GUEST COMMENT

Biodiversity and the Challenge of National Borders

The Convention on Biological Diversity was launched in Rio de Janeiro on 5 June 1992 in an affirmation that the conservation of biodiversity was a common concern of Humankind and in due recognition that a fundamental requirement for such action was the conservation of ecosystems and natural habitats *in situ*.

The conservation of biodiversity involves the protection of diverse natural habitats, both terrestrial and oceanic, throughout the globe — a globe that is in large part partitioned among some 190 sovereign states. Among the several crucial considerations that arise in conserving biodiversity are the optimal (or at least minimal) numbers, sizes, and locations, of the natural habitats that need protection. An equally important consideration regarding such key natural habitats — and perhaps an even more nearly intractable one — is the extent to which those that fall within the confines of a sovereign state remain the responsibility of the international community as a whole, in terms of control, protection, and maintenance costs. Similar questions arise for habitats in areas beyond any national jurisdiction. However, the concern dwelt upon here is the conservation of natural habitats that happen to straddle two or more national borders.

Border-straddling Natural Habitats

The Convention on Biological Diversity is essentially silent on conserving biodiversity in habitats that are shared by more than one country. Any problems that might arise in this respect are in essence covered only by the commitment, *via* Article V, for the parties to cooperate so far as possible and as appropriate in matters of mutual interest. As it turns out, the 190 or so sovereign states now in existence are separated by some 220,000 kilometres of land boundaries. That these boundaries must often bisect priority habitats can almost go without saying. Nonetheless, some rough estimate of the magnitude of the problem is of importance here, and can be gleaned from the extraordinarily valuable recent contribution of Bibby *et al.* (1992), who have provisionally identified the majority of the high-priority natural habitats throughout the terrestrial portions of the world. Thus identified are 221 areas involving 127 sovereign states: of these 221 high-priority natural habitats, some 77 — that is, fully 35% — turn out to cross national boundaries.

Elsewhere I suggest that ecosystems straddling national borders provide the opportunity for abutting states to cooperate in protecting biodiversity and, in the process, build political confidence (Westing, in press). Fortunately, various precedents exist that would support the Convention on Biological Diversity in the notion of strengthening regional environmental security in this way. At least two issues are involved here: (a) the explicit protection of Nature; and (b) the protection of the area concerned from military disruption, that is, its demilitarization.

International Instruments to be Noted

A number of international instruments can be cited as regards the explicit protection of transfrontier natural habitats. The Ramsar Convention of 1971 on Wetlands of International Importance [UNTS Nr 14583] commits its parties to consultation with respect to a transfrontier wetland or water system (*cf.* Article V). The Bern Convention of 1979 on the Conservation of European Wildlife and Natural Habitats [UNTS Nr 21159] commits its parties to coordination in protecting natural habitats in frontier areas (*cf.* Article IV). The Geneva Protocol of 1982 Concerning Mediterranean Specially Protected Areas [UNTS Nr 24079] commits its parties to consult each other regarding any frontier protected area, and to examine the possibility of establishing a corresponding area (*cf.* Article VI). And the Benelux [Brussels] Convention of 1982 on Nature Conservation and Landscape Protection commits its three parties to develop a concept of transboundary natural areas and landscapes, to inventory them, to establish coordinate programmes for their management and protection, and to seek their establishment (*cf.* Article III).

A number of comparable bilateral agreements for natural habitat protection could be mentioned as well, among them those between Germany and Luxembourg of 1964, between Belgium and Germany of 1971, between Germany and The Netherlands of 1976, between Costa Rica and Panama of 1982, and between Finland and the now Russian Federation of 1989. It should also be of interest to note that the Consultative Assembly of the Council of Europe (Strasbourg) has recommended the creation of transfrontier protected natural areas as a means of strengthening the spirit of regional cooperation and solidarity (Recommendation Nr 587 of 1970, §6).

