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Key Concepts and Issues Concerning Sport and the Environment

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Abstract



Environmental issues are becoming a general concern all over the world, as they affect the daily lives of each and every one of us. Admittedly, the concept of environment is not new; moreover, it is deeply related to each specific culture and its relationship with nature. Nonetheless, numerous major international conferences and countless scientific research projects have, over the past few decades, underscored the urgent need to address these issues on the basis of a coherent and world-wide approach, and urged the different players of society to adopt concrete measures to reduce their negative impacts on the environment, thereby ensuring the well-being of present and future generations.

Keywords: *Environment, Sports, Physical Education, Olympics.*

Sport, as recreational and physical education activities, is now a days a major component of society. It gathers under its umbrella millions of adepts world-wide and constitutes, through its clubs, associations and other organizations, a major and well structured network in our society. But as one of many human activities, it also impinges on the environment. Given that global environmental problems are deeply rooted in local environmental conditions and behaviour, the interaction of the sports community with the environment in which its activities are performed must be carefully analysed, and ways to improve it must be sought, to the benefit of all. Indeed, the concepts of sport and environment are fully interdependent and need to be addressed simultaneously.

The Olympic Movement, as the movement encompassing sports organizations, athletes and other persons who agree to be guided by the Olympic Charter, has a direct and concrete role to play in the field of environmental protection. Olympics is a philosophy which places sport at the service of the harmonious development of men and women, and contributes to building a better world by educating youth through sport. In this sense, a healthy global and local environment is a natural partner of the Olympic ideals and the promotion of Olympics. Environment fully deserves to be considered as the third pillar of Olympics, after sport and culture. The Olympic Movement has therefore the responsibility of addressing environmental issues and integrating its actions with in the framework of sustainable development.

The International Olympic Committee (IOC), as the coordinator of the Olympic Movement is convinced that it has to assume a leading position in this field. Its goals are two-fold. First, and more specifically, the IOC ensures that the Olympic Games are held in conditions which demonstrate a responsible concern for environmental issues. In this respect, we are pleased to observe that major efforts have been accomplished with the cooperation of the Organizing Committees. Second, and on a more global scale, the IOC wishes to promote an educational programme among the members of the Olympic family advocating environmentally sound practices and turning environmental challenges into new opportunities to associate the sports community to sustainable development. Hence, our action during the Games of the XXV Olympiad in Barcelona, where all the International Federations and National Olympic Committees signed the Earth Pledge and thereby committed themselves to contributing towards making the Earth a safe place. It is also in this context that the IOC decided to establish cooperative links with the United Nations Environmental Programme (UNEP), the leading international institution in the field of environment, with which we have undertaken several joint initiatives. The former IOC President, Juan Antonio Samaranch, who launched the sport and environment issue, further reinforced this trend by creating a Sport and Environment Commission, which I have the privilege to chair, together with a special section in the administration responsible for the implementation and follow-up of all IOC environmental actions. Through a genuine awareness-building process and the setting up of

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an appropriate working structure, the IOC has given itself the basis for the definition and implementation of its environmental policies.

Such is the framework in which this Manual on Sport and the Environment was prepared, for use by all the members of the Olympic Movement, from the largest and most developed entities to the smallest organizations, all the way down to the individual level. It is designed for a public which is not necessarily equipped with a specific expertise in environmental issues, and aims to provide basic tools to identify problem areas, establish priorities and find appropriate responses to issues stemming from the relationship between sport and the environment. This being said, by no means do the recommendations included in this Manual purport to be the panacea. Cultural, historical, geographical, political and economic specificities all have to be considered, as they impinge significantly on the nature and extent of any environmental measure which may be undertaken.

The contribution of the Olympic Movement and of its numerous volunteers must be complementary, the basic responsibility to protect the environment lying with governments. Nevertheless, we are firmly convinced that much can be done with limited means. Each step taken to harmonize the development of sport with its environment can, in the long term, make a real difference to the cause of sustainability.

The environment is everything that surrounds an organism or organisms, including both natural and human-built elements. Human beings, as all the other species that form the global ecosystem, have always interacted with their environment and, in the process, shaped it to some extent. However, human beings are the only species able to affect the ecosystems considerably. Since ancient times, the use of fire has altered flora and fauna, farmers have cut forests and domesticated certain species of animals, and early civilizations have transformed deserts through irrigation.

