- Structured exchanges of ideas and dissemination of information on funding practice, administration, governance, and corporate community investment;
- Reinforcement of the infrastructure of citizens' associations by the establishment of training, research, and self-help, programmes and facilities to underpin and stimulate organized independent funding; and
- *Respect for* openness and accountability within the rule of law.

By providing resources and undertaking operational projects, independent funders promote innovation, flexibility, diversity, and voluntary citizen involvement. They have a proven ability to reach out to disadvantaged, minority, and marginalized, groups. They make a key contribution to the creation of open, democratic society and provide both the means and the motivation for active and compassionate citizenship.

To ensure a dynamic and accountable independent funding sector free from narrow national or other interests, the European Foundation Centre therefore calls on governments and European and international institutions to take all appropriate action to:

- *Uphold* the right of citizens to form new foundations and associations;
- Acknowledge a strong independent sector as an essential component of open civil society;
- Encourage individual and corporate community involvement; and
- Promote funding partnerships between the public, private, and voluntary, sectors.

## Courses on Life-zone Ecology and Tropical Dendrology Offered by the Tropical Science Center, San José, Costa Rica

Classification of the Earth's ecosystems and ecocomplexes affects many aspects of both ecological and geographical sciences. Additionally, the identification of plants is closely related to the classification of ecosystems which on land are largely characterized by their plant components. From an academic perspective both subjects are crucial, as they form the basis for sustainable resource management and biodiversity preservation.

Dr L.R. Holdridge's Life-zone Ecology classification system and Tropical Dendrology (a system to identify forest trees) have been used by scientists and other professionals in the tropics for more than 30 years. Furthermore, based on the Life-zone Ecology system, several practical, sound applications have been developed by the Tropical Science Center to be used in rural development, sustainable resource management, watershed management, land-use capability, assessment of environmental impact, territorial zoning, and ecosystem characterization in protected areas.

Recently, the United States National Atmospheric and Space Agency (NASA) prepared an earth map of life-zone ecosystems which has been used to monitor and predict vegetation changes due to the increase in atmospheric  $CO_2$ (the so-called 'greenhouse effect'). Also, in 1992, the World Conservation Monitoring Centre (WCMC), located in Cambridge, England, gave strong support to the Holdridge Life-zone system by including it in their official publication 'Global Biodiversity: Status of Earth's Living Resources'. Upon participating in the Life-zone Ecology course, students should have gained enough knowledge to implement sound, practical applications of the system to activities as mentioned in the preceding paragraphs. After attending the Tropical Dendrology course, students should be accomplished at identifying a large proportion of tropical trees and shrubs down to family, genus, and in some cases species. Successful course participants will also gain special skills enabling them to continue making progress on their own upon returning to their respective countries.

Courses last for 3 weeks and will be offered in 1994 from March 21 to April 8 (Dendrology), and from April 25 to May 13 (Ecology). Costs will be US \$2,500 for Tropical Dendrology and US \$2,700 for Life-zone Ecology (please note that these amounts include accommodation but not airfares). For additional information, please contact the undersigned.

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## Bay of Bengal Islands' Population and Environment Future: An Urgent Appeal

The Andaman and Nicobar Islands are situated in the Bay of Bengal, have a total geographical area of 8,294 sq. km, are bestowed with one of the world's richest ecocomplexes of forest, marine, and mangrove, maintaining partly- or completely-closed systems of energy, nutrients, and fresh water. These Islands harbour an irreplaceable gene-pool of many interesting endemic plants and animals, unique to the islands and confined to some specified areas representing Indo-Chinese and Indo-Malayan elements.

The ecology of the Andaman and Nicobar Islands is fragile and very sensitive to population growth. The present human population of about 0.3 million already exceeds the absolute carrying capacity of 0.25 million of these islands, while the projected population of 0.45 million or even more in AD 2000 is estimated to make annual demands of 442 thousand million litres of water (both drinking- and irrigation-) and 0.9 million tonnes of firewood. Intensive agriculture over 500 sq. km would require 8,500 tonnes of fertilizers and 275 tonnes of pesticides for optimum yield. The consumption of petrochemicals for power and transport would be 50% more than the present annual consumption of 38 thousand million litres of petrol and 37.5 thousand million litres of high-speed diesel oil.

