



Synergies

in national implementation

The Rio Agreements

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PREFACE

This year the world community is taking stock of progress made in environmental protection and sustainable development since the 1992 Rio Earth Summit. A key component of this assessment involves the four international environmental agreements developed as a result of the Earth Summit process: the Conventions on Biological Diversity, Climate Change and Desertification, and the Forestry Principles.

In March of this year experts involved in implementing the Rio agreements on every continent met in Sede Boquer, Israel to explore how to create “synergies” in national implementation of these international instruments. For those concerned with sustainable development, this is one of the central challenges facing developing countries. Each of these instruments requires that countries develop specific implementation mechanisms and fulfill obligations involving reporting, training, public education, and other activities. While these requirements are essential to the Rio agreements, they can also place a great burden — both in terms of financial and human resources — upon countries. Understanding the synergies among these instruments, and finding ways to coordinate and harmonise overlapping activities among them, can ensure success at the country level.

The present document results from deliberations held at the Expert Meeting on Synergies, organised by UNDP and funded by the Governments of Israel, Japan, Norway, and Denmark. It contains recommendations on how to produce synergy institutionally, in capacity building, in national planning, and in fulfilling reporting requirements. These recom-

mendations were developed by participants based on their own experience, on the ground, in implementing the conventions within their countries. As such, they provide a highly useful input into the ongoing quest to translate these international agreements into reform and results at the country level, and to help fulfill Agenda 21's programme for sustainable development.

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Director, Sustainable Energy and Environment Division

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We would also, of course, like to offer our gratitude to the expert participants in the meeting who gave so generously of their time, expertise, and experience, and to the Governments of Denmark, Israel, Japan and Norway whose generous financial contributions made the meeting possible.

Finally, there are two people without whom the workshop and this report would not have come about. We give special thanks to Ted Howard and Robert Prescott-Allen, who served as Rapporteur and Facilitator of the workshop, for their invaluable support, efforts and good humour.

This report has been prepared by the Sustainable Energy and Environment Division of UNDP, under the leadership of Karen Jorgensen, Assistant Director. UNDP takes full responsibility for any errors in presentation of the workshop discussions. We hope to carry forward the process initiated at the Expert Meeting in consultation with the Secretariats of the Rio instruments, and in partnership with those responsible for implementing these agreements at the national level.

ACRONYMS AND ABBREVIATIONS

CBD	Convention on Biological Diversity
CCD	Convention to Combat Desertification
COPS	Conference of the Parties
FP	Forestry Principles
NGO	Nongovernmental Organisation
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change



Producing Synergy: Opportunity and Challenge

Synergy: “a combined effect ... that exceeds the sum of individual effects”

- Concise Oxford Dictionary, 7th edition

During the past five years individual governments and the international community as a whole have declared specific goals with regard to sustainable development. These goals are contained in Agenda 21 and a range of individual instruments and conventions. These agreements are not simply environmental plans or proposals; most are binding international commitments with concrete objectives concerning the integration of environmental protection and natural resources management with socio-economic development.

Four of these instruments — (i) the Convention on

Biological Diversity (CBD), (ii) the UN Framework Convention on Climate Change (UNFCCC), (iii) the Convention to Combat Desertification (CCD), and (iv) the Forestry Principles (FP)¹ — derive directly from the 1992 UN Conference on Environment and Development (UNCED, the “Rio Earth Summit”).

Although the four instruments have a common association with UNCED, they are at different stages of implementation. The CBD and UNFCCC were the first to come into force and have had several meetings of their respective Conferences of the Parties. The CCD is to have its first Conference of the Parties at the end of September 1997. The FP embody widely agreed concepts but do not have the status of a convention. Their inclusion in this report is not to prejudge their eventual status or form. Rather, it is to acknowledge that forests are crucial for maintaining biodiversity, managing climate change, and combatting desertification. Consequently, the three conventions need to take the FP into account. By the same token, any convention that incorporates the FP will be more effective if it is designed to take advantage of synergies with the CBD, UNFCCC, and CCD.

These sustainable development instruments share a concern for many environmental issues and contain numerous overlaps in terms of the obligations required of their Parties (such as requirements for research, reporting, training, and public education and awareness). Each instrument focuses on a particular set of problems, yet each also recognises that activities to address effectively its own issues must also take into account those of the other instruments. There is a growing recognition that while each instrument does stand on its own, with its own

defined objectives and commitments, there is also an inherent relationship and mutual dependency between all of them.

Each instrument represents a way of achieving one or more of the sustainable development goals of Agenda 21. The CCD specifically mandates coordination with the UNFCCC and CBD, including the conduct of joint programmes (Article 8). The four instruments operate in shared ecosystems — so much so that if one is implemented without regard for the others it is likely to impede them. But if they are implemented collaboratively, progress can be made on all fronts. For example, maintaining the biodiversity of forests and of arid and semi-arid lands depends on managing forests and combating desertification in ways that are sensitive to the conservation needs of species and ecological communities. At the same time, it is important to make sure that the people who live in forests and drylands are the main potential beneficiaries of the biodiversity of their areas. Similarly, control of climate change is probably essential to achieve the objectives of the CBD, CCD and FP. But achieving the objectives of the CCD and FP are just as necessary for control of climate change, since it is influenced by Earth's reflectivity and the role of forests in the hydrological and carbon cycles.

Operationally, there is a great deal of overlap among the instruments. All need common, shared or coordinated institutions to turn their somewhat general requirements into action on the ground. These include coordination mechanisms to ensure that implementation of one convention enhances (or does not conflict with) implementation of the others. All would benefit from sharing training methods and materials, and increasing the capacity of grassroots groups to support the

conventions at the local level. All require an information system, which would be developed more cost-effectively if it were shared by the other instruments as well as other users.

Experience in many countries has shown that the overlapping and sometimes duplicative commitments under multiple instruments can produce tremendous challenges. Commitments to prepare inventories, reports, plans, and public information programmes, can lead to in-country conflicts, confusion, and wastage of resources, particularly for countries with limited financial, human, and institutional capacity.

Yet the linkages between the instruments provide important **opportunities** as well. Because implementing countries are required to take a number of similar actions for each instrument, countries can carry out these obligations in ways that greatly leverage their participation by reducing costs, by relieving the burden of multiple reports and other requirements, and in general by producing greater effectiveness and efficiency.

In sum, these sustainable development instruments can be more effectively implemented through a greater understanding of the commonalities and the overlaps between them and a coordinated and harmonised approach to their implementation at the local, national, and international levels. In other words, creating **synergy** among the instruments and their requirements.

The barriers to achieving synergy are often political and cultural. At the international level, organisations may view their mandates in ways that put them at odds with one another, despite what appear to be common, substantive goals. In the case of the Rio agreements, the institutions responsible for the various instruments can support synergy by coordinating among themselves and helping to ensure that participating

countries are not burdened by conflicting directives or timing in reporting requirements.

At the country level, responsibility for achieving the goals of the agreements may be distributed among ministries and offices that are not sufficiently linked or are in competition for limited resources. For example, economic conditions may drive a ministry charged with overseeing forests to be more focused on timber products as important sources of national income. The domestic power base of the relevant ministry may derive from using rather than preserving forests and habitats.

In the face of these challenges there is a need to develop and enhance synergies between the instruments in terms of their implementation at the national, regional, and global levels. In many cases synergies and integrated approaches to issues covered by the instruments already exist and can be built upon (chapter 2). In other cases, including at the international level, new efforts are needed to stimulate collaboration, cooperation, and greater harmonization between the instruments in order to catalyse integrated approaches to implementation.

Expert Meeting on Synergies

Recognising the imperative of seizing the opportunity for synergy while avoiding the pitfalls of overlap among the Rio instruments, the United Nations Development Programme organised and convened a meeting in Sede Boqer, Israel (17-20 March 1997) of some 30 experts involved in implementing the agreements at the national and international levels (Annex A). The meeting was supported with funding from the Governments of Israel, Japan, Norway, and Denmark, and from UNDP.

The purpose of the meeting was to explore ways to create synergy between and among the instruments — *particularly at the national level* — to help foster implementation and to improve the prospects for sustainable development. This meeting was based on two fundamental principles developed in consultation with participants and stakeholders, including representatives of the Secretariats of and Parties to the instruments:

- First, that a recognition of potential synergies among the instruments must be an integral part of the planning process and implementation for each; and
- Second, that strengthening and building in-country capacity is essential to the producing synergy in the implementation of the agreements.

