

Part Three

THE BIODIVERSITY ACTION PLAN: PRIORITY ACTIVITIES AND ACTIONS

CHAPTER 5 THE NEED FOR CHANGE AND ACTION

INTEGRATION OF BIOLOGICAL AND LANDSCAPE DIVERSITY WITH ACTIVITIES IN OTHER SECTORS

5.1 The success in the implementation of the CBD and the BSAP can be achieved only through the integration of strategic principles and objectives to protect biodiversity in other sectors of the economy. These include agriculture, forestry, fishing and hunting, energy and industry, transport, tourism, and water management.

5.2 Protection of the country's landscape and biological diversity is only possible if sustainable policies and practices are implemented as an integral part of sector policies.

5.3 Agriculture plays a vital role in the protection and management of the landscapes and semi-natural habitats, and also in the protection of the country's biological diversity. Over one-third of the ornithofauna species of the country visit the country's agricultural ecosystems seasonally, and over 15 bird species (some of which are globally threatened) have their critical habitats within agricultural lands. The life of some animal species and reptiles is also linked with agricultural ecosystems. Draining channels, riverbanks, gardens, and salty lands within agricultural lands are a habitat for a considerable number of plant and animal species.

5.4 Following the privatisation of land in the 1990s, agriculture has returned to the traditional practices of a more extensive agriculture with less impact on the environment and biodiversity. This is primarily because state subsidies for more intensive agriculture were abolished. During

recent years, there have been a number of advantageous and disadvantageous effects of these changes on the landscape and biological diversity.

5.5 The following factors have had a positive impact on biodiversity: change of land use structure – the surface covered with crops is diminished, the surface of land planted with fodder (37% in 1996 compared with 23% in the early 1990s) has been reduced, pesticide use has decreased, and farming techniques are now less mechanised.

5.6 Reduction of soil fertility, desertification, and impoverishment of the soil from degradation have been among the adverse effects over the past decade. Erosion exists on one-third of the total land area, and its effects are closely linked to impacts on the country's biodiversity.

5.7 Under a free market economy without the support of state investments, parts of the native agricultural plant and animal genetic material have been lost in Albania. Other parts have genetically degenerated. To reverse this situation the support of the government through a protection and subsidy policy for farmers to protect these genetic resources is necessary. Alternatively, efforts could be made to preserve them *ex-situ* through genetic banks to be preserved for future generations.

5.8 Albanian agriculture is an extensive biological one. Preservation of this ecological character and its

balanced development must be kept in mind as the basis for future policies since intensive land use practices are likely to increase with economic development. In particular, the development of agriculture is expected to be highest in the low-lying coastal areas, and this will have a significant impact on the country's biodiversity. Implementation of Environmental Impact Assessment procedures, in particular for new projects on soil drainage and irrigation, will be imperative in the future.

Box 9

The EC Agro-Environment Regulation (EEC 2078/92) provides for:

a) Subsidies to farmers in selected areas of high environmental value: these would help to maintain traditional, low-intensity farming. This includes the designation of schemes similar to Environmentally Sensitive Areas (ESAs), and other management agreements.

Many Category V protected landscapes and some Category IV areas would greatly benefit from such designation, since changes in farming practice are often the greatest threat to their integrity.

b) The removal of land from agriculture: Under this provision, reserves for selected habitats and species should be created, perhaps by establishing new national parks and forest parks on land no longer needed for agriculture or extending existing parks.

c) Extensification generally in agriculture: Most measures are horizontal (i.e. affect all farmers equally), but some can relate to specific areas. Extensification will be particularly important by reducing the use of fertilisers, herbicides, and pesticides in and around protected areas.

Source: IUCN (1993)

5.9 The effects of agriculture on the country's biodiversity should be taken into account based on the "Green Agriculture Strategy" which has been prepared by the Ministry of Agriculture and Food and is expected to be approved soon. In this way, the negative effects of agricultural activities on biodiversity can be addressed.

5.10 The requests of the EU Directive on Agro-Environment (see Box 9) need to be incorporated into the Agriculture Strategy.

5.11 Preservation, rehabilitation, and enlargement (where possible) of the natural and semi-natural habitats of agricultural land are required to secure the preservation of the country's biodiversity.

5.12 Priority measures proposed in the framework of the BSAP for the agriculture sector include:

- afforestation of abandoned lands;
- creation of soil protection barriers to reduce the impacts of erosion;
- planting of bushes and trees in coastal lowlands;
- restoration of the natural vegetation on river banks;
- re-creation of the wetlands in some saline and former marsh lands;
- afforestation of watersheds to avoid creation of floods and sliding;
- agroforestry development;
- use of new technologies to decrease deep tillage;
- new technologies for cultivation of different agricultural plants through artificial irrigation;
- rehabilitation of poliphyte pastures through evaluating the stages of degradation and vegetation succession;
- increasing farmers' awareness of the benefits of ecological agriculture;
- application of models of Mediterranean and Albanian ecological agriculture, taking into account agro-silvo-pastoralism;
- application of biological actions to prevent against parasites and their damages on agricultural and forestry cultures.

5.13 Energy and Industry. The impact of these sectors on the environment, biological diversity, and landscape are well known. Although a large part of the industrial sector is not currently working, its negative effects on the country's biological

diversity are likely to increase in the future. This will be particularly true in low-lying coastal areas, where the main population and industrial centres of the country are located.

Box 10	
Main Elements of a National Energy Strategy	
<ul style="list-style-type: none"> <input type="checkbox"/> Policies for the optimal use of fossil fuels, bearing in mind the need to minimise depletion of non-renewable resources and to minimise pollution from energy consumption and production; <input type="checkbox"/> Policies for the safe use of other fuels; <input type="checkbox"/> Policies and standards for energy efficiency; <input type="checkbox"/> Economic policies that ensure that energy prices reflect the full social and environmental costs of alternatives and encourage the consumer to choose the least damaging option; <input type="checkbox"/> Taxes and incentives to encourage energy efficiency and shelter poorer families from steep energy price increases; <input type="checkbox"/> Information campaigns to promote energy efficiency; <input type="checkbox"/> Obligations on manufactures to monitor and publicise the energy efficiency of products; <input type="checkbox"/> Production of a national report, recording progress towards realisation of energy efficiency targets; and <input type="checkbox"/> Support for citizens' groups promoting energy conservation. 	
Source: IUCN (1993)	

5.14 In the framework of the BSAP, it is recommended that energy and industry policies and practices integrate ecological considerations by using the proper sites for industrial activities. Reduction of waste and discharge of harmful substances will enhance biological diversity and landscape protection. The main elements of a sustainable national energy strategy are discussed in Box 10.

5.15 The Action Plan for the protection of biological diversity and landscape proposes that all industries should implement sustainable development practices such as: (i) clean production technologies; (ii)

environmental protection measures; (iii) use of recycled materials; and (iv) pollution control measures such as integrated waste management.