Today, the Earth itself is undergoing a global transformation. Rapid population growth combined with the development of fossil fuel-based industrialized societies has dramatically accelerated the impact on the environment. Climate change, the global destruction or pollution of ecosystems and other environmental problems are closely linked to our attitudes and practices. This also applies to sports activities. Like any other human activity, sport is set in a physical environment and has effects on it.

The practice of sport includes activities at different levels. It ranges from persons who occasionally engage in sports activities and physical education to elite athletes, from small clubs to International Federations, from local competitions to championships and large scale events such as the Olympic Games. The practice of sport implies, to a varying degree, a structured organization, sports facilities and equipment, logistics and sponsors, media, and athletes of course, i.e. persons who practice a sport more or less intensively.

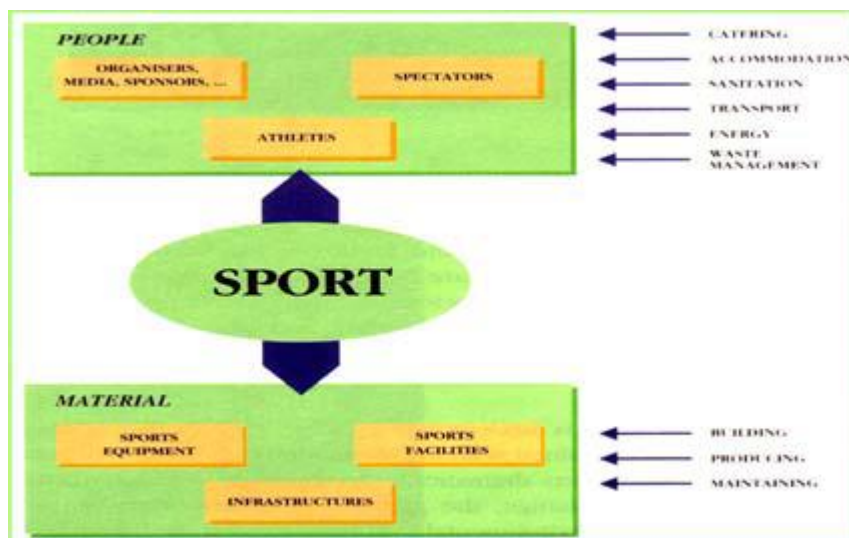


Figure 1: Activities and needs created by sports events

Potentially, sport can generate various impacts on the ecosystems, from insignificant repercussions to major damage. The scale and gravity of impact depends mainly on the kind of sport and the size of the event. The following types of impact generated by sports events should be considered:

a) Short-term impacts

Short-term impacts occur during the event, e.g. noise or local air pollution due to a specific event are short-term impacts.

b) Long-term impacts

Long-term impacts continue to exist after the end of an event; they can be due to facilities or infrastructures that remain. Soil deterioration (long-term pollution or soil packing) are also long-term impacts.

c) Direct impacts

Direct impacts are caused by facilities and people directly involved in the event.

d) Indirect impacts

Indirect impacts are due to new infrastructures built for the event but not directly related to the sports activity (e.g. new roads, new bridges).

