/Ps are as indicated below.

Table 11. Staff

<table>
<thead>
<tr>
<th>UNU Unit</th>
<th>Total Staff</th>
<th>Of which, Professors</th>
<th>Of which, General Services</th>
<th>Of which, Senior Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>LDC</td>
<td>Women</td>
<td>Total</td>
</tr>
<tr>
<td>UNU Centre</td>
<td>78</td>
<td>11</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td>UNU/WIDER</td>
<td>23</td>
<td>4</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>UNU/INTECH</td>
<td>25</td>
<td>7</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>UNU/IIST</td>
<td>15</td>
<td>12</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>UNU/INRA</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>UNU/IAS</td>
<td>30</td>
<td>10</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>UNU/INWEH</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>UNU/ILA</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>UNU/BIOLOC</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>196</strong></td>
<td><strong>61</strong></td>
<td><strong>86</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**Appointed Members**

Professor Ingrid Moses (Australia) (Chair of the Council), Vice-Chancellor, University of New England, Armidale, Australia

Dr. Yoginder K. Alagh (India), Member of Parliament (Upper House), India; Vice-Chairman, Sardar Patel Institute of Economic and Social Research; and former Minister of State (Independent Charge) for Science and Technology and Power, Government of India

Professor Faizah M. Al-Kharafi (Kuwait), President, Kuwait University, Safat, Kuwait

Dr. Josep Bricall (Spain), President, Conference of European Rectors (CRE) - Association of European Universities, Geneva, Switzerland

Professor José Joaquin Brunner Ried (Chile), former Minister, Ministry of the Secretary-General, Government of Chile

Professor Ana Maria Cetto (Mexico), Vice-President, Committee on Science and Technology in Developing Countries, International Council of Scientific Unions (ICSU); and Research Professor, Institute of Physics, National University of Mexico (UNAM), Mexico

Professor Paolo Costa (Italy), Department of Economic Science, Università Ca' Foscari di Venezia; and former Minister of Public Works, Ministry of Public Works, Government of Italy

Professor Elizabeth J. Croll (United Kingdom), Head, Department of Development Studies and Professor, Chinese Anthropology, School of Oriental and African Studies, University of London, United Kingdom

Professor Donald Ekong (Nigeria), Scholar-in-Residence, The Ford Foundation, Johannesburg, South Africa

Dr. Salim El-Hoss (Lebanon), Member, Lebanese Parliament; Professor of Economics, American University of Beirut; and former Prime Minister of Lebanon

Dr. Donald Gerth (United States), President, California State University, Sacramento, USA; and President, International Association of University Presidents

Professor Genady Nikolaevich Golubev (Russian Federation), Head, Department of World Physical Geography and Geocology, Faculty of Geography, Moscow State University, Russian Federation

Professor François Héritier-Augé (France), Director, Laboratoire d'Anthropologie Sociale, Ecole des Hautes Etudes en Science Sociales, Collège de France

Professor Risto Ihamuotila (Finland), Chancellor, University of Helsinki

Professor Aleksandra Kornhauser (Slovenia), Director, International Centre for Chemical Studies, University of Ljubljana, Slovenia

Professor Lin Quan (China), Secretary-General, State Science and Technology Commission of China, Beijing, China

Dr. Graça Machel (Mozambique), President, Foundation for Community Development (FDC), Mozambique

Dr. Valeria Merino-Dirani (Ecuador), Executive Director, Corporacion Latinoamericana para el Desarrollo CLD), Quito, Ecuador

Professor Ahmadou Lamine N'Diaye (Senegal), Rector, Université Gaston-Berger de Saint-Louis, Senegal

Dr. Jairam Reddy (South Africa), Independent Consultant in Higher Education; and former Vice-Chancellor, University of Durban, South Africa

Professor Françoise Thys-Clement (Belgium), Pro-Rector, Université Libre de Bruxelles, Belgium

Dr. Carlos Tünnemann Bernheim (Nicaragua), Special Adviser to the Director-General of UNESCO for Latin America and the Caribbean, Managua, Nicaragua
Professor Wichit Srisa-an (Thailand), Rector, Suranaree University of Technology, Thailand

