



INTERNATIONAL ACADEMY  
OF THE ENVIRONMENT - GENEVA

ACADEMIE INTERNATIONALE  
DE L'ENVIRONNEMENT - GENEVE



**ROUND TABLE ON POPULATION,  
ENVIRONMENT AND SUSTAINABLE  
DEVELOPMENT**

**Geneva, 24-26 November 1993**

**Fundação Cuidar o Futuro**

**Summary Report and Recommendations to the Secretariat of  
the International Conference on Population and Development**

MARCH 1994, GENEVA SWITZERLAND

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#### THE INTERNATIONAL ACADEMY OF THE ENVIRONMENT

The International Academy of the Environment, a Swiss Foundation, was inaugurated in 1991 by Mr. Flavio Cotti, Federal Councillor and ex-President of the Swiss Confederation. In 1992 the Swiss Federal Government officially appointed the Governing Council of the Academy and made the initial Federal grant. In addition to Federal support, the Academy benefits from financial assistance from the Canton of Geneva and such partner organizations as the World Bank, the United Nations Population Fund, the United Nations Environment Programme, and GTZ - the German Aid Agency.

In the light of priority needs highlighted in the 1992 Earth Summit's Agenda 21, the Academy is mandated to help strengthen the capacity of countries and institutions to address the challenges of sustainable development. The Academy's activities are therefore interdisciplinary, intersectorial, and international; importantly, they are oriented towards the development of the North/South dialogue and aim to impact policy making at local, national, and international levels. Since its creation, IAE has run a wide variety of educational and training programmes, convened several high-level policy dialogues, and initiated three important research programmes in the fields of biodiversity, consumption patterns, and trade and the environment.

As the tempo of international environmental activities accelerates, the Academy believes that informal but structured dialogue among decision makers, academic and scientific experts, and representatives of nongovernmental organizations can enhance possibilities for effective progress, either in connection with intergovernmental negotiations or in other contexts. The IAE Policy Dialogue Programme is designed to foster such dialogue. The programme is directed by Dr. Richard E. Benedick, Visiting Professor, who, as Deputy Assistant Secretary of State, was the chief U.S. negotiator and a principal architect of the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The Academy's policy dialogues differ considerably from academic workshops, training programmes, negotiating sessions, or large conferences. Basically, policy dialogues are informal but structured discussions among a relatively small number (20 to 35) of high-level participants, designed to explore important issues, to consider options and recommendations, and/or to resolve problems outside of a formal context.

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### I) Chairman's Summary (Ambassador Benedick)

On 24-26 November 1993, approximately 35 experts from different regions of the world, with differentiated experience and perspectives, from universities, research institutes, governments, multilateral and regional agencies, and local nongovernmental organizations participated in a policy dialogue to consider interlinkages between population factors, environmental degradation, and sustainable development (a full list of participants can be found in Section IV of this report). The meeting was organized by the International Academy of the Environment in close collaboration with the United Nations Population Fund (UNFPA), and with the support of the United Nations Environment Programme (UNEP) and the Government of Switzerland, as part of the preparatory process for the 1994 International Conference on Population and Development (ICPD).

The Round Table was designed to provide insights for the ICPD into these multiple and complex interrelationships, in order to assist UNFPA and other actors at intergovernmental, national, local, and nongovernmental levels in the formulation of programs to promote sustainable development. The Chairman's Summary and Recommendations of the Round Table were submitted to the ICPD Secretariat and subsequently formed the basis for the drafting of Chapter III, entitled "Interrelationships Between Population, Sustained Economic Growth, and Sustainable Development", of the Draft Programme of Action of the ICPD. This paper, which is the draft final document of the Conference, was considered by national delegations and observers from intergovernmental and nongovernmental organizations at the Third Session of the Preparatory Committee for the ICPD, meeting at the United Nations in New York in April 1994.