One outcome of the Expert Meeting was a range of preliminary proposals, options, and recommendations to improve national-level implementation of the instruments, to reduce conflicts and overlaps, and to produce synergy (chapter 3). Along with these initial proposals, larger themes and messages emerged from the deliberations, both for implementing countries and the international community.

Themes and Messages: Implementing Countries

- **Synergy *is* possible**

Synergies in implementing the Conventions — at the international, national, and local levels — are clearly possible. However, producing such synergy is no easy matter; it is the culmination of a process in which complementarities between the conventions are identified and used to further implementation while overlaps are eliminated (or at least conflicts between

them reduced). Taking advantage of the complementarities and reducing conflicts (e.g., the potential for conflict between a biodiversity strategy and a forest strategy) requires the ability to design necessary actions and the means to take them. Even before a potential point of synergy is reached, eliminating or reducing the conflicts can go a long way towards improving implementation of the instruments. Because of this, complementary provisions of conventions can be implemented in ways that improve cost effectiveness by achieving the same or greater results with fewer or the same resources. Synergy does not need to end with the Rio instruments; participants noted that many of the same overlaps extend to other international agreements such as Ramsar, CITES, the Montreal Protocol, and the Law of the Sea. To take advantage of these overlaps, countries need to do a broad review of the institutional capacity and information requirements of all international agreements to which they are party.

- **Planning *is* essential**

The requirements (including reporting obligations) of these instruments can lead to duplicative effort and place a substantial burden on countries — particularly a strain on human and financial resources. To turn such potential burdens into possible synergies requires planning — national and sectoral development planning *and* plans built specifically for national implementation of the conventions. The key is to anchor implementation plans into national development priorities and policies. In many countries, there may be no cohesive planning framework, which makes the integration of the instrument-related plans into sectoral policies essential.

- **Implementation requires new and strengthened capacities**

Conventions are implemented in countries at the national, regional, district, and community levels. A high priority is to develop the institutions and capacities necessary to enable countries to translate these international agreements into action at these levels. One problem countries face is that capacities diminish from the national to the local level, therefore the well-justified efforts of governments to decentralize and devolve authority must be supported by additional resources of skilled, trained people and money.

- **Information systems are a key to sustainable development**

Underlying the challenge parties face in fulfilling the reporting requirements of the conventions is the more fundamental issue of the lack of effective information management in many developing countries. For example, where there is no monitoring system, reporting is necessarily *ad hoc* and demanding. Worse, a country has no real means for saying whether the conventions are being implemented or even whether progress is being made toward the goals of sustainable development. A systematic approach to information management not only allows a country to have the data necessary to fulfill its obligations and generate reports, but also to better define, guide and assess the progress being achieved on its development policies.

Themes and Messages: International Community

Interventions at the international level can support — and in many cases are required in order to produce — synergy at the national level. Several messages emerged for the international

community, not only associated with the Rio instruments but other environmental and sustainable development conventions as well:

- Instructions by the COPs to their Secretariats to work collaboratively and synergistically with the Secretariats of the other conventions would contribute greatly to opportunities for national-level synergy.
- Shared reporting schedules could be developed between instruments, thus lessening the reporting burden on developing country Parties.
- The instruments could be analysed in detail to identify data and information needed to monitor and assess progress. Carrying out such an analysis at the international level would provide a valuable resource to all parties. Interpretation of this global analysis at the national level will allow different data needs, scale, precision, and definitions to be developed locally.
- The convention Secretariats can contribute to the development and dissemination of training modules and information tools that increase understanding of and give greater access to the conventions at the country level.



The Rio Instruments: Linkages and Complementarities²

What do the Conventions have in common, and how can these overlaps be used to produce synergy?

Scientific linkages

Scientific assessments were key to informing the negotiating processes for the Rio instruments. These assessments include an estimate of the socio-economic implications of climate change, biodiversity loss, desertification, and deforestation. They are a summary of extensive experimental, theoretical (modelling work, for example), and observational studies carried out by research groups, individual scientists, and international research programmes. A general characteristic they

share is a recognition of the scientific linkages between the various disciplines.

Fundamentally, these assessments have established many linkages between biodiversity protection, mitigation of climate change, preventing desertification and land degradation, and the sustainable management of forests.

Take, for example, the linkages between climate change and forests, land, and biodiversity. Widespread deforestation converts forest into carbon dioxide and reduces the vegetative cover for CO₂ storage. By removing this cover, deforestation reduces the water retention capacity of the soil and increases soil erosion. This, in turn, can lead to changes in the weather patterns of surrounding areas, and to the potential for warming of the climate on a global scale. Thus, the sustainable management and use of forests could, among other things, help limit global warming.

The array of impacts of climate on land and the implications of degraded land surface for the climate system are many. Changes in weather patterns and climate can negatively affect tree species which are both important biological resources and home to a great percentage of the world's biodiversity. And, should the sea level rise as a result of global warming — as climate change models predict — air streams and patterns and strengths of currents and upwellings could shift, affecting fish and other marine life. Climate change could also impact the productivity of grasses in ecosystem habitats, thus affecting wildlife biodiversity, especially of large animals. Increased surface temperature could result in reduction in land vegetation cover which would affect soil microbial diversity due to enhanced exposure to higher temperatures.

Because of the inextricable scientific linkage between the four issues considered by the Rio instruments, actions taken in furtherance of the objectives of each of the agreements can be beneficial to the purposes of the others.

Reinforcing provisions and approaches

Given this, it is not surprising that the Convention on Biological Diversity proposes to establish cooperation with other bodies dealing with similar matters. These connections are explicit in the Desertification Convention in two important cross-linking references: the instrument specifically refers to the contribution that combating desertification can make to achieving the objectives of the agreements on Climate Change and Biodiversity, and it encourages joint programmes, particularly in research, training, observation, and information collection and exchange. The same link could logically be made with the Forestry Principles.

The instruments also contain many similar requirements for action, research, reporting, and other necessary activities agreed to by their signatories.

• Approaches to goals

The instruments adopt similar approaches toward achieving their global environmental goals. The preambles of each acknowledge in one way or another the complex physical, biological, political, social, cultural, and economic factors that are at the root of the issues they seek to address, and the scientific uncertainties in either diagnosing or remedying the identified problems. Each also implicitly or explicitly recognises that it is only possible to achieve its goals by setting in motion a com-

plex, multi-year process with a variety of interactive approaches and activities.

- **Activities**

The various agreements share a commitment to gather, assess, and make available information to diagnose environmental problems. The specifics include research, information exchange (such as sharing results of technical, scientific and socio-economic research), training and institutional development, national and regional action plans, and developing national inventories.

Capacity strengthening and building is also central to each instrument to create domestic skills and build problem solving abilities to address the complex scientific and institutional problems, and to provide adequate support for planning.

- **Role of governments**

Each of these agreements effectively recognises that progress toward its goals requires concerted, joint activity of numerous governmental and civil society actors. They also distinguish between the available resources and obligations of developed and developing countries. A significant role of governments in the developed world is to contribute resources to developing countries to combat and address the environmental issues identified in the agreements.

Governments must create or strengthen appropriate legislation, regulations, orders, and policies. They also are obligated to develop national action plans, policies, and strategies that can provide the framework for increased efforts. Some of the agreements specify training of government decision-makers,

managers, and others to strengthen their skills in taking necessary actions.

Actions at the government level also include the introduction and use of environmental impact assessments. Impact assessment is a means, where relevant, to avoid or minimize the effects of proposed activities on the economy, on public health, on the quality of the environment, on biological diversity, on forests, and so forth.

- **Participation of civil society**

Each agreement notes and encourages the important role of nongovernmental actors in effective development, implementation and planning of national environmental policies and in finding solutions for environmental problems. The instruments call for measures to increase public understanding, create an informed constituency for environmental change, and assure adequate private and nongovernmental (NGO) participation in achieving the goals of the agreements. Specific reference is made of making use of the knowledge base of local communities and / or indigenous people.

