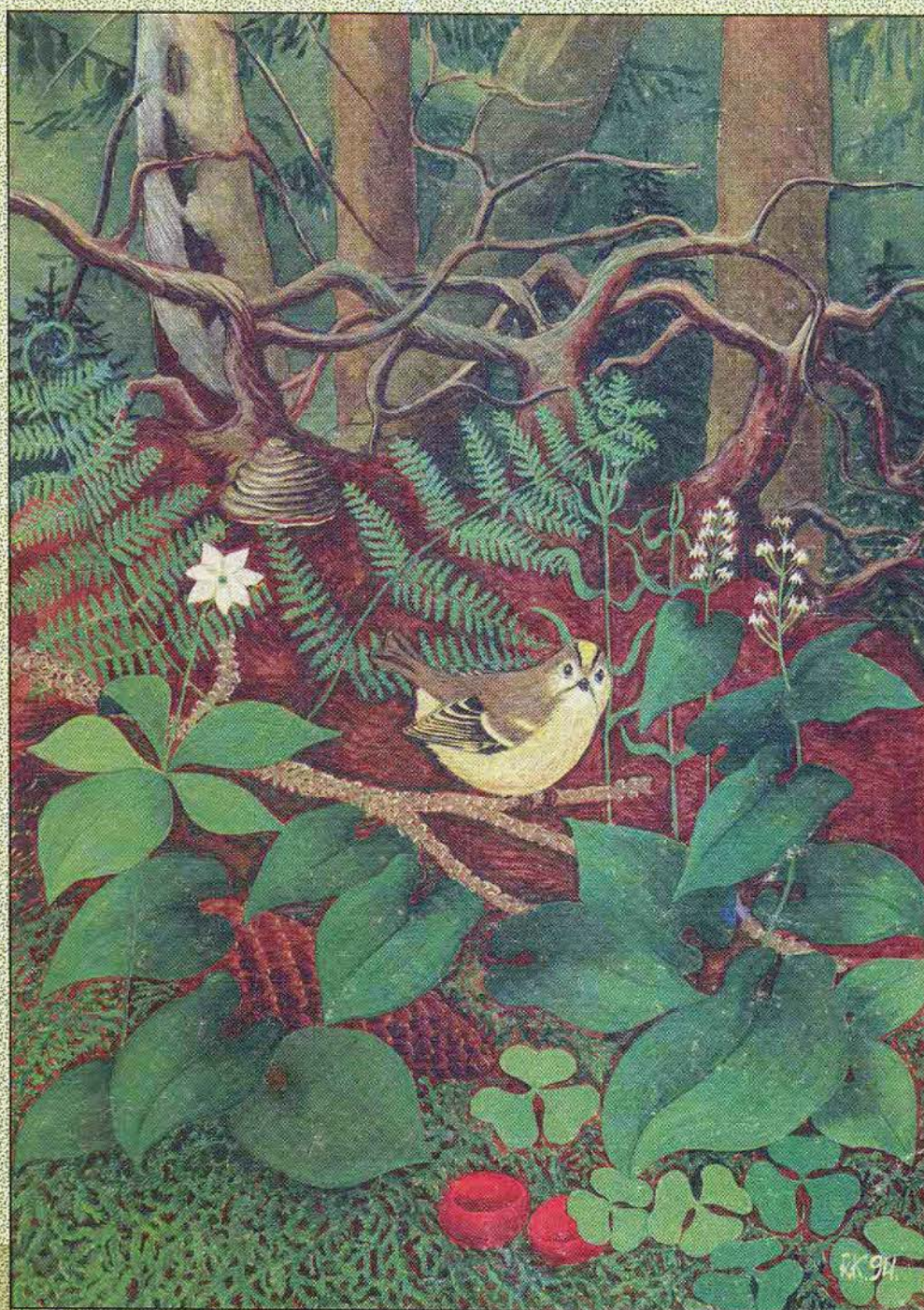


Workshop
on the Practical Implementation
of the Convention on Biological Diversity
in the Baltic Countries



16 - 18 October 1994, Tallinn



W o r k s h o p
on the Practical Implementation
of the Convention on Biological Diversity
in the Baltic Countries

16 - 18 October 1994, Tallinn

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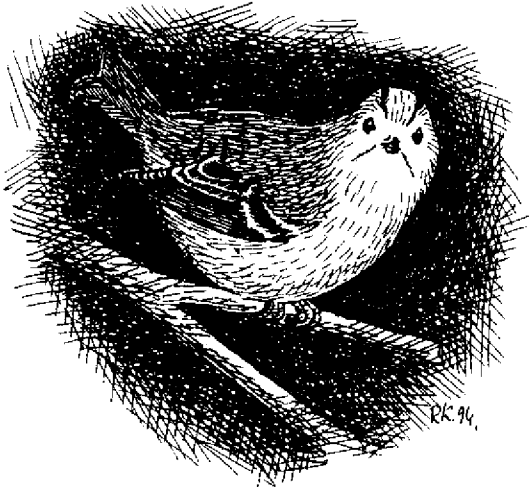
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Views expressed in this report are not necessarily those of the United Nations Environment Programme.

CONTENTS

<i>Contents</i>	3
<i>Preface</i>	5
<i>Summary Report of the Workshop</i>	7
<i>Recommendations on Strategies and Follow-Up</i>	13
 <i>Supplement I</i>	
1. Agenda	17
2. List of participants	21
3. Welcoming address, A. Tarand, Minister of the Environment, Estonia	29
4. Objectives and outputs	31
5. Guidelines for working groups	35
6. Working group recommendations: Lithuania	37
7. Working group recommendations: Latvia	39
8. Working group recommendations: Estonia	41
9. Speaking Notes for the Interim Secretariat's Briefing Sessions on the First Meeting of the Conference of the Parties for the Convention on Biological Diversity	43
 <i>Supplement II</i>	
1. Keynote Address, Dr. H. Zedan	51
2. Background paper, Dr. J. Salo and Dr. R. Pakalnis	57
3. Background paper, Ms. G. Schneider and Ms. I. Lodzina	69
4. Panel presentations	
Estonia	
- State-Of-An-Art: Mr. J. Tambets	83
- Science: Mr. M. Külvik	86
- NGO: Mr. R. Kuresoo	88
Latvia	
- State-Of-An-Art: Ms. I. Lodzina	91
- NGO: Mr. M. Kreilis	93
Lithuania	
- State-Of-An-Art: Dr. M. Lapele	95
- Science: Dr. R. Pakalnis	97
- NGO: Dr. P. Mierauskas	99
5. List of acronyms	103



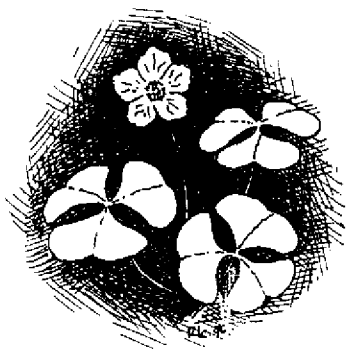
PREFACE

The Workshop on the Practical Implementation of the Convention on Biological Diversity in the Baltic Countries, held in Tallinn from 16 - 18 October 1994, was an important step in facilitating the follow-up of the United Nations Conference on Environment and Development (UNCED) at the sub-regional level. As an input to emerging national biodiversity programmes, the workshop elaborated a set of recommendations for national and sub-regional strategies for the ratification and implementation of the Convention on Biological Diversity.

The meeting was organized by the United Nations Environment Programme (UNEP), through its Regional Office for Europe ROE, in cooperation with the Interim Secretariat for the Convention on Biological Diversity. The Estonian Ministry of Environment hosted the Workshop, and the United Nations Development Programme's Resident Representative assisted in its practical arrangements. All the collaboration and assistance received is acknowledged with thanks.

This report, compiled by Mr. Mart Kõlvik from the Nature Conservation Research Centre, Estonia, documents the main events, speeches and interventions of the workshop. Implementation of the Convention on Biological Diversity should be understood as a process. It is hoped that this document will become a part of that process by facilitating the follow-up of the Workshop in the Baltic Countries.

J.G.M. Alders
Director
UNEP Regional Office for Europe



SUMMARY REPORT OF THE WORKSHOP

WORKSHOP ON THE PRACTICAL IMPLEMENTATION OF THE CONVENTION ON BIOLOGICAL DIVERSITY IN THE BALTIC COUNTRIES

Tallinn 16-18 October 1994

The Workshop was attended by 32 participants and 16 observers from governmental and non-governmental institutions of Estonia, Latvia and Lithuania as well as representatives of neighbouring countries and international organizations (Supplement I, 2).

The Workshop started with a guided field excursion to the Lahemaa National Park, 50 km east of Tallinn. The trip included visits to traditional pastoral landscapes, to a strictly protected forest reserve and to sites of cultural value. During the whole trip the autumn migration of thousands of birds was observed. For example, several flocks of Barnacle geese (*Branta leucopsis*) were seen at the shore-line of the Baltic Sea.

The indoor part of the sessions was opened with a briefing on the objectives of the first Conference of Parties (COP) given by representatives of the Interim Secretariat for the Convention on Biological Diversity (ISCBD) (Supplement I, 10).

Opening session

Andres Tarand, Minister of the Environment, Estonia delivered the welcoming address and opened the Workshop. Andres Tarand expressed the particular importance, of the conservation of biodiversity and the sustainable use of biological resources (Supplement I, 10), for the Baltic countries as well as for all Countries in Transition.

Dr. Hamdallah Zedan, Coordinator of UNEP's Biodiversity and Biotechnology Unit, Chairman of the Session, discussed the role of the Convention on Biological Diversity (CBD) and explained the programmes of UNEP's Biodiversity and Biotechnology Unit. He also commented on the role of UNEP/ROE, ISCBD and the significance of the first COP as well as the importance of implementing the Convention at national and sub-regional levels (Supplement II, 1).

Mr. Sipi Jaakkola, UNEP/ROE, explained why UNEP had taken the initiative to organize the Workshop and presented its objectives and expected outputs (Supplement I, 4). He also commented on different items of the agenda (Supplement I, 1) and envisaged the outcome of the Workshop as well as the role that UNEP/ROE could play in the follow-up of the Workshop.

The Workshop continued with the presentation of the background papers.

Dr. Jukka Salo, Director of the Maj and Tor Nessling Foundation in Helsinki, Finland, and Dr. Romas Pakalnis, Director of the Institute of Botany in Vilnius, Lithuania, presented a co-authored paper which focused on the identification, evaluation, conservation and sustainable use of biodiversity (Supplement II, 2).

Following a brief discussion on the objectives and terms of the Convention on Biological Diversity, the emphasis was put on the most significant guidelines for country studies for the implementation of the Convention.

Dr. Salo dwelt upon a number of activities that were to be taken into consideration as priority areas for country studies in the Baltic Countries, such as a biological survey and inventory, environmental impact assessment, education and training, information exchange, monitoring and assessment, etc. A list of priority ecosystems of utmost importance in the Baltic countries, including coastal waters, inland waters, forest projects or meadow restoration, concluded the first session.

During the ensuing discussion Dr. H. Zedan outlined the procedure for the drafting and adoption of the Convention on Biological Diversity. He indicated the existence of two approaches to the title of the Convention. The developing countries supported titling it as a Convention on Conservation and Utilization on Biodiversity, while the developed countries are in favour of stressing the conservation idea. He also illustrated arguments between lawyers, economists and biologists, drafting the technical text and legal context of the Convention. H. Zedan also discussed the global cost of diversity and the possible implications arising from this for each country.

Dr. Zedan pointed out the general idea of Biodiversity Country Studies, identifying the Objectives for Biodiversity Country Studies:

- 1) To undertake a quick survey of biodiversity (ecosystems and habitats, species and genetic resources);
- 2) To identify pollution, threats;
- 3) To set priorities for conservation;
- 4) To establish measures to be undertaken for conservation;
- 5) To estimate the cost and benefits of conservation;
- 6) To assess the value of conservation.

Further, a questions were made by the audience. H. Zedan, answering question on countries eligible for financial support for a country study, remarked that every country was eligible for financial and technical assistance from UNEP or on a bilateral basis. UNEP had set Guidelines for compiling country studies. For example, Estonia could apply for assistance from UNEP after identifying needs for financial and technical support. Once this is completed, UNEP would sign an agreement with the Estonian Government. The finances could be available either from the Global Environmental Facility (GEF) or on a bilateral basis.

H. Zedan also discussed whether it was feasible to perform one study for each of the Baltic countries or one for the whole region. He explained differences in case of compiling country studies in different countries. There are a number of countries which have undertaken country studies at present. Some countries received support from UNEP (e.g. Malaysia, Thailand, Philippines, some of African and South-American countries), while others like Germany, Canada and Australia did receive financial support from UNEP but followed the UNEP Guidelines for country studies.

Session No. 2

The Session was chaired by Dr. Mindaugas Lapele, Head of the Division of the Wildlife Protection Department, Environmental Protection Ministry, Lithuania.

This session consisted of the presentation of the second background paper co-authored by Ms. Gudrun Schneider, Lawyer at the Ministry of Environment in Oslo, Norway, and Ms. Ilona Lodziņa, Head of the Nature Protection Division of the Ministry of Environmental Protection and Regional Development in Riga, Latvia. The paper, attached as Supplement II,3, was presented by Ms. Schneider.

The presentation focused on different aspects of the national follow-up of the Convention, using the Norwegian process of as an example on how the necessary legal and institutional instruments could be identified, developed and utilized. In particular, the Norwegian practice in combining the two key obligations under the Convention, namely developing relevant national strategies, Art. 6a, and integrating conservation and sustainable use of biodiversity into sectoral and cross-sectoral strategies, Art. 6b, was given special attention.

The following key instruments in the overall strategy and their application in the Baltic Countries were discussed further: superimposed policy instrument, such as a coordinated, comprehensive national action plan which establishes sector-responsibility; agreed cross-sectoral goals for the conservation and sustainable use of biological diversity; *in-situ* and *ex-situ* conservation instruments; planning instruments for land use, including possibilities for restricting certain non-sustainable uses of private property; instruments for impact assessment; instruments for mitigating modifying processes and activities that affect biodiversity; instruments for increasing the level of knowledge through capacity building or public awareness; administrative and institutional instruments for local implementation and international cooperation.

The role of the Convention in countries with economies in transition was addressed. On the one hand, all the Contracting Parties assumed the same obligations under the Convention. On the other, the status of the above countries, in terms of who was to provide financial resources, unclear. It was stated that there existed a strong need for the countries with economies in transition to cooperate on these issues, to define their common views on their status in the Convention and to take action to influence the decision-making mechanisms of both GEF and COP in this respect. As there were no predetermined directions for these countries in the Convention, it might be useful if they could form a bloc at COP or in other Convention bodies. On the initiative of this bloc, a separate protocol could be developed to clarify the position of the countries in transition in CBD.

Also, the arrangement and focal areas of GEF, possibilities to finance biodiversity projects through GEF implementing agencies (UNEP, UNDP and World Bank), the arrangement of providing eligibility for such funding as well as the eligibility criteria were discussed. It was suggested by a UNDP representative that, the Countries of the sub-region might consider the possibility of supporting a joint Baltic biodiversity initiative.

The role of local authorities in the process of the implementation of CBD as well as the importance of economic, social and psychological aspects of the process were also touched upon.

Session No. 3

This session, chaired by Dr. Mindaugas Lapele from Lithuania, gave the opportunity for representatives from all three countries to express their views on the conservation and sustainable use of biodiversity, focusing on state-of-the-art, scientific aspects and NGO approaches for implementing the Convention.

The standpoints of Estonia were expressed by Mr. Jaak Tambets, Senior Conservation Officer of the Ministry of the Environment, Mr. Mart Külvik, Head of the Nature Conservation Research Centre, and Mr. Rein Kuresoo, Chairman of the Executive Committee of the Estonian Fund for Nature.

The views of Latvia were expressed by two representatives, Ms. Ilona Lodzina, Head of the Wildlife Protection Department of the Ministry of the Environment and Mr. Maris Kreilis, Director of the Latvian Fund for Nature.

Lithuania was represented by Dr. Mindaugas Lapele, Head of the Wildlife Protection Department of the Environmental Protection Ministry, Dr. Romas Pakalnis, Director of the Institute of Botany and Dr. Pranas Mierauskas, Secretary General of the Lithuanian Fund for Nature.

The panel presentations are attached as Supplement II, 4.

Each presentation was followed by a brief discussion during which different aspects of the present situation related to the prospects of CBD in the three countries were specified.

Session No. 4

During the session, chaired by Dr. J. Salo, an opportunity was given to each country to discuss their national strategies for the implementation of CBD. A brief group work orientation was carried through to guide the groups in their deliberations (Supplement I, 5). Entries such as country studies, institutional arrangements, policy and national legislation reforms and scientific and technical needs were proposed.

During the group discussions, the working groups worked out their recommendations for action to be taken nationally to implement CBD. The recommendations (Supplement I, 5, 6 and 7) were presented at the plenary session.

The working group presentations were followed by a discussion which concentrated on the prospect of ratifying CBD (in the case of Estonia, on the experience of its ratification), on how the results of the Workshop would be distributed, and on what the next steps towards the implementation of the Convention would be. As one of the first actions to be taken, several speakers emphasized the importance of establishing an *ad hoc* working group in each country to initiate the process of implementation and to familiarize different institutions with the potential implications of CBD. Thereafter, permanent in-country and regional mechanisms should be established to coordinate the elaboration of national action plans and strategies as well as regional activities in the follow-up of CBD.

Besides the above, the necessity for close regional cooperation was stat-

ed. As CBD was to a large extent a research-oriented Convention, it offered new possibilities to increase research cooperation between different countries. These possibilities should be used by strengthening the already existing connections between universities and research bodies of the region. There were also other existing research activities, such as the dense network of migratory bird observing stations, marine biological stations etc., that could be utilized as means for the follow-up of CBD. Since, as was made clear by several speakers, the Baltic Countries had long research traditions, it was now necessary to collect the already existing data from all the countries into a common database and organize the data so that they could be used by decisionmakers and policy-makers.

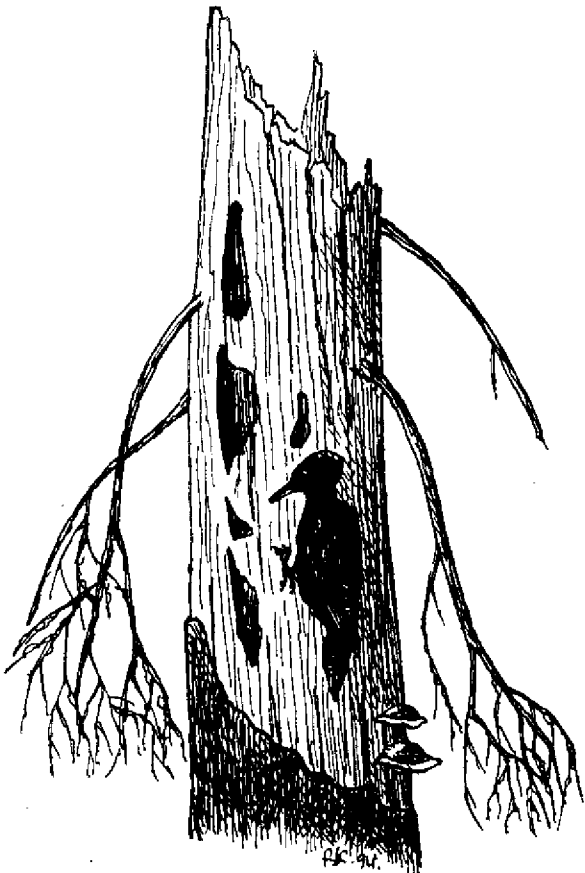
Several other potential forms of regional cooperation were considered, such as the use of rare natural ecosystems preserved in the Baltic countries (coastal meadows, flooded meadows) as models for activities of ecosystem restoration in other countries of the region, the cooperation on the ministerial level in developing legislation necessary for the successful implementation of CBD and various twinning agreements.