5.16 Because an important part of the country's biodiversity is linked with forests and pastures, the implementation of sustainable forestry policies and practices is a priority issue for Albania. Integrated management of the Albanian forests must be the first step. GDFFP has the main responsibility to design and implement sustainable policies for integrated forest and pastures management, which will enhance the protection of natural habitats and wildlife.

5.17 The strategic objectives of a sustainable forestry policy are: (i) better integration of strategic principles (see chapter IV) in forestry management and planning; (ii) protection of native tree species; (iii) to secure some protected forest areas where man can not intervene in natural development and processes; (iv) harmonisation and co-ordination of reforestation policies with landscape and nature protection policies; and (v) sustainable use of pesticides and fertilisers where it is feasible. Some of the principles of a sustainable forestry policy are shown in Box 11.

5.18 The measures and pilot projects for the ecological use of forests and pastures, which are recommended by the working group on pasture and forest ecosystems, are explained in detail in Appendix B of this report. The priority issues to be addressed are:

- Control of cutting in forests, in particular of illegal cutting;
- Rehabilitation of forest and pastures ecosystems, degraded terrain, landscapes, and abandoned lands for the protection of habitats and wildlife;
- Creation of new forests, establishment of new areas, and widening of existing forest Protected Areas;

- Protection of the environmental balance through ecological intervention in forest and pasture ecosystems;
- Inclusion of biodiversity considerations in Forest Management Plans;
- Inclusion of biodiversity considerations in forest harvesting;
- Consideration of the effects of population migration; and
- Inclusion of the public and local communities in forests and pastures planning and management.

5.19 One important emergency and temporary measure which could be taken to control illegal cutting in forests when the state can not control this activity is the ban of export of round-wood and charcoal. This measure would prevent the over-harvesting in forests, help the development of the forestry business within the country and the internal market for timber, and create jobs for Albanians. In addition, it is proposed to liberalise the price of timber to improve the quality of the product so that the domestic market and product more closely approximate the international one.

5.20 The working group on Alpine and Forests Ecosystems proposed to be established to ensure the implementation of the CBD and BSAP will support and further develop alpine ecosystems and forestry biodiversity action plans, and will monitor the implementation of sustainable practices and policies in the forestry and pastures sector.

5.21 **Fishing.** The effects of fishing, aquaculture, and hunting practices on the country's marine and wetland biodiversity have been substantial in this decade. The further development of this sector in the future will have considerable effects on biodiversity if measures and policies to promote sustainable development are not taken.

5.22 Strategic objectives of a sustainable policy will include

integration of landscape and biological diversity objectives in fisheries in a way, which harmonises these activities with nature. The effects on resource sustainability of over-fishing, inappropriate fishing practices, including those of benthic, pelagic, and other animal communities will need to be taken into account and minimised.

Box 11

The Principles of Sustainable Forestry Policy

- Establishment of a legally guaranteed permanent forest;
- Training in forest ecology and management;
- Secure conditions for forest managers in the public, private, and community forestry sectors;
- Standards for annual allowable cut, cutting cycles, harvesting techniques, infrastructure, and environmental safeguards;
- Controls over all aspects of harvesting and forest treatment to protect the environment;
- Economic and financial policies that do not require more from forests than they can sustainably yield;
- Multiple use policies, to ensure that the society gets the full benefit (e.g., timber, jobs, environmental services, recreation) from all forests;
- Environmental policies that protect ecological services, biological diversity and the resource base of all forest users; and
- Effective monitoring of all the above.

Source: *Caring for the Earth* (1991)

5.23 Responsible fishing management should consider the impact of fisheries on the ecosystem as a whole, including its biodiversity, and should strive for sustainable use of whole ecosystems and biological communities. Some of the main principles of a responsible fisheries are given in the box 12.

Box 12

Main Principles of Responsible Fisheries

- The State and water users should preserve water ecosystems
- Fishing management should promote and ensure the maintenance of quality, diversity and values of fishery resources
- The State should not allow over-fishing and should implement appropriate measures to avoid that
- Facilities and practices of a selective fishing should be developed and implemented in order to ensure the enhancement of biodiversity and conservation of water ecosystems
- Fish catching, and processing and distribution of fish products should be carried out in a way that reduces the waste and minimise the adverse impacts on environment
- All the key habitats for fish communities in marine and freshwater ecosystems should be preserved and restored, if appropriate.
- The State should ensure that its fishing interests and those to conserve fishery resources are considered and respected by all the users of the Coastal Zone, and are integrated in the management, planning and development of this zone
- The State should promote and increase public awareness through education and training

Source: *Code of Conduct for Responsible Fisheries* (FAO, 1995)

5.24 The proposed measures to be taken in this sector aim at ensuring an effective control and a sustainable development of fishery and aquaculture in Albania. Some of them are the following:

- periodically review of the objectives and policies in the fishery sector in order to ensure that ecological considerations are incorporated into the sector
- improvement and enforcement of the law and regulations on fisheries
- further improve the survey, control and monitoring scheme on fisheries
- improve the water regime of the coastal lagoons and their water exchange with the sea
- creation of a national network of fish hatcheries in fresh and coastal waters in order to rehabilitate and restore native fish populations and biological communities

5.25 Hunting was and still is having its adverse impacts on the country's biological communities, particularly along the coast and wetlands. With the increase of hunting activities in the future the effects on biodiversity will be increasingly higher. National, regional and local policies to control and sustainably develop hunting activities, taking into account the sustainability of the hunting resources, and the species requirements for survival.

5.26 There is an urgent need to enforce the law and stop and control the illegal hunting activities and practices, particularly those practised on benthic, pelagic, and other animal communities of the coastal zone, with special emphasis on endangered species protected by international conventions.

5.27 The relevant and responsible hunting state authority should administrate and manage the hunting on a scientific basis and should take appropriate measures to protect and manage the hunting species, but also to create facilities for hunters and generate incomes from hunting.

5.28 More attention should be paid to the illegal trade of the endangered species that are protected by the international laws. The custom personnel should be trained to get

knowledge to deal with this problem and get the law enforced. Another important requirement to the relevant state authority is the development of quarantine regulations and enforcement in customs at the national level, in order to control the import of animals and breeds that might be vector of diseases or harmful for native animal species.

5.29 Territorial Planning and Urbanisation. Urbanisation is turning into a serious negative factor because of high levels of construction, a considerable part of which is out of control and without any territorial planning. This has especially damaging effects in very sensitive environments of high ecological risk. The establishment of state control on this activity, and the integration of the principles of nature, biological diversity, and landscape protection in territorial planning policies are a high priority for the country. Without such considerations, the adverse effects will increase, and the costs very high.

5.30 In the future, free and uncontrolled movement of the population from rural areas to urban areas will have increasing impacts and pressures on the coastal and land ecosystems, which are more ecologically sensitive. This will require the responsible authorities to take measures to prevent and minimise the impacts.

5.31 The Council of Ministers, and especially the Ministry of Public Works and Transport, will need to take the responsibility in this sector. More responsibility and expertise is required from the Planning Institute, NCTP, and RCTP to consider the integrated nature of development in the rural and urban planning process. In this way, steps can be taken to preserve natural and landscape values, in particular in the areas with high landscape and biodiversity values.