The Menace of Military Activities

Turning now to the all-too-frequent likelihood of military depredations of natural habitats, it is manifestly clear that zones which are being designated as protected natural areas deserve to be shielded from disruption of all sorts, whether civil or military (Westing, 1992). Thus it is urged that transfrontier reserves be formally demilitarized — a safeguard that should, in fact, be carried over to every protected natural area in the world. The demilitarization of an area finds support in a number of international instruments. The Spitsbergen Treaty of 1920 [LNTS Nr 41] demilitarizes the Svalbard Archipelago and Bear Island in the Arctic Ocean (*cf.* Article IX). The Aaland Island Convention of 1921 [LNTS Nr 255] demilitarizes the Åland Islands in the Baltic Sea (*cf.* Articles III etc.). And the Antarctic Treaty of 1959 [UNTS Nr 5778] demilitarizes the land area of Antarctica (cf. Article I).

Several bilaterally demilitarized borders also exist, among them those between Canada and the USA

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(since 1817), between Norway and Sweden (since 1905), and between China and Nepal (since 1960). More generally — and of central importance in the present context — the Bern Protocol I of 1977 on the Protection of Victims of International Armed Conflicts [UNTS Nr 17512], provides for the creation of demilitarized zones (*cf.* Article LX).

In committing themselves to accepting the Convention on Biological Diversity, the many countries that did so acknowledged, in their preambular statement, the importance of promoting regional and global cooperation among states, at the same time suggesting that, ultimately, the conservation of biological diversity would strengthen friendly relations among states and contribute to peace for Humankind. Thus, one readily-available approach for many contiguous states to initiate or nurture friendly relations, would be to act jointly in the conservation of biological the protection of any high-priority natural habitats that may straddle their common border. It would at the same time facilitate a recognition that notions of absolute state sovereignty must be relaxed somewhat in order to achieve environmental security — and thereby human security.

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GUEST COMMENT

Ecotechnology and Rural Employment

One of the most formidable challenges faced by countries with large and predominantly young populations, such as India, China, and Bangladesh, is the generation of new opportunities for skilled and productive jobs in rural areas. The need for concurrent attention to on-farm and off-farm employment is becoming more and more urgent as soil degradation, ground-water depletion, pollution, and other environmental problems, are rendering further advances in agricultural production and productivity ever-more difficult.

Disconcertingly slow growth in the diversification of opportunities for gainful and truly productive employment on the land is leading to economic access to food becoming the major food-security challenge at the household level. Particularly acute is the lack of opportunities for skilled jobs in rural areas, resulting in brain-drain from villages to towns and cities. Over 70% of the population of India still live in villages, while this percentage is nearly 80 in China.

Unplanned migration of educated rural youth to towns and cities, besides causing new social problems in urban areas, hampers the upgrading of rural enterprises and makes the blending of brain with brawn difficult in villages whence too many of the best brains have departed. Consequently, a majority of rural families depend on brawn to maintain the primary sector (crop and animal husbandry, fisheries, and forestry) for their livelihood.

As a result of the above, the secondary industrial and agro-industrial sectors and tertiary-services sector tend to remain untapped opportunities. How can we achieve the goal of generating new opportunities for skilled or value-added jobs in rural areas in both farm and non-farm sectors? And especially for women, how can we provide greater opportunities in villages for skilled jobs involving a necessary degree of flexibility in the time, place, and duration, of work to enable them to care for their homes and families? These issues need careful, action-oriented, interdisciplinary and cross-sectoral analysis.

While addressing this issue, it should not be forgotten that rural families put together a living through multifarious activities. The urban concept of employment will have little meaning under such conditions, so every effort has to be made to optimize this strength of diversity of sources of occupation and income in rural day-to-day life.

India and China face the greatest challenges on the rural-livelihood security front, as both countries have predominantly rural populations operating small farms. China's experience through its 'Spark Programme', leading to the growth of rural township enterprises, shows that millions of jobs can be created through a mixture of enterprises — actually nearly 100 millions during the last 10 years.

In a recent address, Premier Li Peng highlighted both the economic strengths and ecological shortcomings of this programme in the following words:

'Township enterprises are a fresh experience for China's rural areas. About 100 million people in rural areas were employed and the peasants' living standards were obviously improved, thanks to the development of such enterprises.