Discussion also focused on how other regional agreements (e.g. HELCOM) could help countries in forming common policies to speed up CBD process. The Working Group on Management Plans for Coastal Lagoons and Wetlands (MLW) of HELCOM was mentioned as a good example of how classical nature conservation and economic management could be associated in order to conserve biodiversity.

The observer from the Russian Federation gave a brief overview of the developments related to CBD in Russia and expressed the wish that a similar Workshop be held in Moscow.

Representatives of the Interim Secretariat for the Convention on Biological Diversity briefed the participants on the objectives of the first Conference of Parties and on the agenda items to be discussed during the Conference.

The recommendations on strategies and follow-up were put together by a small drafting group. After a lively discussion, where the representatives from all three countries and international organizations (Birdlife International, IUCN) made several comments and changes, the recommendations were adopted (Supplement I, 9). The session and the Workshop were closed after taking all the comments into consideration.



WORKSHOP RECOMMENDATIONS ON STRATEGIES AND FOLLOW-UP

Institutional issues:

The implementation of the Convention on Biological Diversity should be understood as a process.

Each Ministry of Environment should convene an *ad hoc* interim task group consisting of representatives of relevant institutions and bodies, to facilitate, as appropriate, the ratification and implementation of the Convention on Biological Diversity.

The task group should:

- * prepare a background paper for the Government describing the substance of the Convention on Biological Diversity and giving practical examples on the possible benefits from its ratification and implementation;

- * explore the possibilities for cooperation at sub-regional and regional levels with regard to the conservation and sustainable use of biological diversity, in particular with regard to the ratification and implementation of the Convention on Biological Diversity;

Threats to conserving biological diversity in each country and sub-region, e.g. ongoing land reform, should be identified as a high priority.

Awareness within the public and private sectors concerning the benefits and obligations of the Convention on Biological Diversity should be promoted.

Because the Convention on Biological Diversity and the sustainable use of its components involve cross-cutting issues, a cross-sectoral approach should be applied, and capacity for it should be built within the public and private sectors.

National biodiversity committees should be set up to facilitate and keep under review the implementation of the Convention on Biological Diversity.

Issues related to the Baltic Sea should be considered as appropriate and linked to the HELCOM process, as well as other relevant processes.

Ecosystems, landscape structures and species assemblages unique and typical to the Baltic Region should be identified, and measures for their conservation should be established and enforced.

Measures for *ex-situ* conservation should be provided.

Because of their unique situations, the Baltic Countries should promote, as a group, their common interests in implementing the Convention on Biological Diversity.

Twinning arrangements involving e.g., government bodies, universities and NGOs, should be promoted within the sub-region and Baltic region.

The governments should look for bilateral assistance e.g. from the countries of the Baltic region.

The rational, cost-effective and efficient implementation of other relevant conventions should be considered, as appropriate, with the implementation of the Convention on Biological Diversity at the national level.

Countries should prepare, as appropriate, for participation in the first meeting of the Conference of the Parties for the Convention on Biological Diversity.

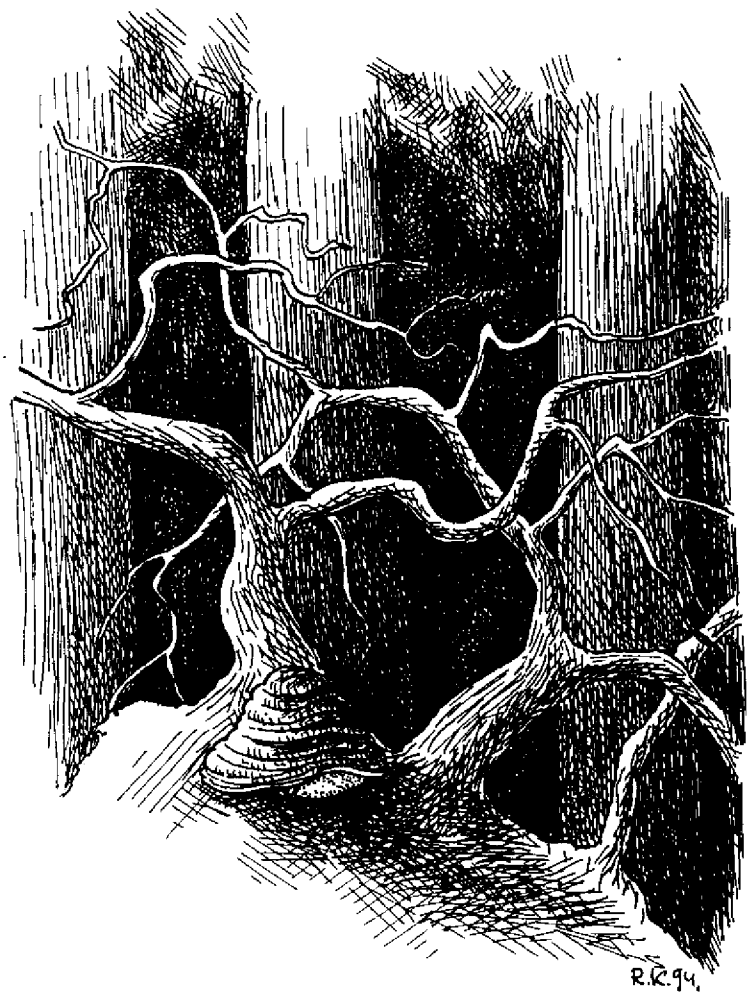
Technical issues:

Biodiversity Country Studies, which can be assisted by UNEP, should be simultaneously undertaken in each of the three countries. Sub-regional aspects should be considered in the Studies.

Data management: the use of Internet and Biodiversity Information Network 21 (BIN21) as well as a geographic information systems approach could be considered.

Demonstration projects should be implemented.

Biotechnology and ecotechnology should be applied for sustainable development in the Baltic Region.



AGENDA

WORKSHOP ON THE PRACTICAL IMPLEMENTATION OF THE CONVENTION ON BIOLOGICAL DIVERSITY IN THE BALTIC COUNTRIES

Hotel "Pirita", Regati pst 1
Tallinn, Estonia
16-18 October 1994

Saturday 15 October

17.00-19.00 Registration of participants

Sunday 16 October

9.00-16.00 Excursion (information available at the hotel)

17.00-19.00 Informal briefing session on the Convention on Biological Diversity (CBD)
Conference of the Parties (COP)

Monday 17 October

8.30- Registration of participants continues

9.00-10.00 OPENING SESSION
Chairman: Dr. H. ZEDAN

Welcoming Address, A. TARAND, Minister of the Environment, Estonia
Keynote Address, Dr. H. ZEDAN, UNEP, Biodiversity and Biotechnology Unit
Workshop objectives and outputs, Mr. S. JAAKKOLA, UNEP Regional Office for Europe

10.00-11.00 "Implementation of the Convention on Biological Diversity at National Level:
Identification, Evaluation, Conservation and Sustainable Use of Biodiversity",
background paper by
Dr. J. SALO, Nessling Foundation, Helsinki, Finland, and
Dr. R. PAKALNIS, Institute of Botany, Vilnius, Lithuania

11.00-11.15 Refreshments

11.15-12.00 Discussion

12.00-13.00 Lunch

SESSION No. 2
Chairman: Dr. M. LAPELÈ

- 13.00-14.00 "Implementation of the Convention on Biological Diversity at National Level Institutional and Legal Aspects",
background paper by
Ms. G. SCHNEIDER, Ministry of Environment, Oslo, Norway, and
Ms. I. LODZINA, Ministry of Environment and Regional Development, Riga,
Latvia
- 14.00-14.45 Discussion
- 14.45-15.15 Refreshments

SESSION No. 3
Chairman: Dr. M. LAPELÈ

15.15-18.00 Panel presentations (presentations and discussion 45 minutes per country)

* Estonia

State-of-the-art and needs presentation: Mr. J. TAMBETS
Scientific presentation: Mr. M. KÜLVİK
NGO presentation: Mr. R. KURESOO

* Latvia

State-of-the-art and needs presentation: Ms. I. LODZINA
NGO presentation: Mr. M. KREILIS

* Lithuania

State-of-the-art presentation: Dr. M. LAPELÈ
Scientific presentation: Dr. R. PAKALNIS
NGO presentation: Dr. P. MIERAUSKAS

19.00 Reception

Tuesday 18 October

SESSION No. 4
Chairman: Dr. J. SALO

- 8.30-8.45 Reporter's Summary
- 8.45-9.00 Orientation of Group Work
- 9.00-12.00 Group Work
Including recommendations for national and sub-regional strategies
- 12.00-13.00 Lunch

- 13.00-14.30 Working Groups' presentations and discussions
- 14.30-15.00 "CBD Process including the objectives and agenda items of COP"
Mr. L. GLOWKA, Interim Secretariat for the Convention on Biological Diversity
Ms. Y. ST. HILL, Interim Secretariat for the Convention on Biological Diversity
- 15.00-15.15 Refreshments
- 15.15-16.15 Discussion on strategies and follow-up measures for effective Baltic participation of the Baltic Countries in the implementation of CBD and in COP
- 16.15-16.30 Reporter's Summary
- 16.30-16.45 Recommendations on strategies and follow-up
- 16.45 CLOSING OF THE WORKSHOP

Wednesday 19 October

- 8.30-10.30 Informal briefing session on CBD COP

WORKSHOP ON THE PRACTICAL IMPLEMENTATION
OF THE CONVENTION ON BIOLOGICAL DIVERSITY
16-18 OCTOBER 1994
TALLINN, ESTONIA

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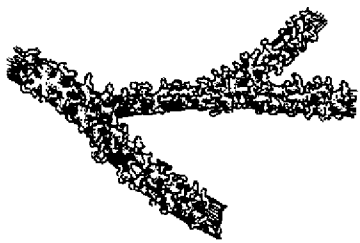
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**WELCOMING ADDRESS BY ANDRES TARAND,
MINISTER OF THE ENVIRONMENT OF THE REPUBLIC
OF ESTONIA**

Mr. Chairman, Ladies and Gentlemen,

I am pleased to open the Workshop on the Practical Implementation of the Convention on Biological Diversity in the Baltic Countries and I am also honoured that Estonia was chosen to host this important meeting. I am very glad to welcome here in Tallinn all the participants from numerous countries and international organizations.

Since the restitution of its independence, Estonia has acceded to several international environmental multilateral agreements, notably Basel 1989, Ramsar 1971, Washington 1973, Helsinki 1974/1992, MARPOL etc. In 1992 at Rio de Janeiro Estonia was among the signatories of the United Nations Framework Convention on Climate Change and the Biodiversity Convention. I personally have had the opportunity and honour, as a member of the Estonian Parliament, to be a witness to this historical event.

The Biodiversity Convention is considered to have a significant impact on relations between the environment on one hand and economy, trade, intellectual property and science on the other. It was ratified by the Estonian Parliament in May 1994 and will enter into force for Estonia later this month. Therefore the issue of its implementation is becoming crucial.

The implementation of the Biodiversity Convention, which attempts to deal, within one legal instrument, with issues to date regarded separately, is a complex problem. Taking into consideration the recent history of the Baltic states, these countries have had the chance to enjoy their restored independence during the last three years, but have also faced the tough work on building up all necessary governmental structures. Hence, the implementation of the convention, which requires well-functioning cooperation between various governmental and non-governmental institutions, is a challenging task, I suppose, not only for our country.

Nevertheless, the Ministry of Environment is at present responsible for the implementation of the provisions of the Biodiversity Convention. A part of our staff is dealing seriously with this, in many cases in collaboration with other ministries and NGOs, thus adding their share into our joint movement towards sustainable development, combining economic growth with concern about the future of our so far quite well maintained nature. This is, to my mind, the only possible way to achieve our common environmental objectives.

WORKSHOP OBJECTIVES AND OUTPUTS

Sipi Jaakkola
UNEP Regional Office for Europe

Mr. Chairman, Ladies and Gentlemen

The Convention on Biological Diversity was intended to put an end to and then reverse the alarming trends that destroy the biological capital of the planet (V. Sanchez, Chairman, ICCBD; 1994). This Convention is a new contract between people and nature: a contract characterized by solidarity, interdependence and equity (E. Dowdeswell, UNEP, at the ICCBD, 1994). It has three objectives:

- 1) conservation of biological diversity,
- 2) sustainable use of its components (genes, species and ecosystems),
- 3) fair and equitable sharing of the benefits that result from the use of genetic resources.

Why do we meet

The Convention of Biological Diversity is the first comprehensive, global agreement to go beyond traditional nature conservation by addressing all aspects of biological diversity: genetic resources, species, and ecosystems. Its primary innovation is that the conservation of biological diversity has been recognized as an integral part of the sustainable development process, and as part of sustainable management of natural resources. This is particularly important for countries with economies in transition where rapid privatisation and land-reform imply risks to biodiversity. - And this is why UNEP's Regional Office for Europe has taken the initiative to organize this meeting.

As participants of this workshop, UNEP has invited high level policy makers, technical officials and special advisors from the three governments' relevant ministries. We have neither forgotten non-governmental organizations, nor the scientific community. As observers we have here donors', banks', and regional NGOs' representatives.

Objectives and outputs

The objectives for this Workshop, as I see them, are to enable participants to:

- (i) understand the Convention, in general, and its benefits in particular,
- (ii) explore ways to facilitate ratification, (Latvia, Lithuania),
- (iii) obtain advice on the steps required for implementation,
- (iv) initiate the formulation of mechanisms for implementing the Convention, including

- national policies, action plans and other instruments,
- national committees, research programmes, etc.
- sub-regional approaches,
- transboundary issues relating to shared biological resources,

(v) prepare for participation in the first meeting of the Conference of the Parties to be held in November - December 1994.

The sub-regional aspect is important here. Historically, socio-economically, bio-geographically and environmentally speaking the Baltic Countries form a particular sub-region of Europe. As sub-regional issues in this Workshop I would suggest you consider:

- establishing Baltic biological diversity institutions,
- the role of legislation and incentive measures in biodiversity conservation,
- scientific, technical and technological strengths of the sub-region,
- development, transfer and use of biotechnology products,
- financial resources for the Convention,
- creating sub-regional biological diversity networks,
- threats to conserving biological diversity in each country and the sub-region.

As a concrete output we aim at agreeing upon a set of recommendations and sending a message to the governments and other relevant bodies in the three countries. UNEP will publish a substantive report on this Workshop, to be compiled with assistance from Estonian colleagues.

The Agenda

During these two days we will benefit from technical presentations, discussions and group work.

Two background papers will be presented on the implementation of the Convention on Biological Diversity at the national level. The first presentation will focus on the identification, evaluation, conservation and sustainable use of biodiversity. The second will consider the institutional and legal aspects of implementing the Convention. These papers have been prepared as a cooperative effort by consultants from Latvia, Lithuania, Finland, and Norway.

Another important agenda item is the panel presentations this afternoon. Representatives from each of the Baltic Countries will discuss their national views on biodiversity, highlighting state-of-the-art approaches, the science of biological diversity, and the perspective of non-governmental organizations (NGOs). A short discussion will follow each country's presentation.

Tomorrow morning, as an input into their national biodiversity programmes, the three countries will discuss recommendations for national and sub-regional strategies for implementing the Convention. The

results of this work will be discussed in a plenary session.

The Convention's Geneva-based interim secretariat will hold several briefings on the upcoming first meeting of the Conference of the Parties for the Convention, which starts on 28 November in the Bahamas. This meeting will be attended by governments that have ratified and signed, or signed the treaty and will mark the official start of the Convention's implementation.

The Workshop will produce a list of recommendations on strategies and follow-up in the three countries. The resulting workshop report will be an important reference for similar workshops in other regions, as well as to the meeting of European environment ministers that will be held in Sofia in October 1995.

One of the most important outcomes of this Workshop is its follow-up. It seems clear to me that our meeting here is only a stepping stone: the work that will follow after we go from here back to our offices will generate the real results.

UNEP, through its substantive units and its Regional Office for Europe, and in cooperation with its partners, will be interested in providing some relevant assistance in the follow-up of this Workshop. Our role is not to implement big projects but, rather, being a voice of environment, to initiate, catalyze, and raise public awareness. As a current example in the host country, ROE is funding the translation of the "Caring for the Earth" to the Estonian language.

Mr. Chairman,

Three days may not change the world, but may help in changing the ways of thinking. This Workshop will hardly provide a complete solution to the complex problem of biodiversity conservation in the Baltic Countries. But it may, and this really depends on us, help in finding right tracks for follow-up. It may help us review our ideas and, what is important, finding partners for work to be done at the national level. You all are key people, a carefully chosen core group, for putting the Convention to work in your home countries.

I would like to finish by emphasizing - in concert with the previous speakers - how important it is that we take action now if we hope to stop the alarming loss of biological diversity.

I wish you success with your deliberations.

Thank you.

GUIDELINES FOR GROUP WORK

Monday:

- Designate chairman and rapporteur
- Designate resource person for each group

Tuesday:

* Elements of work:

- Background papers
- National presentations
- COP briefing

* Focus:

- Strategy: Country Study (Discuss need for UNEP sub-regional approach)
- Institutional arrangements
- Policy reform
- Reform of national legislation
- Scientific and technical needs

* Output:

- Written summary of the results of the work to be presented after lunch

WORKING GROUP RECOMMENDATIONS: LITHUANIA

We state that it is urgently needed to ratify CBD in the Lithuanian Parliament and create a National Committee on its implementation.

I Country study

Taking into account a great influence of the process of the country study on the implementation of CBD it is necessary to note that the levels of evaluation of different components and biological diversity are not equal.

- General knowledge of ecosystems is sufficient, while the level of their investigation is different and requires a complex approach.
- Data on species are very different as concerns taxonomic groups. Vertebrates and vascular plants are sufficiently studied.
- Evaluation of genetic resources is most problematic, information is insufficient and dispersed at numerous institutions.
- Main problems of the country study are:
 - territorial distribution and biological resources.
 - cross-sectoral analysis of investigations on BD (biological diversity), use of resources and protection.
- We suggest to prepare separate reports on each Baltic Country on the basis of which to select fields and priorities for subregional cooperation.
- Technical and financial assistance from international organizations is necessary, consultations would be highly welcome.

II Institutional arrangements

- Regular institutional structures for carrying into effect BD conservation and sustainable use have been formed in Lithuania; however, coordination is insufficient.
- The principal coordinator of CBD implementation will be the Ministry of Environment Protection.
- In the process of ratification of CBD in the Lithuanian Parliament, coordination between relevant institutions will be defined by a special document.

III Policy reform

In the process of the Environmental Policy Reform it is necessary to take into account restoration of property, privatization and land reform.

- Conservation of biological diversity and sustainable use of resources will be selected as one of the main priorities in the National

Environment Protection Strategy.

- Users of basic resources are to be actively involved in the process of implementing CBD.
- Economic evaluation of biological resources and implementation of the financial mechanism will be one of the main priorities.

IV Reform and national legislation

- Revision of the existing legislation in relation to CBD, with the aim to supplement it where necessary and to remove current disagreements.
- Elaboration, adoption and enforcement of missing laws, especially those on *ex situ* conservation.
- International experience in environmental legislation for conservation of BD and its sustainable use would be very useful.

V Scientific and technical needs

- Lithuania has sufficient scientific potential for evaluation of biodiversity.
- In order to fill the existing gaps, regional cooperation would be very useful.
- Creation of a database, mapping of biological diversity and elaboration of a network of information systems will be CBD related scientific priorities for the nearest future.
- For implementing these tasks, additional financial and technical support on the state level is crucial. International support would also be most welcome.

WORKING GROUP RECOMMENDATIONS: LATVIA

Country study:

- Sub-regional approach for a country study in the Baltic Countries.
- Developing a separate national sub-programme for country study.
- determining the economical value of biological resources with participation of UNEP experts:
- Developing of the National Report on biological diversity.
- Creating of the national monitoring programme and monitoring network.
- Creating biotope classification and landscape classification.

Institutional arrangements:

- Establishing a task-group on the basis of the existing working group for the Environmental Policy Plan.
- Creating the National Environmental Action Plan.
- Elaboration of legislation.

Financial support:

- For maintaining the existing genetic collections (creating of common trilateral maintaining system is proposed);
- For management in designated valuable areas.

