

**Summary of Highlights**  
**January – 30 June 2001**  
**UNU Centre Environment and Sustainable Development**

**PROGRAMME ON NATURAL RESOURCE MANAGEMENT**

**People, Land Management and Environmental Change (PLEC):**

During its final year of the present four-year phase under GEF support, PLEC made much of progress by focussing on identification and demonstration of profitable and biodiversity-rich management systems, and on networking and capacity building. Dissemination of project results has seen considerable progress recently. Gap filling and analysis of biodiversity and agro diversity data continued.

In twelve developing countries (Brazil, China, Papua New Guinea, Uganda, Kenya, Tanzania, Ghana, and Guinea, Peru, Mexico, Jamaica and Thailand), demonstration sites are turned into fruitful places for farmer-to-farmer interaction, with the scientists playing a supporting role. Officials and other stakeholders are brought into the farmers' meetings to demonstrate the success of PLEC approaches, which are recognized and replicated elsewhere. Working with PLEC has helped more than 200 professional participants to embrace a farmer-centred approach, and learn research skills. Increased involvement of schoolteachers and children in PLEC demonstration helps appreciation of local knowledge among new generation.

Successful dissemination of emerging results has raised PLEC standing at both national and international levels. In Tanzania, feedback meetings of initial results draw active involvement of the leadership at village, ward, division and district level in promoting PLEC. The Second Meeting of PLEC Advisory Group praised PLEC progress and prompted PLEC, IPGRI and CBD to organize "International Symposium on Managing Biodiversity in Agricultural Systems".

The Fifth Meeting of the PLEC Management Group, Arusha, Tanzania, 2 - 6 May 2001 set strategies for successful conclusion of the present phase and development of a new PLEC.

**Major presentations and conferences:**

- PLEC-China presented at UNESCO "Workshop on Social-economical Development and Biodiversity Conservation in Xishuangbanna", Xishuangbanna, China, 2-3<sup>rd</sup> January 2001,
- PLEC presented at CBD Liaison Group Meeting on Agricultural Biodiversity, Rome, 24-26 Jan 2001.
- PLEC presented at Regional Science/Policy Conference on Global Change and Sustainable Development in Southeast Asia, Chiang Mai, Thailand, 17 - 19 February 2001.
- PLEC case studies from China and Peru presented at UNESCO-sponsored International Conference on Biodiversity & Society, New York, 22-25 May 2001.

**Contributions to UN initiatives:**

- PLEC highlighted in The Difference GEF Makes, Year 2000 Annual Report of GEF (draft), Volume I.
- Contribution to the CBD synthesis paper on on-farm management of crop genetic diversity, April 2001.
- PLEC in Brazil, Tanzania, Uganda and China selected for GEF Second Study of Overall Performance (OPS2), May 2001.
- Case studies of Ghana and China contributed to the GEF Biodiversity Planning Support Programme (BPSP), May-June 2001.

**PLEC meetings:**

- Workshop on "Strategies for Involvement of Stakeholders in Agrodiversity Conservation", Arusha, Tanzania, 25-26 Jan 2001.
- Workshop on Regeneration Ecology and Management for Degraded Landscapes and Forest Ecosystems, Chiang Mai University, Thailand, 10-16 February 2001.
- Annual Meeting of China Cluster, Kunming, China, 19-20 February 2001.
- The Fifth Meeting of the PLEC Management Group, Arusha, Tanzania, 2 - 6 May 2001.

### **Managing Land Degradation in Dry Areas:**

The objective of this project is to assist the developing countries in dry areas to manage their land resources, while achieving sustainable utilization of water and biodiversity resources contained therein. Integrated management of natural resources and developing multidisciplinary approaches is the key to achieving these objectives. The project functions as a network of researchers and institutions working together through project activities and research programmes. The first batch of research grants for Traditional Water Management in Dry Areas was authorized in February 2001. The Steering Committee of the project will meet in Tashkent in July 2001 to finalize project proposals and seek financial support from potential donors. The proceedings from the UNU/ICARDA Workshop on New Approaches to Freshwater Management in Central Asia (Aleppo, Syria, November 2000) will be printed and distributed in July 2001. The fourth International Workshop is planned in Beijing, China in September 2001, with the main theme on soil conservation practices.