5.32 To date, in the *construction and transport* sectors in Albania, biodiversity and landscape protection are virtually not considered. In order

to change this, with the help of the Council of Europe and the NEA, the level of training and assistance to the institutions dealing with these activities must increase in order to ensure that there will be enough specialists to include the concept of sustainable development and biodiversity management in planning.

Box 13

Main Elements of a Sustainable Policy for Transport

- Ensure that transport policy takes full account of the social and environmental costs of each form of transport;
- Review the current balance of expenditure between road construction, and investments for improvements in the railways and other forms of transport;
- Use economic instruments (e.g. charges and taxes) to promote efficient transport use and cleaner technologies;
- Link land-use planning to transport planning so as to reduce the need for journeys, especially by private transport;
- Encourage traffic management and "traffic calming" measures to fit traffic to the environment rather than *vice versa*; and
- Greatly expanded research into pollution-free vehicles and clean and efficient public transport.

Source: IUCN (1993)

5.33 Transport has a great impact on the country's biodiversity, especially taking into account Albania's need to widen the transport infrastructure to promote trade with Europe. For example, plans to construct the "Corridor 8" will have environmental impacts. Therefore, it is important to integrate landscape and biological diversity considerations into transport policies and infrastructure development. This will require avoiding as much as possible areas with high natural values, and prevention and mitigation measures to reduce the negative impacts on ecosystems and landscapes.

5.34 The Albanian government, and in particular the Ministry of Public Works and Transport, must review its policies in the transport sector to better develop sustainable policies. Some of recommended principles, from the programme *Caring for the Earth*, to be included into sector policies are shown in Box 13.

5.35 Tourism and recreation are expected in the near future to have a big impact on the country's biological and landscape diversity, in particular in the coastal areas. Tourism with its development demands and possibilities, is a factor that can have an adverse impact on the biodiversity, in both the new areas of development and the existing ones.

5.36 In the existing tourism developments, care must be taken to minimise the negative impacts on biodiversity. For a sustainable development of the sector it is necessary that tourism and recreational policies better integrate the objectives of landscape and nature preservation since this will prevent sensitive damages to landscape and biological diversity which would undermine the appeal of tourism.

5.37 The Committee for Tourism Development (CTD) and the NCTP both play an important role in this sector. It is unacceptable that the CTD does not have a staff person responsible for environment. Re-organisation of the tourism sector as a Committee under the Council of Ministers, and strengthening the role of National Environmental Agency on environmental matters will create the possibility to ensure more responsible consideration of environmental issues in the tourism sector.

5.38 There are many examples of policies and types of tourism development, and Albania should learn from the experiences of other countries. In particular, Albania should take into consideration that in many developing countries poverty and pressures for fast economic development have lead to over-exploitation and extraction of natural

resources, which has not always benefited local populations. Ecotourism or green tourism is one of the best and most sustainable

Box 14

Environmental Guidelines for Tourism Adopted by the World Travel and Tourism Council (WTTC) 1992

1. Travel and tourism companies should state their commitment to environmentally-sustainable growth;
2. The environment commitment should be company-wide;
3. Education and research into improved environmental programmes should be encouraged; and
4. Travel and tourism companies should seek to implement sound environmental principles through self-regulation, recognizing that national and international regulation may be inevitable, and that preparation is vital.

Environment improvement programmes should be systematic and comprehensive. They should aim to:

1. Identify and minimise product and operational environmental problems, paying particular attention to new projects;
2. Pay due regard to environmental concerns in design, planning, construction and implementation;
3. Be sensitive to conservation of environmentally protected or threatened areas, species and scenic aesthetics, achieving landscape enhancement where possible;
4. Practice water conservation;
5. Reduce and recycle wastes;
6. Practice fresh-water management and control sewage disposal;
7. Control and diminish air emissions and pollutants;
8. Monitor, control, and reduce noise levels;
9. Control and reduce environmentally-unfriendly products, such as asbestos, CFCs, pesticides, and toxic, corrosive, infectious, explosive or flammable materials;
10. Respect and support historic or religious objects and sites;
11. Exercise due regard for the interests of local populations, including their history, traditions and culture and future development; and
12. Consider environmental issues as a key factor in the overall development of travel and tourist destinations.

Source: WTTC (1992)

alternatives, which can protect and improve the quality of the environment, biological diversity, and landscape. At the same time, this will help to secure a sustainable income base for the Albanians working in this sector.

5.39 One important area of collaboration is to develop the tourism potential within and near protected areas. Sustainable planning and management of tourism based on nature protection can be a positive force to bring incomes to the local communities. Tourism is welcomed within and near protected areas if it respects the specific characteristics of every area, and the natural and cultural values. Ecological tourism can be both cultural and educational and have minimal pollution and adverse environmental effects.

5.40 Tourism development in Albania must keep in mind the Environmental Guidelines on Tourism approved by the World Council on Travel and Tourism (WCTT) of 1992 shown in Box 14.

5.41 Water Management has been and continues to be an important factor with impacts on the country's environment, biological diversity, and landscape. As a result of demographic movements and an increase in population and the demand for water, the effects of this sector on the quality of the country's biological diversity are becoming increasingly important.

5.42 Albania is a rich country in water resources, but it is necessary that these resources be managed in a sustainable manner for present and future generations. The strategic objectives of this sector in the framework of the BSAP are: integration of biological diversity and landscape protection objectives in all aspects of water administration and management, including the management of wastewater discharges and polluting substances.

5.43 To achieve these objectives an important role is played by the Council of Ministers, through the

National Water Council (NWC). The responsible Ministries must reconsider their policies to promote the sustainable and environmentally sound use of waters.

5.44 Improving the existing water supply and wastewater sewerage systems will be important for better managing biodiversity. Presently, the existing networks and water management are poor, and this adversely affects biodiversity. Feasibility studies and projects for rehabilitation of water supply and wastewater treatment systems in urban areas must play an important role in the future.

5.45 Application of EIA procedures and calculation of the social and environmental costs of different operations of water management must be a priority for future policies in the sector.

5.46 Defence/Military. The military's role in the past has been important for the country's biological diversity and landscape, and this will continue in the future. This role has been and can be positive and/or negative. As a positive example, the military areas have been, and are, the most protected natural areas in the country. As a negative example on landscape and biological diversity, one can note the construction of bunkers and tunnels, where the environmental costs of these activities were not taken into account.

5.47 The low cost attributed to environmental damage in Albania was a result of the lack of knowledge of its importance and values. Today, the strategic military needs of the country have increased the demand for the Albanian territory to develop military manoeuvres with foreign partners.

5.48 Military objectives should be integrated with those for landscape and biological diversity in order to avoid as much as possible the use of areas with high natural value for military reasons. Measures to prevent or mitigate the negative impacts of military activities on the landscape,

and to develop more environmentally friendly activities, should be taken.