The meeting was chaired by Ambassador Richard E. Benedick of the International Academy of the Environment. As the keynote speaker, Dr. Nafis Sadik, Executive Director of UNFPA and Secretary-General of ICPD, addressed the meeting (the text of her speech can be found in Section II of this report). A background paper entitled "Issues



in Sustainable Development: Population, Poverty and the Environment", prepared by Mary Barberis of the Population Reference Bureau (Washington D.C.), surveyed the literature and provided a point of departure for the discussion. The paper focused, in particular, on five varying ecosystems where environmental degradation and natural resource depletion is serious and where poverty and population pressures appear to be significant contributing factors. Regional experts led off the discussion of each of the five ecosystems, and the experience of these subregions provided the Round Table with useful analogues for our planet as a whole:

- Deforestation in Central America
- Desertification in Sub-Saharan Africa
- Coastal and marine degradation in the Bay of Bengal
- Forested uplands of Indonesia, Nepal, the Philippines, and Thailand
- Small island states in the South Pacific

Against a background of growing international concern over population pressures, the World Population Plan of Action, which was adopted in 1974 in Bucharest by the first United Nations conference on population, stressed the need for a deeper understanding of relationships between population, depletion of natural resources, environmental degradation, and development. In the intervening twenty years the world's population has grown from 3.9 to 5.6 billion, an increase of 44 percent, and far greater increases in terms of absolute numbers lie ahead for most countries and regions. During this period, many basic resources on which future generations will depend for survival and well-being have been depleted at rapid rates and environmental pollution has intensified. Such ecosystems as tropical forests, wetlands and coastal areas, mountainous uplands, arid regions, and small islands have suffered serious damage and are proving to be more fragile than once believed. New ecological problems on a planetary scale, such as global climate change, ozone layer depletion, and mass extinction of species, largely driven by unsustainable production and consumption patterns, add to the threats to future quality of life.

Now more than ever it is recognized that the phenomena of historically unprecedented growth in human numbers, depletion of natural resources, and environmental degradation are inseparably linked, while being themselves influenced by widespread and persistent poverty, income disparities, and wasteful consumption. The Rio Declaration on Environment and Development and Agenda 21, adopted by the nations of the world at the highest political level during the United Nations Conference on Environment and Development (UNCED) in June 1992, reflect these complex modern realities.

The population-environment-development nexus is admittedly characterized by complicated interactions in which the chains of causality are often difficult to quantify. The impacts of population growth, structure, density, and migration are mediated through political, economic, socio-cultural, behavioral, and institutional factors. They can also vary with the environmental conditions and resource base of a particular region during a given time period. Nevertheless, it seems evident from the large body of existing research as well as from the case studies examined here, that population pressures can exacerbate problems of environmental deterioration and resource depletion and limit the options for sustainable development policies and actions.

The Round Table endorsed the principles and guidelines for action embodied in the Rio Declaration and Agenda 21 and, without attempting to reflect every aspect of them, elected to highlight certain recommendations as most pertinent to restoring a balance between population, environment and resources in the context of sustainable development. The following recommendations (Section III), which reflect a general consensus of the meeting, are addressed for action by international and regional organizations, national governments, local communities, and nongovernmental organizations. Participants emphasized the urgent need for timely and sustained actions, for integrated and multisectoral approaches, and for international cooperation in mobilizing financial and technological resources.



## II) Keynote Address by Dr. Sadik

It gives me great pleasure to welcome you all to this Round Table. Special thanks go to the International Academy of the Environment and its Director, Professor Giovannini, for sponsoring the meeting. It is the first time UNFPA has collaborated with the Academy on such a gathering, and we are most appreciative of your support. I would also like to convey our deep appreciation to UNEP and the Swiss Government for the generous support they have provided to this event.

This Round Table will build on the findings and recommendations of the expert group meeting held in January 1992, as part of the ICPD preparatory process. We will be guided by Agenda 21, the plan of action adopted at UNCED in Rio last year. However, Agenda 21 is an expression of goals rather than a policy document. To use it as a basis for policy formulation will require the application of detailed knowledge and experience. I hope your recommendations will help translate the aspirations of Agenda 21 into action.