WORKING GROUP RECOMMENDATIONS: ESTONIA

Introduction

Estonia was among the signatories to the Convention on Biological Diversity (CBD) in June 1992 in Rio de Janeiro. The Convention was ratified by the Parliament of Estonia on May 11, 1994 and will enter into force in October 1994.

According to Article 6 of the Convention, the Parties should develop national strategies, plans or programmes for the implementation of CBD. In order to speed up the process of implementation, the Workshop on the Practical Implementation of the Convention on Biological Diversity in the Baltic Countries was held on October 16-18 in Tallinn.

Within the framework of the above Workshop, a Group Work Session was held to consider national and sub-regional strategies for the implementation of CBD.

The Working Group for Estonia was attended by members of the Estonian delegation, observers from the Ministry of the Environment of Finland as well as representatives of various international organizations.

The Working Group stated that Estonia has relatively good preconditions for the implementation of CBD: Estonia was the first of the Baltic countries to ratify CBD; Estonia has a reasonably solid scientific basis, a developed system of protected areas, an established national monitoring system etc. However, the institutional capacities and cooperation between different sectors and institutions need to be strengthened to meet the goals of CBD.

Recommendations of the Working Group

As a result of the Working Group discussion, the following recommendations were made:

- 1) The outcome of the Group Work Session should be presented to the Minister for the Environment.
- 2) The Minister of the Environment should convene an *ad hoc* Task Group consisting of representatives of different institutions that could potentially be involved in CBD process.
- 3) The Task Group should
 - (a) prepare a background paper for the Government describing the substance of CBD and giving practical examples on possible benefits for different institutions, that arise from the implementation of CBD. Where necessary, this will be done by consultation with the UNEP or consultants from other countries;
 - (b) outline a programme for the Estonian Country Study;

- (c) consider the possibility of cooperation aimed at the implementation of CBD on sub-regional and regional levels;
 - (d) elaborate recommendations for the Minister of the Environment regarding the measures necessary for involving the Government in CBD process.
- 4) Based on these recommendations, the Minister is to submit a proposal to the Government for convening a permanent Working Group for implementing CBD.
- 5) The permanent Working Group should
- (a) initiate the necessary country study, and
 - (b) develop the national strategy for implementing CBD.

Tallinn, October 18 1994

SPEAKING NOTES FOR THE INTERIM SECRETARIAT'S BRIEFING SESSIONS ON THE FIRST MEETING OF THE CONFERENCE OF THE PARTIES FOR THE CONVENTION ON BIOLOGICAL DIVERSITY

Lyle Glowka
Yvonne St. Hill

The Convention on Biological Diversity Process

* Formal negotiating process began in 1991 with the Intergovernmental Negotiating Committee (INC) for a Convention on Biological Diversity

* Convention adopted by the INC on 22 May 1992

* Opened for signature in Rio on 5 June 1992; 156 Governments and the European Community signed

* As of 14 October:

92 States have ratified

83 States are Parties

* Resolution 2 provided a framework for international cooperation for the conservation of biological diversity and the sustainable use of its components pending the entry into force of the Convention, as well as for the preparations for the first meeting of the Conference of the Parties

Interim Period (between the Convention's opening for signature and the first meeting of the Conference of the Parties)

* Four expert panels convened by the UNEP Executive Director to provide follow-up to the Convention on Biological Diversity finished their work in 1993

The panels prepared informal reports on four subject areas

Panel I: Priorities for action for the conservation and sustainable use of biological diversity; also proposed an agenda for scientific and technological research (UNEP/Bio.Div/Panels/Inf.1)

Panel II: Evaluation of the potential economic implications of conserving biological diversity and sustainable using its components; also evaluated biological and genetic resources (UNEP/Bio.Div/Panels/Inf.2)

Panel III: Technology transfer and financial issues (UNEP/Bio.Div./Panels/Inf.3)

Panel IV: considered the need for a possible Convention protocol addressing the transfer and handling of living modified organisms resulting from biotechnology (UNEP/Bio.Div./Panels/Inf.4)

UNEP Interim Secretariat

* Resolution 2 of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity requested the UNEP Executive Director to provide the Convention secretariat on an interim basis until its entry into force

* Article 40 (Secretariat Interim Arrangements) states that UNEP to provide the secretariat on an interim basis between the entry into force of the Convention and the first COP

* The Interim Secretariat was established in Geneva in late September 1993; The Secretariat's professional staff comprises an executive secretary, a lawyer, biologist, biotechnologist, an economist, a financial instruments specialist

Intergovernmental Committee on the Convention on Biological Diversity

* Pursuant to Resolution 2 of the Nairobi Final Act, UNEP Governing Council resolution 17/30 (21 May 1993) established an Intergovernmental Committee on the Convention on Biological Diversity to prepare for the first meeting of the Convention's Conference of the Parties

* The first session was convened in Geneva in October 1993

* The second session was convened in Nairobi in June 1994

Open-ended Intergovernmental Meeting of Scientific Experts

* Established to provide scientific input to assist the ICCBD in its work to prepare recommendations for COP

* Met in Mexico, April 1994

* 3 elements of the terms of reference

First element: identification of scientific programmes and international cooperation in research and development related to conservation and sustainable utilization

Second element: organizing the preparation of an agenda for scientific and technological research, including possible institutional arrangements for cooperation among governments for early Convention implementation

Third element: identification of state of innovative, efficient and state-of-the-art technologies and know-how and ways and means of transferring

First Meeting of the Conference of the Parties

Convening of the Meeting

- * Article 23(1) provides that the first COP to be convened by the UNEP Executive Director no later than one year after CBD's entry into force
- * The Convention on Biological Diversity entered into force on 29 December 1993
- * Mongolia was the 30th State to ratify
- * The first meeting of COP I -> 28 November - 9 December 1994 -> Nassau, the Bahamas

Ministerial Meeting

- * Ministerial component 7-9 December
- * Rationale for the ministerial meeting:
 - demonstrate States commitment to the Convention process
 - facilitate the advancement of recommendations from the experts
 - provide high level political and policy direction from the Convention's COP to the Ministerial Segment of the UN Commission on Sustainable Development (CSD), given the importance of the relationship between COP and the CSD
 - provide policy and political guidance to the future development and implementation of the Convention, especially COP's Medium Term Programme of Work

Informal consultations prior to COP

- * Needed to resolve some outstanding issues to ensure a productive COP
- * Will be convened by the Executive Director of UNEP
- * Date of the informal consultations is set for Sunday, 27 November, ball room of the Crystal Palace Hotel - 10.00-13.00
- * Attendance
 - Heads of delegations with one advisor
 - Regional groups will probably meet in the afternoon
- * Areas of focus
 - Rules of Procedure

The ICCBD was not in a position to agree on the exact wording of:

(1) paragraph 1 of Rule 4 on the periodicity of meetings of the Conference of the Parties;

(2) Rule 21 on the Bureau of the Conference of the Parties; and

(3) paragraph 1 of Rule 40 regarding decisions with respect to article 21 paragraphs 1 and 2 of the Convention

The remaining outstanding wording appears in square brackets in the draft rules of procedure

- Informal agreement on officers for the meeting

Bureau of COP and, perhaps, the Subsidiary Body for Scientific, Technical and Technological Advice

- Organization of Work of the First COP

Organization of Work

* The meeting will have its agenda items divided between, Plenary and *ad hoc* Working Group of the Whole

* *Ad hoc* Working Group of the Whole

- Open to all delegations

- Designed for consideration of agenda items requiring detailed negotiations to facilitate process of decision making by the plenary

- The proposal is in keeping with established UN practice (UNCED, UN Population Conference and the Conference of Small Island Developing States)

- On formal meeting at a time to maximize ability of 1 person delegations to participate in COP work; minimize cost of servicing meetings; flexibility to create smaller contact groups when the need arises

Items on the Provisional Agenda for the First Meeting of the Conference of the Parties

Three briefing sessions focused on some of the issues which may be discussed in conjunction with the following items on the provisional agenda for the first meeting of the Conference of the Parties:

* Adoption of the rules of procedure for the Conference of the Parties

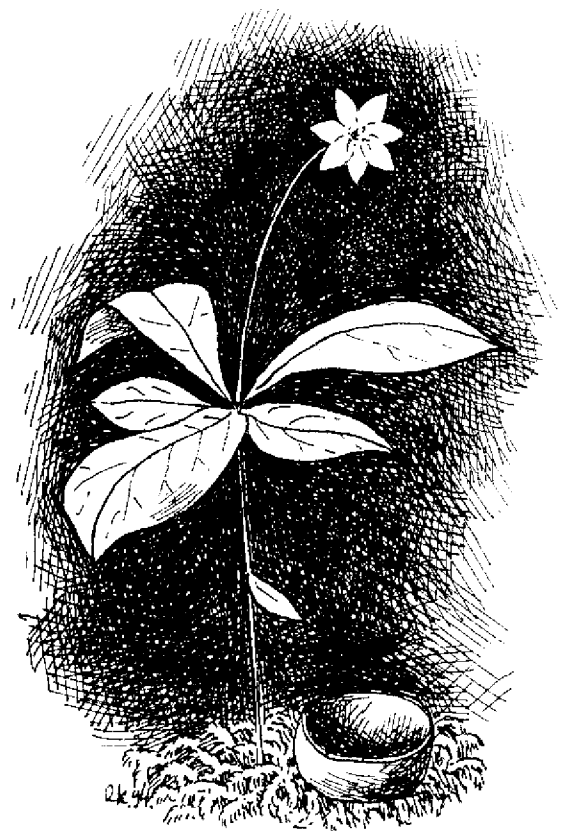
* Matters stipulated by the Convention for action by the Conference of the Parties at its first meeting:

- Policy, strategy, programme priorities and eligibility criteria regarding access to and utilization of financial resources;

- Institutional structure to operate the financial mechanism under the Convention;

- List of developed country Parties and other Parties which voluntarily assume the obligations of developed country Parties;

- * Clearing-house mechanism for technical and scientific cooperation;
- * Selection of a competent international organization to carry out the functions of the Secretariat of the Convention;
- * Financial rules governing the funding of the Secretariat of Convention
- * Subsidiary body on Scientific, Technical and Technological Advice
- * Preparation of the participation of the Convention on Biological Diversity in the third session of the Commission on Sustainable Development
- * Medium-term programme of work of the Conference of the Parties
- * Budget for the Secretariat of the Convention
- * Venue and date of the second meeting of the Conference of the Parties



STATEMENT BY DR. HAMDALLAH ZEDAN,
Co-ordinator, Biodiversity and Biotechnology (UNEP) on
behalf of Ms. E. Dowdeswell, Executive Director, UNEP

Mr. Chairman,
Minister Tarand,
Ladies and Gentlemen,

Let me first express my profound gratitude to the organizers of this meeting and to the Government of Estonia for hosting it.

It would have been the pleasure and privilege of Ms. Elizabeth Dowdeswell to address this important conference in person. But her other simultaneous engagements elsewhere have prevented her from doing so. We in UNEP, are honoured to be associated with this forum. We are also particularly gratified by the initiative taken to organize this meeting.

The legendary hero of the Hottentots, a group of pastoralists in southwestern Africa, was the offspring of a cow, an appropriate parent for nomads who depend on herding cattle. According to the legend, Heitsi-Eibib was a Hottentot warrior against whom none could prevail. He was killed in combat on a number of occasions, but was able to resurrect himself by magical means. In this age of high technology, he would be the ideal bionic man for the television.

We cannot overestimate the significance of biological diversity in our cultural, social and economic life. Biological resources have always played a crucial role in our development.

However, as the 21st century approaches, the world is being impoverished as its most fundamental capital stock - its genetic resources, species-habitats and ecosystems - erodes at an alarming rate.

Unlike Heitsi-Eibib the Hottentot hero, species cannot magically resurrect themselves.

As you are aware, the Convention on Biological Diversity has now come into force and the first meeting of the Conference of the Parties will take place in Nassau, the Bahamas next month.

The Convention is much more than just a set of rights and obligations to be implemented by the Parties. You are assembled here to deliberate on the best way forward regarding the implementation of the Convention by the Baltic Countries. As you approach the Bahamas, it is worth stressing that the Convention is a treaty with a built-in enabling mechanism to drive forward the implementation process. The Convention is also a means by which nations can support one another. It will have important national, regional and global implications offering both challenges and opportunities.

Ladies and Gentlemen,

Clearly, estimating the true magnitude of existing national, regional or global biodiversity, precise rates of its loss, or even its current status is challenging because no systematic monitoring is in place and much of the baseline information is lacking.

The first set of implications of the Convention for the Baltic Countries will emerge during

the problem identification process. In other words, it is incumbent upon countries to undertake a problem analysis exercise. Decisions on conservation must be based on objective criteria. We realize that blanket conservation of all biodiversity is neither economically feasible nor technically possible. What this implies is the preparation of national biodiversity profiles drawing together a host of information on which priorities and actions can be based.

I am sure that compiling such data for the Baltic region will also provide the baseline against which the efforts of nations to implement relevant provisions of the Convention can be measured. This will also enhance the monitoring and assessment capability of the Baltic countries.

The second important step pertains to the need for countries to make this information available in a properly organized fashion to those who can do something about it. They will also need to consolidate national consensus on the analysis of the causes of loss of biological diversity.

Ladies and Gentlemen,

Article 6 of the Convention stipulates that Parties will develop national strategies, plans or programmes for conservation and sustainable use of biological diversity, integrating them into relevant sectoral and cross-sectoral plans, programmes and policies. This implies that nations will develop such strategies and action plans building upon existing structures and programmes. It will also include assessment and agreement on the need for new legislation and administrative measures, on the roles and responsibilities of institutions that will collaborate in the implementation, on resource requirements, cost implications of the proposed strategy and associated action plans, mechanisms for promotion of the strategy to foster cooperation and commitment to its implementation. It will require the formal commitment of all parties involved to implement the strategy and to monitor its implementation.

Ladies and Gentlemen,

The Convention, a strategy or an action plan in itself will not save biological diversity unless its provisions are implemented. The Convention stipulates that Parties will undertake a wide range of activities to protect individual species - and their genetic resources - and to conserve the habitats where they continue to evolve and respond to a changing environment.

A number of measures would need to be implemented if these provisions are to be meaningful. I would like to highlight six areas in urgent need of measures.

First, establishment of nation-wide, regional and sectoral information and monitoring mechanisms. Decision-making on protection of biological diversity should be based on adequate and reliable biological, socio-economic and environmental data that can be obtained and made available through identification and monitoring and exchange of information.

Secondly, there is the need to adopt appropriate measures to enhance in situ and ex situ conservation of biological diversity and genetic resources. The loss of genetic diversity in domesticated plants and animals is particularly dangerous for those species whose wild progenitor is already extinct. There might also be a need to collect and evaluate the genes of unrelated wild species that exhibit traits of potential value for insertion into existing domestic species. There is also the question of whether new wild species should be domesticated. The transfer of knowledge and technology from developed to developing countries and to countries with economies in transition as well as between countries for the application of appropriate ex situ and in situ conservation techniques should be adequately supported.

Thirdly, a crucial challenge to Baltic countries will be the integration of biodiversity concerns into agriculture and forestry policies and laws and the provision of necessary incentives or disincentives to identified key sectors and cross-sectoral policy areas. This implies restructuring and reforming national policies and the revision of existing laws and development of new ones to realize the Convention's potential. For example, taxation policies could be adjusted to generate funds for conservation of biological diversity and sustainable use of biological resources. There is also a need for positive incentives for those countries and communities whose practices maintain or promote diversity. Hence, public participation and the views of resources users on relevant issues and on the need for institutional restructuring should be taken into account.

Fourthly, there is the need to regulate access to genetic resources. Previously, there were fewer economic incentives for developing countries where most biodiversity is found to undertake biodiversity conservation efforts. This was because they had no way of capturing any significant proportion of the economic benefits derived from these resources. The Convention places access to genetic resources under the sovereign control of States, and hence subject to mutually agreed terms. A major stumbling block continues to lie in the disparity between available means to reward the generation of intellectual property in industrial countries as compared to developing countries. This issue must be equitably resolved.

Article 15 of the Convention indeed calls for the fair and equitable sharing of the results of research and development and of the benefits arising from the utilization of genetic resources. New legislation, administrative measures and practices, such as registers of biological resources will need to be formulated at country level to facilitate the implementation of the provision. Access to genetic resources shall also be subject to the prior informed consent of the party providing such resources. There is a need to introduce regulations governing the collection of biological resources, measures which, for example, require applicants for patents to provide proof that the biological materials in respect of which IPRs are being sought have been legally acquired. There is a need for mechanisms for negotiating the terms of exploitation and sharing of benefits at the international, national and local levels. The impact which international agreements that incorporate issues of IPRs and the inclusion of trade-related IPRs within the Uruguay round of GATT will have upon access to and conservation of biological diversity will have to be analyzed.

Fifthly, we need to enhance technological capacity of developing countries and countries with economies in transition and facilitate access to and transfer of relevant technologies. Each country needs to assess its technological capability, determine its needs and decide on how much to invest in technology transfer, including biotechnology development; as well as on the integration of technology development into national development strategies. Maintenance of a wide genetic base is therefore important to the future improvement of agriculture, forestry, health and environment.

Baseline research on indigenous knowledge, technologies and practices, is a priority for sustainable biodiversity conservation programmes. It is crucial that the contents of a community's environmental knowledge be compiled.

For example, African herds, from generation to generation, have maintained genetically diverse stocks and varied the composition of their herds to adapt to changing environmental characteristics. Such knowledge has enabled pastoralists to practise sustainable development long before the term became fashionable. When nomads can roam freely, which is becoming rarer, seasonal, and even daily movements of herds across pastures help prevent overuse of a single area of biomass.

African pastoralists have also developed sophisticated techniques to maintain stock health. Ethnoveterinary studies have documented elaborate classifications of cattle diseases and their remedies among East African pastoralists. In Nigeria, one survey identified some 92 herbs and plants used in ethnoveterinary medicine. Fulani, WoDaabe and Maasai all vaccinate against bovine pleuropneumonia, and the Maasai vaccinate against rinderpest as well. Their indigenous technique of vaccinating through the nose proved superior to early Northern commercial vaccines administered in the tails.

A clear link was recognized in the Convention between the supply of genetic resources and access to and transfer of technology which helps characterize, evaluate, conserve or make use of these resources. This implies the need for the development of creative partnerships between nations and between public and private sectors, under which nations and institutions will establish collaborative ventures in this area. I hope this Workshop will be able to give some creative suggestions on this.

The issue of the regulatory climate governing the safe transfer, handling and use of novel biotechnology products is a matter of concern for the Convention. Institutions at the national, regional and international level should recognize the potential environmental and socio-economic impacts of new technological applications and act with caution.

Sixthly, integration of conservation of biological diversity into national economic planning. Resources for the conservation of biodiversity are limited and this forces nations and the global community to set priorities. To mobilize political and public support, economics should be used to demonstrate the importance of biological diversity to human society by assessing and, as appropriate, assigning values to the full range of goods and services such diversity provides at the local, regional and national levels. Because such goods and services fail to show up in conventional accounting systems, the economic significance of biological diversity remains undervalued or not valued. Thus, its loss entails no debit charge against current income that would account for a decrease in potential future production. Valuing and measuring economic benefits that may accrue to different levels of society - local, national, regional and international - demand a great deal of information and the development of appropriate methodologies. Countries need to modify their systems of national accounts to integrate the costs of depletion of biological resources into the decision-making and national accounting.

Mr. Chairman,

In any of the above mentioned areas, it is not possible for a country or organization to discharge its activities and responsibilities in isolation. International scientific and technical cooperation is essential for the implementation of the Convention. In this respect, Governments will need to put in place measures that facilitate the mobilization of scientific, technical, financial and human resources and the sharing of experience and skills. Appropriate United Nations and other international and regional organizations should assist countries in this respect. We could also provide scientific and technical advice and support and catalyze finance to facilitate the implementation of the Convention in a systematic manner.