5.49 It is important to create and strengthen an environmental unit at the Ministry of Defence, and to introduce the polluters and users pay principles. In the case of areas to be used for military manoeuvres, permission should be taken from the National Environmental Agency so as to take into account and minimise the environmental impacts of the activity.

EXPANDING AND STRENGTHENING THE NETWORK OF PROTECTED AREAS AND ESTABLISHING THE ECOLOGICAL NETWORK

5.50 One of the main mechanisms for biodiversity protection and ecological management is the establishment and management of Protected Areas. These areas vary in dimensions and protection scale, and in the level of control of human use. They offer a number of products and services with local, national, and international benefits.

5.51 The Global Biodiversity Strategy and the Pan-European Strategy on Biological and Landscape Diversity (PESBLD), understanding and appreciating the importance of Protected Areas for the preservation of biodiversity, have recommended expanding Protected Areas and strengthening their management as high priority objectives for every country.

5.52 A European initiative to establish and develop an ecological network known as EECONET aims to protect the structure and complex ecological relationships of Europe. EECONET at the same time is an instrument to develop the priorities for action for each country. The establishment of the ecological network requires four main elements: (i) core area or biocenter to preserve ecosystems, habitats, species, and landscapes; (ii) ecological corridors or biocorridors to improve the coherence of the biological systems; (iii) rehabilitation areas where damaged elements of the ecosystems, habitats, and landscapes

have the need for repair or full recovery; and (iv) buffer zones which support and protect the ecological network from external impacts. Core areas/biocenters must include areas and main characteristics, which represent biological diversity and landscapes. Biocorridors are necessary to secure the coherence and functioning of the ecological network because they facilitate spreading and migration of species between biocenters.

5.53 A Representative Network of Protected areas (RNPA) which is proposed for approval in this strategy represents the realisation of the first step for the creation of the country's Ecological Network. Approximately 14% of the country's territory are included in it, and within it there are the best ecosystems, habitats, and landscapes of Albania. After approval, the first steps to be taken will be to preserve and improve the country's biological and landscape diversity for present and future generations. At the same time, this approval will be a contribution of Albania to the establishment of the pan-European ecological network.

5.54 The proposed RNPA does not mean that the man and his interests are excluded from the 14% of the country's territory designated to be covered as Protected Areas. Rather than dictating the exclusion of economic, social, and recreation activities, Protected Areas are zones where this activity is sustainable and controlled, and developed in accordance with the needs for the protection of the ecological integrity of the ecosystems, habitats, landscapes, and survival of the plant and animal species (Box 15).

5.55 Preparation of the management plans for the Protected Areas of Albania is considered as a high priority; so far, only 2-3 Protected Areas have existing management plans or plans under preparation. This should be a high priority activity not only for the responsible authorities such as the DGFP and the NEA, but also for the scientific and research institutions such as the

MNS, IBR, FPRI, FRI, the Hydrometeorological Institute (HMI), and specialised NGOs in the country which have the necessary expertise for the preparation of the management plans.

Box 15

Protected Areas and Sustainability

Protected areas contribute to sustainable development by:

1. Conserving soil and water in erodible areas;
2. Regulating and purifying water flow, especially by protecting wetlands and forests;
3. Shielding people from natural disasters, such as floods or storm surges;
4. Maintaining important natural vegetation on soils of inherently low productivity;
5. Maintaining wild genetic resources important to medicine or for plant or animal breeding;
6. Protecting species that are highly sensitive to human disturbance;
7. Providing critical habitat for feeding, breeding or resting of species that are harvested;
8. Providing income and employment through tourism.

Source: *Action Plan for the Protected Areas in Europe* (IUCN, 1993)

involvement in this process. The second step for the establishment of the Ecological Network after RNPA approval and establishment will be the creation of the biocorridors for linking the various Protected Areas with each other. A long-term objective of this process is that Protected Areas cover 25% of the country's territory by 2020.

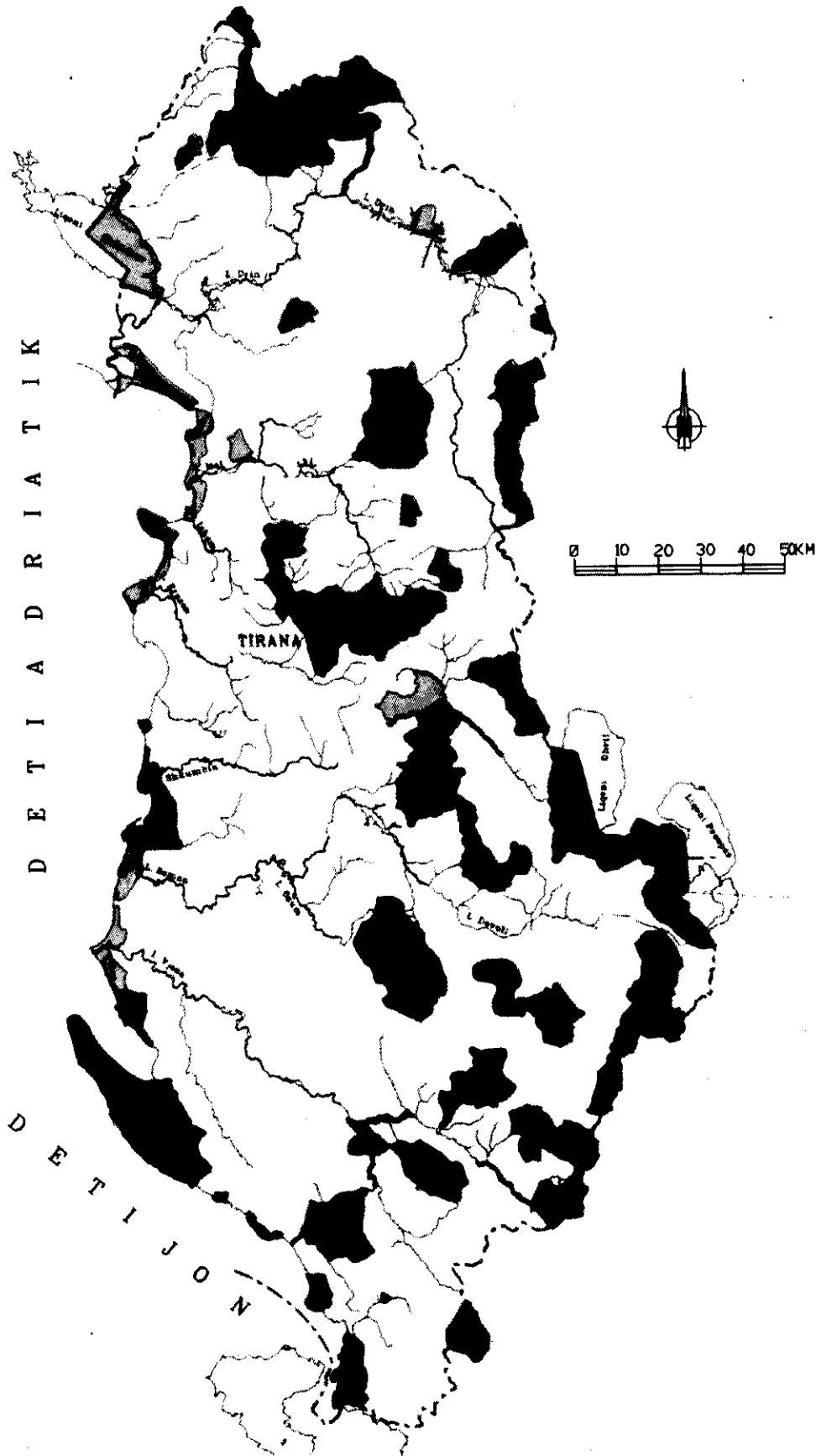
5.58 Achieving short and long term objectives for the establishment of the Ecological Network will need support from the government, in particular from the NEA and Environmental Protection Unit (EPU) within DGFP, to enable fulfilment of these objectives.