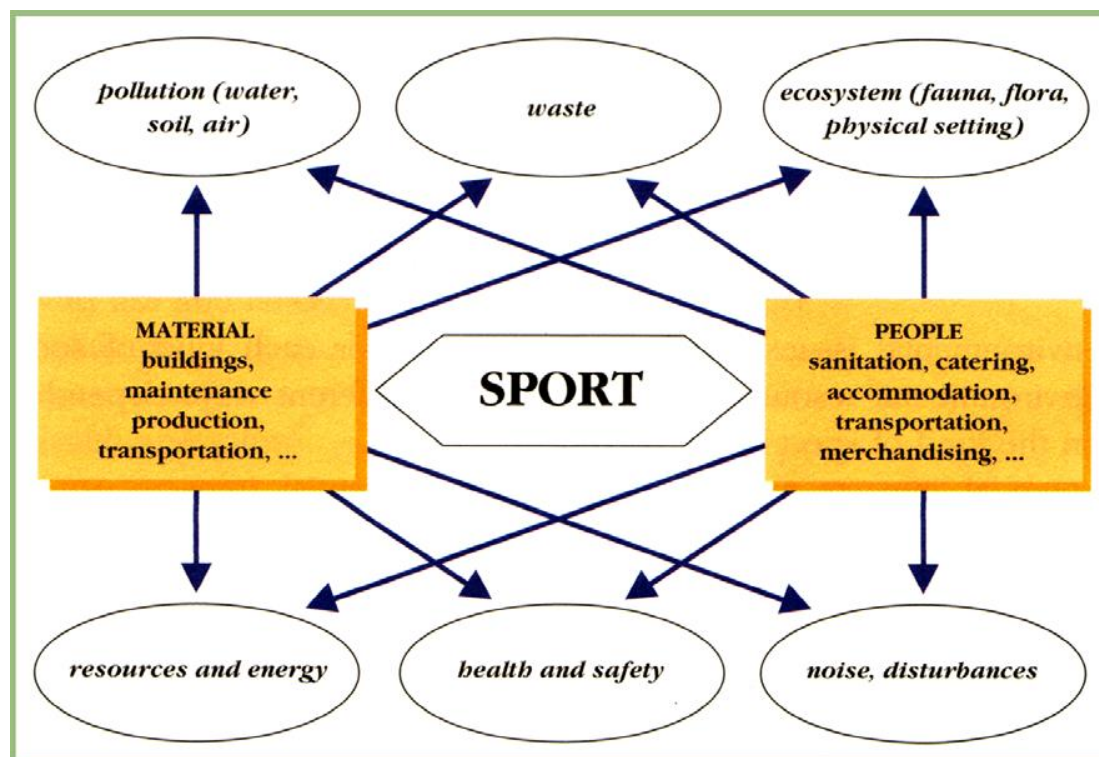
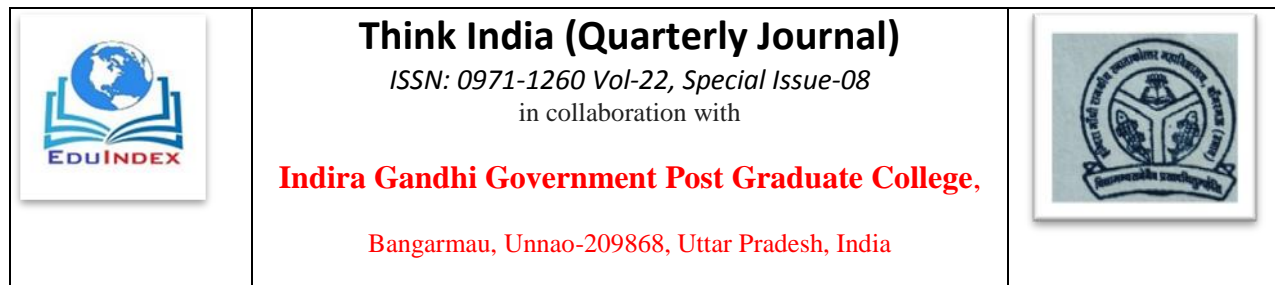


Figure 2: Potential impact of sport events on the environment

The attractiveness of a region, and the consequential human pressure on it, through increased tourism for example, also constitute indirect impacts.

It is particularly difficult to describe with accuracy the environmental effects of sport at a general level, mainly because:

- Environmental issues can be very different for each kind of sport.



- Environmental resources are drawn on in different ways depending on the kind of sport being played;
- Potential impacts are not real impacts. Potential impacts can be reduced or even eliminated by choosing a sound place, adopting an environmentally sound management of events and transforming people's behaviour;
 - The extent of an impact is often more relevant than its type. The size of an impact depends on:
 - how intensively the sports place is used.
 - how sensitive the natural setting is.

How ever, three kinds of impacts are especially relevant in regard to sports events:

- High concentration of people in a short time and in a limited place
- Increase of sports activities in time and place (where previously there was little or nothing)
- Indirect effects due to the sport, often similar to those due to tourism

Public attention has been focused on environmental problems generated by large scale events like the Olympic Games, but little attention is paid to other sports activities and events which are practised regularly and concern a majority of people. Impacts of big events are more visible and more important, but daily practices may also have negative effects on the environment through the large number of people they involve.

Sport may be related to tourism in the way that sports events and facilities (infrastructures, trails, natural setting, etc.) constitute a tourist attraction. Although the environmental effects of tourism can be significant, they are not taken up in the present Manual.