### **Sustainable Mountain Development – UNU Global Mountain Partnership Programme:**

Discussion during the 2nd Working Group Meeting in Tokyo, 22 February 2001 resulted in the plan of activities with particular responsibilities towards the International Year of Mountain 2002, and in establishing the Mountain Committee of Japan. The proceedings and abstract volume emanating from the International Symposium on the Himalayan Environments: Mountain Sciences and Ecotourism/Biodiversity, 24-26 November 2000, Kathmandu Nepal (with several co-funding agencies) were published. Editing and publishing executive summary of the first Global Mountain Biodiversity Assessment (GMBA) Conference, 7-10 September 2000, Rigi-Kaltbad, Switzerland on Mountain Biodiversity Matter continues. Preparation activities in Kyrgyzstan and Tajikistan for the project on "Nature Conservation and Sustainable Development of the Pamir-Alai Region" in the High Pamir and Tien Shan mountain regions were carried out during this period. UNU reviewed the Mountain Agenda: "Mountain of the World: Mountains, Energy and Transport" published by SDC and CDE Berne.

### **Targeted Research and Human Capacity Building on the Role of Forests in Sustainable Development – Preparatory Phase:**

The major activities of project initiatives focused on World Forests, Society and Environment Strategy Workshop in Costa Rica 30 January – 5 February 2001, and on the Meeting of the World Forests, Society and Environment Research Project WFSE Partners at the International Union of Forest Research Organizations (IUFRO) Headquarters Vienna, Austria, 10–12 June 2001. Volume II of the World Forest Series "World Forest from Deforestation to Transition?" has been published by Kluwer with acknowledgement to UNU. UNU contributed to the First Substantive Session of the UN Forum on Forests, New York, 11-22 June 2001. Preparation activities are continuing for the new project on "Research and Capacity Development for National Forestry Programmes in Countries with Economies in Transition" with European Forest Institute and the Faculty of Forestry in Kaunas, Lithuania, and for its first symposium planned for May 2002.

## **PROGRAMME ON WATER CRISES**

### **Environmental Monitoring and Governance in Coastal Hydrosphere:**

The major emphasis remains on evaluating threats to coastal areas and ecosystems contained therein. A number of activities were successfully completed in the first half of FY 2001. These include: (i) UNU-UNESCO International Course "Biodiversity in Mangrove Ecosystems" [5-20 March 2001 at Annamalai University, India]; (ii) UNU International Symposium "Industries and EDC Pollution" [16-17 April 2001, Seoul, co-hosted by KORDI and KJIST]; (iii) UNU Training Workshop on analytical techniques for monitoring phthalates [18-21 April 2001, Hadano, Japan]; and (iv) a CD-ROM was produced containing all the project data and related documents, including proceedings from workshops and symposia [June 2001]. Negotiations and discussions with the project partners are under way to outline activities for the next three-year phase (2002-2005), and several international workshops and conferences are planned in the short-term:

### **International River and Lake Basins Management (formerly Governance of Transboundary Water Resources - Focus on Salween, Mekong and Zambezi River Basins):**

Through the synthesis of past findings, several components of new project on International River and Lake Basins Management have been elaborated. Book manuscript from UNU Workshop on Southern African Waters was prepared for publication by UNU Press. Preparation for self-organized workshop during the 9<sup>th</sup> World Lakes Conference, Shiga (planned for November 2001) is under way, with the focus on “Lakes and Reservoirs – Important Element of International Water Systems”, in cooperation with World Lake Vision, towards the 3<sup>rd</sup> World Water Forum.

UNU co-organized, in partnership with the World Water Assessment Programme (WWAP) and the 3<sup>rd</sup> World Water Forum secretariat, a series of meetings that highlighted critical issues for management of global water resources. The first WWAP Synthesis Meeting was held at the UNU Center on 4-5 April 2001 focusing on synthesizing global water assessments into information to be used for the World Water Development Report (WWDR). Following the Synthesis Meeting, a public symposium on Human Water Stewardship was held in Tokyo, 6 April 2001. Workshop on Climate Variability, Climate Change and Water Resources Management was organized jointly by UNU, 3<sup>rd</sup> World Water Forum Secretariat and the World Water Council, in cooperation with eight international agencies (Tokyo, Japan 8-9 June 2001).

#### **Development Approaches to Remedy the Arsenic Contamination in Water: The Major Environmental Crisis in the Alluvial Gages Aquifer:**

UNU has collaborated with the Bangladesh University of Engineering and Technology (BUET) in development of economical technologies/methods for treating arsenic contamination in pumped water considering local conditions in Bangladesh. A two-year project has completed in May 2001 and a workshop was held at BUET to have a roundtable discussion on the various technologies available to treat arsenic-contaminated groundwater (5-7 May, 2001; Dhaka). UNU is now collaborating with an NGO Earth Identity Project (EIP) to organize a meeting of various stakeholders (3 July 2001, Dhaka, Bangladesh). This meeting will help in the development of an emergency policy to tackle with the crisis and identify long-term policies. A policy brief is also being developed. A book comprising latest research papers on the subject of treatment of arsenic contamination will be published by the end of this year.