5.59 The working group for the establishment of the Ecological Network and Task Force (ENTF) which will be established after the BSAP approval, and will design the proper programmes and projects which are needed in order to strengthen Protected Areas management and establish the Ecological Network of the country.







5.56 Taking into account that Albania's Protected Areas are part of the European natural heritage, it is the responsibility and obligation of the international organisations to provide support for the preparation and implementation of the existing and proposed management plans. The NEA and DGFP must help to create the conditions to attract more of these organisations to work in Albania.

5.57 Establishment of the Ecological Network is a long process which will be accompanied by a programme to help understand the Ecological Network, its planning and establishment, and to promote public participation and local community

RRJETI I PROPOZUAR I ZONAVE TE MBROJTURA TE SHQIPERISE
 PROPOSED REPRESENTATIVE NETWORK OF PROTECTED AREAS OF ALBANIA



Legjenda/ Legend

- | | | |
|--|--|--|
|  Rezervat Strikt Natyror/ Rezervat Shkencor
Strict Nature Reserve/ Scientific Reserve |  Monument Natyre
Nature Monument |  Zone e Pajshave te Mbrojtur
Landscape/Seascape Protected Area |
|  Park Kombetar
National Park |  Rezervat Natyror i Menaxhuar
Managed Nature Reserve |  Zone e Perdimit te Shumfishte
Multiple Use Area |

BIODIVERSITY CONSERVATION OUTSIDE THE PROTECTED AREAS

5.60 Only some 5.8% of the country's territory are currently included in the Protected Areas network. Although a much larger percentage (14%) is proposed by the RNPA, the proposed territory under protection would still be small in comparison with the country's territory outside of the Protected Areas. Even if we suppose that the surface of Protected Areas will increase, and be sustainably managed, this will not be enough to secure the survival of the species and habitats, in particular of the migratory species of birds and animals. Outside the Protected Areas there are also a number of landscapes, which must be protected and managed in a sustainable manner.

5.61 To achieve the above objectives it is necessary to prepare action plans for the ecosystems, habitats, and species. This will be the task of the Working Groups, which will be established after the approval of the strategy.

NEED FOR *EX-SITU* CONSERVATION

5.62 Increasing pressure on biodiversity, accompanied by the extinction of a number of species and an increase in the number of endangered ones, warrants *ex-situ* preservation in zoological and botanical gardens or parks established for this purpose. The support of the Botanical Garden to realise *ex-situ* preservation of endemic and endangered species is an important action which should be complemented by the future development of such practices for animal species in the long-term.

5.63 Where *in-situ* and *ex-situ* preservation of the threatened species are not possible, preservation of biological material should be done through genetic banks for plants and animals. The strengthening of the Genetic Banks within the National Seed Institute, and a Laboratory of Deep Freezing nearby the ZRI should include preservation of the genetic

material of wildlife species. It is proposed to establish a genetic bank for the spontaneous flora of Albania, a genetic bank for microorganisms, and a genetic bank for wild animals.

NEED FOR FURTHER RESEARCH AND MONITORING

5.64 The unknown can not be protected against and managed. Starting from this, the need for the development of scientific research in Albania is a high priority. The lack of study of many animal groups (mostly invertebrates) and plants (mostly low species of moss) and low scale of knowledge of a considerable part of plant and animal species call for more and better research support in Albania. With economic development there will need to be more research for the protection of the sea, and coastal and inland water biodiversity, which will be more threatened in the future due to the increased activities of man in these ecosystems.

5.65 More financial support is also needed for training programmes for the main research institutions involved in biodiversity inventory and monitoring such as the BRI, MNS, FRI, and FPRI. Better co-ordination among the country's research institutions, and with their counterparts abroad, is important. In addition, increased NGO and private sector involvement should be developed in the future.

5.66 Biodiversity protection and management requires monitoring in order to control and prevent damages from exploitation and mismanagement. This can be realised with the establishment of fixed stations to regularly monitor the evolution of the plant and animal communities.

5.67 Monitoring biotic data rather than measuring abiotic data can best monitor the environmental situation. As a first step, a map of the most sensitive biotopes should be prepared, beginning with those of Protected Areas (within first 5 years), and later for the rest of the country (5-20

years). Within this activity is proposed the mapping of sea meadows with *Posidonia oceanica* and *Cymadocea nodosa*, and those environments with reed coral (*Coralum rubrum*) and (*Lipthophaga lipthophaga*) which are collected by fishermen and divers (within 1-3 years).

5.68 Securing funds for biodiversity monitoring must be considered a priority not only for government institutions, but also for the international community. The NEA, GDFP, GDF, and others must better co-ordinate their work programmes to improve efficiency. NGOs with their projects and programmes financed from internal and foreign donations should also offer their contribution. A priority for BSAP implementation will be the development of biodiversity monitoring and research.

INFORMATION USE AND MANAGEMENT

5.69 Information use and management is another high priority for biodiversity management and protection in Albania. The lack of use of existing knowledge of the country's biodiversity derives from the lack of an operative and well-organised information system in the country. Improving the use of this information will save time, money, and energy, since this issue has not received enough attention in the past.

5.70 Article 56 of the constitution states that everybody has the right to be informed concerning the state of the environment and its protection. Establishment of the Ministry of Information is an important first step, which must be followed by other ones. This action must be used to secure the necessary support to develop information programmes for biodiversity.

5.71 To improve the quality and use of information and data on biodiversity the following measures are proposed:

- Maximal use of the information and existing data;

- Data completion and standardisation;
- Establishment of a biodiversity database at the national level; and
- Development of a co-operative and open information network for interested parties at the local level.

5.72 Establishment of a database on flora and fauna to be used by existing institutions such as the BRI, MNS, FRI, and FPRI is considered a high priority. Without a good database, it will not be possible to promote sustainable management of biodiversity. As a first step, a database for Protected Areas is proposed, beginning with National Parks. To do so, the above institutions must co-ordinate their work, and be supported with equipment and necessary expertise from the state and donors.