Ambassador Chusci Yamada (Japan), Professor of International Law, Faculty of Law, Waseda University, Tokyo, Japan

**Rector**

Professor Hans van Ginkel (The Netherlands)

**Ex Officio Members**

Mr. Kofi Annan (Ghana), Secretary-General, United Nations, New York, USA

Dr. Federico Mayor (Spain), Director-General, United Nations Educational, Scientific and Cultural Organization, Paris, France

Dr. Marcel Boisard (Switzerland), Executive Director, United Nations Institute for Training and Research, Geneva, Switzerland
Annex 2: Titles Published in 1998

**UNU Press**


**Other Published Books based on UNU Work**


*Amin, Mario M. and Ximenes, Tereza, 1998, Habitat in the Amazon River Region*, Universidade Federal do Pará/Associação de Universidades Amazônicas.


## Annex 3: UNU Depository Libraries around the World

<table>
<thead>
<tr>
<th>Country</th>
<th>Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>National Library of Australia, Canberra</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Bahrain University Library, Manama</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Bangladesh Institute of Development Studies Library, Dhaka</td>
</tr>
<tr>
<td></td>
<td>Dhaka University Library, Dhaka</td>
</tr>
<tr>
<td>Belgium</td>
<td>Bibliothèque Royale Albert 1er, Brussels</td>
</tr>
<tr>
<td></td>
<td>Commission of the European Communities Library, Brussels</td>
</tr>
<tr>
<td>Botswana</td>
<td>University of Botswana Library, Gaborone</td>
</tr>
<tr>
<td>Canada</td>
<td>McGill University Libraries, Quebec</td>
</tr>
<tr>
<td></td>
<td>University of Toronto Library, Toronto</td>
</tr>
<tr>
<td>China</td>
<td>National Library of China, Beijing</td>
</tr>
<tr>
<td>Colombia</td>
<td>Biblioteca General, Universidad de los Andes, Bogotá</td>
</tr>
<tr>
<td>Denmark</td>
<td>Det Kongelige Bibliotek (The Royal Library), Copenhagen</td>
</tr>
<tr>
<td></td>
<td>Statsbiblioteket (State and University Library), Aarhus</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Addis Ababa University Libraries, Addis Ababa</td>
</tr>
<tr>
<td>Fiji</td>
<td>The University of the South Pacific Library, Suva</td>
</tr>
<tr>
<td>Finland</td>
<td>Helsinki University Library, Helsinki</td>
</tr>
<tr>
<td>France</td>
<td>Bibliothèque nationale, Paris</td>
</tr>
<tr>
<td>Germany</td>
<td>Die Deutsche Bibliothek, Leipzig</td>
</tr>
<tr>
<td></td>
<td>Universitätsbibliothek, Freiburg</td>
</tr>
<tr>
<td>Ghana</td>
<td>The Balme Library, University of Ghana, Accra</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Biblioteca Central, Universidad de San Carlos de Guatemala, Guatemala City</td>
</tr>
<tr>
<td>Guyana</td>
<td>University of Guyana Library, Georgetown</td>
</tr>
<tr>
<td>Hungary</td>
<td>Library of the Hungarian Parliament, Budapest</td>
</tr>
<tr>
<td>Iceland</td>
<td>Landsbókasafn Islands (National Library of Iceland), Reykjavik</td>
</tr>
<tr>
<td>India</td>
<td>Bangalore University Library, Bangalore</td>
</tr>
<tr>
<td></td>
<td>H. T. Parekh Library, Madras</td>
</tr>
<tr>
<td></td>
<td>Jawaharlal Nehru University Library, New Delhi</td>
</tr>
<tr>
<td></td>
<td>The National Science Library, New Delhi</td>
</tr>
<tr>
<td>Indonesia</td>
<td>National Library of Indonesia, Jakarta</td>
</tr>
<tr>
<td>Israel</td>
<td>Elias Sourasky Library, Tel-Aviv University, Tel-Aviv</td>
</tr>
<tr>
<td>Jamaica</td>
<td>University of the West Indies Library, Kingston</td>
</tr>
<tr>
<td>Japan</td>
<td>National Diet Library, Tokyo</td>
</tr>
<tr>
<td></td>
<td>University of Tokyo Library, Tokyo</td>
</tr>
<tr>
<td>Country</td>
<td>Library/Institution</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Jordan</td>