### **PROGRAMME ON GLOBAL ENVIRONMENTAL GOVERNANCE**

#### **Reducing the Societal Impacts of Extreme Climates Events Through Early Warning and Preparedness:**

The project focused on building the societal capacity in developing countries to better deal with environmental emergencies arising from extreme climate events. An extended summary of the project that includes summaries from all 16 countries will be printed through the UNU Press (August 2001). This will include the full country reports in a CD-ROM. A three-year capacity building project will start towards the end of the year 2001; a training workshop will be held in Kuala Lumpur (November/December 2001). Additional funding resources for the project are being explored.

#### **Global Integrated Model Development**

(Funding sources: UNU Core budget; Ministry of Foreign Affairs of Japan)

The major initiative focuses on a forum for exchange of ideas related to global integrated modeling. The first international workshop is being co-organized with RIVM (Netherlands) and UNU-IAS [October 2001]. This will be held at UNU-IIST facilities in Macau. Targeted participants include modeling groups within academia and IHDP, multilateral agencies (UN DESA, UNEP, UNESCO, WRI), and MEA secretariats.

#### **The UNU Inter-Linkages Initiative – Synergies and Coordination between Multilateral Environmental Agencies:**

A survey was conducted in interview form to delegates at the Economic Social commission for Asia and the Pacific (ESCAP) Ministerial Conference in Kitakyushu, Japan in August 2000, with the objectives to identifying challenges encountered by ESCAP nations during the implementation of Rio instruments and to determine to what extent mechanisms are used by nations to enhance synergies and coordination between MEAs. Survey results were presented at the Informal Regional Consultation/ Workshop on Inter-linkages Synergies and Coordination among Multilateral Environmental Agreements. A discussion

paper outlining the findings and postulating recommendations is being prepared and will be ready by the first week of July 2001 and a final report will be prepared by the end of August 2001.

A Regional Consultation Meeting on Inter-Linkages was held in Kuala Lumpur on 26-27 February 2001. The meeting focused on the national and regional aspects of MEA synergies and coordination, particularly regarding implementation of MEAs. A number of high-level participants attended the meeting. The summary of the meeting is now available at <http://www.iisd.ca/> with a policy brief now under preparation.

## **PROGRAMME ON SUSTAINABLE URBAN AND INDUSTRIAL DEVELOPMENT**

### **Zero Emissions Forum:**

(Funding source: UNU Core budget, SPC from ZEF networks)

UNU Zero Emissions Forum and the research group of Monbusho (Ministry of Education) Grant-in-aid for Scientific Research on Priority Areas "Zero Emissions" jointly organized a symposium at the UNU Headquarters, where 22 research results of the Monbusho-supported project on Zero Emissions were presented. Poster sessions were also organized during the symposium, and over 250 people participated in the events. (29-30 January 2001). From 28 March to 10 April 2001, at the invitation of the Tunisian Government, the delegation of ZEF academic network led by the Vice-Rector visited Tunis and gave lectures on zero emissions. and ZEF Steering Committee meeting was held on 23 April 2001 to discuss the final preparation of the Annual Meeting in May, the activity plan for Year 2001, and the preparation of the International Symposium to be organized in October 2001. The ZEF Annual Meeting was held on 11 May 2001 at the UNU Headquarters. The meeting this year featured special lecture on the "Management of Environmental Forestry" and on the "Environmental Education for the Children", presented by representatives of the forest industry and NGOs, respectively. Over 100 members from ZEF network and the public attended the meeting. As a part of its dissemination tools, a compilation of all the reports and presentations made at various ZEF meetings during year 2000 was published in June 2001.

### **Natural Disaster Risk Management: The Geography of Urban Vulnerability:**

Based on the case studies of the six mega cities (Johannesburg, Los Angeles, Manila, Mexico City, Mumbai, and Tokyo) initiated in 1998, various workshops were held during Yr.2000 in order to create dissemination videos based on the results of the project. The videos explore the more unique aspects of each city's situation in regard to vulnerable groups, NGO's neighborhood groups and others, and the production of the videos is now under way and expected to complete during 2001.