- **Subsidiary Bodies for Scientific and Technological Advice**

The climate change, biodiversity, and desertification conventions all require the creation of an international body of scientific expertise composed of experts with a proven scientific or technical track record. The CBD provides for the establishment of a Subsidiary Body on Scientific, Technical and Technological Advice. The UNFCCC provides for a Subsidiary Body for Science and Technological Advice. The CCD establishes a Committee on Science and Technology.

These bodies share a number of common elements: they all are required to be multidisciplinary; they are open to all Parties to the conventions; the representatives of the Parties are required to be competent in the relevant fields of expertise; the bodies are required to provide scientific and technical assessments and advice on scientific programmes and international cooperation in research and development.

Since each of these bodies is required to assess the state of the science and technology, there is an obvious need for linkage between them and the scientific community. Cooperation and collaboration between convention entities and the international scientific community is fully mandated by specific provisions of the conventions. Because these provisions call for Parties to initiate action, it would be useful to coordinate such action at the national level first. Optimally, activities related to climate change would be integrated with activities focused on conservation of biological diversity and combating desertification.

• **Information, monitoring, and reporting**

The view shared by the instruments is that only through networking at the national, regional, and international levels can necessary knowledge be freely exchanged and taken full advantage of, and duplication avoided. The Convention to Combat Desertification has a specific article on networking of institutions, agencies, and bodies. The UNFCCC calls upon the Parties to “promote access to, and exchange of data and analyses thereof obtained from areas beyond national jurisdiction.” The CBD calls for the establishment of a clearing house mechanism to promote and facilitate technical and scientific cooperation.

Overlapping Requirements of the Parties to the Rio Agreements

	Climate Change	Biological Diversity	Desertification	Forestry Principles
National Inventories	Article 4(b)			Principle 12(a)
National & Regional Action Plans	Article 4(b)	"strategies" Article 6(a), (b)	Articles 9, 10	Principles 3(a), 5(a), 6(b), 8(d & h), 9© Article 4(b) and IPF Proposals for Action
Identification & Monitoring		Article 8	Article 16	
Develop Protected Areas		Article 8		Principles 7(b), 8(f)
Legislation	Preamble	Article 8(k)	Article 5(e),	Principles 8(f), 13(d & 3)
Research	Article 5	Article 12(b)	Articles 17, 19(b)	Principle 12(a)
Public Education	Article 6	Article 13	Articles 5(d), 19, 6	Principle 12(d)
Environmental Impact Assessment	Article 4(i)(d)	Article 14		Principle 8(h)
Clearinghouse for technical information		Article 18	Article 18	
Public Participation	Article 6(i)(a)(iii)	Article 9	Article 19(4)	Principle 2(d)
Conference of Parties (COP)/regular reviews	Article 7			
Exchange Information	Article 7	Article 17	Article 16	Principles 2(c), 11, 12(c)
Training	Article 6	Article 12(a)	Article 19	Principles 3(a), 11, 12(b)
Reports	Article 12	Article 26		
Data Collection			Article 16	Principle 12(a)
Examine obligations- Assess implementation	Article 7(e)	Article 23		Principle 12(a)
Report Steps to COP	Article 12	Article 26	Article 26	
Compatible Data/Standards				Article 16

The Forest Principles call for strengthening of scientific research, forest inventories, and assessments through international cooperation.

The three Rio conventions also contain a good number of measures related to monitoring progress. Pre-eminent among them, countries are required to submit reports to the COPs concerning steps taken to fulfill their obligations and implement the instruments.



Working Group Reports and Recommendations

In a world in which governments work primarily in a sector-based mode to develop and implement their policies and programmes, how can cross-cutting environmental conventions best be implemented for maximum effectiveness and impact?

At the heart of the Expert Meeting were four thematic Working Groups, each focusing on a different facet of the challenge of synergy at the national level:

- Institutional Requirements and Structures
- Capacity Requirements
- National Planning Requirements
- Information and Reporting Requirements

As with the Rio instruments themselves, there was a recognition from the outset that this division of the meeting repre-

sented a useful but somewhat artificial, set of distinctions. Modeling the larger search for synergy, the meeting process was designed to promote cross-fertilisation and the development of harmonised approaches and recommendations. At the same time, just as there are overlaps between the instruments, so too were there necessarily overlaps between the recommendations of the working groups.

The summary reports which follow seek to synthesise some of the proposals and recommendations of the Working Groups. The reports also draw in part on background papers prepared in advance of the meeting. What follows is not intended to be definitive, but rather to point towards the many issues to be addressed — and some of the ways to address them — in order to facilitate synergy in country-level implementation of the Rio instruments.

Working Group 1: Institutional Requirements and Structures

In light of the commonalities of purpose and intention among the Rio instruments, there is a real opportunity for governments to provide a more intensive and enhanced attention to environmental and sustainable development efforts. To do so requires creating a new “critical focus” within the government, bringing together existing — and creating when necessary — institutions with diverse interests to work toward a set of shared goals.

The Rio instruments call for integration of environmental concerns into other areas of policy, but they leave it to country par-

ties to determine the policy and institutional framework for implementation. The instruments do not, for example, require the establishment of particular institutions at the national level; this is for each Party to decide. While most countries have in place some form of agency or ministry with overall responsibility for environmental issues, a number of activities associated with the Rio agreements may fall within the mandates of other ministries. Thus, coordinated implementation of the agreements is likely to require horizontal structures for inter-ministerial consultation and cooperation. Effective mechanisms are not always in place to facilitate this coordination. Moreover, even where structures are in place, the different power bases and priorities of the ministries involved may tend to work against coordination.

There are no quick institutional “fixes” that can ensure synergy in the implementation of the agreements. Institutional arrangements intended to produce coordination are unlikely to result in benefits unless directed towards achieving specific goals. Institutional implementation of the agreements must be nationally driven, with identified synergies that both fulfill obligations under the agreements and support nationally set priorities.

Summary of Key Challenges

- The sectoral division of responsibility for implementation of environmental and sustainable development programmes is often a hindrance to effective, integrated implementation of such programmes at the national, regional (subnational), and local levels. The Rio agreements are international instruments that are the responsibilities of national governments which generally work in a

sectoral fashion. To a large extent these agreements can be implemented only locally on the ground — which requires a multi-sectoral approach. There is a real tension here, which few governments have resolved.

- The institutions with responsibility for implementation under particular instruments vary greatly in their authority and resources. They also frequently lack effective means of coordinating information and activities, or even simply communicating, with other actors. In some cases, there are real disincentives to effective coordination, including institutional rivalries and tension over turf and resource control.
- The recognised need for effective coordination and a central “focal point” may tend to lead toward an unhealthy centralisation of control and power over environmental and sustainable development policies and programmes. The thrust of the effort should instead be on continued decentralisation and democratisation of participation, while at the same time maximising the cross-fertilisation, efficiencies, and available synergies.
- At the local level, communication between stakeholders and government is often fragmented and inadequate. In many countries local people are insufficiently involved in the development of national policies.
- While these challenges are to a greater or lesser extent common to many nations, effective strategies and structures to address them will necessarily vary widely from country to country. Different structures and strategies will therefore apply to different circumstances. Recommendations regarding institutional arrangements must offer options which are flexible and adaptable to a variety of circumstances.

Activities around which institutions can work synergistically

Within the overall framework of policy-making, planning, and implementation of the Rio instruments and other sustainable development-related agreements, there are several core activities which are particularly amenable to the search for institutional synergies:

- Awareness-raising
- Education
- Reporting
- Data-gathering and inventories
- Public participation
- Research
- Training

Institutional models for supporting synergy

A variety of institutional approaches are available for use in a country setting. The workshop considered various options at the national, regional, and local levels. Again, these are not intended to be definitive but rather to indicate some of the institutional configurations which could prove supportive of synergy.

National-level Institutions

Effective national-level institutions are anchored at a sufficiently high political level in the national government, respond to national priorities, have built-in incentives for coordination and participation, and provide an effective information-sharing center or clearing-house as part of the established structures. Where appropriate, cross-sectoral task forces charged with implementing plans and programmes have the necessary authority to carry out activities and decisions.

Responsibility is established at multiple levels with appropriate decentralisation of implementation authority: while consultative inter-ministerial exchanges take place regularly, synergies are also generated at the level of implementation, including the line ministries and other actors. Important to success is an enabling environment, including appropriate framework legislation, delegation of authority, and leadership at the highest levels. Convention focal points should be integrally involved as core participants in both policy and implementation-level structures.