That is the first reason for calling this meeting. The second is that we are barely nine months from the opening of the International Conference on Population and Development (ICPD) in Cairo on 5 September 1994. The Conference will influence population policy and activities for the next twenty years. Your contributions here will be of great importance in shaping the discussion in Cairo on the population aspects of sustainable development. Third, we hope and expect that the results of this Round Table will help UNFPA in the formulation of specific strategies and approaches in the area of population which are relevant to the concerns of Agenda 21.

The unprecedented growth in human numbers in our time will have profound effects on our physical environment. Population is growing faster than ever before, at 93-95 million people a year. Our current population of 5.6 billion will grow to 6.2 billion by the end of the century. Nearly all of this growth will be in Asia, Africa and Latin America. Over half will be in south Asia and Africa, the poorest regions in the world.

One result of this skewed growth will be to stimulate movement. People are leaving the rural areas for the cities in greater numbers than ever: by the end of the century, half the world's population will live in cities. Conversely, some of the world's poorest people are invading forests and fragile watersheds in search of land and a livelihood.

Population growth also means that there are more very poor people in the world than ever before, and fewer prospects for an improvement in their lives. Somehow, if the world is to make progress towards development, and avoid the destructive effects of poverty, some way must be found to give hope to the "bottom billion" poorest people. Some means must also be found to meet the aspirations of the three billion who are neither very poor nor very affluent.

At the same time we must not forget the importance of the relationship between population and consumption. Whilst we ask the peoples and governments of the developing world to be conscious of the importance of achieving a balance between population and the sustainable development of their resources, we must also ask the peoples and governments of the developed countries to change the manner in and rate at which they consume their own and others' resources.

All of these changes will have deep and interacting environmental effects. The challenge is to raise the living standards of four-fifths of the world's people, an increasing number of whom live in cities, and who are increasingly mobile, without destroying the environment on which we all depend. We need development; but development without sustainability defeats its own purpose.





Considerable knowledge of a general kind has been generated about population/environment relationships. Much general research has been carried out in many parts of the world. Demand is now increasing for case studies at the local or community level, in order to understand better the many causes likely to lead to environmental stress, and assess realistically what can be achieved through population measures and policies. The role of women in the entire population-environment nexus is more widely appreciated now than before, especially their actual and potential role as protectors and managers of the environment, and this too is stimulating interest in programmes.

Much also remains to be done in the area of consciousness-raising, among all groups of people, on the relationship between population and environmentally sound development.

It should now be possible to formulate and implement policies and programmes over a broad range. UNFPA is trying to respond to some of these needs. Both our mandate and Agenda 21 place much emphasis on the eradication of poverty. At the same time it is clear that population interacts with poverty and environmental degradation in ways which are often not well understood. We are therefore seeking for approaches with direct relevance to policy formulation and remedial action. This Round Table should be seen also within this context.

Much has changed since 1984 when the last United Nations population conference was held. Let me mention three changes.

First, there is the large influx of new members in the United Nations since 1984 when the membership stood at 159 as against the present membership of 184. The demographic circumstances of many of these new states are quite precarious. The ICPD offers these states the opportunity to participate in an international consensus building endeavor on an issue of great importance to their future.

Second, many other states have redefined their attitude to the population issue and these new attitudes need to be integrated into a new consensus.

And third, since 1984 the entire development paradigm has undergone profound changes which will inevitably influence the population field as well.

These and other developments will be reflected in the ICPD which I hope will accomplish at least the following.

1. Outline a plan of action linking population concerns to those of economic growth and sustainable development. Two goals are prominent - first, more effective local action to meet individual needs and aspirations of both men and women, and, second, more effective national policies and programmes to bring population into balance with available resources.
2. Reaffirm the right of women to access to quality reproductive health care, including access to safe and affordable family planning methods.
3. Ensure that all population and development policies and endeavors emphasize the empowerment of women.
4. Decide on a plan of action which will stabilize population, ease pressures underlying rapid urbanization and migration within and across borders, and safeguard the rights of international migrants.