UNEP's biodiversity and biotechnology programmes are in fact geared towards enhancing collaboration, co-operation and co-ordination with other agencies and creating partnerships with various organizations and institutions worldwide to implement the Convention on Biological Diversity and relevant chapters of Agenda 21. Relevant programmes and activities include support to the preparation of national biodiversity studies, strategies and plans; capacity building for improved biodiversity data management and networking; global biodiversity assessment; preparation of biodiversity status reports; ex situ and in situ conservation of genetic resources and their use for development of agriculture, forestry, fisheries and industry; improving related professional and institutional capability for assessment, conservation and utilization of biological resources; and developing and strengthening national environmental legislation, to name a few.

Recently, UNEP embarked on the formulation of a UNEP's Biodiversity Strategy and Programme in keeping with the principles laid down in the Convention and Agenda 21.

Mr. Chairman,

The issue of adequate financial resources for biodiversity conservation is central and critical to all efforts.

GEF was invited - through Articles 21 and 39 - to operate the interim financial mechanism for the Convention.

GEF was restructured in March, 1994, and GEF instrument agreed upon by representatives of governments was adopted by the governing bodies of GEF Implementing Agencies this summer. Now, it will be up to the Conference of Parties to assess whether the restructuring of GEF satisfies the requirements of the Convention for the purpose of inviting it to operate the funding mechanism, on interim or a permanent basis.

It is difficult to see how GEF funds alone could significantly slow down biodiversity loss. However, GEF should be able to leverage other funds and show models that could be replicated in the funding operations of international financial institutions and bilateral aid. National, regional and global initiatives are required to mobilize additional finance.

Ladies and Gentlemen,

The genetic resources which form the pool of biological diversity available to meet the massive global demand by humankind for food and agriculture are threatened. This past decade the international community has worked in partnership to negotiate the Convention on Biological Diversity.

Now we must all strive to implement it. The single policy challenge facing our world is to preserve natural resources and a healthy environment while improving the conditions of the world's poor. International responsibility must work hand in hand with international equity.

While science reveals the possibilities, and technology realizes them, the Convention on Biological Diversity provides the international community with the legal, ethical, social and financial framework.

Ultimately, the solution to the biodiversity crisis is each and everyone's responsibility. Only by marrying scientific facts to political will and economic reality can we hope to maintain the biological wealth on which sustainable development depends.

This meeting is a clear example of the way the countries should collaborate to advance the objective of conserving biological diversity and sustainably using biological resources.

I am confident that this Workshop will lead to policy developments in keeping with the Convention to help manage genetic diversity more effectively in the future.

I wish you fruitful deliberations.

IMPLEMENTATION OF THE CONVENTION ON BIOLOGICAL DIVERSITY AT NATIONAL LEVEL: IDENTIFICATION, EVALUATION AND SUSTAINABLE USE OF BIODIVERSITY

Jukka Salo and Romas Pakalnis

Introduction

Leaders of 157 countries signed the Convention on Biological Diversity on 5-14 June 1992 in Rio de Janeiro. Since then, more than 170 countries have signed the Convention which entered into force on 29 December, 1993 on the ninetieth day after the date of deposit of the thirtieth instrument of ratification. Today, some 90 countries have ratified the instrument, including Estonia. Though signatories of the Convention, Latvia and Lithuania have not yet ratified the document.

This report is aimed to specify some actions related to the Convention and to formulate priorities and actions which the countries may find useful during the process of ratification.

1. Objectives and terms

The Convention on Biological Diversity is not a traditional approach to the conservation issues. In addition to classical conservation objectives of the biological diversity, the convention strongly underlines the economic and cross-sectoral issues related to the sustainable use of biological resources. Daniel Janzen has formulated this aspect of the Convention in his famous motto: "Biodiversity - Use It or Lose It!" Biological diversity cannot be considered safe by establishing protection areas only. One way how the Convention is solving these problems is putting economic value on biodiversity by acknowledging each country's sovereign rights over its genetic resources. The other approach is to facilitate technology transfer related to pharmaceutical, agronomic and biotechnological industry from the donor countries into the recipient countries. This is considered to promote interest in the survey, protection and long-term sustainable use of the natural ecosystems, which are often subjects to land development for other purposes. For a thorough survey of these issues, see e.g. WRI 1993, Sanchez and Juma 1994, and Krattiger et al. 1994.

The guiding principle in the Convention is a balance between the more traditional conservation approach and the view that only through sustainable economic development the biological resources can be maintained in the long term. To accomplish these goals, the Convention has put forward several means. These means include, inter alia:

Establishment of a funding mechanism (currently Global Environment Facility GEF, on an interim basis) to help developing countries to fulfil the commitments of the Convention.

Initiation of Country Studies Programme under the guidance of United Nation's Environment Programme, UNEP. The Country Studies form a basic programme to survey the components of biological diversity in each country, and help the nations to target their policy on the sustainable use of their biological diversity.

- Establishment of the Conference of Parties, where member countries to the Convention formulate the policy of the convention implementation.
- Establishment of the Secretariat which is currently operating in an interim basis in Geneva under UNEP.

- Development of a Clearing House for technology transfer.
- Establishment of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) which is operating under the Conference of Parties as an advisory body on scientific issues.

2. National implementation

“The objectives of this Convention, to be pursued in accordance with its relevant provisions, are conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding”.

To specify the needs for national plans and programmes on protection and sustainable use of biological diversity, it is necessary to define the main concepts of the Convention. Article 2 defines biological diversity as *“the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”*. The term biological resource is defined as including *“genetic resources, organisms or part thereof, populations or any other biotic component of ecosystems with actual or potential use or value for humanity*.

It is important to emphasize, that biological diversity is a very wide concept, including all living organisms, analyzed on different levels: global, biogeographical realms, species, genetic resources, processes level, etc.

Protection of biological diversity on the global level means, before anything else, the preservation of the biogeographic realms and the main ecosystems. The species level includes the maintenance of all species and their habitats, as well as the functional processes of the ecosystems. Finally, the genetic resources level may be defined as genetic variability of the genetic material of an organism- a prerequisite for technological applications which use biological system, living organisms, or derivatives thereof, to make or modify products or processes for specific use.

The cross-sectoral subjects of the biological diversity include e.g. legal aspects, regulations or control of alien species or populations, regulation of genetically modified organisms (GMOs), education, research and regional cooperation.

National activities: Summary of Guiding Principles (Guidelines for Country Studies on Biological Diversity UNEP / Bio.Div. / Guidelines / CS / Rev.2):

- The final decision and authority regarding the interpretation and selection of elements of these guidelines for country studies lies with the country undertaking the study.
- The responsibility for the data gathering must be multi-disciplinary and multi-sectoral, with the NBU or other identified institution providing coordination and integration.
- The primary use of the data is to reinforce the biodiversity planning process through the preparation of national strategies and action plans.
- Developing this planning capability is an incremental process that evolves through the acquisition of additional data and expanding knowledge.
- The initial selection of data should focus on readily available information that will provide a baseline for monitoring the effectiveness of action.
- The data gathered must be selected on the basis of their applicability to the planning process and their use in generating "on the ground" action.
- Priorities must be agreed on at the outset concerning the types of data to be compiled: a general focus on species of economic value, indicator species, flagship species and genetic resources is recommended.
- The standard definitions and units of measure prescribed in these guidelines should be adopted whenever possible, but inter-country comparability is of secondary importance to identifying national needs and priorities.
- The data gathering must focus on the interaction between human and biological systems and must be assessed in the context of human use and functional benefits.
- Threats to biological diversity must be identified and monitored, recognising that most threats are generated by a potential beneficiary and that threat reversal involves an economic trade-off.
- The spatial context of the information is a key consideration: integrated tables and maps will be essential for GIS assessment.
- Biodiversity managers should be asked what additional data they need as a means of determining priorities for filling information gaps.
- One of the first steps should be the development of a list of information sources and their data holdings, and a list of human sources and their expertise.
- The data on ex situ measures must recognize the potential economic value of genetic resources as an incentive for nations to conserve their biodiversity
- The protected areas' data must emphasize their integration into the rural development process.
- Data gathering, analysis and management must contribute to building the national capacity for improved biodiversity planning.
- The current capacity of the country to conserve, study and sustainably use its biodiversity must be assessed.
- The interpretation and application of these guidelines must be flexible, with the countries themselves deciding the balance between comprehensive coverage and overload.

3. General steps

Inter-Governmental Committee on the Conservation on Biological Diversity in the Resolution 2 (Nairobi, on 22 May 1992) provide the following Steps of Implementation of the Convention on Biological Diversity on national level:

“2(a) Assistance to Governments, upon request, in further work in the preparation of country studies in recognition of their importance in their development of their national biological diversity strategy and action plan, inter alia:

(i) The identification components of biological diversity of importance for its conservation and the sustainable use of its components including the collection and evaluation of data needed for effective monitoring of those components;

(ii) to identify processes and activities which have or are likely to have an adverse impact on biological diversity;

(iii) to suggest priority action for the conservation of biological diversity and the sustainable use of its components;

2(b) Organization of the preparation of an agenda for scientific and technological research on conservation of biological diversity and the sustainable use of its components, including possible institutional arrangements *ad interim* for scientific cooperation among Governments for the early implementation of the provisions on the Convention on Biological Diversity before it has entered into force”.

Lately UNEP experts have worked out two documents, which are helpful in defining national objectives and practical goals to benefit the Convention: Guidelines for Country Studies on Biological Diversity (Nairobi, 1 October 1993) and Report of Panel I: Priorities for Action for Conservation and Sustainable Use of Biological diversity and Agenda for Scientific and Technological Research (UNEP / Bio.Div. / Panels / Inf. 1). Also the other Biodiversity Panel Reports of UNEP provide helpful information about the cross-sectoral issues of the Convention (see UNEP / Bio.Div. / Panels / Inf. 2-4).

The following four most important steps of implementation of the Convention on Biological Diversity have been singled out (UNEP: Guidelines):

- **Step 1: Take Stocks** is the process of gathering and analysing data to identify gaps and potential conflicts as might be revealed by the data, and to review the array of possible conservation measures. It includes *the collection of data on the status and distribution of biological resources, identifying threats, assessing current capacities, collecting socio-economic data useful in evaluating benefits of conserving and sustainably using biodiversity, and estimating the current expenditures on biodiversity related activities*. Collectively these activities comprise the Country Study, and these guidelines are intended to assist nations to undertake this process of national assessment. The provisions in the Convention that related to these activities are Articles 6 and 7.

- **Step 2: Set Priorities and Prepare Action Plan** is the formulation of strategies and action plans, involving all sections of the community and Government, and including the assessment of objectives, priorities and resource requirements, and the evaluation of the costs and benefits of the proposed measures. Interacting with this evaluation is the need for analyses of the environmental and social impacts on the proposed measures. References to this step are contained in Articles 6, 10, 11, 12, 13 and 14 of the Convention.

- **Step 3: Take Action** is the implementation of actions for conservation and sustainable use of biological diversity. This includes all types of action such as the implementation of policies, improved management of conservation areas, incentives to promote adoption of new methods for sustainable use, development of economic instruments to integrate biodiversity into national accounting systems, enforcement of national legislation, research programmes, biodiversity monitoring and other activities. References to this step are found in

Articles 6, 7, 8,9,10,12, 13 and 14 of the Convention.

- Step 4: **Evaluate** is the evaluation of the effectiveness of the actions, including the monitoring of the progress in implementing the proposed actions assessed against targets prescribed in the action plan.

It is necessary to emphasize the obligatory fifth step, which can occur any time during the process, in the mandatory reporting by each Contracting Party on the measures it has taken to implement the provisions of the Convention. Reference to this step is given in Article 26 of the Convention.

4. Country study process

Initiation of the Country Study is of great importance as it helps the governments to set practical goals for national biodiversity strategies. Furthermore, it also helps the countries to put up national funding priorities as well as to pinpoint the areas for the international cooperation. The main sectors of a Country Study are listed in Table 1 (source: UNEP Guidelines).

TABLE 1
<ul style="list-style-type: none">• to provide the information basis for countries to develop national strategies and action plans for the conservation and sustainable use of their biological diversity;• to gather baseline information on the components of biological diversity and their conservation status as a benchmark to monitor the effectiveness of national strategies and action plans;• to identify activities that are likely to have an adverse impact on the conservation and sustainable use of biological diversity;• to provide a basis for determining national priorities for the conservation and sustainable use of biological diversity;• to identify the economic benefits resulting from the conservation and sustainable use of biological diversity;• to identify appropriated measures, such as agricultural practices, training and institutional capacity building, to achieve effective conservation and sustainable use of biological diversity;• to quantify the costs of these measures;• to quantify the current level of national, bilateral and multilateral funding for the conservation and sustainable use of biological diversity and the unmet financial needs to implement national strategies and action plans;• to build the monitoring, assessment in the setting of priorities and in the implementation of the action plans;• to provide a feedback mechanism to evaluate the effectiveness of national biological diversity action plans.

Different levels of socio-economic development, political structures, land use policies, land tenure systems, and biological resources will generate variation in national needs and priorities for data types and biodiversity planning requirements.

5. Types of data

Decisions relating to the types of data to be included in the country study must be made in the context of the planning needs of each country and the resources available but in general the following kinds of data are likely to be priorities (see UNEP / B.o.Div. / Panels / Inf. 1 and the UNEP Guidelines):

TABLE 2

- data that will provide a practical baseline for monitoring the effectiveness of action;
- data identified by biodiversity managers as being important for decision-making;
- species of actual or potential economic value;
- plant and animal genetic resources, including medicinal plants, land races and wild ancestors of domestic breeds and cultivars;
- species that could serve as indicators of ecosystem health, particularly predators at the top of the food-chain or invasive colonising species that may indicate ecosystem disturbance;
- "flagship" species, the conservation of which will also protect a diversity of other species and habitats;
- alien or exotic species, the spread of which could threaten indigenous biological diversity;
- species threatened at the national and regional level;
- species already protected within conservation areas;
- data on threats to species and habitats;
- time-interval data on rates of loss or endangerment of species and habitats;
- geographical information, particularly data that can be mapped, on species and habitat distributions;
- data on biodiversity function and benefits, particularly the service functions of ecosystems and protected areas;
- data on species and sites of special significance for the conservation of biological diversity outside existing protected areas;
- status and distribution of protected areas, including the species and habitats they contain;
- data on the socio-economic values of protected areas;
- policy, conservation programmes, legislative and institutional-related information.

There are currently several attempts to homogenize the type of data collected during the Country Study process, although there are no binding rules in this. The most important international data collections/collection formulas are:

- World Conservation Monitoring Centre/IUCN/UNEP data files.
- Biodiversity Information Network 21 (BIN21): Internet-based general information network on biodiversity data, currently six participating countries.
- Convention-related institutions and their databases: UNEP/GRID, Biodiversity Secretariat, GEF-Clearing House (UNEP, Nairobi).

It is important to note, however, that the view to publish and share biodiversity data is a subject of some discomfort. Some countries have expressed views that the biodiversity data (especially information on the sites of endemics) may not be publicly available due to problems related to bioprospecting (see, e.g. WRI 1993).

Currently, for the Baltic Countries which are in transition to market economy, it is particularly complicated to assess the data collection and management needs. This is largely due to the current shift in macroeconomy, land tenure, and other activities related to the management of biological resources.

6. Experience of the Baltic Countries

In the Baltic Countries, the main resources of biological diversity occur in the forest and agricultural territories, in the Baltic Sea economic zone, and in the lakes and rivers. Marine resources management and fisheries do not so far influence greatly the economy of the

Baltic Countries, though Estonia and Latvia give more attention to these goals than Lithuania.

The three Baltic Countries have made an attempt to assess human activity impact on environment (natural complexes included), effect of environment pollution and other damage to nature, human beings and economy even during the occupation era. Besides, they have tried to predict possible variants of development, decisions and means necessary to stop further degradation of the environment. These scientifically sustained planning works were carried out during the years 1981-1986 by scientists and territorial planning specialists from all Baltic Countries. The projects were based on territorial analysis of natural characteristics and anthropogenic activity, and were called complex schemes of natural protection.

They were prepared for a 20-year period and revealed the critical state of the natural complexes and environment of the Baltic Countries. The material of estimation and planning have become generally available and served stimulation of its activity and even promoted political Green Movement in Estonia, Latvia and Lithuania.

The above discussed nature protection schemes have been developed on the basis of the objective estimation data of impact on environment. However, the impact of military activities and dangers related to nuclear power has not been taken into consideration. Nevertheless, in these schemes attempts have been made to achieve regional planning, as well as technological, biological and other measures which correspond to the principles of sustainable use of biodiversity.

Beyond doubt, the material of these environmental schemes enabled to enlarge the protection areas twofold in the Baltic countries during the years 1991-1993; they currently exceed 10% of the territory of these States. They also served the preparation of the general concept of environmental policy and basis of the national environmental legislation in the Baltic countries.

The experience of preparation of complex nature protection schemes in the Baltic countries is significant and can be successfully applied for promotion of the national strategy and action plan of the conservation of biological diversity and its sustainable use in these countries.

This inter coupling would need the following urgent steps:

- To ratify the Convention on Biological Diversity by the parliaments of Lithuania and Latvia.
- To form national biodiversity units, in which state institutions, scientific bodies, users of the natural resources, local authorities and non-governmental organizations could be represented.
- To develop and confirm strategies and action plans of conservation of national biological diversity and its sustainable use and to raise financial resources.
- To coordinate activities between the Baltic Countries and within the Baltic Sea Region in the field of conservation of biological diversity.

7. Priority areas for conservation in the Baltic Countries

Taking into account that identification of conservation priorities is the object of national committees for biological diversity and government bodies we suppose, that the following conservation priorities may be indicated as a preliminary:

- increase of protection efficiency of functioning protected areas (strict reserves, national and regional parks, nature reserves, etc.).

- development of a system of protected areas by establishing new protected areas on natural enough territories distinguished by biological diversity. The priority areas should include, *inter alia*:
 - former military territories (often well preserved)
 - forested meadows
 - coastal meadows and wetlands
 - old growth forests
- development of a natural frame - a system of territories of geological compensation and establishment of land use regulations in it.
- establishment of special land use conditions for private land ownership plots outside protected areas by issuing land ownership documents on behalf of the State.
- economical stimulation of conservation of biological diversity in private land ownership plots.
- assessment, stabilisation and decrease of the negative impact of anthropogenic activity.
- restructuration of national economy taking into account needs of the community and nature tolerance limits, in a long-term, local, regional and global perspective.
- elaboration, adoption and enforcement of national environmental legislation necessary for conservation of biological diversity and its sustainable use.
- development of ecological education and information stimulation of the activity public and local authorities.

8. Priority areas in institutional strengthening and institutional building in the Baltic countries

An ordinary institutional structure with characteristic functions able to effect biodiversity conservation and sustainable use have formed in every Baltic Country. As the process of privatisation in the Baltic Countries is still going on, the governmental structures will play a more important role if compared to the private sector. Taking into account the above-discussed aspects, the following priority areas in institutional strengthening and capacity building in the Baltic Countries can be established:

- The principal coordinator of a national biodiversity unit in every country is the Ministry of Environment Protection (functions and name can be different in every country), which carries out monitoring and forms national policy of protected areas, too.
- Conservation of biological diversity in agriculture - Ministry of Agriculture.
- Conservation of biological diversity in forestry - Ministry of Forestry.
- Conservation of biological diversity in waters - Ministry of Agriculture or Ministry of Fishery.
- Conservation of biological diversity by territorial planning measures - Ministry of construction and urban development or Ministry of Environmental Protection.
- Economic evaluation of the biological diversity and strategic decisions of sustainable use - Ministry of Environmental Protection; Ministry of Economy, Industry and Trade and Ministry of Finance.
- Taking into account a great influence of state structures on formation of the strategy of biological diversity, leaders of the governments should take care of the national biodiver-

sity units.

- Every Baltic country has a sufficient number of scientists (ecologists, botanists, zoologists, geneticists, ethnobotanists, biogeographers, resource economists, sociologists, anthropologists, physicians, etc.), whose effort will be necessary for development of the national programme on biological diversity. Most of these experts work at state scientific institutes, the Universities of Tartu, Riga, Vilnius, etc.
- The participation of the institutions of local authorities in the programme of biological diversity will be very significant, however, local governments in the Baltic Countries are making only the initial steps, their functions change and activity as well as the competence level being very different.
- The non-governmental organizations, such as societies of botanists, ecologists, ornithologists, mycologists, nature protection, biotechnologists, journalists and other can raise public awareness and mobilize public involvement very effectively.
- The success of biological diversity conservation will depend strongly upon the standpoint of people working in a private sector, thus land owners, representative of private business organizations are invited for practical actions.