• ***Option one: a cross-cutting national committee bringing together key participants***

The national committee is a policy-making structure which deals with strategic planning, implementation, and legislative requirements for successful implementation of the instruments and other related initiatives. It brings together the various government departments and ministries, including the focal points for each convention, into what ideally is a decision-making (rather than an advisory) body.

To function effectively, a national committee:

- is vested with sufficient authority, including a legal and policy mandate and authority over allocation of resources, to make its decisions take hold.
- has an efficient secretariat function which can pull together a diverse group of participants with different agendas and interests.
- includes all key stakeholders at the highest appropriate levels.
- retains policy and resource allocation responsibilities.
- delegates operational responsibilities to the line ministries and other programme implementors (NGOs, institutes,

industry) rather than becomes an implementing institution in its own right.

- forms subcommittees to address technical matters, specific cross-cutting initiatives, or issues with a particular geographic focus. To avoid defeating the fundamental purpose of the National Committee structure, all such substructures retain the cross-sectoral, integrated character of the National Committee.

• ***Option Two: Separate Institutions with a Coordinating Mechanism***

Where strong functioning structures or committees already exist with responsibility for particular instruments, these structures can take joint action to build synergies, avoid duplication of effort, and carry out joint coordinated planning and implementation. Under these conditions:

- specific structures have policy and decision-making power
- high-level leadership creates an enabling environment for coordination
- regular joint consultative fora are organised for team leaders in each sector
- an entry point to synergistic action is to use the instrument of greatest national priority as the lead institutional convener for joint consultation, planning, and action. Alternatively, leadership can be rotated or shared.
- as is the case under option one, cross-sectoral interaction takes place at multiple levels, and includes those directly responsible for policy formation, those with line implementation responsibility, and a wider circle of others including academic and NGO participants.

- mechanisms ensure that each sector is fully informed in a timely manner about the plans and activities of each of the others. This can be accomplished in part through regular distribution of the minutes of meetings.
- cross-sectoral working groups, created on an as-needed basis, address challenges with clear synergistic implications. In addition, ongoing crosscutting working groups can work to ensure efficient synergistic implementation in areas such as reporting, information and data-gathering, and dissemination.

• ***Option three: a single institution responsible for all instruments***

In some cases, it may be appropriate to vest responsibility for policy, planning, and implementation activities relating to all environmental/sustainable development instruments in one high-level institution, with sufficient authority to pull together other essential participants. In this case:

- strong political support for the institution is needed.
- focal points for all conventions are housed within the same institution.
- policy-making and planning go hand-in-hand: neither are separated from responsibility for implementation. Experience has shown that planning frameworks (such as National Environmental Action Plans or other multi-sectoral strategies) can serve as a viable mechanism for integration of biodiversity, desertification, and other relevant issues. In the absence of a national sustainable development planning framework, such mechanisms can form the basis for synergy, provided that strong leadership, implementation responsibility, and effective coordination among line ministries are in place.

District level

The number and significance of subnational levels varies with a country's size and administrative structure. It is essential that the quest for coordination and synergy at the national level be carried through in implementation to the district and local levels. Indeed, for activities relating to awareness-building, education, information and data gathering, and training, effective integration at subnational levels assumes even greater importance.

The possible models at the district level parallel those at the national level. However, elements of each model can be applied regardless of the structure being used at the national level. Depending on the country situation, there could be:

- a coordinating committee pulling together the different sector
- a district coordinator for each sector, with a priority sector taking the lead in managing coordination
- a single district coordinator responsible for all sectors.

Experience has shown that the lack of adequate human and institutional capacity at the district level is a critical factor in causing breakdowns in coordination. Ensuring adequate capacity can be undertaken by:

- secondment of well-trained and experienced officer
- processes by which district and local actors are directly involved in the policy and programming dialogue at the national level
- ensuring that adequate authority has been delegated to the proper level
- ensuring that adequate resources are available
- ensuring that adequate training, both sectoral and skills-based, is available.

An important function of district coordinators is to identify and develop mechanisms for joint action involving people at the local level (see below). In many cases, this will involve extension agents, local officials, rangers, foresters, and others involved in natural resource management.

In addition to coordination and synergy within a subnational region, it is important to create mechanisms for inter-district information exchange and joint action. This includes mechanisms to facilitate cooperation and joint planning and management of shared ecosystems.

Local level

While many of the commitments deriving from the Rio instruments are seen as national-level tasks (such as reporting, compiling inventories, and reforming legislative frameworks), the success of the instruments depends on their implementation at the local level where people live and make their livelihoods in close relationship to the environment. The CCD, for example, explicitly recognises that desertification occurs, and can be combated, only at the local level. The same applies to biodiversity and its conservation, to forests and their management, and to emissions of greenhouse gases. National actions may provide an influential policy context, but the necessary physical changes can take place only at the local level — and it is here that the instruments will succeed or fail.

As is the case at the district level, capacity is key (see report of Working Group 2, below). Capacities need to be strengthened and built among local institutions and outside intervenors. Local institutions include local government, grassroots organisations, schools, and local corporations. Outside inter-

venors include the local offices of the national and regional government and NGOs.

Local institutions need greater capacity to develop, implement, and support the necessary regulatory regimes. They need support for planning their own actions and assessing progress on implementation of the conventions and improvements in socio-economic and ecological conditions. Outside intervenors have the difficult task of forging the links between top-down policies (which are inevitable in international instruments) and bottom-up actions (which are essential for lasting results). As such, they need training to become facilitators of locally-owned processes rather than enforcers of nationally-imposed plans.

In some countries, one model for local-level synergy involves the use of existing extension agents. In theory, these government agents have the most regular contact with local people. Often, extension agents involve existing community-based organisations and institutions at the village-level in identifying priorities and planning for action. When properly trained, they are capable of communicating effectively with villagers and can assist in developing community-based indicators, in monitoring and reporting, and in accessing information and resources.

In countries without a strong extension agent system, other local-level institutions and groups, such as churches, community-based organisations, and women's and youth groups, can be involved.

Working Group 2: Capacity Requirements

*Capacity building and strengthening of
already-existing capacities among developing*

country Parties to the Rio agreements is urgently needed. Many countries are already over-taxed by the instruments' competing demands for reports and other obligatory activities.

In supporting more effective implementation of the Rio agreements, capacity building will enable the development of capabilities of individuals, groups, organisations, and institutions to address environmental issues as a part of a range of efforts to promote sustainable development. These capabilities may include technical and scientific knowledge, practical knowledge of resource management skills, data and information management, communication, training and empowerment, financial management, institutional development, leadership and management, policy development and analysis, and other areas of activity. Capacity building activities should include relevant partners and stakeholders to ensure the effectiveness of their participation in policies, plans, and processes affecting them.

Because there are many opportunities for synergy in joint capacity strengthening and building around the four Rio instruments, it is difficult to justify an approach in which each instrument acts in isolation, either from the other agreements or from larger national capacity building needs and efforts. Seeking greater synergy can make the building and strengthening process easier while helping ensure the development of enduring national capacities.

Consistent with the multi-sectoral approach of the instruments, country-level capacity building should be carried out as part of a comprehensive and integrated approach to sustainable

development, one that takes into account overarching concerns including livelihood needs, poverty alleviation, and gender issues.

The Working Group explored the commonalities among the instruments and considered possibilities for capacity building initiatives and approaches which could both help countries to fulfill obligations (to the multiple instruments), and which would empower them to address creatively the many other concerns on their sustainable development agendas.