5.73 Data creation and standardisation will require better collaboration with specialised international organisations.

5.74 Development of an open and co-operative information network for the interested parties will need to secure the right of access to electronic information services such as the internet for central and local institutions, environmental NGOs, and other groups interested in information exchange. This will increase the efficacy of biodiversity protection and management. As a first step, it is recommended to provide electronic information services to the central and specialised institutions that are responsible for data collection and management.

5.75 Copyrights and intellectual property rights must be respected and regulated by the law and regulations pertaining to environmental information. Such a legal framework must still be developed in Albania to enhance biodiversity management and protection. For this reason Albania must consult the existing international legislation and regulations.

EDUCATION, TRAINING AND EXTENSION SERVICE PROGRAMMES/INCREASING AWARENESS OF THE PUBLIC, POLICY-MAKERS, AND DECISION-MAKERS

5.76 Achieving the objectives of the CBD require increased public awareness and sensibilisation of decision-makers and policy-makers. Article 13 of the Convention states that the contracting parties must: *promote and encourage understanding of the importance of, and the measures required for, the conservation of the biological diversity, as well as its propagation through media, and the inclusion of these topics in educational programmes.* In light of the low level of public awareness and environmental education in Albania, this is an important priority.

5.77 Programmes and projects to encourage public and community participation in the process of biodiversity planning and management must be developed, encouraged, and implemented in the future. These programmes should be suitable for the target age groups and professions. Environmental education should start with children under 7 years old, and be a priority for pupils of elementary schools.

5.78 Biodiversity protection should receive more attention in textbooks and programmes as a way of developing more environmentally aware citizens.

5.79 In a civil society the role of mass media in environmental education is increasing. Although small progress has been achieved, the Albanian media is still very much focused on politics and pays less attention to issues like biodiversity or the environment. The information provided to readers or viewers is often lacking, presented by people without adequate expertise, and is sometimes wrong or difficult to be understood. Given its importance in a post-Communist society, the Albanian media must find more and better ways to inform the public and have a more positive impact on its environmental awareness and education. Formation

and training of professional journalists for environmental matters is a priority for the media in Albania.

5.80 Providing a simple and understandable message is important for environmental education and public awareness since highly scientific presentations will not effectively increase the awareness of the public. Increasing public awareness of biodiversity will require simple messages to explain what is biodiversity, why it is important, and what needs to be done to preserve it. Preparation and publication of any guidelines to make a clear and emotional communication with the public for different aspects of the biodiversity can be an important tool. Editing of popular books, which treat the importance and the role of biodiversity for man, will also help to promote its sustainable management and protection.

5.81 NGOs play an important role in increasing the environmental awareness in general, and for biological diversity in particular. They often promote environmental education by carrying out concrete actions for nature and biodiversity protection. The state and NGOs should work to renew the tradition of nature care. Special days or months offer good opportunities for environmental education and public awareness events. For example, December was the month of reforestation and there can be special days such as Earth Day, Bird's Day, Spring Day, and others.

5.82 Implementing the above recommendations will be the duty of a separate working group on Public Education and Awareness proposed to be established after BSAP approval.

5.83 Training and qualification programmes on biodiversity study and management are another priority for Albania. These programmes must involve state institutions and organisations, the NGO community, and the private sector. Some of the objectives and directions of these programmes will be:

- Focusing on professional training schemes for biodiversity management and protection;
- Personnel training, of those that work on a professional basis on biodiversity monitoring and management;
- Training on particular issues of biodiversity action plans; and
- Encouraging a wider participation of the public with the nature as a source of education and pleasure.

5.84 Extension service on biodiversity for land users is a long-term objective, but necessary to be developed in the future. This service must be organised at the local level by the REAs, in collaboration with the specialised institutions in the country for biodiversity protection and management (e.g., existing ones such as the BRI, MNS, FPRI, and FRI, and new ones such as the NPI).

