

natural resource use in and around the National Park. Also identified is a core protected area around which there will be other zones of land where different activities can occur — for instance, some areas will be designated for 'traditional use'. Here the gathering of forest produce such as nuts and vegetables will be allowed, together with limited hunting (no dogs or night-lights, and only of specified species) and fishing in sustainable ways.

Integrated rural development is another key feature of the scheme and will take place in a support zone around the Park. In addition to infrastructural improvements (water-supply, basic health-care, and possibly even family-planning services) there are also plans to develop agricultural 'outreach help.' This includes the introduction of new, improved crops and farming techniques, agro-forestry nurseries, livestock breeding centres, and fish hatcheries. The extension programme will specifically aim at identifying village-level projects and activities to increase incomes. Research will be an important part of this programme, so that the project should gain widely from indigenous wisdom.

#### *Settled Cultivation Favoured*

Included in the project are schemes designed to make settled cultivation more profitable than slash-and-burn practices and haphazard gathering. The emphasis is on agro-forestry (trees complementing crops), which is better suited than 'full' agriculture to areas of fragile ecosystems. Stress is also laid on the need for a variety of crops. 'It is important for the project that people grow a very diverse range of tree crops — bush-mango (*Mangifer* sp.), rattans [*Calamus* sp. of spp.], and any number of other,' Miss

Allcott says, adding that 'This is much safer — for economic reasons as well — than growing monocrops.'

An education programme, which will be crucial in the long-term, is already being introduced throughout the Support Zone with the help of the Nigerian Conservation Foundation, one of WWF's affiliate organizations. A key element is the Village Liaison Officer (VLO) — a local villager who will act as a bridge between the project and local people. The VLOs will organize clubs, tree-planting programmes, and habitat surveys. They will also be available to answer everyday questions and to raise awareness of why the Park is being created, as well as to communicate the desires and concerns of the local people to the Park management — a very important role.

In August 1990, WWF appointed a new project manager, Nicholas Ashton-Jones. 'His previous experience in rural development projects will be invaluable in ensuring that the Project meets the needs of the local population,' says Miss Allcott. Mr Ashton-Jones has to date spent most of his time with the local communities affected by the project, while plans are under way to organize training for the VLOs, and to include villagers in the decision-making of the programme. 'We consider the involvement of the people as absolutely vital,' points out Miss Allcott: 'Only when they truly support the Park, can the project be viewed as a success'.

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### Summer Institute for Environmental Values Education

Each year the Harmony Foundation of Canada offers an 8-days' residential environmental education programme for educators from all over the world. Teachers from all levels, as well as community educators, attend the Institute in order to improve their knowledge of environmental issues and values, explore teaching methods, and cultivate their skills in environmental education.

This year's Summer Institute for Environmental Values Education is offered from 17–24 July 1992, and will be held at Econiche — a beautiful, forested Nature retreat near Cantley, Quebec (Canada). The first two Summer Institutes energized and inspired participants,

and seeded many new and rich relationships between them. In addition, participants returned to their homes with concrete examples of their own enriched skills in environmental education. Anyone interested should contact the undersigned:

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of the pivotal importance of the structure, functions, and diversity, of the world's natural systems, development will undermine itself and fail.'

Major causes of biodiversity loss also include industrial agriculture and forestry, while pollution strains ecosystems and threatens some species. Air pollution is said to have contributed to the extinction of 43 species in Poland's Ojcow National Park; pesticides, used to control crayfish along the boundaries of Spain's Cota Donaña National Park, killed an estimated 30,000 birds in 1985; and acid rain has poisoned thousands of lakes and pools in Europe and North America.

#### *Climate Change Menace*

In the coming decades, climate change may pose the greatest risk of all to biological variety. Human-induced 'greenhouse gases' are likely to cause an increase in the global temperature by from 1 to 3°C during the next century, raising the sea-level by up to 1 metre. Many species seem unlikely to be able to adapt fast enough to

survive such changes.

Loss of marine diversity, especially in coastal waters, is already reaching crisis proportions. Scientists predict that Florida's Barrier Reef, one of the world's most diverse yet intricate eco-complexes, may be doomed in the next decade because of water pollution and mysterious marine diseases. In Rio de Janeiro — the site of UNCED in June — beaches and the sea are so polluted that local officials fear the tourists will not return.

'The world is beginning to recognize that there are practical as well as ethical reasons to stop the destruction of the Earth's biological richness and genetic heritage', said IUCN's Director-General Dr Martin W. Holdgate: 'The Global Biodiversity Strategy provides policymakers with guidelines to make major changes in laws and policies that [will be] needed over the next decade.'

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