Gauging a country's existing capacities

Indicators of a country's existing capacities to conceive, plan, implement, and monitor effective initiatives related to the four instruments include:

- General level of knowledge and technical skills among decision-makers concerning the nature of the country's environmental problems and how those relate to key sustainable development challenges
- The degree to which existing strategies, plans, and programmes related to the instruments are participatory and involve affected stakeholders
- Familiarity and skill in using different types of planning tools in support of the instruments
- Clarity of distribution of responsibilities for different instrument-related activities among government agencies, the private sector, and civil society

Country-level requirements of the instruments

The instruments contain a number of requirements at the national, regional, and local levels which Parties are obliged to

fulfill. In many cases, countries lack sufficient capacity to conduct these activities:

- Inventories, monitoring, and systematic observation
- Planning, policy development, and reform of legal frameworks
- Impact assessment and research, including participatory assessment
- Information and data management, including reporting
- Education and public awareness
- Training

Capacities needed for implementation of the instruments

Capacity for the implementation of the country-level requirements is needed in the following areas:

- **Human resources:** scientific and technical skills at all levels (government, NGO, private sector, and local community)
- **Infrastructure development:** physical infrastructure, materials and equipment needed to provide an adequate and effective working environment, ensure results, and achieve desired long-term goals
- **Coordination and cooperation:** integrated or complementary implementation of the requirements which takes advantage of potential synergies, thus lessening the burden on those responsible for individual instruments

Capacity-building interventions

A number of capacity-building tools and interventions are available to help maximise synergy in each of these areas:

Human resources

- **Education:** development or adaptation of existing curriculum at all academic levels of issues addressed by the four instruments (for example, expanded curricula in environment, biology, forestry, climatology, environmental law, policy analysis, and allied fields reflecting requirements under the convention). Education on global environment issues can promote the development of an increased awareness and understanding of the impact of local deforestation, desertification and drought, land and ecosystem degradation, and climate change on sustainable development.
- **Training:** use of existing national and regional specialised centers (such as regional centers for data management) to provide courses in technical areas relevant to all four instruments to targeted audiences (for example, collection of baseline data on forests that could be used for biodiversity purposes, calculation of carbon sinks, deforestation and desertification patterns and trends).

Another training tool could be course materials for technical professionals and agency staff on issues relevant to the four instruments — and the synergies, complementarities, and areas of overlap that exist — to be used in structured courses, workshops, and seminars. The materials and workshops could be modeled on CC:Train, the Climate Convention Training and Capacity Building Programme that produces multilingual training and information modules in regional and national seminars and workshops on climate change and the implementation of the Climate Change Convention.

Training in information and data management is urgently needed. Another tool could be joint exchange programmes of professionals at the national level (and between nations) on the implementation of activities under the different instruments (e.g., how to use forest inventory techniques in conducting biodiversity inventories).

- **Public outreach:** raising awareness of the four instruments at the national and global levels through media, fact sheets, public relations materials, video, radio programming, and other means.
- **Community participation:** involving local authorities and local communities in the planning and implementation of key components of the instruments (for example, in conducting inventories).

Infrastructure development

- **Development of infrastructure facilities:** such as laboratories, data centers, libraries, museums, herbariums, field stations, and monitoring sites. These could be shared between two or more institutions implementing activities under the instruments to make use of existing synergies (in, for example, data storage) and for cost effectiveness.
- **Equipment:** office, laboratory and field equipment, and supplies (including hardware and user friendly and compatible software, GIS equipment, and vehicles) needed to carry out activities under the instruments.
- **Material:** including maps and collections of germplasm, soil samples, water samples, and vegetation.

Coordination and cooperation

- **Implementing bodies:** encourage governments to establish multidisciplinary, cross- sectoral committees to help build capacity among policy and decision-makers for joint implementation of the four instruments and integration of policy reforms into national environmental action plans.
- **Compatible information systems:** build capacity to establish and maintain such systems in the different agencies and programmes tasked with the implementation of the different instruments to ensure that data collected and processed in one agency or programme can be used in another.
- **National assessments of sustainable development:** assess the effectiveness of actions underway to implement Agenda 21, international conventions, and other sustainable development initiatives. Also, assess the impact of a country's structural adjustment programme as part of the general assessment of conventions and sustainable development.
- **Audits of government accountability:** assess whether government actions are consistent with obligations under the four instruments.

Working Group 3: National Planning Requirements

All four instruments provide for the development of strategies and action plans as a framework for country-level implementation. There are a number of options for developing national action plans and strategies to implement the Rio instruments. A key is ensuring that action plans related to these agreements are har-

monised with existing national sustainable development and other overarching plans, if they exist.

Plans to implement the Rio agreements can foster synergies if they meet three conditions. The first is to be part of a national goal to improve both the well-being of people and the condition of the ecosystem, consistent with Agenda 21. The second is to identify the roles of the four instruments and other international and national commitments in achieving the improvements. The third is to show clearly where overlaps of organisation and action are likely among these commitments, and how to turn them into synergies rather than conflicts.

The purpose of a plan is to produce a set of practical actions that have widespread support. Plans will be implemented effectively if they are owned—in other words, prepared — by the country concerned, rather than by outside agents. Also essential are: commitment at the highest levels of government; adequate resources for preparation and implementation (or a programme to raise them); full participation by all those expected to carry out the plan; a clear legal mandate for the development of a plan; and a strong institutional arrangement to provide an “engine” for the planning process. Often this means that capacity for the planning process must be built or strengthened. A planning process that provides for periodic review, reflection, monitoring, evaluation, and feedback will enable the plan to be updated and improved. A well-designed public outreach and awareness program is necessary to inform stakeholders about the instruments, their requirements, and how their implementation will affect stakeholder groups.

Options for national planning

Countries are faced with one of two situations. First, there may be no national plans already in existence. Second, a national plan of some kind may exist — whether a national development plan, a National Environmental Action Plan (NEAP), a national conservation strategy, or a national sustainable development strategy.

Many countries have existing sectoral or multi-sectoral and national plans which can incorporate the requirements of the four instruments. The Working Group, a preliminary analysis, identified at least three options for undertaking national planning related to the instruments:

- **Develop separate plans for each of the four agreements**

This option requires four distinct planning processes, and thus is costly in resources, time, and integrated management. Separate planning is also likely to lead to overlaps and perhaps contradictions among the plans.

- **Develop a new umbrella/master plan that incorporates all four instruments**

While this option allows for greater harmonisation of the instruments, it may lead to conflicts with existing national development plans. It also requires substantial new resources for planning implementation and is likely to burden country planning capacity. However, in countries without an existing national plan, this umbrella/master plan approach may be desirable.

- **Develop a mechanism to integrate planning associated with the instruments into existing national plans and planning frameworks**

This option has the advantage of producing a synergy between instrument planning and other existing national

programs and plans. For example, components of a plan to implement the CBD might include problems such as loss of biodiversity through monoculture, forest clearing, misuse of pesticides, and solutions such as mixed cropping, agroforestry, and integrated pest management. These elements feed directly into the agricultural sector of the existing national development plan, thus ensuring that the two plans are integrated and harmonised. Integrated planning also has the advantage of making use of existing planning structures, thus producing cost effectiveness and planning efficiencies.

Recommendations for supporting integrated planning

- Pressures or problems existing in each country can be used to determine the strategic entry point into planning for the instruments. For example, if a country has a serious deforestation problem, this issue can be used to assess and analyse impacts on carbon sinks, forest gene pools, and biodiversity habitats. Activities can be designed that address these issues in ways that have clear linkages to other instruments and to the existing national plan.
- Establish an inter-ministerial or inter-departmental committee composed of high level representatives of appropriate ministries, along with focal points for the instruments, NGOs, and other stakeholders to coordinate integrated planning.
- Establish periodic review, analysis, and feedback into the plan and the planning process. Fill gaps in information through new research and other means identified through the review process.
- Important elements to be addressed during preparation for the planning include:

- institutional arrangements and a legal basis for the plan
- participation of all stakeholders through forums, new policies, and legal instruments
- a multi-sectoral approach to facilitate integration and coordination
- support by all agencies at the highest levels to provide the planning process with access to relevant information and to ensure transparency and the free flow of information
- a pre-planning public awareness strategy to lay the groundwork for informed participation and eventually widespread ownership of the plan
- identification of capacity strengthening and building needs early in the planning process and a program to develop essential capacities
- The international community should provide support to the planning process, including financial resources, technical assistance, and technology transfer. Support can be most effective when given as an integral part of the process rather than in elaboration of separate action plans.

Working Group 4: Information and Reporting Requirements

Strong information systems equip a country to regularly assess its progress toward sustainable development, and to better define, guide and assess the implementation of its development policies. How can information systems and reporting mechanisms be designed to maximise

synergy between the instruments, thereby optimising their contribution to the sustainable development movement?