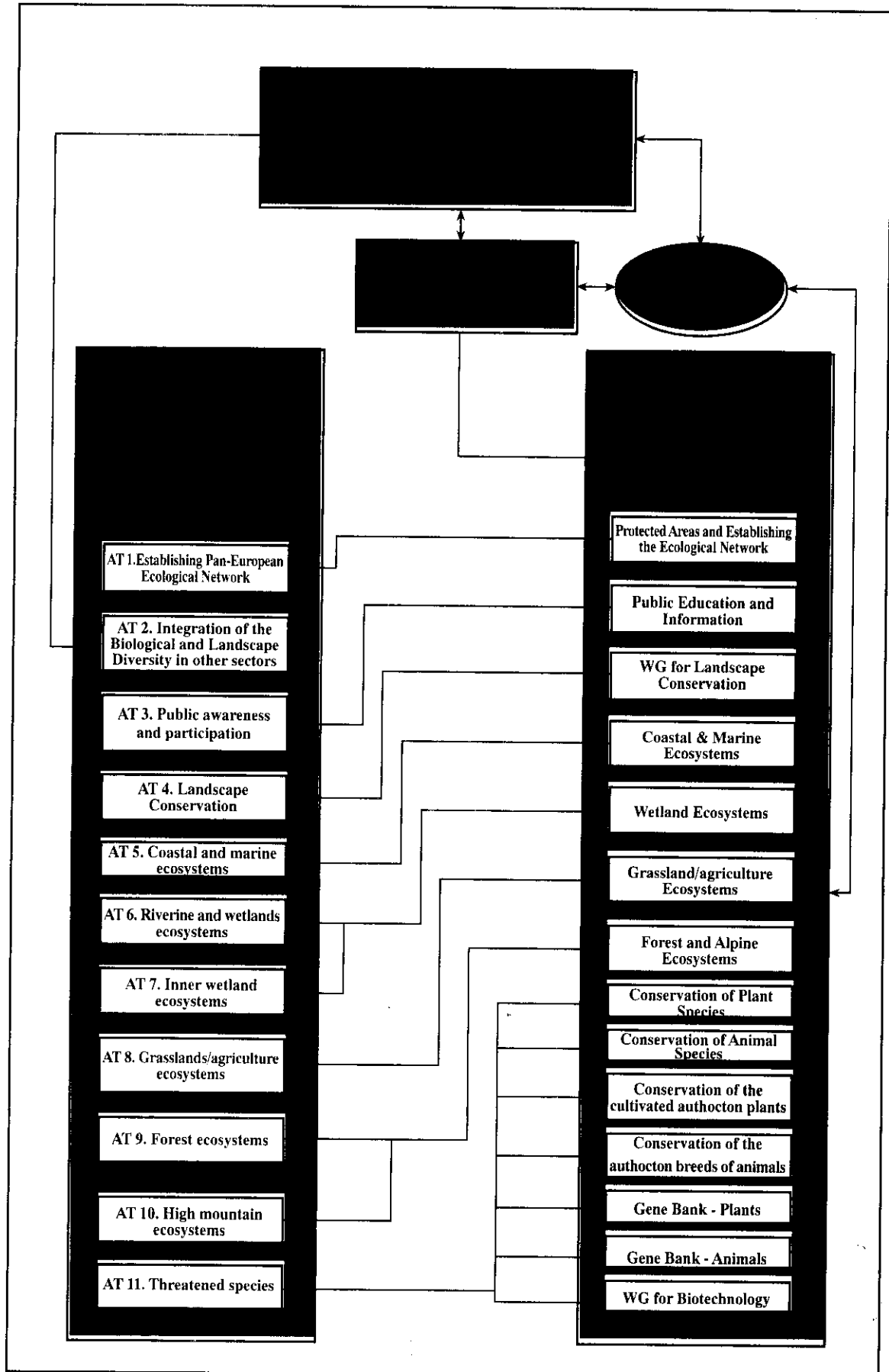


Figure 6. Functional Scheme for the Implementation of the CBD and BSAP

CHAPTER 6

THE IMPLEMENTATION OF THE BIODIVERSITY ACTION PLAN

REFORM AND INSTITUTIONAL STRENGTHENING

6.1 Reform and institutional strengthening are essential to guarantee the implementation of the BSAP. Only through completion and improvement of the legal framework, reforming and establishing suitable and responsible institutions, and improving law enforcement can we be optimistic for the future.

LEGISLATION

6.2 Legislation, which is coherent and enforceable, will form the foundation for sound biodiversity management. Of particular importance will be the approval of the proposed draft-law on Nature Protection and Biodiversity, its harmonisation with other sector laws, and its supremacy over the other laws and regulatory measures on nature protection issues. The NEA and DGFP must discuss and agree on the division of responsibilities emanating from this law.

6.3 Laws, which create autonomous authorities that encourage wide participation, will form the cornerstone for future law enforcement. This process must be accompanied by cooperation between public and private institutions in the management of Protected Areas in accordance with management plans and the stated policies established by the central environmental authorities. These policies should consider the opinions of technical experts, and have public approval.

6.4 The priority of the coastal area for the country's development warrants the preparation of the Law on Coastal Zone Management. Implementation of such a law can help to avoid environmental problems in the coastal areas. The law should be based on the principles of sustainable use and integrated management and development of this territory, and

include a plan for administration and the creation of a decision-making authority. Preparation of the law on Watershed Management must also be undertaken to harmonize the protection and use of water resources for economic interests in a way, which minimises adverse effects on the ecosystem.

INSTITUTIONAL STRENGTHENING

6.5 Strengthening of the responsible state institutions for biodiversity inventory, management, and monitoring is also a high priority. Greater support must be given to the strengthening and enlargement of the NEA and its regional authorities, as well as creation of environmental units in different sectors. For this reason, an important recent step is the establishment of the Project Environmental Management Unit (PEMU) in the Ministry of Agriculture and Food (MAF). The establishment of such units in other sectors is also recommended.

6.6 In the framework of scientific and institutional reform, it is necessary to create as soon as possible the Institute for Nature Conservation (INC). The INC should be multidisciplinary, and able to offer qualified guidance for biodiversity protection and sustainable management. Simultaneously, additional support is required for the existing responsible institutions for biodiversity inventory, management, and monitoring.

6.7 The consideration of environmental issues, and particularly biodiversity, has been very weak in the decision-making process. With the inclusion in the executive system of new concepts of territorial administration (watersheds, coastal areas, and other territorial

ecosystems), and with the preparation and approval of integrated laws on Coastal Zone Management, Protected Areas, and Watershed Management, the results of the decisions of the inter-ministerial structures should be more consistent with the principle of sustainable development in the future.

6.8 Decision-making of Inter-ministerial structures such as the NCTP, NUC, and NEC, will yield better results if project assessment criteria better incorporate environmental issues, and not exclusively focus on natural resources exploitation. Establishment of the National Council on Nature and Biodiversity (NCNB) can help to provide balance in the decision-making process.

6.9 The NCNB would be composed of: (i) representatives of the ministries/institutions of the main sectors of the economy; (ii) representatives of the scientific and academic institutions in the area of biodiversity and nature preservation; and (iii) representatives of the environmental NGO community. The Chairman of the NCNB would be the Chairman of the Council of Ministers (Prime Minister???) and its secretary would be the Chairman of the NEA. The establishment of this council would promote proper decision-making and prevent or minimize the adverse effects of different interventions on the environment – especially in the design and preparation of national or regional programmes and projects. Strategic principles will be incorporated into the decision-making process in order to promote their implementation in other sectors since, without cooperation with other sectors, the implementation of the CBD and BSAP can not be guaranteed.

DEVELOPMENT OF INTER-SECTOR CO-ORDINATION MECHANISMS

6.10 Development of inter-sectional co-ordination is also a high priority. Establishment of the NCNB is the first step towards the achievement of this objective. The *Implementation Board* of the CBD and BSAP would be

composed of the co-ordinators of technical working groups. The *Secretariat of the Convention on Biological Diversity* (SCBD) in the NEA, proposed for approval, will be another important co-ordination mechanism. Their duty would be the co-ordination of work and programmes in the framework of the BSAP, and identification and securing of the financial resources for the implementation of the landscape and biological diversity action plan.

DECENTRALIZATION

6.11 Power decentralization and a wider autonomy for the local authorities is necessary for the democratic development of the country. More regional autonomy as it is foreseen under the New Constitution will allow local and regional authorities to become increasingly active in the planning and management of the biological and natural resources they share. In this context, the implementation of the objectives of the CBD and the BSAP at the regional and local levels will be essential.

6.12 Laws and national programmes are effective if they are realized and implemented at the local level since implementation of the BSAP can not be realized without the direct support and participation of the public and local communities in the planning and management of landscape and biological diversity. Physical vicinity with the natural environment, animals, plants, and habitats which have the need for protection and proper management create a strong personal link of man and nature, and focus particularly on the importance of nature protection. In addition, many areas in towns and villages, which are not expected to be used for buildings or streets, are the property of the municipality or commune. Local authorities are directly responsible for the management of the public areas such as game areas, parks, riverbanks, zoological gardens, and green areas. These and other reasons must be kept in mind by the central authorities, in particular those

responsible for environmental, nature and biodiversity management and protection.

THE NEEDS AND THE ROLE OF THE NGOS AND LOCAL COMMUNITIES

6.13 Increasing the role of the NGOs and local communities will be essential for the implementation of the CBD and BSAP since a precondition for their implementation is a well-informed public. Principle 10 of the Rio Declaration says: *"Every individual has the right to be informed concerning issues related to the environment, dealing with public authorities, including information on hazardous substances and activities in collective, and to have the possibility to take part in decision-making."* A second important step is the creation of the legal mechanisms for the participation of NGOs and the public in the decision-making process. NGO representation in the NCNB, and the Implementation Board of the CBD and BSAP, will institutionalize public participation in the decision-making process, and be an important step forward.