We have identified below a series of environmental issues which may have to be addressed, whether when engaging in a sports activity or organizing a sports event:

- Biodiversity conservation
- Protection of ecosystems
- Land use and landscape
- Pollution
- Resource and waste management
- Health and safety
- Nuisances
- Safeguard of cultural heritage

Sports activities can be classified by the type of ecosystem in which they take place and by their impact on it:

1) Activities in constructed ecosystems (outdoor and indoor)

Refers to sports practised in totally closed and artificial places like stadium, indoor tennis courts, sports halls or swimming pools. In urban areas, these facilities are a source of nuisances and can generate environmental problems similar to other urban activities (waste, wastewater, energy). In non-urban areas, the main problem is the loss of a more or less natural ecosystem and its substitution by an artificial one.

2) Low-impact activities in natural ecosystems (mountain bike, equestrian, water sports)

Refers to sports practised in a natural setting and which do not require a substantial modification of the ecosystem. In this case, the impact is caused more by the high concentration of sportsmen and sportswomen whose behaviour is not always environmentally friendly.

3) High-impact activities in natural ecosystems (alpine ski trails, bobsleigh)

Refers to sports practised in a natural setting and which require a substantial modification and/or destruction of the ecosystem. Facilities and users cause extensive damage to the whole ecosystem.

The different parts of the ecosystem which may be affected are:

- Flora
- Fauna
- Physical surroundings (water courses, topography, etc.)

Pollution According Sports:

Pollution is defined as the presence of hazardous gases, particles and solid and/or liquid substances, or of excessive amounts of normal constituents in the atmosphere, water and land bodies. Pollution may impinge on economic

activities, degrade ecosystems including their natural resources, harm human health and destroy aesthetic values of landscape. Pollutants travel relatively easily through the different parts of the ecosystem.

Washing out from soil into the groundwater, air deposition over soils and waters, runoff from roads into rivers are some of the processes which contribute to global contamination. Once in the environment, pollutants are absorbed by plants, animals and finally humans, and endanger the health of these organisms.

Sport is a human activity which produces waste (domestic and hazardous), uses substances, and could be a potential polluter. Some sports facilities may contain toxic substances like cooling agents or chlorine (e.g. in swimming pools).