Information gathering, analysis, and dissemination are at the heart of the four instruments. Each addresses a specific set of problems. Information is essential to know what the problems are, how big they are, whether and how they are changing, and where the priorities are for action. Accordingly, the CBD, for example, calls for assessment of the status and trends of: “components of biodiversity” (ecosystems and habitats, species and communities, and genomes and genes); threats to the components; and sustainable use of the components. It also requires assessment of whether the benefits of using biodiversity are shared fairly and equitably, as well as of measures to implement the CBD. Similarly, the CCD calls for systematic observation of land degradation and the processes and effects of drought, as well as monitoring and evaluation of implementation measures and their effectiveness. The UNFCCC requires reporting on greenhouse gas inventories, land use, forests, projections on emissions and sequestration, in addition to activities related to implementation of the Convention. Not being a convention, the Forest Principles do not require national reports, but FAO requests reports on forest matters through questionnaires and partially automated information systems.

Governments need information technology and the capacity to use it to respond to these instrument-required reports. Integrating capacity building and technology transfer programmes across the instruments will greatly enhance synergy and cost-effectiveness. Synergy in information systems, data manage-

ment, and reporting will help ensure that investments in information management build a reusable infrastructure. Governments and donors, recognising the opportunities for efficiency, will be more likely to help finance national information systems.

Sound information systems also provide countries with the data they need to fulfill their reporting obligations. Oversight and reporting are important ways to determine whether parties are making progress towards the goals of the international environmental agreements. The Rio conventions, in common with other international agreements, require reports to their Conferences of Parties concerning steps taken to implement the conventions, implementation strategies, and related matters.

Reporting serves implementation goals in a number of ways. It provides guidance to all the parties to the agreements, as well as to the agreements' administrative bodies. It gives them an opportunity to take stock of whether implementation measures are producing the intended outcomes, and to redirect energy and resources to be more effective. Reported information can notify the international community that a particular intervention is warranted and worthy of assistance. Results from reporting can reveal non-compliance, and stimulate either peer pressure for compliance, or assistance, or both.

Information can also assist NGOs, advocacy groups, and businesses. Armed with information, they can mobilise public awareness through publicity campaigns, product boycotts, and the full range of activities to pressure governments to adhere to their obligations.

But reporting requirements can also be a financial and administrative burden. Affluent countries with well-developed

environmental protection infrastructures have an easier time absorbing this burden. Many other countries with skeletal environmental protection ministries and limited assets have greater difficulty. There may only be a small number of environmental professionals in a country who have the skills to obtain, process, and report information. Where personnel are limited, time spent responding to reporting obligations may reduce the human resources available for implementation activities or environmental enforcement.

Reporting overlaps among the instruments

The information and reporting needs of the instruments overlap institutionally and physically.

Institutional overlaps

One of the key areas of reporting to the COPs is on implementation of action plans to fulfill obligations under the instruments. There are many common information and data needs for effective policy formulation, and this information often becomes part of the reporting to the convention COPs. Opportunities for synergy and efficiency in programme implementation and reporting are enhanced when strategies and action plans for each of the instruments are developed with greater coordination from the beginning.

Physical overlaps

There are three areas of physical overlap among the instruments. First, the role of forests: forests are biotic resources and havens for species (biodiversity); they are sinks for carbon (climate change); and they act as stabilisers of local climate and soils

(desertification and land degradation) (table 1). Second, dryland areas: as habitats for species and as sources and users of specially adapted genetic resources (biodiversity) and as influences on climate change (through reflectivity). And third, the potential impact of climate change on dryland areas and on biotic resources in general. These overlaps establish obvious possibilities for synergy in data gathering and reporting (table 2).

As an example of how a more detailed analysis could be performed, the case of forest information products was developed to identify areas of potential overlap. These areas could, if made the focus of a collaborative effort between the concerned agencies, yield valuable synergistic actions.

In the case of forestry, a core data set on forest type and extent, available at the national scale, serves the background information needs for each of the instruments. At present, data are not collected and reported in manner permitting equal and easy access by all concerned parties. Yet, with a minimal effort in training and resources, it would be possible to modify forest inventory methods to include data of interest to other instruments. For example, data on biodiversity values (such as wildlife habitat) could be included in the data collection forms by the Forest Department and addressed in database design in such a manner that those agencies interested in biodiversity could access a common data source, rather than collecting similar data as part of a separate process. The synergy is represented by the savings incurred by not duplicating data collection. In addition, greater collaboration between agencies is enhanced by the dialogue stimulated through the above process.

Table 1: Forest-related information needs

	CBD	CCC	CCD	FP
Forest Area / Extent	■	■	■	■
Forest Type	■	■	■	■
Species Composition	■			■
Distribution by Zone (altitude, climate)	■			
Status of Naturalness	■			
Forest Condition and Health	■	■	■	■
Common flora and fauna	■			
Forest Density		■		■
Forest Age Structure		■		■
Regeneration Type and Rate		■	■	■
Deforestation (area, by type)	■	■	■	■
Afforestation (area, by type)	■	■	■	■
Timber Use and Fate		■	■	?
Site Location (Elevation, slope, aspect)				■
Growing Stock / Biomass		■		■
Canopy Information				■

This general comparison shows that there are several data sets of common interest, at least at the national level, to each of the instruments. Themes such as forestry and vegetation cover, land use, and soils are particularly relevant to each instrument. This argues for building a core data set common to each instrument's needs as a synergistic action.

A model for country-level reporting

Reports are products of information systems, thus information systems and reporting requirements cannot be treated separately. These systems are susceptible to harmonisation, synergy, streamlining, and efficiencies at many points in the chain. When improperly constructed, information systems can also be burdened with overlap and duplication leading to waste of scarce resources. For this reason it is important for countries to establish an information /reporting model that can serve as an effective framework for implementation.

Diagram 1 presents a series of steps — leading from data gathering to policy decisions — for building effective information systems. The model is designed as a feedback loop whereby monitoring and reassessment of policies and actions leads back to new approaches to data gathering and management. This model clearly shows opportunities for synergy and is used as the framework for the rest of this section.

Diagram 2 is a conceptual model showing linkages and relations within a pool of available information. The model presents the information hierarchy as a pyramid with raw data and grass-roots organisations forming the base of the pyramid and international integrated reports, indicators, and negotiations at the apex. Each level of the pyramid is a key data source for the levels above.

Table 2: Illustrative comparison of data needs across the instruments

Core Data Set Needs	BD	For	Des	CC
land use (by type)	■	■	■	■
vegetation (by type)	■		■	■
forests (by type, condition, density)	■	■		■
forest production and export information	■	■		■
forest tenure / land tenure	■	■	■	
soils (by type)	■	■	■	■
agriculture (by type)	■		■	■
rice cultivation				■
fertilizer use				■
livestock census	■		■	■
wetlands	■			■
oceans	■	■		
climate (temperature, precipitation, etc.)	■	■	■	■
topography (elevation, slope, aspect)	■	■	■	
surface hydrology (lakes, rivers, streams)	■	■	■	
estimate of areas' risk of desertification			■	
flora and fauna (species type and density info)	■			
endangered species habitat	■	■		
protected areas (by type and condition)	■	■		
human settlements	■	■	■	■
indigenous peoples homelands	■	■	■	
population (count and density)	■	■	■	■
roads	■	■	■	■
other infrastructure (transmission lines, etc.)	■	■	■	■
power transmission lines	■			■
industrial activities	■			■
power generation facilities (by type, capacity)	■			■