9. Priority areas of country studies

The territory of the Baltic Countries is investigated intensively with regard to the biodiversity issues. The broader surveys of this subject include, *inter alia*, the following compilations: *Ministry of the Environment of Finland 1991; Environmental Centre/ National Board of Waters and Environment (Finland)1993; Kallaste et al. 1992; Klingstöm and Wiberg 1990; Nilsson et al. 1992; NOPEF 1989; Peterson 1994; Pylväläinen 1993, and Zobel 1988*. The high intensity of current changes in environmental issues and the complexity of biological diversity urges the following activities (Tables 3,4):

TABLE 3

- renovation of land-use mapping and its analysis;
- detailed mapping of vegetation cover, habitats and ecosystems;
- analysis and renovation of the conservation status of all species of living organisms in the country;
- assessment of the viability of the existing system of protected areas and its completeness in terms of coverage of ecosystems, habitats, species;
- evaluation of major adverse effects caused by different threats to biodiversity;
- development of a national monitoring programme in accordance with biodiversity monitoring needs;
- determination of the economic value of biological resources and biological diversity;
- promotion of modern data basis for biodiversity conservation with the application of a geographic information system.

TABLE 4

- biological survey and inventory
- biodiversity research and evaluation
- data management and analysis
- monitoring and assessment
- education and training
- public awareness and participation
- *in situ* management
- restoration and rehabilitation
- *ex situ* conservation measures
- capacity building of institutions
- networking and information exchange
- environmental impact assessment
- policy coordination and development
- assessment economic benefits
- equitable distribution of benefits
- estimating conservation costs
- institutional collaboration
- legal instruments
- technology transfer
- socio-economic studies and surveys

10. Conclusions

Specifications of the preliminary priorities and realization of the above-discussed action plans and national priorities for conservation of biological diversity and its sustainable use will enable Baltic countries to obtain an actual possibility to join the world's environmental policy of the 21st century. It will be based on cooperation and coordination of national and global interests.

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IMPLEMENTATION OF THE CONVENTION ON BIOLOGICAL DIVERSITY AT NATIONAL LEVEL: INSTITUTIONAL AND LEGAL ASPECTS

Hlona Lodzina
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Introduction

The task that has been allocated to us in this workshop is to share some ideas with you on the "institutional and legal aspects" of implementation of CBD at national level.

The concept of "institutional aspects" is not a clearly defined one: Institutional aspects can cover a wide spectrum ranging from ways to organize the work, division of responsibilities and roles to play, forms of cooperation both nationally and internationally, capacity building, to the development of more formal institutions. We will touch upon several of these forms of institutional aspects in this paper. Rather central in this paper, is, though, the first-mentioned aspect of how to organize the work.

As for the legal aspects, there are two sides to this: On the one hand there is the question of what the legal obligations under the Convention are. On the other hand, there is the question whether national legal instruments are necessary to implement these obligations. And if the answer to this last question is yes, the follow-up question then will be what those instruments could or should look like. In this paper both sides of the legal aspect issue will be taken up.

Key-obligations

* CBD art. 6

One of the central and strongest obligations for national follow-up of CBD, lies in Art. 6, which states that contracting parties shall develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity (Art. 6 (a)). The counterpart of this obligation is stated directly afterwards in Art. 6 (b): The obligation to integrate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. These two "key-obligations" should of course be linked to the over-all goals of the Convention stated in Art. 1. Art. 1 states three main goals for CBD: The conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Art. 6 seems to cover first and foremost the two first-mentioned objectives. However, it is of course possible for a Party to take up also the third objective as part of the national strategy: This will then encompass both follow-up for biodiversity on the national level, and follow-up of the obligations linked to the relations between Contracting Parties, developing and developed, which would imply necessary legal, financial or institutional instruments and proposals for action. In this paper the focus will be on the national level. However, as the national and international level are closely interrelated, at the end some attention is given to the more "international" obligations. Finally, a few issues related to financial aspects are raised. Implementation of CBD Art. 6 (a) and (b), will necessarily encompass implementation of especially Art. 8, 9, 10, 11, 12, 13 and 14, in this context it is interesting to notice the difference in legal wording in the beginning of Art. 6, versus the introductory wording of the other mentioned articles: While Art. 5 states that each contracting Party "shall" (in accordance with its particular conditions and capabilities) carry out the obligations described, the wording of Art. 8, 9, 10, 11 and 14 is that the obligations shall be carried out "as far as possible and as appropriate". The obligations in Art. 11 and

12, on the other hand, are again absolute: The Contracting Parties "shall" promote research, training, public education and awareness.

The position of Art. 7 is somewhat different in its relation to Art. 6, compared with the Articles 8 to 14: To carry out an identification and monitoring of both biological diversity and activities and processes affecting biological diversity, will on the one hand make out the basis of a strategy for action as mentioned in Art. 6. At the same time, this identification process can create awareness in different sectors, and thereby lead to a better integration of the conservation and sustainable use of biodiversity in sectoral activities and programmes. Moreover, an identification of a lack of knowledge, will necessarily have to lead to some proposal for action in the national strategy or plan.

In Norway we have chosen to combine the two obligations of Art. 6 into one process of follow-up on the national level. In this paper, the Norwegian process will be used as an example to illustrate how legal and institutional instruments could be identified and developed. Intentionally, we do not generalize this example: National follow-up is really national, and will depend upon how each individual society is build up. It is therefore difficult to proclaim certain legislation or certain institutional choices as universally applicable. Ways to approach the subject can, however, be common, and by illustrating one possible way, we hope to be able to contribute to a fruitful discussion on effective implementation.

Organizing the work - The Norwegian process in short

*** *Cross-sectoral approach at an earliest possible stage.***

Norway ratified the Convention on Biological Diversity on 7 July 1993. The process of implementation at national level started in fact already at an earlier stage than that: The first Norwegian country study was finished in May 1992. This was, however, only the beginning: The Norwegian process can be described in four steps:

1. A descriptive phase, based on existing knowledge, covering the status quo of biological diversity in Norway, activities affecting biological diversity, and an identification of gaps in knowledge and research needs. (Result: Report 1992-5b from the Directorate for Nature Management, Biological Diversity in Norway - A Country Study. Some copies will be available at the workshop).

2. A phase of developing strategies for action, resulting in a "national action plan". This phase is not yet completed. In preparing this phase, the Norwegian government was looking for a way to combine both the goals of the Convention's Art. 6, by taking into account the sectoral approach right from the start. In our view, integration of the aspect of biological diversity in all sectors is crucial. It was therefore decided that the drafting of the national action plan should be carried out in three steps:

* Each ministry responsible for activities affecting biodiversity, or for activities concerning conservation or sustainable use of biodiversity, should make a "sector-plan for biodiversity", based on agreed guidelines drafted by the Ministry of Environment for the set-up of the sector-plans. (Some copies of the English version of these guidelines will be available at the workshop.) The country study of the first phase mentioned above, served as a basis for the sectors to be able to find out how their sector affects which biodiversity. In addition, environmental agencies and some research institutions were consulted on effects of specific sectoral activities. Each sector-plan was to include proposals for goals to reach and measures to be taken, and necessary instruments (both legal and other) to be established.

* The sector-plans were to be circulated on a broad public consultation, thereby including NGO's and the private sector in the process.

* After the public consultation, a coordinated, cost-effective and ecologically effective conservation policy should be drawn up, based on the sector-plans and the results of the public consultation.

3. Implementation of the national action plan.

4. Revision of the national action plan, and probably sector-plans, within regular periods.

The Ministry of Environment is responsible for the process as a whole.

Reports to the parties under the Convention, will be based upon the national action plan and its implementation.

Aims of the process

**** Strategic, process-oriented goals linked to the objective of conservation and sustainable use of biological diversity***

The strategic approach taken by the Norwegian government combines several aims. Of course, the overall, formal, goal is to implement CBD at national level. The main objective, therefore, is naturally the conservation and sustainable use of biological diversity. On the underlying level, however, several other objectives can be identified:

- * The integration of existing activities which already fulfill certain objectives of the Convention, in an overall strategy
- * To start a dynamic process for implementation, rather than just drafting yet another "document"
- * The full involvement of all sectors in this process, and attempt to achieve that sectors identify problems as their responsibility, and at the same time raising awareness and building capacity within the sectors through the process
- * Increase mutual understanding between environmental authorities and other sectors: The counterpart of environmental authorities' demands is a need to understand how each sector functions, which strategic instruments it possesses, which goals it has
- * The incorporation of the aspect of biological diversity into all significant decision-making processes

Guidelines for sector-plans

**** The sector itself as a starting-point***

As an English version of the guidelines will be available, the details as regards their contents are not repeated here. There is, however, one important point we would like to focus on here: As part of the plan, each ministry was asked to identify the basis for action. In order to reach the objective of making each sectoral ministry identify concerns of biological diversity as their concerns, the guidelines reversed the usual order of things: While normally an identification of biological diversity comes first, and threats to this diversity thereafter, we asked the sectoral ministries instead to describe their activities first: By going through the activities, effects on biodiversity, both negative and positive, are logically brought forward. Moreover, goals and proposals for action can be linked up better to concrete activities.

Status so far

**** Broad debate on sector-plans***

The following seven ministries finished their drafts for sector-plans in June this year: Ministries of Fisheries, Agriculture (which includes Forestry), Transportation, Energy and industry, Defense, Research and Education. In addition, also the Ministry of Environment sent out its "sector-plan", containing this ministry's activities, instruments, goals and proposals for action.

The public consultation on these plans is just closed (deadline being September 1994), and about a hundred environmental organizations, private interest organizations and other authorities have sent in their comments. In general, there is a broad agreement on the advantages of the process in itself. Naturally, however, there are many different opinions on whether or not the sector-plans have sufficiently ambitious goals, and on how those goals should be achieved.

The process of coordinating the sector-plans and the results of the public consultation, has only just started. There is still a long way to go, many discussions have to be carried through, before the goal of a first satisfactory action plan can be reached. The Ministry of Environment is responsible for this process, but the work will be carried out in close cooperation with the other sectors.

Most probably we won't reach all the goals we could wish for in this first plan. This underlines the importance of the fact that we in our view only have started a process when we reach our first action plan: The first action plan will certainly not be the end of our struggles:

Involving local communities

** Local action should take the specifics of the local situation as a starting point.*

Major parts of national policies have to be implemented at local level. The involvement of local authorities is therefore important. At the same time it should be recognized that local government, in the same way as other sectors, has its own activities, ways of working, instruments, goals and possibilities for action. Strategies on a local level should therefore take the local situation as a starting-point.

So far, we have started trial-projects in seven local communities, to find models for implementation of CBD at local level. These local communities have been given guidelines for developing such models which resemble the guidelines given to the sectoral ministries. The first results of the projects will be available at the end of this year.

Key instruments in an overall strategy

In the guidelines for the sector-plans, each ministry was asked to review the range of instruments available to it, based on the following classification:

- instruments for the conservation of biological diversity, both in situ and ex situ
- instruments designed for mitigating or modifying processes and activities that affect biological diversity
- instruments for the restoration of ecosystems, species and population by means of reintroduction
- instruments designed to improve the level of knowledge of biological diversity throughout society

Based on the contents of the sector-plans so far, and on earlier experience in efforts to conserve biological diversity, we can very broadly extract some legal and institutional instruments as crucial for a successful strategy. The most important instruments in our case seem to fall into the first, second and fourth categories. Instruments for restoration seem to be of less importance in Norway at the moment, apart from some measures on reducing the acidity of some rivers and lakes. On the other hand, we realized that an overall policy in itself, with overall environmental goals, is a crucial instrument.

Below, several important instruments will be discussed generally. The more specific nature of each instrument will, of course, depend on specific national characteristics.

- * A superimposed policy instrument, such as a coordinated, comprehensive national action plan which establishes sector responsibility
- * Agreed cross-sectoral goals for conservation and sustainable use of biological diversity
- * Conservation instruments
- * Planning instruments for land-use, including possibilities for restricting certain non-sustainable uses of private property
- * Impact assessment instruments
- * Pollution control instruments
- * Instruments for controlling modifications and releases of organisms
- * Instruments for sustainable harvesting of biological resources
- * Instruments for capacity building
- * Instruments for increasing scientific knowledge
- * Instruments for monitoring
- * Instruments for increasing public knowledge and awareness, including securing rights for the public to ensure sustainable open air recreation
- * Instruments for local implementation

Some remarks on the instruments mentioned above

**** A superimposed policy instrument, such as a coordinated, comprehensive national action plan which establishes sector-responsibility***

The implementation of CBD should be organized in a systematic way, in order to obtain both cost-effective and ecologically effective action, where priorities can be easily identified. Such a systematic approach should also clearly indicate the different bodies responsible for the different actions to take. Moreover, it is important that this instrument of implementation has political authorization, for instance, through adoption by the national government, or Parliament.

Both the process of developing a national strategy or action plan and its implementation are dependent on many governmental bodies, non-governmental organizations, and the private sector. The process itself will therefore have an important educational and training aspect, and will be a necessary step towards a successful implementation.

It is important that the process of developing a national implementation instrument easily can be "repeated". Implementation of CBD is not a one-time measure, but a dynamic process towards the conservation and sustainable use of biological diversity. Policy instruments should therefore be easily adaptable. Moreover, they should be formulated in a way which makes it possible to measure whether or not the actions set out are followed. A practical way of implementation will in this way form the basis for reporting back to the Parties under the Convention on the status of implementation in the national state.

A national strategy, plan or programme does not necessarily lead to the establishing of completely new instruments of implementation, such as new legislation. It can combine existing policies based on existing instruments, with new instruments based on an identification of missing tools for satisfactory implementation.

Baltic countries

Baltic countries are so far only working on preparation of legally binding policy instruments.

In Latvia the Ministry of Environmental Protection and Regional Development, the Department of Environmental Protection is by now working on the National Environmental Policy Plan for Latvia. Its first draft is ready for discussions. As one of the main goals was chosen the maintenance of existing level of biological diversity in Latvia and in accordance with it measures, instruments and actions were selected to prevent the depletion and implement the sustainable use of biological resources. This document is proposed to be adopted by the Council of Ministers and to become a legally binding act.

* **Agreed cross-sectoral goals for conservation and sustainable use of biological diversity**

In a coordinated biodiversity-strategy, the objectives for government-policy should be common, agreed upon and integrated within each sector. Here it is important, however, to take into account that environmental agencies mostly will be the competent bodies as to defining the environmental challenges. One can picture a model where the Ministry of Environment is given a role with regard to biological resources, equivalent to the role that the Ministry of Finance has regarding the financial resources. The Ministry of Environment should then play a central role in setting the environmental objectives, and in helping the sectors in identifying impacts on biodiversity and possibilities for action. The goals will, however, most probably not be reached if they are not realistic when seen in relation to other objectives the sectors have to fulfill. Real close cooperation is therefore necessary in order to obtain objectives which are internalized as natural for all involved parties.

Moreover, it is necessary to be as specific as possible: If the objective is conservation, which level of conservation do we talk about? Conservation of the status quo? Restoration and rehabilitation? What do we mean when we say that activities should not have detrimental effects on biological diversity? Which effects can we accept? How do we define sustainable use? These kind of questions have to be addressed, and the answers as far as possible agreed upon, in order to understand the goals we set, and in order to be able to measure whether or not we have reached them.

Baltic countries

The National Environmental Policy Plan for Latvia is quite a unique case where environmental policy is integrated with the nature protection policy in the same document and the principle of sustainable development is interweaving all the plan. One of the measures selected was the development of a balanced economy, which means that the principle of the maintenance of biological diversity must be implemented in all relevant sectoral policy plans.

* **Conservation instruments**

Protected areas form, of course, a central element in any strategy to conserve biological diversity. Also in CBD, they have an important place, cf Art. 8(a) and (b). To establish protected areas, legislation is a necessity. One important reason for needing legislation, is that decisions for protection of areas can infringe upon private property rights. The appointment of protected areas should in general be decided out of scientific criteria, independent of whether or not the area is private or government property. Secondly, it needs to be possible to put restraints on all citizens' activities within the protected area, such as traffic, harvesting of resources, activities which pollute etc. A third reason for needing a legal instrument, is that it might be necessary to carry out management measures on private property, or to impose certain ways of management on the landowner, in order to conserve biological diversity. Since the designation of an area as protected might imply the prohibition of all existing activities, including for instance forestry and agriculture, some form of economic compensation needs to be discussed. Here a balance has to be found between the individual's rights, and the common interest of the community. This implies that economic compensation should be limited to cases where there are placed significant restrictions on the already existing use.

Naturally, regulations attached to protected areas will also have to apply to other government agencies' activities. Here, however, the question of economic compensation should not arise.

CBD mentions also ex-situ instruments. It is, however, important to notice that those first and foremost should be complementary to in-situ instruments.

Baltic countries

Baltic countries have a long lasting tradition in nature conservation since the beginning of this century. Networks of particularly protected territories were created. In the new political and economical situation, when changes in ownership rights on land are taking place there are new threats to lose the existing values. By now all three countries have created new legal background for nature protection and especially conservation:

Law on Protected Territories, 9 November 1993, Vilnius, Lithuania;
Law on Environmental Protection, 21 January 1992, Vilnius, Lithuania;
Law on Protected Natural Objects, 1 June 1994, Tallinn, Estonia;
Law on Nature Protection of Estonia, 23 February 1990, Tallinn, Estonia;
Law on Specially Protected Nature Areas, 2 March 1993, Riga, Latvia;
Law on Environmental Protection, 6 August 1991, Riga, Latvia.

At present, however, the Baltic countries lack economic resources to establish management plans for protected territories, for paying compensations to land owners and for establishing and maintaining administration of the territories.

*** *Planning instruments for land-use, including possibilities for restricting certain non-sustainable uses of private property.***

As is stated in the preamble of CBD, the "fundamental requirement for the conservation of biological diversity is the in-situ conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings". At the same time, it is obvious that not all areas within a state can be designed protected areas. It is therefore crucial to establish or maintain some kind of legal instrument which secures that land-use and the designation of land for certain purposes in the long run does not have significant adverse impacts on biodiversity. CBD contains several articles which demand an assessment of land-use in this context. Most central are:

- Art. 8(d), which requires the promotion of the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.
- Art. 8(e), which requires the promotion of environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas,
- Art. 8(f) which asks for regulation or management of relevant processes and categories of activities where a significant adverse effect of such processes and activities on biological diversity has been identified under Art. 7(c): Some of these activities or processes will consist of certain types of land-use, for instance building activities or the construction of transportation systems.
- Art. 10(b), demanding measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity: To avoid habitat destruction and fragmentation will be one of those measures.
- Art. 14(a), on environmental impact assessment, will naturally be also important when it comes to projects involving land-use that threatens biodiversity. Site-selection is then the key issue for minimizing negative effects on biodiversity.

What kind of instrument for planning is to be developed, will depend on national characteristics. However, since limitations on land-use often will infringe upon private property rights, a legal instrument will be necessary, giving the state authority to impose such infringements. As for economical compensation, the same balance has to be struck as mentioned under the issue of conservation in a more narrow sense.

An important factor to consider when developing instruments for land-use, is on what level decisions should be taken. An obvious solution would be, to place such decisions at the lowest possible level of government: This would secure that decisions are taken on the level closest to those affected by the measures, that traditional, local knowledge is taken into account, and that public awareness can be raised (Preamble of CBD, Art. 8(j) and 10(c) and Art. 13(a)). At the same time, it is necessary to secure some kind of control mechanism, allowing for national authorities to intervene when local decisions should jeopardize national objectives of conservation of biodiversity.

A final important aspect of a legal planning instrument, is that it should provide for procedures of public hearing and public participation. In this way all interests will be considered, at the same time as one achieves a general awareness-raising.