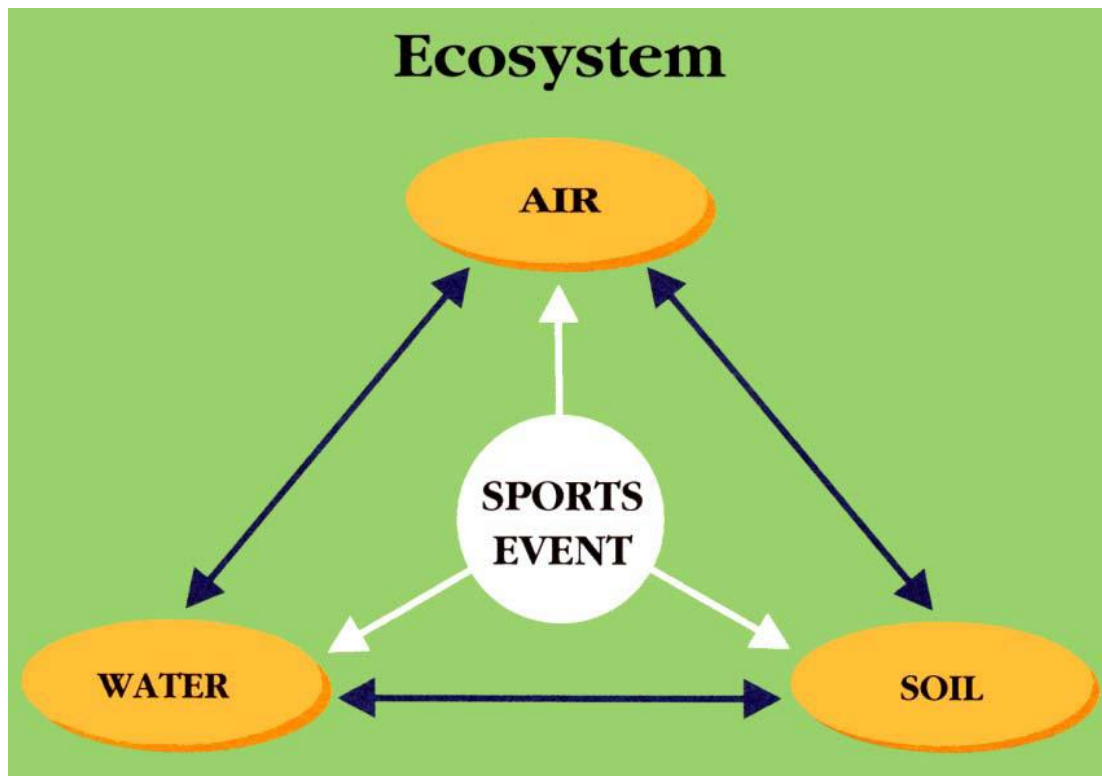


Figure 3: Pollutants are emitted in the air, water and soil

Water (groundwater and surface water are potential resources of drinking water)

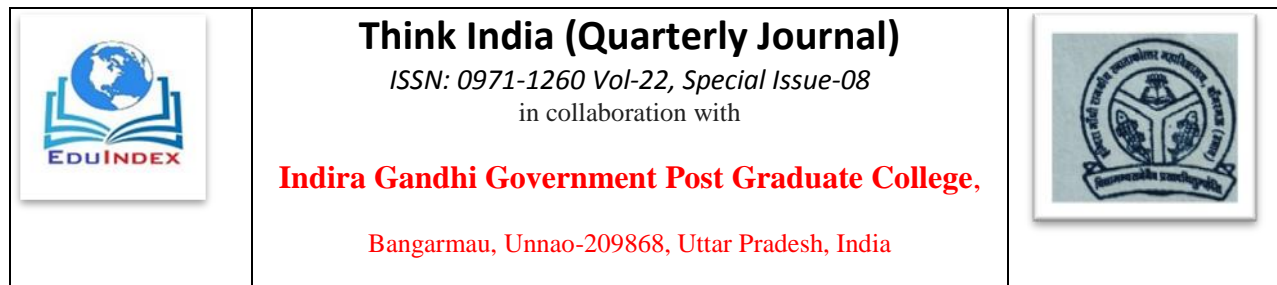
- Untreated wastewater flowing into lakes, rivers and oceans
- Groundwater pollution through the runoff of fertilizers and pesticides used in sports facilities, maintenance (e.g. sports fields)
- Direct release of toxic substances

Air

- Emission of gas from transportation (building facilities, travelling to sports facilities)
- Other emissions from facilities

Soil

- Pollution of soil due to agrochemicals used to treat grassland for playing fields
- Contamination of soil through hazardous waste (industry, building)



Environmental Requirements For The Olympic Games

The Olympic Games are a veritable microcosm, a scaled-down model of our society and the problems that trouble it: heavy and light constructions, permanent or temporary; the purchase, distribution and elimination of products; the movement of goods and persons; administration and human resources management. The IOC sees that the Olympic Games are held in conditions which demonstrate a responsible concern for environmental issues, and collaborates with Organizing Committees (OCOGs), competent public or private organizations and authorities in the endeavour to achieve this goal and place s port at the service of humanity.

Therefore, environmental considerations and compulsory ecological studies have been included in the process of evaluating cities applying to host the Olympic Games. This includes the official documents relating to the award of the Olympic Games to the host city, which have to be updated regularly.

It is fundamental for a successful end result that all studies and planning relating to facilities and infrastructure include environmental principles and parameters from the outset, and that they be directed in such a way as to minimize and where possible eliminate harm to the environment. Environmental principles on architecture, design, landscaping and restoration contribute to a harmonious and natural integration of the Olympic Games into the natural and cultural

surroundings. Environmental impact assessments of sites and facilities must be carried out by the applicant cities according to accepted scientific and legal standards, and a summary presented to the IOC. The IOC shows special concern for the surrounding community, cultural monuments, protected areas and species, wetlands, fragile mountain areas and other vulnerable habitats.

The bid must satisfy legal the norms, rules and requirements established with regard to the environment within the areas of the IOC's competence, and excel in these areas whenever possible. Such excellence can be achieved by the introduction of economic, scientific and technical innovations and by the establishment of appropriate relations with other organizations, the private sector and public authorities.