6.14 The scale of the public participation in decision-making and implementing the decisions taken in the environmental area depends on the level of economic development, and cultural and social awareness. NGOs, in particular environmental ones, play an important role in increasing the environmental awareness of the public, and of the importance of improved environmental protection and biodiversity management. Securing assistance for NGOs to develop their programmes for environmental education must be a priority not only of the NGO forum and Regional Environmental Centre (REC), but also for the state. Partnerships of the state with NGOs working on the environmental are a new objective of NGOs, which must be developed in the future.

6.15 A number of Albanian NGOs, in collaboration with international ones, have developed sufficient expertise

and experience to contribute to landscape and biological diversity inventory, planning, management, and monitoring. Creation of the legal mechanisms to promote a wider involvement of these NGOs in this process will better ensure the implementation of the CBD and BSAP in Albania.

COST-BENEFIT ANALYSES OF BIOLOGICAL DIVERSITY

6.16 To date, man has not adequately taken into account the environmental costs associated with natural and biological resources exploitation. Only when forced to pay for and/or repair the damages or the loss to the environment and biodiversity has society become aware of their real value. This concept has only recently begun to be implemented in Albania.

6.17 Cost-benefit analysis for the protection and preservation of biological diversity, and the benefit from its use and preservation, must be used to avoid non-economic and non-sustainable practices and policies. Cost-benefit analysis is an instrument, which should be increasingly used in the future for decision-making in sector policies, as well as for conservation practices.

INTERNATIONAL CO-OPERATION

6.18 Because of the lack of experience in the environment field, international technical and financial co-operation has been, and continues to be, vital for Albania. The opening of the country in 1990 created wide possibilities for such collaboration, and its results are measurable.

6.19 A number of programmes for technical assistance have made the transfer and use of international experience possible. These programmes have been important for increasing the professionalism of our experts in environment. EU programmes, such as PHARE, and LIFE, the World Bank, the Global Environment Facility (GEF), UNDP, UNEP, and technical assistance from the governments of the USA (USAID),

Germany (GTZ), Italy, and Netherlands (SNV) and others, have all contributed to this effort.

6.20 The benefits of international co-operation have also been realized by environmental NGOs. A number of environmental NGOs such as PPNEA, ASPBM, AQUARIUS, ABA, Forestry Progress, the Albanian Ecological Club, and others have had a successful co-operation with international organisations such as the IUCN, WWF, EURONATURE, REC, Birdlife International, MILIEUKONTAKT, and counterpart associations in neighbouring and other European countries.

6.21 There are three primary mechanisms for developing international co-operation:

- Conventions;
- Co-operation with International Organisations; and
- Agreements and bilateral activities.

6.22 Adherence of Albania to international environmental conventions such as Ramsar, the CBD, and the Barcelona Convention have had important impacts on the environmental policy. It increases Albania's international obligations as a party to these conventions, and increases the possibilities to raise foreign funds. The examples of Karavasta, MedWet 2 and MedWet 3, The Lake Ohrid Conservation Project, Coastal Zone Management Program and others demonstrate this fact. Strengthening Albania's compliance with these international conventions, and signing other conventions such as Bonn, International Trade of Endangered Species of Flora and Fauna (CITES) is a priority. The strengthening of the links with Ramsar Convention can be done through designation of other Ramsar sites such as Shkodra Lake, Lake Ohrid, Lake Prespa, and Narta Lagoon – all of which fulfil the conditions to be included on the Ramsar list.

6.23 Co-operation with International Organizations during the past years

has increased. A number of contacts have been established with UNEP, UNESCO, IUCN, REC, WWF, EURONATUR, Birdlife International, EUCC, and others. Besides strengthening co-operation with these organisations, which is a continuous priority, establishment of links and co-operation with other international organisation is also recommended. These include:

- World Conservation Monitoring Centre (WCMC) offering data on protected areas and endangered species;
- European Environmental Agency (EEA);
- European Thematic Centre on Nature Conservation (ETC/NC in the framework of CORINE and NATURA 2000 programmes);
- PLANTA EUROPA through the project on Important Plant Areas;
- European Commission, DG IX – the process of conforming to European legislation;
- Federation of EUROPARK – Exchange of Experience and PHARE project
- ICOMOS International Council on Cultural Monuments;
- IPGRI – International Institute of Plant Genetic Resources;
- ECP/GR – European Co-operation Programme on Genetic Resources;
- EUFORGEN – European Programme on Forest Genetic Resources;
- SAVE – Protection of Agricultural Varieties in Europe; and
- UNIDO – United Nation's Industrial Development Organisation.

6.24 Although there have been achievements in international co-operation for the environment, bilateral intergovernmental agreements and interministerial ones or memoranda of understanding on environment are lacking. In other countries, these are valuable practices for environmental integration into Europe, and have enhanced the implementation of the environmental programmes in Central Eastern European Countries. The only

agreement signed with the German Ministry of the Environment made possible the removal of 460 tons of dangerous and damaged pesticides. Other agreements, particularly with neighbouring countries for issues like transboundary co-operation, use of natural resources, and technical assistance for specific programmes are required. In the framework of international conventions, co-operative work planning with neighbours can yield positive results.

STRATEGY FOR BSAP IMPLEMENTATION

6.25 The work to be carried out for BSAP implementation includes:

- Dialogue and co-ordination processes;
- Identification and securing of financial resources;
- Reducing economic barriers to biodiversity preservation;
- Finding and implementation of the proper mechanisms;
- Project support; and
- Monitoring.

6.26 The NEA and its regional offices, the National Council for Nature and Biodiversity (NKNB), and the Secretariat of the Convention on Biological Diversity (SCBD) proposed to be established at the NEA will be responsible for the implementation of the CBD and BSAP, and monitoring this process.

6.27 For poor countries like Albania, investments for nature protection, in comparison with other sectors, receive less attention. Still, it is imperative that modern states not only exploit these resources, but also, preserve, protect, and rehabilitate them for future generations. It is the duty of the central and local government, scientific and research institutions, NGOs, and other to convince international organizations and donors to invest in sustainable nature protection and the improved management of landscape and biological diversity in Albania. Some of main financial sources can be:

- GEF/World Bank;
- UNESCO;
- Ramsar Convention;
- UNEP;
- European Union;
- IUCN;
- WWF;
- REC for Central and Eastern Europe; and
- Econet Fund (EUCC, EURONATUR, Euro Sites).

6.28 Creation of a *Biodiversity Special Fund* from the State and its administration in the interest of biodiversity protection would be another instrument, which could be established to guarantee financial support of the CBD and BSAP implementation process.

6.29 Support of identified projects and those to be identified and prepared in the future in the framework of the implementation of the BSAP is necessary to achieve CBD objectives. The GEF will be contacted together with other donors to make possible preparation and financing of a national project for biodiversity based on the priority actions identified in the BSAP. The general meeting to present the BSAP to the Government and donors will serve as a step to identify and secure support for the BSAP.

6.30 The BSAP is not the final act. It can change and must change together with the changes in the country. It must adapt to the new conditions created as part of the economic and social development of the country. BSAP preparation is the first important step along the long and challenging road to preservation and sustainable management of the country's biological and landscape diversity – the wealth upon which our common future depends.