Baltic countries

None of these three Baltic countries have yet developed the regulation system on spatial planning. The risk to lose the natural values increases in the situation when the land property rights are changing. The National Environmental Policy Plan for Latvia recognizes the

law on spatial planning as one of the most important instruments for habitat protection and protection of biological diversity outside the protected territories. However we have to take into account the general opposition in these states to restrictions on private property use.

*** Impact assessment instruments**

CBD's provisions on environmental impact assessment have both a national and an international component: Art. 14(a) and (b) represent the more national part of the obligation, stating that EIA procedures should be established both for projects that are likely to have significant adverse effects on biodiversity (a), and for programmes and policies that are likely to have such effects (b). As for projects, the obligation of CBD refers to the Parties, which would mean governmental, projects. Several states, especially within the European legal tradition, have however adopted legislation that places obligations to carry out EIA on private enterprises. A legal instrument to enforce the assessment is in that case necessary. The legislation should set out the elements to be assessed, demand for possible solutions to avoid negative effects, ask for alternative ways to put through the project, and provide instruments for public participation. Even if the demand for EIA is limited to governmental projects, a legal instrument would still be needed to safeguard this last-mentioned aspect: Rights to participation, legal standing and rights to enter complaints need a legal basis.

An effective way of implementing EIA in certain cases, is to link EIA procedures to procedures for governmental approval of private projects. Where appropriate, one could in such procedures also attach conditions to a consent demanding e.g. certain restoration measures after completion of the project, or providing opportunities for public recreation.

The more international side of EIA is expressed in Art. 14(c), dealing with activities under a Party's jurisdiction which are likely to have significant adverse effects on another State's biodiversity or on the biodiversity in areas beyond the limits of national jurisdiction. The obligations are rather weakly formulated, and would not necessitate national legislation. But for Baltic states this would be a good background to develop bilateral or trilateral agreements to avoid possible conflicts like projects for the Butinge oil terminal or Ainazi harbour.

*** Pollution control instruments**

Art. 8(l) of CBD implies that processes and categories of activities which significantly affect biological diversity, should be regulated. Pollution activities are a clear example that has to be covered. The obligation is not to forbid such activities, but to "regulate or manage" them. This would imply some kind of case-by-case approach, assessing concrete activities as to their effects on biodiversity.

Instruments to reduce emissions of CO₂, NO_x and SO₂ will of course also be essential in a strategy for the conservation of biodiversity. In how far national measures to obtain such reductions have to be of a legal character, is, however, an open question. More often economical incentives/disincentives will be used as instruments in this case.

*** Instruments for controlling modifications and releases of organisms**

CBD contains obligations concerning the introduction of both alien species and modified organisms resulting from biotechnology, respectively in Art. 8(h) and 8(g). To control both these kinds of introduction, legislative measures are necessary, though their contents and build-up may vary from country to country. As for controlling alien species, legislation regulating importation from other countries is necessary, but there might also be a need for regulating the introduction of species alien to certain parts within one country, or even the introduction of specimens of a certain population into other populations within the country. To raise the level of knowledge, both amongst government officials and the public in general, of the dangers of introduction of alien species could also contribute to avoid negative impacts on biodiversity.

As for modified organisms resulting from biotechnology, both the contained use and releases into the environment need to be regulated. Whether or not this regulation should be included in existing product-related legislation, or regulated through legislation specifically tailored for these organisms, is up to each Party to decide. Strictly speaking, CBD does not oblige parties to enact legislation (cf the wording "means to regulate, manage or control the

risks”), but it is hard to imagine satisfactory measures without having the legal means of enforcement. Regulations should take into account the level of risk, based on the characteristics of the organisms used, the introduced trait, the application imagined, containment measures, and, in the case of releases, the environment into which the organism is to be introduced. Based on these elements, a system can be developed ranging from general regulations for low-risk applications, to case-by-case assessment in higher risk categories, e.g. in cases of releases into the environment. In the countries of the European Union and most EFTA states (including Norway) legislation has been passed which implements the EU directives on genetically modified organisms. These directives are based on the approach illustrated above. The wording of CBD, “living modified organisms resulting from biotechnology”, is more comprehensive than the concept of GMOs. In how far the broader concept of LMO in practice will be implemented in national legislation, is an open question. Discussions on Art. 8(g) (and Art. 19.3 and 19.4) have so far focussed mainly on GMOs.

More and more it is realized that the use of modern biotechnology not only raises questions of environmental risk and risk for human health, but also broader issues of sustainability and issues concerning ethical and societal aspects. As for the demands of CBD, it seems clear that not only direct environmental risks should be covered in national legislation, but also questions concerning long-term ecological effects and secondary environmental impacts related to the use of the GMO (cf. the wording “that could affect the conservation and sustainable use of biological diversity”). In addition, legislation covering ethical and social aspects, could take into account aspects of sharing of benefits between countries. The Norwegian Gene Technology Act includes those “other aspects” (some copies of the Act will be available at the work-shop).

The more specific international aspects of biotechnology will be discussed later on in this paper.

Baltic countries

Until 1992 the Soviet Union norms and instructions on maintenance, use and transport of genetically modified organisms had been followed in all three countries. This legal background is still valid or under revision. The European Union directives also should be implemented in the national legal systems. However in Latvia the law “On Environmental Protection” (1991) and in Lithuania the law “On Environmental Protection” (1992) gives the main background for subordinated legal acts. Also the law “On Nature Protection of Estonia” (1990) contains some issues concerning biological pollution. All these acts should be developed in the nearest future.

*** Instruments for sustainable harvesting of biological resources.**

What constitutes a sustainable harvesting of biological resources, is a scientific issue which still is subject to vast debate, both nationally and internationally (cf paper 1). Art. 10 is CBD’s central article covering this obligation. What characterizes the strategic approach to both setting goals and finding means to obtain them, is the pronounced need to involve the private sector engaged in the use of biological resources. A comprehensive approach of the objective of sustainable use demands integration in both the governmental sectors responsible for harvesting biological resources, such as fisheries and agriculture, and an internalization of biodiversity-related goals in private enterprise. Not surprisingly, Art. 10 is one of the articles explicitly stating that Parties should “encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable uses of biological resources”. Mere legislative measures regulating e.g. quota for maximum take-out, are not sufficient to obtain sustainable use. Capacity-building is necessary, to increase understanding both of effects of harvesting within the species that is the target of harvesting, but also of possible effects on other parts of biological diversity. Also economic instruments should be used to direct the use of biological resources in a sustainable direction. Government incentives stimulating in a negative direction should be wound up.

*** Instruments for capacity building.**

Capacity building on a national level contains several aspects. It is a legal obligation under CBD Art. 12a to establish and maintain scientific and technical training. This will mean training both in natural sciences and also in social sciences, in order to understand the impact of social conditions on the conservation and sustainable use of biological diversity.

Capacity building will be necessary on several levels.

- On the level of scientists providing the scientific material for decision-making processes. Here it should be born in mind that additional training is necessary not only for scientists directly involved with questions of biological diversity, but also for scientists specializing in subjects which might lead to activities having an adverse impact on biodiversity.
- On the level of decision-makers, both in environmental agencies and in other sectors.
- On the level of people trained for technical implementation of biodiversity measures.
- On the level of users of biodiversity

Capacity-building can be done through national programmes; however, international cooperation will also be an important instrument for capacity-building. Such international cooperation is explicitly mentioned in Art. 12 (c). For the Baltic countries, such cooperation might for instance be cooperation with the Nordic countries under the Nordic Council of Ministers, which, for instance, has specific programmes on the national follow-up of CBD and on environmental risks related to genetically modified organisms.

CBD demands that in capacity-building programmes the special needs of developing countries should be taken into account. How this should be implemented, has to be discussed on a bilateral or multilateral level. Instruments for capacity-building will mostly not be of a legal nature.

Both the obligations concerning training, research (see below) and public education (see below), are strongly formulated: Both the Articles 12 and 13 are formulated as "shall"-articles, i.e. without "softening-up" notions such as "as appropriate" or "as far as possible".

*** Instruments for increasing scientific knowledge.**

Within a national strategy, gaps of knowledge will be identified. It should therefore be part of any action plan to single out priorities for research areas on a national level (Art. 7). Those research priorities will necessarily vary from country to country, but some gaps in knowledge will probably also be common for several countries. In Norway so far the following research needs have been pointed out (not arranged in order or priority): Documentation of biological diversity, i.e. registration and identification, taxonomy, both in Norway and in some developing countries, conservation-biology (the viability of small populations, effects of habitat fragmentation and destruction, effects of introductions, threatened or endangered species or populations), sustainable use of biodiversity, methods of monitoring, effects of activities with negative impacts, management models, methods for measuring values of biodiversity, sociological research such as understanding the reasons for reductions of biodiversity, methods for societal impact assessment of infringements on nature resources, knowledge on how decision-making processes can contribute to and secure public accept of conservation measures, knowledge on institutional solutions for an effective implementation of international measures. (Input of the Norwegian Research Council to the sector-plan of the Ministry of Science and Education. An English copy of a short survey of ongoing research-programmes relevant to CBD of the NRC will be available at the workshop.)

The obligation to promote and encourage research contributing to the conservation and sustainable use in developing countries is particularly stressed in CBD Art. 12(b).

Also for the instruments promoting research amounts that they mostly will not be of a legal nature.

*** Instruments for monitoring.**

The more scientific side of monitoring instruments is discussed in paper 1. Monitoring is a necessity in order to be able to measure results of action or non-action. Monitoring mostly will not need a legal basis. An institutional structure could however be necessary, to secure a systematic and effective approach.

*** Instruments for increasing public knowledge and awareness.**

Public understanding and thereby support is a necessary condition for a successful biodiversity strategy (CBD Art. 13). Knowledge about biodiversity and its importance for human existence should therefore be an obligatory, integrated part of all formal education both on primary and secondary school levels. National educational plans need therefore to be eval-

uated and adjusted to comply with this goal. Indirectly, this goal means that the education of teachers also must be assessed in order to ensure that teachers can follow-up such an educational strategy.

Other means of increasing public knowledge should also be exploited. Non-governmental organizations, local communities, media, can in this context be valuable partners. It could also be considered to make biological diversity one of the main focusses of the European Nature Conservation Year in 1995.

Public participation in decision-making processes is another, legal, way of increasing knowledge and raising awareness.

Yet another very important tool is strengthening possibilities for public open air recreation. One's own experience of nature can often lead to a strong internalization of values attached to biodiversity. Legal instruments to secure free passage on foot on uncultivated land and non-motorized travel on waterways, even if in private property, are in the Nordic countries central tools for contributing to such open air recreation.

*** Instruments for local implementation.**

CBD stresses in several articles the importance of local knowledge and traditions (Preamble of CBD, Art. 8(j) and 10(c)). Moreover, national policies often have to be implemented at local level. It is therefore important that a national biodiversity strategy should contain proposals for implementation on a local level.

An important tool could be, as mentioned above, an instrument for land-use planning that is to be effectuated on local level. Local communities could, moreover, be given authority to decide on other aspects of local biodiversity, e.g. give permissions for hunting, fishing or harvesting of other wild resources. Local knowledge can thus be combined with local responsibility for one's own resources. Local communities would have to play an active part in developing strategies and plans that have to be implemented at local level. At the same time, models should be developed which secure that power given to local communities is exercised in accordance with national objectives. Very important is also the link between cultural heritage and nature conservation. This applies in fact to all levels of administration, but will often be rather explicit at the local level.

Baltic countries

The Baltic situation at present is that decentralization is going on in all fields of administration. In this case, it is very important to develop local structures for environmental and nature protection, control and consulting.

Obligations for international action that demand national instruments of implementation

As mentioned earlier, the fair and equitable sharing of the benefits arising out of the utilization of genetic resources is the third main objective of CBD. In this sense, CBD can be called a "pioneer"-convention: It is the first internationally binding instrument stating the sovereign right of states to control their genetic resources. At the same time, the Convention tries to strike a balance between this right to control access, securing access for the benefit of human kind, and sharing of benefits as a compensation for giving access. Closely connected to these issues are questions of intellectual property rights and possible alternatives to traditional patenting systems, that - inter alia - could reward farmers' contribution to the maintenance and development of genetic diversity. CBD itself does not take a stand as to whether or not intellectual property rights affect the sustainable use and conservation of biodiversity in a negative way, and under what conditions such rights are compatible with the Convention (Art. 16(5)). All of these issues represent complicated legal and institutional questions that demand a creative spirit and inventiveness from policy-makers both on a national and international level.

Legal questions related to implementation of CBD Art. 15 - access to genetic resources, can broadly be divided into two categories:

1) questions on national legislation to regulate access to one's own genetic resources

2) questions of national legislation to secure that genetic resources taken in other Parties are taken in agreement with that party's legislation. For instance, patenting rights could be denied for genetic material which has been taken in conflict with CBD.

Basically, it is up to each contracting Party to decide if and how such legislation is to be established. Art. 15 provides, however, some principles to take into account, *i.a.* the principle that access, where granted, shall be on mutually agreed terms, the principle that access to genetic resources shall be subject to prior informed consent of the Contracting Party providing the resources, unless otherwise determined by that Party, and the obligation to share research based upon the resources taken (respectively Art. 15(4) and 15(5) and 15(6)). The issue of access is discussed more broadly in IUCN's "Pre-publication Copy of A Guide to the Convention on Biological Diversity".

Closely linked to the issue of access to genetic resources are CBD's obligations concerning technology transfer and scientific cooperation between Parties. Several articles address these issues, specifically articles 15.6, 16, 17, 18, 19.1. How to implement these articles, is still the subject of intensive debate, and it is important for countries as Parties to the Convention, to contribute to this debate, e.g. by building on experience from similar bilateral or multilateral cooperation. Implementation on a national level seems mostly not to demand any legislative instruments. A review will, however, be needed on existing policies concerning technological and scientific international cooperation and its compatibility with the goals and obligations of CBD. Such a review could be incorporated in a national action plan.

Another obligation for international cooperation which demands action on the national level that has to be mentioned, concerns the safe use, handling and transfer of LMO's (see above). Parties are obliged to consider the need for and modalities of a protocol dealing with this issue, including procedures to advance an informed agreement. As you know, the majority of UNEP's Panel IV advised that there is a need for such a protocol, and suggested several items of information to be included in a possible protocol. The issue has so far been taken up on both ICCBD meetings, and it is intensively discussed whether or not a binding instrument is needed. Norway has been one of the countries strongly supporting the idea of a binding instrument, specifically taking into account that the transboundary aspects naturally involve more than one State, and therefore need regulation by an international agreement.

Independent of what the outcome of the discussion on a protocol will be, there is a legal obligation in CBD Art. 19(4) for a Party introducing LMO's into another Party, to provide information both on regulatory demands to these kind of LMO's in its national legislation, and available information on potential adverse impact of the organisms concerned. National measures need to be taken to secure that this obligation can be fulfilled.

Some financial issues to be considered

When drawing up a national strategy for implementation of CBD, several financial issues have to be addressed. Generalizing national financial issues is, however, extremely difficult. Some points to consider are, however, of a more general nature. One of those points is the importance of an integrated policy, where it is possible to select the most cost-effective measures. A problem in this approach is, that the most cost-effective measures are not necessarily those measures that have the highest success-rate with regard to goal-obtainment. This aspect has to be considered when weighing measures against each other. On the other hand, cost-effectiveness and ecological effectiveness could push in the same direction: It could, for instance, in some cases be both ecologically and economically more effective to reconsider transportation or industry policies than conserve large areas, for instance urban areas or be forced to compensate for the loss of biodiversity.

An evaluation of costs should include an assessment of the benefits of the measures proposed, or the cost of not implementing them. In order to be able to make such an assessment, values have to be attached to biological diversity. It is crucial that the concept of "value" here is interpreted in a broader sense than pure economic value. How this should

be done, is still subject to much debate, both nationally and internationally. In Report 1992-5b of the Directorate for Nature Management, Biological Diversity in Norway, a Country Study, some examples of value-analysis may be found. One of the problems is, that approaches to put a price on non-economical values often have been based on "willingness-to-pay" research. This is, however, a rather limited approach to the problem.

Internationally, the financial questions are at least as complicated as at the national level. On both ICCBD meetings the questions of eligibility for financing and criteria for programme-priorities, have been heavily discussed. They will also be amongst the major issues at the first COP.

Conclusion

Above, a strategic approach has been suggested for implementing CBD at a national level, and central elements of a legal and institutional character have been addressed. One of the main aims of this paper has been to try to show a way of implementing that can be carried out step-wise, improving strategies, plans and actions on the way. By taking CBD Art. 6 as a starting point, most of the other "pieces of the puzzle" will fall into place while going along. Moreover, the first step can be made by building on already existing knowledge and existing instruments. CBD will demand an effort, and a willingness to go new ways. But if one is really willing to start this process, it is not an impossible job. Moreover, CBD really gives us all a unique chance to work out over-all, integrated environmental policies. That chance should not be missed!

Background material

Convention on Biological Diversity, June 1992

Reports of UNEP expert panels established to follow-up on CBD, panel I, II, III and IV

M.S. Swaminathan Research Foundation - Draft legislation relating to plant breeders' and farmers' rights, by M.S. Swaminathan

Norges forskningsråd - Nasjonal handlingsplan om biologisk mangfold, Forskningsrådets bidrag til delplan for Kirke-, utdannings- og forskningsdepartementet, Etter Rio.... Rapport nr 3

Norges forskningsråd - Agenda 21 og norsk forskning - innstilling fra en arbeidsgruppe som har vurdert forskningsmessig oppfølging av Agenda 21, Etter Rio... Rapport nr 2

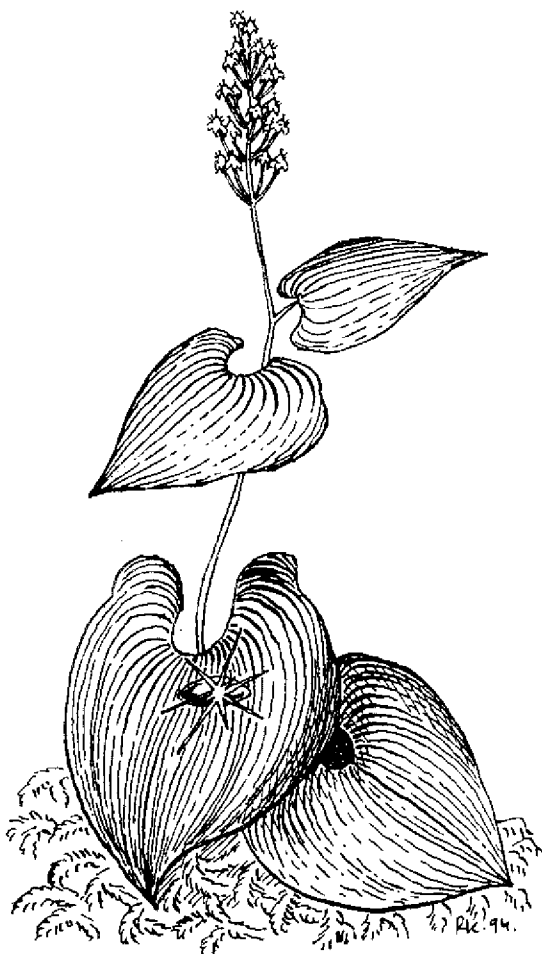
Seven draft sector plans for biological diversity, Norway

National action plan for biological diversity - guidelines for sectoral plans

Research programmes of relevance to the Convention on Biological Diversity under the Norwegian Research Council (NFR)

Report 1992-5b, the Directorate for Nature Management, Biological Diversity in Norway, a Country Study

Pre-publication Copy of A Guide to the Convention on Biological Diversity - Lyle Glowka, Francoise Burhenne-Guilmin, Hugh Synge, and others, Environmental Policy and Law Paper No. 30, IUCN



PANEL PRESENTATIONS

STATE-OF-THE-ART: ESTONIA

Jaak Tambets

After the restitution of independence in Estonia, the country has been trying to integrate into the regional and global system of nature conservation. Since principles valid worldwide have always been followed in traditional nature conservation here, the process has not been too complicated for Estonia. To date our country is party to the Bern Convention, the Ramsar Convention, the Washington Convention (CITES), the Helsinki Convention, the Gdansk Convention.