## **DISSEMINATION AND NETWORKING IN ENVIRONMENT**

### **Global Environment Information Center (GEIC):**

Jointly with CityNet and Asia/Pacific Cultural Centre for UNESCO (ACCU), GEIC organized a training workshop "Localizing Environmental Action: Bringing Together Local Governments and Urban Stakeholders in the Asia Pacific Region", at the UNU Headquarters from 2-21 February 2001. The programme targeted ten city officials from Asia Pacific region, to build capacity of participants on a range of global and urban environmental management issues, and to demonstrate the importance of building partnership among different stakeholders in the urban environment management processes. Following the Tokyo programme, another training workshop was organized at the Asia Institute of Technology (AIT), Thailand, in cooperation with CityNet, AIT, and ACCU. The second workshop on "Follow the Leader: Youth and Environmental Leadership in the Asia Pacific Region" invited ten undergraduate and graduate level university students from Japan with the aim to foster younger leaders that will have the knowledge and skills to deal with the environmental challenges of the future. The session dealt with both the concepts behind environmental problems and their solutions, and the practical aspects of these issues through simulation exercises, internship programmes and field trips.

## **DISSEMINATION MATERIALS (JANUARY-JUNE 2001):**

## BOOKS

- 1) Brookfield, Harold. 2001. *Exploring Agrobiodiversity*. Columbia University Press: New York
- 2) Biswas, Asit K. & Juha I. Uitto, eds. 2001, *Sustainable Development of the Ganges-Brahmaputra-Meghna Basins*. UNU Press
- 3) Faruqui, Naser I., Asit K. Biswas and Murad J. Bino, eds. 2001. *Water Management in Islam*. UNU Press and IDRC

## JOURNALS

- 1) Wu, Zheng-Yi, ed. 2000, *Agrobiodiversity Assessment and Conservation*. In *Acta Botanica Yunnanica, Suppl. XII*, Science Press: Beijing. (in Chinese)
- 2) *PLEC News and Views*, No. 17, February, 2001 and online.
- 3) Liang, Luohui, Michael Stocking, Harold Brookfield and Libor Jansky. 2001. *Biodiversity conservation through agrobiodiversity*. In *Global Environmental Change: Human and Policy Dimensions* 11(1): 97-101.

## CD Rom:

- 1) *Environmental Monitoring and Governance in the East Asian Coastal Hydrosphere*, produced by UNU. (Database of findings of the past 6 years under the project activity)

## ARTICLES

- 1) In *Work in Progress*, Volume 16, Number 2, Spring 2001 (Introducing the UNU Environment and Sustainable Development Programme):
  - Liang Luohui, Michael Stocking, Harold Brookfield, Christine Padoch and Libor Jansky. *Biodiversity Conservation through Agrobiodiversity: PLEC midterm report*
  - Zafar Adeel and Michael Glantz. *A Retrospective Study of the 1997-98 El Niño: Identifying Major Challenges and Opportunities*
  - Hurni, Hans and Libor Jansky. *Sustainable Use and conservation of Natural Resources in the High Pamir Mountains of Central Asia*
  - Palo, Matti. *The Role of Forests in Sustainable Development – An Ongoing Pilot Project*
  - Zafar Adeel. *Hunting for Endocrine Disruptors in East Asian Waters: Synopsis of a UNU Regional Project*
  - Nakayama, Mikiyasu and Libor Jansky. *International River Basin Management*
  - Suzuki, Motoyuki. *Zero Emissions Forum*
  - Srinivas, Hari. *Focusing on the Real Environmental Culprits Urban Areas: UNU's City Inspirations Initiative*

## PROCEEDINGS AND REPORTS

- 1) Proceedings of the UNU International Symposium on Industries and EDC Pollution: Environmental Monitoring and Governance – EDCs in East Asian Coastal Hydrosphere, organized by UNU and Korea Ocean Research & Development Institute, at Seoul National University, Seoul, Korea, 16-17 April 2001
- 2) Executive Summary of the First International Conference on Mountain Biodiversity, organized by the Swiss Academy of Natural Sciences, Institute of Botany of the University of Basel, the Institute of Geography of the University of Berne, the Institute of Ecology and Conservation of the University of Vienna, and UNU, 7-10 September 2000, Rigi-Kaltbad, Switzerland
- 3) Report of the International Conference on The Value of the Forests (in English), February 2001, UNU/GEIC
- 4) Report of the International Conference on The Value of the Forests (in Japanese), April 2001, UNU/GEIC
- 5) Compilation (Report) of the UNU Project on Zero Emissions Forum activities during 2000 (in Japanese). May 2001.
- 6) Hidayati, Deny. 2001. *Costal Management in ASEAN Countries: The Struggle to Achieve Sustainable Coastal Development*. UNU.
- 7) Inputs into WSSD (Rio+10): Comprehensive Report - Institutional Analysis

## MANUAL/TRAINING MATERIAL

- 1) Manual for Sample Collection and Analysis: Endocrine Disruptor Compounds (EDCs) in Water, 2001, UNU.