Diagram 1

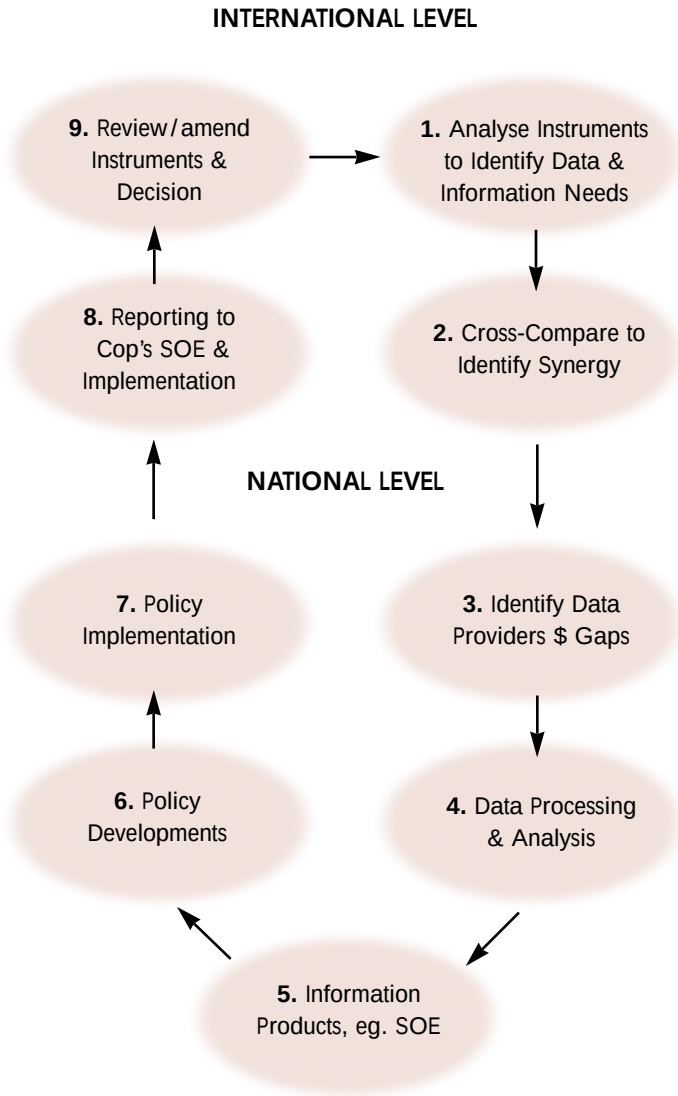
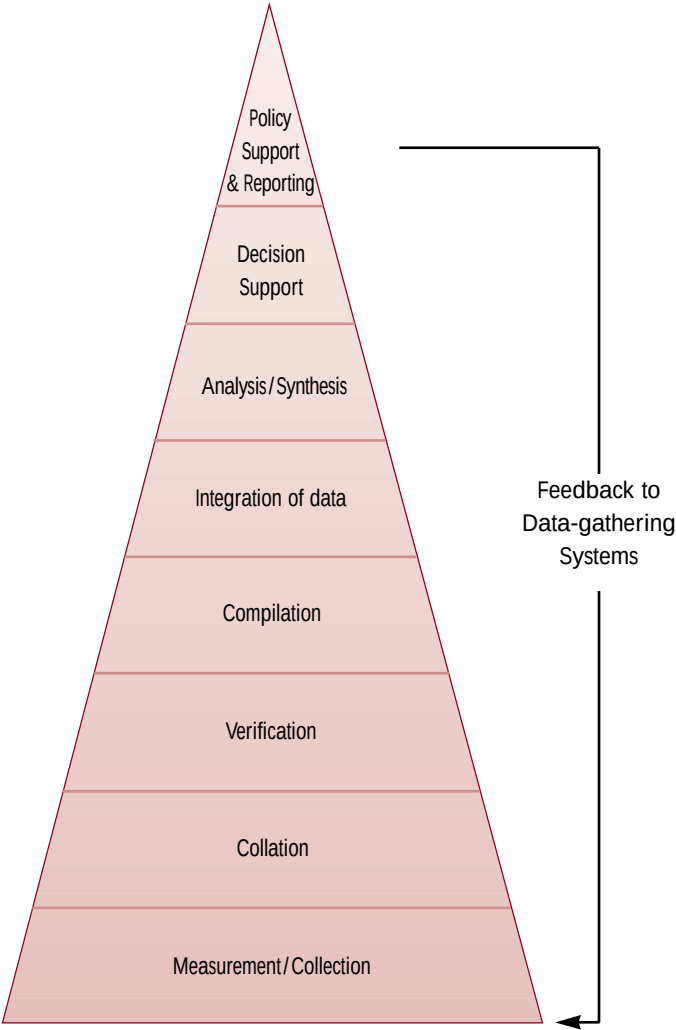


Diagram 2

INFORMATION HIERARCHY



Data-gathering, information management, and reporting

Data and information needs analysis

Careful review of the texts of the instruments is necessary to provide the terms of reference for information systems and reporting procedures, and establish data and information requirements. There are several key actions to take in this process:

- **Analyse data and information needs**

Detailed analysis of the four instruments will enable identification of the data and information needed to monitor and assess progress. If done at the international level, this will provide a resource to all nations. Interpretation at national level will be required since data needs will differ, and issues of scale, degree of data precision, and definitions need to be agreed locally.

The analysis should also help the COPs ensure that reporting requirements focus on the minimum set of useful data for implementation of the conventions. It is also desirable to link core sets of indicators for conventions to indicators recommended by the Commission on Sustainable Development. Resources that could assist the analysis include: the Global Biodiversity Assessment, the assessment of the Intergovernmental Panel on Climate Change, the assessment and indicator work done for the CCD, and the World Conservation Monitoring Centre's analysis of the CBD information needs.

- **Develop standard definitions for key data requirements**

Data management and analysis are plagued with definition problems (consider for example the difficulties in defining “forest”). Common definitions of terms and indicators are essential for synergy.

- **Include non-Rio treaties in the analysis**

The four Rio instruments are not the only international agreements addressing sustainable development. For example, four biodiversity-related treaties — CITES, CMS, World Heritage, and Ramsar — contribute significantly to conservation and sustainable use of biological resources. It is likely that additional synergies could be obtained by adapting the analysis of the Rio instruments to these and other treaties.

Cross-comparison of data and information needs to identify areas of synergy

Once the four instruments have been analysed, they should be cross-compared to identify areas of potential synergy. Because of the many common data requirements there are significant opportunities for efficiency in sharing existing data sets and in coordinating development of new data sets. Agreed definitions and aggregation/disaggregation protocols designed to serve more than one treaty will enable similar data sets to be crosslinked. This will involve difficult issues of reconciling units and scales of data, as well as competing priorities for updating core data sets.

Identification of data providers, coordination, and gaps

Once data and information needs have been compared, it will be fairly clear what data remain to be gathered and how efficiencies can be gained by sharing data sets and designing them so that different scale / precision requirements can be most efficiently handled. The next step is to reach out to all sectors of society to find where these data exist already, may be adapted to serve the treaties, or need to be gathered *de novo*. Actions include:

- **Institutional survey/data collection**

Exchange of information on where data are held and sharing of existing data are important steps in the broader goal of improving coordination in national environmental strategy development and implementation. There are many data-rich national organisations in government, NGO, and the private sector. At the national level, an institutional survey could be undertaken to identify data sources, where data are held, and how they are managed.

- **Custodianship of data**

Data owners and custodians need to be encouraged and rewarded for sharing their data, through dialogue and negotiation concerning the terms and conditions of data usage. This can be a complex and difficult exercise involving issues of data quality and multiple data sets addressing similar subjects. But to do otherwise is to disenfranchise the data owners.

- **Clearing houses**

Clearing house mechanisms using Internet technology to share data and meta-data would encourage synergy and minimise duplication.

- **Gaps**

Data gaps need to be identified and plans developed for how to fill them by using the most appropriate institutions in any given sector.

- **Minimum national data sets**

Minimum national data sets in the public domain should be established.

Data integration, processing, and analysis

Once custodians of all needed data have been identified or established and linked through clearinghouse mechanisms, the data requires processing and analysis to produce needed indicators, statistics, and reports.

- **Develop a data policy**

A national data policy that pays close attention to the concerns of custodians will help to reassure custodians that their data will not be abused or misdirected, and ensure data flow. Key elements of such a policy could include issues of data accessibility, accuracy, pricing, a determination of which data sets should be supported by public investment, and minimum standards of data exchange.

- **Create national capacity for data integration and analysis**

Custodians near to the data sources can manage decentralised datasets and control them for quality, but will not be able to carry out integrated analysis without an analytical hub. Each nation will require a competent agency to do such work, accessing needed data across the Internet. Australia's ERIN is a useful model.

Information Products

Synergies can also be obtained in the design and production of information products. Careful attention to design will pay dividends. Lack of attention will reduce the value of the information system.

- **Establish a mechanism for the design of integrated information products**

This might consist of an expert group or committee drawn from competent agencies.

- **Build and use dissemination systems**

The information products could take advantage of a range of media and dissemination systems. This would promote freedom of access to reports and information, raise awareness, and attract and engage decision-makers.