By now it has been understood in the world that the traditional methods of nature conservation are not sufficient. Effective nature conservation requires protection outside protected areas in the widest sense. A good example of this approach is the Convention of Biological Diversity with its three main aspects: 1) conservation of biodiversity, 2) sustainable use of biodiversity and 3) transfer of technology. The Parliament of Estonia ratified this Convention on May 11, 1994. Thus, we have accepted the principles of CBD at the highest political level.

I will begin with transfer of technology. Here we unfortunately have to admit that Estonia is just beginning in this field. We lack knowledge and expertise as well as a coherent legal and institutional background. Yet, I dare to suggest that technology transfer is not yet an acute problem since the relevant technologies have not yet been widely introduced in Estonia. We intend to address the problem as the need arises.

With respect to the other principles: Estonia, like the other Baltic states, is a good example of how rapid changes in economy compel a country to use different means to conserve biodiversity. The magic phrases at the moment are property reform and land reform. Without addressing this sector of economy we can not effectively conserve biodiversity. Here are some examples of this:

1) Forestry. According to the most recent estimates, forests cover 47 per cent of the territory of Estonia. The extensive forestry policy of the Soviet period has been replaced by a more intensive one. New landowners sometimes look at forest only as at a source of timber. Although clearcutting is restricted for them, the value of forests in terms of biodiversity is decreasing as a result of selective cutting. This endangers the currently high biodiversity of our forest areas.

2) Semi-natural habitats. Estonia is one of the richest countries in the Baltic Sea sub-region in terms of semi-natural habitats. We still have relatively large numbers of wooded meadows, coastal meadows and alluvial meadows of very high biodiversity preserved (e.g. the Laelatu wooded meadow in Western Estonia with 163 species of vascular plants in 100 m² only, being one of the richest plant communities at this latitude). At present, with agriculture not being subsidized, it is difficult to protect these without finding possibilities for their sustainable management.

3) The Baltic Sea. This is not directly associated with privatization. Yet, brackish water ecosystems are threatened by increasing human activities.

These three examples have been chosen due to their importance for Estonia and also

because these are suitable issues for the present discussion. All the three examples are clearly areas where maintenance of biodiversity depends largely on across-sectoral approach. With respect to forests and the Baltic Sea, the Estonian Ministry for the Environment has a much better institutional capacity to influence the processes than several neighbouring countries. Here we should aim to fit as actively as possible into regional cooperation. In the field of forestry we have a good example: the forestry policy of Finland and the other Scandinavian countries is currently going through remarkable changes. In accordance with our Law of Estate, Estonia is following the principles of everyman's right applied in these countries. Now we are hoping for a change in our forestry policy in general. Unfortunately, the present Forestry Act of Estonia does not enable us to implement the principles of CBD. The biggest problems are associated with lack of a truly cross-sectoral approach. In the first place, we have to show that sustainable use of forests can be economically justified.

Briefly about problems concerning the Baltic sea. The Estonian coastal fisheries are currently threatened by excessive fishing. In order to protect the Baltic Sea, a vulnerable brackish water body, much more needs to be done than just restricting fisheries. At least two aspects are important here. Development of Management Plans for different protected areas has been started under the auspices of HELCOM, cooperation with the sectors of agr culture, fisheries and tourism is essential.

Another aspect concerning the Baltic Sea is how to protect, the seals of the Baltic Sea. We are trying to protect their breeding grounds on small islets and on the coast. This leads to a necessity to establish zones where construction is prohibited. For these purposes, we have already mapped our coast but the influence at the planning process is still weak.

Finally, we have been trying to protect the water and pelagic wildlife of the Baltic Sea, but much less is known about how to protect the bottom fauna. In the framework of HELCOM (which Estonia is also party to), attempts have recently been made to establish the so-called marine protected areas. Yet, it appears that we currently have neither well-defined set criteria nor means of implementing these. Here the necessity to intensify cooperation with the scientific community is essential.

These examples lead us to tackling the weak sides of biodiversity maintenance and protection. Since cooperation in the field of tourism is not sufficient yet, much more attention should be paid to cooperation with the financial sector, public awareness collaboration with NGO-s and scientists. Therefore the activities of the Ministry of the Environment alone will not be sufficient to reach these goals. An important precondition for promoting public involvement is introduction of the relevant clauses in the national legislation.

Conservation of semi-natural habitats is especially complicated. The former (Soviet) system in a way promoted sustainable agricultural use of these communities. Now that agriculture is not being subsidized in Estonia any more, the management of such communities is anything but profitable. Besides, Estonia is not rich enough to pay compensation to the landowners for lost potential benefits (or crops) as is the practice of some more developed neighbouring countries. We have been trying to find ways for compensating the sustainable use of such communities without additional funding. For instance, with our Land Taxation Act possibilities are provided to exempt some of the lands of land tax. But land tax is not high enough in order for this to be a sufficient compensation. Since Estonia is a country in transition, which implies strict financial and budgetary policies, we have to address the international funding mechanisms such as GEF.

Considering these three examples - referring to the beginning, we now reach the weak points again. These are:

- 1) fragmented legislation,
- 2) insufficient cross-sectoral cooperation, especially as concerns links with the sectors of finance and agriculture,
- 3) public awareness needs to be enhanced.

In the Convention of Biological Diversity several solutions to these problems are suggested which unfortunately have not been applied yet in Estonia, including:

- 1) initiating a country study,
- 2) elaborating a national strategy,
- 3) joining GEF.

In order to achieve this, we need to achieve close communication with the Secretariat of the Convention, exchange of information and also, it can not be denied, financial assistance.

SCIENTIFIC DISPLAY: ESTONIA

Mart Klvik

As most other countries Estonia has considerable experience in describing and monitoring the components of biological diversity. In fact, there is also a vast amount of scientific data on biodiversity and on functioning of biological systems, but not enough information in the form that decision makers could use. Therefore, for Estonia the issue is not so much whether the data exist but how they can be assembled in a meaningful form for the purposes of the Convention.

The identification status of some of the components of biodiversity in Estonia is briefly analysed basing on the elements of the indicative list of the Convention Annex I.

1. *Ecosystems and habitats*

containing high diversity,
not remarkable on the global scale *
well-elaborated in some cases **

a large number of endemic or
nearly nonexistent

threatened species,
not always related to a distinct ecosystem type
no sufficient data

or wilderness;
comparably large territories
no appropriate concept as far as data go

required by migratory species;
the East-Atlantic Flyway for migratory birds covers the Estonian territory
well documented, partly implemented in conservation

of social, cultural,
recreational (if at all)
data not thoroughly elaborated

or scientific importance;
existing sample-plots and areas
existing data are detailed but depend on particular researches

or, which are representative, unique
not arranged into a concept

or associated with key evolutionary or other processes;
concept vague

Note:

* 1st line of comments - status in Estonia

** 2nd line of comments - data existing in Estonia

2. *Species and communities which are:*

threatened;

Red Data Book lists
data under re-evaluation

wild relatives of domesticated or cultivated species;

some land races
references scarce

of medicinal,

existing but having a separate approach
data depend on the conception of approach

agricultural,

very complex and controversial item
concept to meet the approach of the Convention is lacking

or other economic value;

forestry, fishery should be the fields to seek biodiversity components from

or social, scientific, or cultural importance;

see analogies in paragraph 1

or importance for research into the conservation and sustainable use of biological diversity [e.g. indicator species];

the conception is more distinct in species and less distinct in communities
numerous data of various value

3. *Described genomes and genes of social, scientific or economic importance.*

The abovementioned components has not yet been identified as part of biodiversity in the country

To brief the monitoring status of the components of biodiversity in Estonia, it should be said that a major difficulty is continuity: one scientist may devise a system of monitoring but in some years people tend to be changed and the system is abandoned. A further difficulty is that many of the existing databases are not good at identifying conservation measures for the species and ecosystems that require urgent action.

Since January 1994 a national monitoring programme, supervised and coordinated by the Ministry of the Environment has started in Estonia. It also includes a subprogramme of the components of biodiversity. It is too early to report on success but it has been another step towards assembling data in a meaningful form.

A NGO PERSPECTIVE BY THE ESTONIAN FUND FOR NATURE

Rein Kuresoo

The Estonian Fund for Nature (ELF) was established in 1991. Even before the adoption of the Convention on Biological Diversity (CBD), ELF has concentrated its main efforts directly on safeguarding biological diversity in Estonia, even though relatively little attention has so far been paid to the comprehensive tasks of CBD as such. Yet we can list numerous activities and assets a NGO like ELF may have in the process of implementing the goals of CBD, provided that all efforts at the national level will be coordinated between governmental institutions and NGOs. ELF already participates in projects connected directly with the implementation of several other international agreements (Ramsar and Helsinki conventions).

Quite significant goals have so far been reached: Two new national parks (Soomaa and Karula) and the Lower Pedja Nature Reserve were officially established in response to the proposals of ELF in 1993-1994. All the areas together have increased the total territory of areas with the highest conservation status in Estonia by about 740 square kilometers and are probably the last large natural complexes (over 100 sq. km.) to be protected here, thus significantly contributing to the maintenance of the ecological balance of the country. Further efforts of ELF will be directed to the protection of smaller valuable territories and raising the effectiveness of the protection of biodiversity in areas which are already legally protected, and to lobbying for the adoption of appropriate conservation policies. ELF also understands great needs in the sphere of environmental education and public awareness.

The priority habitats ELF has so far been concentrating on are forests, seminatural wetlands (coastal and alluvial meadows) and, to some extent, wooded meadows. ELF has stressed the need to protect more effectively typical communities (a general approach has often been rarities-oriented, a conception which leads to concentrating the resources for the preservation of marginal populations in unfavorable conditions).

A relatively new aspect in Estonian conservation community has been the focus on needs of the management of habitats. ELF has organized a Workshop on Conservation and Management of Seminatural Wetlands, held at the Matsalu State Nature Reserve in May 1994.

ELF's present working priorities are mainly covered by ongoing large projects: carrying out inventories of the areas of nature conservation with high values as well as working out a Nature Conservation Plan (NCP) which has to include the elements of the national biodiversity strategy and the guidelines for sustainable policies in main economy sectors connected with land-use. Within the NCP and related projects, ELF has accumulated a most comprehensive database on Estonian habitats.

ELF contributed also significantly to the elaboration of the Act on Protected Nature Objects, which was passed by the Estonian Parliament on 1 June 1994, and has thus gained a solid legal and practical expertise.

Main Projects of ELF, dealing with the conservation of biological diversity

Development of the national Nature Conservation Plan (NCP)

(WWF Project EE0001; Project Period: 01.07.92 - 30.06.94)

The Development of a Nature Conservation Plan for Estonia is a crucial ELF project because pressures from economic development and policy (reprivatization, land reform) continue to threaten Estonia's abundant natural resources. The plan calls for a detailed inventory to be made of the areas which hold the greatest conservation value — areas which represent Estonia's rich biodiversity as well as its traditional landscapes. Following the collection and analysis of the data, a publication of the results will be printed that will provide a solid basis for revising and influencing national nature conservation policy. The aim is also to draft a national strategy for the conservation of biodiversity, and policy guidelines for the sectors of economy, connected with land-use.

Within the project period certain key areas were immediately targeted and detailed studies made. Considering zoning and other legal questions, proposals were made to the government for the establishment of new protected areas. In late 1993, the government officially established the ELF-proposed Karula and Soomaa areas as national parks. Later, in February this year the proposed Lower -Pedja area was officially made a national nature reserve.

Because of the need to produce the most detailed field information, and increase in further outside interest and support, other habitat-specific field projects have been coordinated with the NCP (WETSTONIA, Inventory of Old-Growth Forests, Inventory of Rare Plant Communities in Saaremaa); it can now thus be looked at as a larger umbrella project with others closely fitting it

Preserving the integrity of Estonian ecosystems through the creation of additional larger protected areas, and affecting nature conservation legislation have been ELF priorities, and these priorities have been met with success. The need to proceed with the proposed areas quickly as well as changing needs and problems of nature conservation during the project period have shaped an action-oriented approach to the project, with the components of analysis and elaboration of general conservation policies lagging behind. Unfortunately, it is not clear yet whether the WWF funding for the project will continue this year.

WETSTONIA— Conservation and Management of Estonian Wetlands

(WWF project 9E.0048.07 with funding from Danish EPA; Project Period: 01.05.93-30.6.96)

The WETSTONIA project is the largest of the habitat specific studies under the larger umbrella of the NCP. Its objective is to get a comprehensive overview of all Estonian wetlands (excluding offshore marine) and to work out measures needed for their protection and management. A Workshop on Conservation and Protection of Seminatural Wetlands was held at the Matsalu Nature Reserve within the project scope of WETSTONIA and in cooperation with the Estonian Ministry of the Environment. The result was The Matsalu Resolution which included recommendations by the workshop participants to the Ministry of the Environment about the need for concrete management plans and policy for Estonian wetlands. The fieldwork for the project continues and the inventory of all coastal and flood-plain meadows should be completed in gross this autumn; data on other wetland types (bogs, lakes) are already quite sufficient and need to be updated.

Inventory of Old-Growth Forest Stands in Estonia

(Joint project with the Finnish Nature Conservation Association (FNCA); Project Period: 01.09.93 - 31.12.94)

This project also increases the force of the Estonian NCP by providing a finely detailed inventory of all remaining state-owned old-growth forest stands in Estonia, focusing on conservation priority and biodiversity. The project started with the purchase of a selected database from the Estonian Forest Management Center in 1993 to get a background overview of mature and overgrown forests in Estonia. The fieldwork for this project will be completed this autumn and the next steps include analyzing the data and making proposals for conser-

vation. The total budget for this year is quite substantial, yet it does not include any lines for office support. Therefore, this extremely valuable project sets a rather hard pressure on ELF office.

Väike Väin Strait and other projects related to specific wetlands

The project on the Väike Väin Strait (IWRB project; Project Period: 01.09.94-30.11.95) is to conduct a baseline ecological survey of the strait between the two islands, Muhu and Saaremaa. One aim is to have this area established as an official Ramsar site. The area could qualify for HELCOM PITF MLW.

The survey should provide the necessary data to establish zoning guidelines for the area's protection and information necessary for a comprehensive management plan.

Further cooperation with IWRB will probably include drawing up a comprehensive shadow-list of potential Ramsar sites in Estonia (contract under preparation). ELF hopes to initiate additional projects connected with the establishing and management of Ramsar sites. ELF also conducts a project for the protection of a small flood-plain meadow (Ropka-lhaste) situated near the town of Tartu.

Eagles, Flying Squirrels and other species-related projects

ELF continues to fund projects dealing with rare and endangered species of flora and fauna contributing thereby directly to the conservation of biodiversity in Estonia. About 20 species-related projects have been funded to some extent. Among these are the flagship project of monitoring and protecting eagles and the Black Stork, research and protective measures for the Flying Squirrel, studies of the Ringed and Gray Seal populations, monitoring of the Common Crane, Bewick Swan and Great Snipe, research on the distribution of Orchids etc. The number of small projects is far too big to be carried on by a small organization and will probably be reduced if the institutional capacities of ELF cannot be developed adequately.

Institutional considerations

Estonia is a sparsely populated country with one of the best preserved natural values (along with acute environmental problems) in Europe. Therefore it is evident that the number of problems to be dealt with in the protection of biodiversity, counted per person involved in conservation activity, is very high. Therefore a strong focus has to be set on institutional capacity building at all levels.

ELF has, within its short existence, significantly assisted the governmental institutions in reshaping the needs of the protection of biodiversity during major changes in society. The welcome success and rapid growth in the last three years have also weighed heavily on the basic operating structure of ELF. All the activities of ELF have been conducted from 42 square meters of the operating space.

ELF has so far not managed to constitute permanent sources of funding. After some years of enthusiastic work, we consider the NGOs to be highly endangered species.

It is also evident that due to struggling with fiscal constraints, the Estonian politicians are not willing to expand the staff of governmental institutions involved in nature conservation activity (even though it is illogical, because the work is closely connected to the land-reform and therefore technically extremely cumbersome; the second major issue which seems to burden the tiny staffs of governmental officials is related to the increasing international obligations and cooperation). During our existence we have been quite interdependent with governmental organizations in all matters of everyday work (though being rather independent in our ideology). Therefore I hope they would not be hurt by a friendly question, whether officials in the governmental institutions have enough breadth to convey the strategic planning needed for the implementation of the objectives of CBD.

STATE-OF-THE-ART: LATVIA

Iļona Lodzina

Latvia is one among the newly restored Baltic countries that has signed the Convention on Biological Diversity in 1992 in Rio de Janeiro.

In accordance with this event a National Report of Latvia was issued in which the "State of Art" is described. During the last two years radical changes have taken place in the administrative, legal and economic systems.

1. The administrative system was changed after the election of the Latvian Parliament (Saeima) in June 1993. The previous central authority in the political and administrative system for organizing environmental and nature protection, the Environmental Protection Committee, was reorganized into the Ministry of Environment Protection and Regional Development.

This is led by Minister of Environment Protection and Regional Development Mr. Juris Iesalnieks and State Minister of Environmental Protection Mr. Indulis Emsis.

Now their functions are divided so that the State Minister is responsible for environment and nature protection in Latvia.

A direct communication with the Parliament is realized through the Secretary of Communication with the Parliament and the Parliamentary Commission for Environmental and Social Affairs. Being a member of the Cabinet of Ministers, the Minister is to ensure communication with this authority.

Inside the Ministry of Environmental Protection and Regional Development, the Environment Protection Department deals with nature and environment protection. Its structure consists of three divisions.

Environment Quality, Technologies and Nature Protection.

The Regional Development Department has 3 divisions. The most important unit for cooperation in field of nature protection at this moment is the Division of Territorial Planning.

2. The main task of the Environment Protection Department for 1994 - 1995 is to draw up a National Environmental Policy Plan for Latvia. This work is going on with assistance from the Netherlands and Sweden. The first draft is ready to be discussed in November. The maintenance of biodiversity was selected as one of the priority goals for Latvia.

3. The legislation system in Latvia is under revision. In 1993 the law "On Specially Protected Nature Areas" was adopted by the Parliament. This law determines the protected category system, the procedure for the establishment, maintenance and management of protected territories. At present the Environment Protection Department is working on the subordinate act, the resolution of the Cabinet of Ministers "On Special Nature Protection". An important document for biotope conservation on afforested land is the resolution of the Cabinet of Ministers "Regulations of Dividing Forests into Forest Categories and Forming Particularly Protected Forest Districts".

During 1994 the Ramsar convention was prepared for ratification. By now this document is

waiting for approval in the Parliament.

In 1994 Latvia joined also the Helsinki Convention. In accordance with that and in order to introduce changes in property rights the "Law on Protected Zones" was worked out which establishes the status of coastal waterbodies and different other zones. Especially actual now is the status of the coastal zone of the Baltic Sea and watersheds. The respective law is at its first stage to pass the Parliament. The preliminary draft of the "Law on Species and Habitat Protection" is also ready for discussion.

However, the Convention on Biological Diversity involves a broader range of problems than nature and environment protection. That is also the main reason why Latvia has not yet ratified the convention. Nature protection appears only a part of the issue; therefore the Ministry of Environment Protection and Regional Development will be merely the coordinator of this activity, working out recommendations and guidelines for all other institutions that bear any relation to biodiversity or the use of natural resources.

There is a need for coordination and cooperation with different ministries, scientific institutions, industries and NGOs to produce and provide equipment for the maintenance of the existing level of biological diversity in Latvia.

NGO PRESENTATION BY THE LATVIAN FUND FOR NATURE AND THE LATVIAN ORNITHOLOGICAL SOCIETY.

Maris Kreilis

The Latvian Fund for Nature (LFN) was founded in 1990. It was the first and up to now the only national non-governmental fund designed to support projects for the research and protection of rare and disappearing plant and animal species as well as of particularly important natural territories and biotopes. The establishment of the LFN coincided with the period when Latvia regained independence and numerous professional and social interest groups created their new NGOs. On the other hand, the LFN was established by specialists who worked on the protection of rare species and biotopes in different research institutions financed by the state, and who understood that during the transition period these finances will not be available any more.