The ultimate target of the exploding population is to clear virgin forest to meet the requirements of agriculture, firewood, settlements, fodder, etc. — leading to the extinction or threatening of the survival of endemic flora and fauna, which have developed on these Islands after millions of years of evolution. Deforestation enhances soil erosion and leads to increased input of agrochemicals and domestic wastes, which find their way to near-shore waters, endangering marine biota and also entering the human food-chain. Combustion of petrochemicals in generators and automobiles will pollute the healthy atmosphere of the capital city, Port Blair, by adding more harmful gases and noxious fumes. Nondegradable disposable wastes and insanitation will create health-hazards — through contamination, sedimentation, and pollution. Consequently there is the most urgent need for family planning, with adoption of appropriate technology that must be suited to local conditions — to conserve and preserve the existing environment — by avoiding or minimizing the foreseeable damage to the ecology of these beautiful islands, prior to its reaching irreparable levels.

T.C. KHATRI J. N. Government College Port Blair 744101 Andamans, India.

## **Advisory Board on Sustainable Development**

The United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in June 1992, in the context of follow-up arrangements had recommended that the Secretary-General establish a highlevel advisory board consisting of eminent persons knowledgeable about environment and development, including relevant sciences, to be appointed by the Secretary-General in their personal capacity.

Subsequently the UN General Assembly, at its regular session, endorsed the proposals of the Secretary-General regarding the nature, main functions, and general composition, of such a board, and he has now appointed the following 21 individuals to serve on the Board:

Bernard Chidzero (of Zimbabwe), Jacques Cousteau (of France), Birgitta Dahl (of Sweden), Qu Geping (of China), Martin W. Holdgate (of the United Kingdom), Saburo Kawai (of Japan), Tommy Koh (of Singapore), Valentin A. Koptyug (of the Russian Federation), Bola Kuforiji-Olubi (of Nigeria), Rita Levi Montalcini (of Italy), Celso Lafer (of Brazil), Maria de los Angeles Moreno (of Mexico), Laura Novoa (of Chile), Justice R.S. Pathak (of India), Emil Salim (of Indonesia), Marie Angelique Savane (of Senegal), Klaus Schwab (of Germany), Stefan Schmidheiny (of Switzerland), Adeles Simmons (of the United States), Maurice F. Strong (of Canada), and Mostafa K. Tolba (of Egypt).

The Board will serve as a high-level source of advice for the Secretary-General in formulating policy proposals, elaborating innovative approaches and courses for action, and identifying emerging issues to be brought to the attention of relevant intergovernmental bodies — particularly the Commission on Sustainable Development and the Economic and Social Council, including the high-level segments of those bodies, as well as the Administrative Committee on Coordination (ACC).

In more specific terms, the Board is to have the following functions:

(a) To provide high-level advice, proposals, and recommendations, on issues and themes to be addressed by the Commission on Sustainable Development and the Commission's high-level meetings;

(b) To bring to the attention of the Secretary-General and, through him, to that of the relevant intergovernmental bodies, emerging problems related to 'sustainable development' and possible ways and means for resolving them;

(c) To provide the UN Secretary-General and, through him, the ACC, with its views on the expectations and concerns of major constituencies and groups on sustainable development issues and on the contribution of the United Nations system in addressing those issues;

(d) To contribute to the building of partnerships between the United Nations and the scientific, business, and academic, communities and major non-governmental groups; and

(c) To promote knowledge and understanding of, and mobilize support for, United Nations activities in the area of environment and development throughout the constituencies and groups represented by its members.



Press photo with the caption 'Nothing moves at the once busy Dal Lake in Srinagar', as an indication of why Dr Khan declined to return to the Lake for further studies as recommended by a specialist referee, whereupon we requested reduction of his paper to the short communication published on pages 352–6 of this issue.