- **Responsible agencies**

Agencies responsible for information products need to be identified, and their role understood and supported by the data providers.

Policy development

Full value will be obtained from the information products if they are used to develop policies to improve human and environmental conditions. Information derived synergistically will facilitate synergistic and cross-sectoral policies.

- **Synergistic policies**

Institutional mechanisms for coordination, consensus-building and participation will help to provide the conditions necessary for synergistic policy-making.

Policy implementation

Once policies have been prepared, they need to be implemented on the ground in an effort to move towards sustainable development. As indicated in Diagram 1, these actions need to be consistently monitored through assessments (including indicators), with feedback to data management where necessary.

Reporting

It is hoped that the information model outlined so far would ease the reporting burden. However, explicit reporting procedures will still be needed.

- **Define reporting procedures**

Procedures and mechanisms for timely and efficient report development and delivery need to be established, including linkages among the agencies responsible for the various instruments, should be developed. Ideally the instruments would have common reporting schedules.

Review and/or amend instruments and decisions

Reporting procedures are designed mainly to assess the effectiveness of implementation of the instruments. However, the process of developing synergy outlined above will inevitably identify short-comings in the instruments themselves.

- **Prepare amendments to instruments**

Where flaws and inadequacies in instruments become apparent at the national level, it would be helpful if proposals for amendments take account of the implications for other conventions and the continuing need for synergy .



A Guidebook for National-level Synergy in Implementing the Rio Instruments

Reports of the four Working Groups at the Expert Meeting on Synergies emphasised the almost universal need among developing country Parties to the Conventions for various types of support if they are to produce synergy in implementing the instruments. As the preceding chapter made clear, much of this support must necessarily be in the form of financial resources, technical assistance, technology transfer, and decisions taken by the COPs.

But the discussions in Sede Boquer also identified a clear need

for written information for country-level participants that gives recommendations, suggestions, and guidance about how to seize the opportunity for synergy in implementing the Rio agreements. By the end of the Expert Meeting, a broad, preliminary framework for this “National Implementation Guidebook” began to take shape.

Clearly, a great deal more work is needed to identify and share information on “good practices” in implementation of the instruments, and in identifying ways to influence the work at the international level in more coordination directions.

First and foremost, the guidebook should be designed with people at the country level as the primary audience. The document should be non-prescriptive, offering a range of options for ways to maximise complementarities, remove or reduce obstacles and overlaps, and produce synergies in the implementation of the instruments. Participants identified five substantive “chapters” or areas of interest such a document should cover:

- **The rationale for and the possibility of synergy**

Information on the background and contents of the four instruments, how they overlap and are complementary, and different approaches to producing country-level synergy among them.

- **The challenge of implementing global conventions at the local level**

This might include, for example:

- integrating the agreements into policies at all levels through a process of translating national policies into programmes and action plans at the regional and district levels, and then translating these into actions at the local level.

- providing incentives and demonstrating clear benefits of enacting the instruments to communities at the local level.
- improving efficiency in policy implementation and orientation by promoting greater two-way exchange of information and expertise between national and local levels.
- strengthening local institutions and their capacity to plan implementation measures, carry them out, and assess results.

- **Using sectoral institutions to implement cross-sectoral instruments**

For example:

- undertaking an assessment of where the instruments overlap and the cross-cutting issues among them. Once analysed, cross-compare to identify potential points of synergy.
- improving communications between individuals and units responsible for the implementation of the different instruments — such as by placing the responsibility for the instruments in the same ministry or by creating task forces of focal points based in different government units.
- developing a matrix displaying how each instrument intersects with the government's sectoral policies, and compare these points of intersection to identify possible complementarities and conflicts.

- **Meeting information and reporting requirements of the instruments**

For example:

- establishing an information system from existing resources as a first step that can provide information for analysis and to influence decision-making as well as for meeting reporting requirements.

- the instruments have overlapping information needs — in a general sense. If data set development is well planned and coordinated, data sets could fulfill the needs of multiple conventions.
 - sharing information about data holdings and project activities among the various people working on the instruments in a country as a first step toward more coordinated policy development and joint programming.
- **Building public awareness and education**
- Two issues need to be addressed: how to influence the educational system; and how to foster learning and awareness about the instruments and what they cover. Suggestions include:
- developing curriculum for all levels which integrates the concerns of the four instruments and the link of socio-economic issues to environmental and resource management issues.
 - utilising regional training facilities to provide training based on a combined multidisciplinary curriculum.
 - building public awareness of the four instruments through media, public service advertising, on-going education of the press, etc.

UNDP, in consultation with the Secretariats of the Conventions, is willing to assume the primary responsibility for developing and disseminating this guidebook in keeping with UNDP's mandate and commitment to building capacity for sustainable human development. As a next step, UNDP plans to confer with the Convention Secretariats to see how work can best be taken forward on the formulation of a guidebook. Within that context, UNDP will also consult with practitioners from both North and South to gain insights upon which the guidebook would be based.

End Notes

¹ The Forestry Principles have been included in this analysis because of the clear link between forests and biodiversity, desertification, and climate change. Although the FP are voluntary, and not a binding legal agreement, Proposals for Action have recently been adopted by the international community in the Inter-governmental Panel on Forests. Inclusion of the FP and the Proposals for Action in this analysis is not intended to preempt an international decision with respect to a binding Forest Convention or other legal instrument.

² This chapter is based in large part on two papers prepared in advance of the Expert Meeting on Synergies: *A Comparison of the Three Rio Conventions and the Forest Principles for Potential Synergies* (Ruth Greenspan Bell) and *Scientific Linkages and Complementarities Between the Conventions on Climate Change, Biological Diversity, Desertification and the Forest Principles* (Alexander Alusa).

**Expert Meeting on Synergies
Among the Conventions on Climate Change,
Biological Diversity Desertification
and the Forest Principles**

Sede Boqer, Israel, 17-20 March 1997

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**Expert Meeting on Synergies
Between the Conventions on Biological Diversity,
Climate, Desertification and the Forest Principles**
Sede Boqer, Israel 17 - 20 March 1997

AGENDA

Monday 17 March

9.30

Opening Session

Session chaired by Ms. Karen Jorgensen,
Assistant Director, Sustainable Energy and
Environment Division, UNDP

Welcome Remarks

Prof. Uriel Safriel, Director,
Blaustein Institute

Prof. Avishay Braverman, President of
Ben Gurion University

Mr. Michael Arbel, Director, Training Dept.
Center for International Cooperation,
Ministry of Foreign Affairs, Israel

Purpose of the expert meeting

Ms. Karen Jorgensen, UNDP

Introduction of participants

**Why science is important when
considering synergies**

Mr. Alex Alusa, Senior Program Adviser, UNEP

Country Experiences

Ms. Gulnara Bektourova (Kazakstan)

Mr. Mfaro Moyo, (Zimbabwe)

Meeting Process

11.45	Break-out on four Working groups
	Working group 1: Institutional requirements
	Working group 2: Capacity requirements
	Working group 3: National Planning
	Working group 4: Reporting and Information requirements
1.00	Lunch
2.30-6.00	Working groups continue
7.00	Reception (Hosted by UNDP)

Tuesday 18 March

9.00	Plenary - Progress Reports from the Working groups
10.00	Working groups continue
1.00	Lunch
1.45	Excursion to Research Sites
3.00	Working groups continue
6.30	Departure for evening event at Mamshit (Hosted by the Jacob Blaustein Institute for Desert Research)

Wednesday 19 March

- | | |
|-----------|---|
| 9.00 | Plenary - progress reports from working groups |
| 10.00 | Working groups |
| 1.00 | Lunch |
| 2.30-6.00 | Working groups continue |
| 8.00 | Banquet
(Hosted by Mr.Yitzhak Lior, Deputy
Director General, International
Organizations and Human Rights
Department, Ministry of Foreign Affairs,
Israel) |

Thursday 20 March

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| 9.00 | Plenary: Reports from the Working Groups |
| 11.15 | Chairman's Summary; Discussion |
| 12.45 | Closing
Prof. Uriel Safriel, Director,
Blaustein Institute
Mr. Daniel Ayalon,
Ministry of Foreign Affairs, Israel
Ms. Karen Jorgensen, Assistant Director, UNDP |