<td>The University of Jordan Library, Amman</td>
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<tr>
<td>Kenya</td>
<td>University of Nairobi Library, Nairobi</td>
</tr>
<tr>
<td>Malaysia</td>
<td>University of Malaya Library, Kuala Lumpur</td>
</tr>
<tr>
<td>Mexico</td>
<td>Biblioteca Daniel Cosío Villegas, Mexico City</td>
</tr>
<tr>
<td>Nepal</td>
<td>Royal Nepal Academy of Science &amp; Technology Library, Kathmandu</td>
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<tr>
<td>Netherlands</td>
<td>Universiteitsbibliotheek (University Library), Amsterdam</td>
</tr>
<tr>
<td>Nigeria</td>
<td>National Library of Nigeria, Lagos</td>
</tr>
<tr>
<td>Peru</td>
<td>Biblioteca Central de la Pontificia, Universidad Católica del Péru, Lima</td>
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<tr>
<td>Philippines</td>
<td>University of the Philippines at los Baños Library, Laguna</td>
</tr>
<tr>
<td></td>
<td>University of the Philippines Law Complex Library, Quezon City</td>
</tr>
<tr>
<td>Poland</td>
<td>Biblioteka Szkoły Głównej Planowania Statystyki (Library of the Central School of</td>
</tr>
<tr>
<td></td>
<td>Planning and Statistics), Warsaw</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Ministry of Planning Library, Riyadh</td>
</tr>
<tr>
<td>Senegal</td>
<td>Bibliothèque de l'Université de Dakar, Dakar</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Fourah Bay College Library, Freetown</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Marga Institute Library, Sri Lanka Centre for Development Studies, Colombo</td>
</tr>
<tr>
<td>Surinam</td>
<td>United Nations Depository Library, Anton de Kom Universiteit, Paramaribo</td>
</tr>
<tr>
<td>Sweden</td>
<td>University Library, Lund</td>
</tr>
<tr>
<td></td>
<td>University of Uppsala Library, Uppsala</td>
</tr>
<tr>
<td>Tanzania</td>
<td>University of Dar es Salaam Library, Dar es Salaam</td>
</tr>
<tr>
<td>Thailand</td>
<td>Central Library, Chulalongkorn University, Bangkok</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>The Main Library, the University of the West Indies, Trinidad</td>
</tr>
<tr>
<td>Tunisia</td>
<td>Arab League Educational, Cultural &amp; Scientific Organization Library, Tunis</td>
</tr>
<tr>
<td>Uganda</td>
<td>Makerere University Library, Kampala</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The British Library, London</td>
</tr>
<tr>
<td>United States</td>
<td>Joint Bank-Fund Library, Washington, D.C.</td>
</tr>
<tr>
<td></td>
<td>The Library of Congress, Washington, D.C.</td>
</tr>
<tr>
<td>Zambia</td>
<td>The University Library, Lusaka</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>University of Zimbabwe Library, Harare</td>
</tr>
</tbody>
</table>
References


2. PLEC News and Views, No. 10 (May 1998).


5. www.unu.edu/


10. The project meeting in August 1998 represented probably the first time that an African research institution has co-organized a conference in Tokyo.


17. To obtain this CD-ROM, please e-mail unucdrom@hq.unu.edu.


21. www.unu.edu/afica/chilumpha.html


24. vulab.ias.unu.edu/mve98/


26. www.geic.or.jp/ctrain2/

UNU Institute for New Technologies (UNU/INTECH), Maastricht, the Netherlands (October 1990)

UNU/INTECH conducts integrative policy-oriented research and training on the economic and social implications of new technologies for developing countries. It does this by setting up links to institutions in developing countries pursuing similar research. UNU/INTECH's programmes emphasize research on the economic and social impact of new technologies, policy studies on matters of urgent importance, and the training of Ph.D. fellows.