The guidelines and budget allocations for the LFN are fixed by a council consisting of 30 elected members. Candidates for the new council are nominated by the previous council and by project leaders. The council consists of various specialists: botanists, zoologists, geographers, foresters, representatives of leading research and educational institutions and as well as the corresponding ministries. It is remarkable that the new council elected this year includes more specialists and fewer politicians than the previous one. On the other hand, LFN was established by specialists who worked on the protection of rare species and biotopes in different research institutions financed by the state, and who understood that during the transition period these finances will not be available any more.

The budget income of the LFN comes from the donations of partner organizations, companies and individuals. The donations are contributed to the Fund as a whole or for some particular project. A fixed part of the finances donated for particular projects is used for general expenses of the LFN or is reallocated for projects that are considered more important.

At the constitutional meeting of the LFN the first 6 projects were adopted: "Black Stork", "Osprey", "Corncrake", "Otter", "Bats" and "Vegetation of Dunes". At present there are 30 projects adopted and launched, while the proportion between projects concerning different organism groups and biotopes still remains the same. Half of the projects are ornithological, some are devoted to mammals and only a few are purely botanical. It is natural that these projects designed for the protection of individual species are at the same time concerned with the protection of these particular biotopes. Several projects are devoted to large protected areas.

Such an array of projects shows the general development of priorities in the LFN. While at first more attention was paid to projects concerning the protection of species, now the greatest priority is attached to projects related to protected areas and ecosystems; special attention is focused on forest and coastal wetland ecosystems.

The projects realized by the Latvian Ornithological Society (LOF) can generally be divided in four main groups.

1. Projects dealing with rare species. These can be divided further into projects dealing with rare species in Latvia and those devoted to species that are still numerous in Latvia but endangered or even extinct in Western Europe. The investigations carried out in Latvia allow to find out the needs of these species in order to restore their populations in West-European countries. Here the project "White-backed Woodpecker" can be mentioned

financed by the Swedish Nature Protection Society.

Besides the investigations of rare species there exists a large variety of practical protection measures from the building of artificial nests for eagles up to the successful reintroduction of tree-frog.

2. Another group is projects on ecological monitoring. In most cases these represent the continuation of projects started at state institutions.

3. The third group includes projects concerning biotopes and protected areas. Among these "Nature Conservation Plan for Latvia", elaborated in cooperation with WWF can be mentioned, that describes the most important natural territories of Latvia. Further, 50 of such territories will be described more in detail and submitted to the Ministry of Environment and Regional Development. To this group belong also two projects to be carried out by the paid staff. One of these is concerned with the elaboration of the conception for a new national park in the vicinity of Kemeris, financed by the German Federal Ministry of Environment and Euronatur. This conception has been worked out by now and submitted to the Latvian Ministry of Environment and Regional Development. The other project is "Protection of Black Stork and Other Sensitive Forest Species" funded by the Danish government. This is a good example of how a project intended for the protection of one species has expanded, covering the inventory of valuable forest areas and the creation of a network of protected forest areas.

4. To the last group belong projects related to education. For example, the final goal of the project "Atlas of Mammals" is the publishing of a scientific edition on Latvian mammals with a popular approach. The Latvian Ornithological Society has a slightly longer history. It was founded already in the 1980s as part of the All-Soviet Union Ornithological Society. The most well-known work carried out by members of the society is the Latvian Atlas of Breeding Birds, published in the 80s. A more recent work is the publishing of the IBA (Important Bird Areas) national book.

Speaking about shortcomings, first of all the funding mechanism is to be mentioned. A normal perception of foundations is that these are organizations with some basic financial sources. We started from the zero point and are still working as an ordinary public organization on current projects with current funding from the outside, without having our own basic funds. Until now we have oriented on projects supported by partner organizations in Western Europe. The problem is that most of those organizations have not also possibilities for long term funding, thus, the practical application of investigations and management plans has been a task assigned to us.

For this reason, beginning from this year we have been concerned more actively with local companies and donors. At the same time, this is not only a financial issue but also an educational approach to raise the awareness of the society in the issue of nature protection.

Another problem is that LFN has not a wide enough network and membership, which could be solved through closer cooperation with specialized societies and NGOs. Very important step so far is that LFN and the Latvian Ornithological Society decided to run a joint office for better coordination of their work. Also, the Latvian Ornithological Society signed a document during the Birdlife International Congress in Rosenheim for joining Birdlife International.

It should be admitted that the Latvian Fund for Nature and the Latvian Ornithological Society up to now have gained very valuable experience for practical implementation of the Convention on Biological Diversity.

STATE-OF-THE-ART: LITHUANIA

Mindaugas Lapelė

As an independent state Lithuania seeks to integrate into the political, social, scientific and other structures of international community and to work together, solving common problems. Since 1993, Lithuania is a member of the Council of Europe, so we are involved in the solution of European environmental problems. Lithuania has signed Ramsar and Bern conventions and cooperates closely with the executive bodies and contracting parties of the CITES Convention. The convention on Biological Diversity (CBD) was signed by the former head of the Lithuanian Parliament, Mr. Vytautas Landsbergis on 11 June, 1992. Now it is time to make the next step and ratify this convention.

Present-day situation. The main goals and aims of CBD are not new ideas for us. Every kind of activity in this field will be covered by the Convention. It is important to stress that Lithuania as well as the other Baltic Countries have not started activity in the field of environmental protection fields from zero. The present-day status of our nature and the Lithuanian system of environment protection is the result of huge efforts of scientists, administrators and NGOs - all those who were deeply involved in environmental matters in earlier years. Now we must preserve the knowledge and achievements of our colleagues and adapt our environmental protection system and legislation to the great changes in the social order, legal system, economy etc. on. Greatest attention is paid to the establishment of an effective system of the environment protection administration, to create new legal acts and implement management plans for protected areas. The Environment Protection Department was reorganized into the Environment Protection Ministry on 15 July, 1994. The new Wildlife Protection Department was established under the Ministry.

The main aims of this department are to organize and coordinate activity on biodiversity protection in close cooperation with the Land Management Department. The implementation of international conventions and bilateral agreements on nature protection is also one of the major tasks of this department. Other ministries such as the Ministry of Forestry and the Ministry of Agriculture are responsible for the sustainable use of biological resources.

Until SBD is not ratified in Lithuania, special actions will not be undertaken. At the same time, the activity of the Environment Protection Ministry is directly related to the content of CBD and thus we have some achievements in this field. Art. 7 of SBD declares that "each Contracting Party shall ... identify components of biological diversity important for its conservation and sustainable use ..." We understand that threatened species of the flora and fauna are such components of biodiversity that require urgent protection. A new Red Data List was drawn up in 1991 through the joint efforts of naturalists of the Institute of Botany, Institute of Ecology and other scientific centers. The list includes 501 threatened species, among them 210 species of plants, 210 species of fauna and 81 species of fungi.

Protection *in situ*, according to Art. 8 of CBD, is a very important part of nature protection activity in Lithuania. The best possibilities for protecting the whole variety of species, habitats and ecosystems are to be found in protected areas. The current network of protected areas in Lithuania comprises four strict nature reserves, five national parks, 30 regional parks, 290 nature conservation reserves of different type. More than 100 nature reserves and 30 regional parks were established in 1992. Protected areas cover 721.5 thousand ha or 10.9 % of the Lithuanian territory. All these protected areas are included into the natural framework. This framework is not just a network of green areas but includes a number of categories of land use: protected areas, various conservation and recovering areas, recreation and forestry areas and regulated farming areas. These are all characterized by the prohibition or limitation of urban and industrial activities. The management of this complex

network of areas is based on the laws "On the Protection of the Environment in the Republic of Lithuania" (1991) and "On Protected areas of the Republic of Lithuania" (1993) as well as on special regulations on land use. According to these laws "the protection of territories guarantees the preservation of natural and cultural complexes and objects, ecological stability of landscape, biological diversity, restoration of natural resources ...". Territorial or site-based protection would be one of the main priorities of our days because lost our natural and cultural values can easily be in the process of land reform and private property restoration.

Some steps have been taken according to the other articles of CBD. For example, in Lithuania the *Bison bonasius* population has been restored (Art. 9), mass media are widely used for raising public awareness in biodiversity protection problems (Art. 13), environment impact assessment is organized in the case of important projects that can affect biodiversity (Art. 14) etc. Our weak points are conservation of genetic resources, biotechnology problems and some other specific items.

Problems and needs. The main problem is that there is no complex approach to biodiversity conservation activity in Lithuania. Coordination between scientific institutions, NGOs and governmental structures lack the necessary quality. Until now, the activity of Environmental Protection Department was focused on the issues of environment quality such as air pollution, water pollution, hazardous wastes etc. Thus the delay in ratification is connected with institutional reorganization as well as with the selection of priorities. Although there is no doubt that CBD will be ratified in Lithuania, until now decisions on the highest level have not been made. The same applies to the setting up of the National Committee on CBD. This process can be sped up by preparatory work on Environmental Protection Strategy. The Biodiversity Conservation programme will be a part of this strategy.

Another important work on the implementation of CBD would be preparation of the legal background. The existing acts such as the law "On the Protection of the Environment in the Republic of Lithuania" and others cover only general items. Additional legal acts on biodiversity protection will be prepared in the nearest future (law on the protection and use of fauna, law on threatened species, numerous regulations).

The role of local authorities in environment protection and nature conservation must increase. The process of decentralization in Lithuania is quite complicated, thus it is very important to develop local structure for environmental and nature protection and control.

The advice of UNEP, international experts or the Interim Secretariat of CBD will be welcome to ensure the success of CBD in Lithuania. We hope that some financial support for the implementation of this important convention will also be available. On our own part, we will do everything possible in order that the Convention on Biological Diversity would have a positive impact on the preservation of Lithuanian nature and biological diversity.

SCIENTIFIC REPORT: LITHUANIA

Komas Pakalnis

I would like to present you short information on scientific problems concerning the Convention on Biodiversity in Lithuania. Our situation is very complicated because, on one hand, we have a very qualified scientific community while on the other hand, the three Baltic Countries including Lithuania are in transition to market economy, experiencing all difficulties of the transition period. It is evident that the problems of the development of national economy are most important for the implementation of scientific proposals concerning the biodiversity convention.

At the same time, it should be mentioned that even during Soviet occupation Lithuania made an attempt to assess the impact of human activity on the environment (natural complexes included), the effect of environment pollution and other kinds of damage inflicted to nature, human beings and the efficiency of economy. Besides, we tried to prognosticate possible variants of regional development, to work out decisions and means for stopping further degradation of the environment. These scientifically substantiated plans were carried out in 1981-1986 by scientists and territorial planning specialists. The projects were based on the territorial analysis of natural characteristics and anthropogenic activity within complex nature protection schemes. The latter were drawn up for the 20-year period and revealed the critical state of the natural complexes and environment of Lithuania. The materials for estimation and planning have become generally available and have served as a stimulus for activity and have promoted Green Movement in Lithuania. The above complex nature protection schemes were elaborated on the basis of objective data on the impact on environment. However, the impact of military complexes, danger from nuclear power stations and influence of contiguous states were not taken into consideration. Still, it is through these schemes that attempts were made to achieve, by territorial planning, technological, biological and other measures, what is now called sustainable use. The objectivity of complex scheme data enabled to use certain resolutions after the restoration of the independence of Lithuania.

Beyond doubt, the material of these schemes formed preconditions for the twofold expansion of the protected areas of Lithuania in 1992-1993; now they account for about 11 % of the territory. It also helped to prepare the general concept of environmental policy and a basis of the national environment legislation. It is evident, however, that the experience obtained from the preparation of complex nature protection schemes in Lithuania and in all Baltic Countries is useful and can be successfully applied for the promotion of the national strategy and action plan of the conservation of biological diversity and its sustainable use in these countries.

We would like to present some examples of the environmental activity of Lithuanian scientists. The Lithuanian ecological monitoring programme was elaborated by scientists of Lithuanian research institutes: Institute of Botany, Institute of Ecology, Institute of Geography, Institute of Physics, Institute of Forestry, etc. Scientists take part in the realization of this programme together with scientific communities of Nordic countries.

Lithuanian scientists work out state environmental research programmes. For example, we have developed the state research programme "Ignalina Nuclear Power Plant and the Environment". The implementation of this programme has started this year with the participation of one hundred scientists from eleven scientific institutions of the Republic of Lithuania. Another state research programme concerns the ecological stability of regional development.

The scientists contributed to the creation of the national environmental legislation and co-authored environmental laws of the Republic of Lithuania: Law on Environmental Protection, Law on Protected Areas, Law on Ecological Monitoring, etc.

Although the territory of the Republic of Lithuania seems to be sufficiently investigated, in fact, the data are not well enough systematized and actualized in the context of planning needs and the intensity of current changes. Thus, the complexity of biological diversity conservation subjects single out the following general priority areas of scientific activity, necessary for country studies:

- * renovation of land-use mapping and its analysis;
- * detailed mapping of the vegetation cover, habitats and ecosystems;
- * analysis and renovation of the conservation status of all species of living organisms in the country;
- * collection and evaluation of data concerning ex situ conservation of biodiversity and national experience in the investigations of genetic resources;
- * assessment of the viability of the existing system of protected areas and its completeness in terms of the coverage of ecosystems, habitats, species;
- * evaluation of major adverse effects caused by different threats to biodiversity;
- * development of a national monitoring programme in accordance with needs of biodiversity monitoring;
- * determination of the economic value of biological resources and biological diversity;
- * creation of a modern data basis for biodiversity conservation with the application of a geographic information system.

After singling out the scientific priorities one should mention regional collaboration with Estonian and Latvian scientists. It is a great pleasure for me to display the noteworthy edition "Flora of the Baltic countries" in English and Russian languages that reflects the botanical diversity of our countries. Further regional and subregional collaboration in the conservation of biodiversity and sustainable use of its components would be highly appreciated.

CONTRIBUTION OF NGOS TO THE PRESERVATION OF BIOLOGICAL DIVERSITY IN LITHUANIA

Pranas Mierauskas

Who are we and how many of us are there ?

Lithuanian Fund for Nature

- * inventory and management of biological resources
- * protection of rare and endangered species and their habitats
- * ecological education and public awareness

Biota (Centre for Biodiversity Research and Conservation)

- * research and conservation of biological diversity

Lithuanian Ornithological Society

- * research of bird diversity
- * bird population monitoring
- * conservation of birds and their habitats

Lithuanian Botanical Society

- * inventory of plant diversity
- * rare and endangered plant species

Lithuanian Nature Society

- * public awareness and ecological education

Vilnius Nature Conservation Society

- * public awareness and ecological education

Lithuanian Teriological Society

- * monitoring of mammals

Lithuanian Entomological Society

- * monitoring of insect fauna

Lithuanian Hydrobiological Society

- * monitoring of aquatic organisms

What are we doing in the field of biodiversity ?

Lithuanian Fund for Nature (LGF)

LGF has carried out the 2-year joint WWF-LGF project "Biodiversity and Conservation Values in Former Soviet Military Areas in Lithuania". The main tasks were the following:

- to carry out inventory components of biological diversity of importance for their conservation value
- to prepare recommendations and measures for establishing protected areas
- to assess the impact of military activities on biodiversity components and their habitats

Summary of the results

* In spite of the heavy environmental impact of military activity, the surveyed areas have still retained a very rich biodiversity due to the limited access by humans. Altogether, 133 Lithuanian Red Data Book species were found in them, including 68 plant species (36.9 % of the total list), 4 mammal species (16.6%), 45 bird species (65.7 %), 4 species of reptiles and amphibians (80,0 %), as well as 12 insect species (7.8 %). This comprises 22.6 % of the total Red Data Book list.

* Management plans based on the results of the investigations were prepared for all 9 surveyed territories.

* Recommendations include the establishment of 29 different protected territories, including one strict nature reserve.

BACO project "Preservation of the River Nemunas Delta"

The LGF will carry out a new project on the conservation and management of the River Nemunas Delta Regional Park. Some of the main tasks will be following:

- to identify ornithological diversity and promote the protection of birds and their habitats
- to encourage conservation of bird diversity on private lands in the Regional Park
- to manage biological resources important for the conservation of birds
- to monitor bird populations in certain areas

Why has the Convention on Biological Diversity not been ratified by the Parliaments of the Baltic Countries yet?

- Environmental Protection Ministries (EPM) are passive on this issue
- Nature Protection Committees of the Parliaments are weak and passive
- High officials do not designate biodiversity as a priority
- Financial resources are lacking and many conventions are to be ratified

What should we do to get the Convention ratified?

- to raise a public awareness campaign throughout the country, urging the ratification of the Convention, including:
 - * disputes with parliamentarians, EPM officials
 - * publishing articles in newspapers and magazines
 - * presentations on TV and Radio

NGO activities on the implementation of the Convention

- to assist the EPM to develop national strategies and action plans for the conservation and sustainable use of biodiversity
- to strive for the management of biological resources to be included into national management plans (at least in Lithuania)
- to delegate NGO representatives into national biodiversity units
- to co-ordinate activities concerning issues of the biological diversity between the NGOs of the Baltic Countries.

Lithuanian Ornithological Society (LOD) and biodiversity

- * established in 1989
- * over 400 members
- * the largest and most active public NGO for the protection of birds
- * Bird Life International partner for Lithuania

Among the ultimate goals of the LOD there are:

- * Mitigation and gradual elimination of destructive human impact on nature.
- * Preservation of biological diversity in general and that of birds as its integral part.
- * Achievement of economic development based on the appropriate and sustainable use of biological resources.

Strategy and priorities regarding the issue of biological diversity:

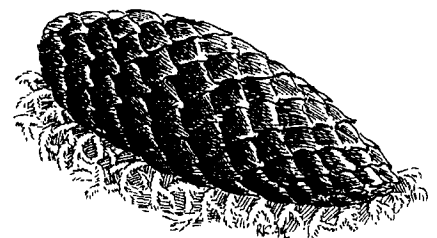
- * Advocacy and support for, and direct engagement in the conservation of biological diversity;
- * Propagation and encouragement of the sustainable use of biological resources.

Activities for the implementation of these goals:

- * Preparation of the national strategy, plans and programmes for the conservation and sustainable use of birds and their habitats
- * Research and monitoring establishment of conservation priorities
- * Data exchange, preparation of recommendations
- * Promotion of the protection of birds and entire ecosystems
- * Rehabilitation of degraded ecosystems, establishment of LOD's reserves
- * Education and public awareness

Examples of practical activities:

- * National Breeding Bird Atlas and contribution to the European Atlas
- * The first LOD's private preserve: rent of the area for renaturalization
- * Designation and protection of IBAs
- * National White Stork Census '94



LIST OF ACRONYMS

BD	Biological Diversity
BIN21	Biodiversity Information Network 21
CBD	Convention on Biological Diversity
COP	Conference of the Parties for the Convention on Biological Diversity
EFTA	European Free Trade Association
ELF	Estonian Fund for Nature
EU	European Union
GATT	General Agreement on Tariffs and Trade
GEF/STAP	Global Environmental Facility/Scientific and Technical Advisory Panel
GEF	Global Environmental Facility
GIS	Geographic Information System
GMO	Genetically Modified Organism
HELCOM	Baltic Marine Environment Protection Commission - Helsinki Commission
ICCBD	Inter-governmental Committee for the Convention on Biological Diversity
INC	Inter-governmental Negotiating Committee for the Convention on Biological Diversity
IPR	Intellectual Property Right
ISCBD	Interim Secretariat for the Convention on Biological Diversity
IUCN	World Conservation Union
LDF	Latvian Ornithological Society
LFN	Latvian Fund for Nature
LGF	Lithuanian Fund for Nature
LMO	Living Modified Organism
LÖD	Lithuanian Ornithological Society
NBU	National Biodiversity Unit
NCP	Nature Conservation Plan
NGO	Non-governmental Organization
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
UN	United Nations
UNCED	United Nations Conference on Environment and Development, also known as the "Earth Summit"
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP/ROE	United Nations Environment Programme, Regional Office for Europe
WWF	World Wide Fund for Nature