This Round Table will be a significant contribution to these aims. I wish you a most rewarding discussion.



### III) Recommendations of the Round Table

#### *Population and Environment*

1. Population should be placed at the center of, and fully integrated into, development, environment, and education policies and programs at all levels.

2. Given the increasing pressures on ecosystems exerted by human populations, the basic human right of individuals to freely and responsibly plan the number and spacing of their children, and the fact that vast numbers of people are still unable to exercise this right, development and population policies should aim for the earliest possible stabilization of populations. This can be promoted, *inter alia*, by ensuring universal access to family planning information and services in the context of reproductive health, and by removing gender inequities in access to education, health care, and job opportunities.

3. Excessive and wasteful consumption in many societies has major impacts on depletion of natural resources, environmental degradation, and global change. Rising market demand in industrialized countries for certain primary products, notably lumber, beef, and cash crops, has contributed to economic distortions and damage to ecosystems. Measures need to be implemented to modify consumption patterns and lifestyles that have adverse ecological impacts. Because of the manifold consequences of rising fossil fuel use, particularly high priority is indicated for energy efficiency, conservation, and development of alternative energy sources. Other measures should include consumer education, incentives, taxes, user fees, and other policies to promote the internalization of environmental and resource costs into product pricing.

4. There are more poor people in the world than ever before. As poverty contributes both to population pressures and to environmental degradation, the array of actions recommended in Agenda 21 to reduce poverty should be pursued as a matter of highest priority. Particular attention should be focused on income-generation and employment policies directed at the rural poor, including *inter alia* improved access to schools, technical training, markets, credit and extension services, and family planning and health care.

5. A combination of rapid population growth and rural unemployment is leading to massive urbanization in areas which have never before seen such concentrations, including the creation of numerous mega-cities of over ten million inhabitants in the developing countries. Major problems are ensuing in furnishing the rising numbers of city dwellers with shelter, sanitation, and social services. The growing cities also generate unprecedented waste, water and air pollution, and impose serious environmental strains on the hinterlands -- including the clearing of forests and savannas for fuel, shelter, and food production. Actions are needed both to moderate population growth and to encourage decentralization, by promoting rural employment and development and family planning and related services. Simultaneously, strategies must be devised and implemented to meet the needs of the inevitably growing urban populations while moderating the ecological impacts of cities.

#### *Sectoral Recommendations*

6. In many countries the gap between the food needs of growing populations and domestic food production is widening, leading to farming of marginal lands and costly dependence on imports. There is an urgent need for measures to increase output while promoting sustainable farming and irrigation through education, incentives, soil conservation, rural credit, pricing policies, and diffusion of relevant technologies.

7. The world's forests are of paramount importance in terms of habitat for species, fuel, energy, food, shelter, wood products, soil conservation, water, and carbon absorption. Yet they are being relentlessly depleted as a consequence of forces of economics,





consumption, poverty, and population. In response to these pressures, development policies should promote forest conservation, sustainable forest management, reforestation, land tenure reform, and alternative energy sources such as solar, wind, and biomass. For their part, population policies should reflect the importance of reducing excessive population pressures and migration in and near vulnerable forest areas.

8. Genetic resources in the form of biological diversity are being depleted at rates that appear to be precipitating one of the largest mass extinction of species in the history of life on earth. Almost all extinctions are due to loss of habitat from human economic activities, which in turn traces back to the needs of growing populations and to unsustainable patterns of consumption and production. Safeguarding biodiversity will imply the implementation of a range of actions in Agenda 21 to promote sustainable development, in particular those applying to population, poverty, and preservation of tropical forests -- which are homes to the greatest concentrations of genetic diversity.