UNU International Institute for Software Technology (UNU/IIST), Macau (July 1992)

UNU/IIST helps developing countries strengthen capabilities and become self-reliant in three areas: the development of software, university-level software curriculum development, and participation in international software research. UNU/IIST also helps bridge gaps between theory and practice, university and industry, consumer and producer, and industrialized and developing countries. In its programme activities, UNU/IIST concentrates on advanced joint research and development, and on dissemination of public domain software and publications - all involving fellowships at UNU/IIST in Macau and with partners in developing countries.

UNU Institute for Natural Resources in Africa (UNU/INRA), Accra, Ghana, with a Mineral Resources Unit in Lusaka, Zambia (April 1990)

UNU/INRA is helping to rehabilitate Africa's natural resources. Its main objectives are to strengthen African research institutions, mobilize scientists and technologists throughout the continent, and empower them with knowledge so that they can formulate self-reliant policy options. UNU/INRA's activities focus on soil and water conservation and management, indigenous food crops and other useful plants, and mineral resource development.

UNU Institute of Advanced Studies (UNU/IAS), Tokyo, Japan (April 1996)

UNU/IAS is the University's newest research and training centre. It develops original, forward-looking solutions to problems at the interface of societal and natural systems. Its research programme investigates three interlinked themes of environmentally sustainable development: eco- restructuring for sustainable development, mega-cities and urban development, and multilateralism and governance. It also has a postgraduate education programme offering Ph.D. fellowships and short training courses in the above three themes.

The University has two specialized programmes. One is the Programme for Biotechnology in Latin America and the Caribbean (UNU/BIO LAC), located in Caracas, Venezuela (July 1988), which develops and promotes biotechnology in the region. The other is the UNU International Network on Water, Environment and Health (UNU/INWEH), located in Hamilton, Canada (October 1996), which integrates international expertise into a programme of education, training, research and technology transfer on major issues that relate to water, environment and human health. The UNU also has the International Leadership Academy (UNU/ILA), located in Amman, Jordan (April 1995), to serve as a focal point for the exchange of information and experience among young future leaders of the world.

The Initiative on Conflict Resolution and Ethnicity (INCORE), a joint undertaking of the UNU and the University of Ulster, carries out research, training and other activities on ethnic, political and religious conflicts. The UNU also works with a consortium of research entities in Barcelona on issues of governance. Iceland serves as the base for two important UNU capacity-building initiatives for specialists from developing countries: a Geothermal Training Programme (since 1979) and a Fisheries Training Programme (since 1998).

Postgraduate training activities

Between 1976 and 1998, approximately 1,700 UNU fellows received postgraduate training in UNU networks. The UNU's postgraduate training programme strengthens institutional capacities in developing countries by promoting self-reliant development and providing opportunities for scholars and scientists to be involved in UNU research networks. Fellows are selected on the basis of three criteria: their work must be in an area of concern to the University; they must be recommended by their home institution, and they must be committed to returning to work at their home institution when their training is completed.

Dissemination activities

The University has its own press that produces academic publications and cooperates in the production of five journals. Work in Progress, NExions and various brochures issued by the UNU's Public Affairs Section are the main information vehicles used in reporting research and ongoing developments within the University's academic networks.

Financing

The UNU receives no funds from the regular UN budget. Its activities are supported entirely by voluntary contributions from governments, agencies, international organizations, private companies and foundations. The University's basic annual income for operating expenses comes from investment income derived from its Endowment Fund. The annual budget in 1998 was approximately US$36 million.
The United Nations University

Public Affairs Section
The United Nations University
53-70, Jingumae 5-chome
Shibuya-ku, Tokyo 150-8925, Japan
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Fax: (03)3499-2828
E-mail: mbox@hq.unu.edu
Internet: http://www.unu.edu

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