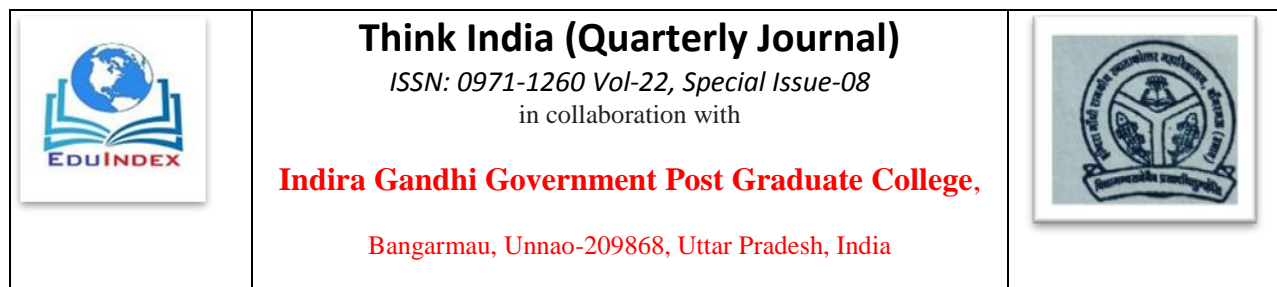
Good environmental practice involves the reuse of facilities wherever applicable, the restoration of derelict areas, minimizing transport needs and avoiding destructive land use. It is necessary to encourage efforts aimed at protecting habitats and biodiversity, minimize consumption of non-renew able resources, minimize emissions and pollutants and contribute to increase environmental awareness and concerns. The IOC recommends that special attention be paid to sewage treatment and solid waste handling, energy consumption and water and air quality, in order to enhance environmental health standards and safeguard the health and well-being of the athletes and general public alike.

Environmental quality standards and know ledge soon become obsolete, and a proactive attitude is necessary in order to meet oncoming environmental challenges. An environmental action plan, complete with local priorities, objectives, goals and projects, is a dynamic way to create a substantial strategy which potentially brings positive development returns, goodwill and tools for continuous improvement. Maintaining a social profile involving community participation with environmental organizations, local residents and underprivileged groups is necessary to attain appropriate goals and secure the successful implementation of efforts.

The specific requirements to which Applicant and Candidate Cities have to respond can be consulted on the IOC website or obtained directly from the relevant National Olympic Committees. From these requirements the IOC seeks to understand the Applicant, and subsequently, Candidate City's environmental approach as it relates to the following elements:

- Geographical features
- Meteorology conditions
- Public authorities
- Environmental management systems
- Venue construction
- Development projects

Once a city has been elected to host the Olympic Games, a follow -up procedure is carried out by the IOC Coordination Commission, which includes an expert on environmental affairs. The Commission holds regular meetings with the Organizing Committees and ensures that the ecological requirements are respected at all levels.



Works consulted:

1. Association Suisse du Sport ASS, (check-list pour les organisateurs de manifestations (sportives).
2. International Olympic Committee, Manual for the candidate cities to the organization of the 2004 Olympic Games, Lausanne, September 1995, 138 pp.
3. UNCU, USJSF, Sports et environnement, Les cahiers de l'université sportive d'été no. 8, 1994, Maison des Sciences de l'Homme d'Aquitaine, Talence.
4. United Nations Environment Programme (UNEP), Taking Action: An Environmental Guide for You and Your Community, edited by Adam Roger, 1996, 224 pp.
5. United Nations Environment Programme (UNEP), From Vision to Action. UNEP since UNCED, Brochure, 1997, 39 pp.
6. United Nations Environment Programme (UNEP), Global Environment Outlook 2000, Earthcan Publ. Ltd, London, 1999, 398 pp.
7. United Nations, Earth Summit Agenda 21. The United Nations Programme of Action from Rio, April 1993, 294 pp.
8. WILKEN Thomas and NEUERBURG Hans-Joachim, Umweltschutz im Sportverein, em Ratgeber für die Vereinpraxis, Meyer & Meyer Verlag, Aachen, 1997, 286 pp.
9. The World Conservation Union (IUCN), the United Nation Environment Programme (UNEP) and the World Wide Fund for Nature (WWF), caring for the World, A Strategy for Sustainability, 1990, 133 pp.