9. Coastal and marine habitat, fisheries, and resources are being both depleted and polluted due to a combination of impacts resulting from growing populations, rising consumption, unsustainable fishing methods, poor coastal zone management, and urban, industrial, and agricultural runoffs. Actions are needed to prohibit harmful fishing technologies, reduce coastal and ocean pollution, preserve dwindling mangrove forests, and rehabilitate depleted fish stocks.

10. Pressures of population are placing ever greater stress on water resources for domestic, agricultural, and industrial uses. Water can no longer be regarded as a free and limitless commodity. Growing water scarcity and pollution requires concerted measures at all levels aimed at more effective water conservation, management, distribution, and development of underground and surface water resources. International cooperation is imperative where water supply straddles national frontiers.

#### ***Institutional Recommendations***

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11. Local communities and nongovernmental organizations have a particularly crucial catalytic role in achieving sustainable development, especially through grassroots and community-based activities. Local participation and initiatives will be essential for reducing population pressures, managing resources sustainably, and restoring damaged ecosystems. The private sector, scientific community, women's groups, youth, indigenous people, and others must be involved in generating ideas and undertaking actions. Governments and multilateral institutions should facilitate decentralization of decision making through active encouragement of partnerships with such groups in designing and implementing population and environment programs.

12. A major precondition for better environmental protection and management of natural resources is the full participation of women in decision making and project design and implementation. This in turn implies women's political, economic, and social empowerment and full and equal access of women and girls to education, family planning and health care, job opportunities, credit, and extension services.

13. Lasting solutions to the complex problems arising from the population-environment-development nexus must be based on initiatives and activities in the developing countries themselves. Therefore, the international community should place particular priority on building institutional capacity in these countries in the form of management, scientific, and technical training to address the population, environment, and resource issues discussed above, as well as development of local administrative and research institutions. Institutions should be encouraged to employ multisectoral and interdisciplinary approaches to these issues.



14. Migration by the poor in search of tillable land and livelihood leads all too often to degradation of marginal lands and damage to fragile ecosystems. Governments should revise laws and policies on land ownership, tenure, and use, with particular attention to promoting and protecting property and use rights of women, pastoral nomads, and indigenous people. Actions are also needed to legalize or better define the tenurial rights of local communities over common resources and to promote local management of such resources. Complementary actions should include expanding rural credit, developing greater local production and marketing capacity, and training and technical assistance.

15. Environmental and population education is needed in all societies in order to increase understanding of the implications of population-environment relationships, to influence behavioral change and consumer lifestyles, and to promote sustainable management of natural resources. Such education should start at primary school level. The media should also be utilized as an important instrument for expanding knowledge and motivation.

### **Research**

16. Expanded policy-oriented research on the interlinkages between population, environment, resource use, and development is necessary as a prerequisite to sound actions. Such research should highlight local level conditions and solutions, family and community strategies, behavioral and motivational issues, sustainable management of natural resources, and the influence of social and political institutions, particularly in rural areas. Other examples of relevant research include:

- monitoring ecologically fragile areas for the impacts of human populations;
- assessing human vulnerability to ecological changes;
- causes of population movements and their effects on particular ecosystems;
- the role of women in local communities as protectors and managers of the environment;
- implications of demographic factors in the management of national parks and other protected areas;
- impacts on indigenous people of environmental degradation and of policy interventions;
- adaptation of experience of indigenous people in managing resources;
- design of structural adjustment programs supportive of population, environmental, and social objectives;
- impacts of lower trade barriers and growing international trade on population, environment and sustainable development.

### **Resource Mobilization**

17. Implementation of the above recommendations will require mobilization of resources and reassessment of priorities in the developing countries themselves as well as in the international community at large. Industrialized countries should develop innovative ways to provide the targeted financial assistance and technology cooperation that will be essential to secure the path to sustainable development and a long-term balance between population, environment, and natural resources.

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A complete report of this policy dialogue, together with the background paper and bibliography for the Round Table prepared by Mary Barberis, amounting to approximately 180 pages, will be available from the Academy in July 1994. For ordering information, write to the Academy c/o **Policy Dialogue Programme**.



#### IV) List of Participants

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