

Opportunities for Synergy among the Environmental Conventions: Results of National and Local Level Workshops

Edited by: David Mouat, Judith Lancaster, Ismail El-Bagouri, Fernando Santibañez





**Opportunities for Synergy
among the Environmental Conventions:
Results of National and
Local Level Workshops**

Edited by:
David Mouat
Judith Lancaster
Ismail El-Bagouri
Fernando Santibañez



The designation of geographical entities in this book, and the presentation of material relating to traditional knowledge, do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Convention to Combat Desertification (UNCCD) concerning the legal status, intellectual property rights or patent rights of any country, territory or area, or its authorities, or concerning the delimitation of frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of the UNCCD Secretariat.

Published by: Secretariat of the United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.

Copyright: © 2006 United Nations Convention to Combat Desertification
Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission of the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation: D. Mouat, J. Lancaster, I. El-Bagouri, and F. Santibañez, 2006, Eds. *Opportunities for synergy among the environmental Conventions: Results of national and local level workshops. UNCCD, Bonn, Germany. 52p.*

ISBN: 978-92-95043-15-2

Cover photo: From down to bottom and left to right: *'Le bonheur est dans le pré,* Samara Chahal/AREA-ED – *Rehabilitation of degraded land,* Semarnap/Deselac - *Bananiers,* Arnaud de Vanssay - *Degraded land,* Ernesto/Deselac

Back cover: *Culture de mil sous parc à Cordyla Pinnata,* IRD/Pierre Milleville

Layout by: Hans Helmich GmbH

Printed by: HelmichPrint

Available from: United Nations Convention to Combat Desertification (UNCCD)
Postal address: P.O. Box 260129, D-53153 Bonn, Germany
Office location: Langer Eugen, Hermann-Ehlers-Str. 10, 53113 Bonn, Germany
Tel.: + 49 228 815 2800 - Fax: + 49 228 815 2898/99
Email: secretariat@unccd.int - Website: www.unccd.int

Contents	
Foreword	5
Acknowledgements	8
List of abbreviations and acronyms	9
Note by the Group of Experts of the Committee on Science and Technology	10
1. Synergy: reflections and main recommendations by country Parties	13
1.1 National Coordinating Council	13
1.2 Institutions and organizations	15
1.3 Implementing agencies	16
1.4 National funding	16
1.5 Planning	17
1.6 Stakeholders	18
1.7 Public and civil society	18
1.8 Awareness raising activities	18
1.9 The way forward	19
2. Options and opportunities in designing national policy and operational frameworks for synergy	20
2.1 Policy frameworks: strategic and organizational options	20
2.2 Development of capacity: funding and information sharing	25
2.3 The future outlook	27
3. Options and opportunities in developing projects	40
4. Summary	44
4.1 Lessons learned	45
4.2 Key problems identified	45
4.3 Recommendations	46
Other referred texts	47
Selected publications on synergy	48

Annex: List of Workshops

49

List of Side Boxes

BOX 1	The environmental Conventions will spur development by conserving the environment and reducing poverty	12
BOX 2	Proposals for harmonization of National Biodiversity Strategies and Action Plans (NBSAPs) for the CBD, National Action Programmes (NAPs) for UNCCD and plans and programmes for other environmental Conventions, and their integration into national development strategies	21
BOX 3	Bolivia global work plan to strengthen synergy	24
BOX 4	Relations and duplications between the activities in the national action programme and plans in Eritrea	34
BOX 5	Case study: linking food security, poverty reduction and sustainable development with the Rio Conventions in Eritrea	35
BOX 6	Case study: initiatives by local communities and civil society: the case of the UNDP/GEF East African cross border biodiversity project	41

List of Figures

Figure 1:	Linkages and feedback loops among desertification, climate change and biodiversity loss	11
Figure 2:	Workshop on Global Environmental Conventions: Synergies at the National Level, Bishkek, Kyrgyzstan, October 2004	13
Figure 3:	While planning activities in a synergistic manner, rehabilitating degraded land appears as a priority issue	17
Figure 4:	Agroforestry – sustainable management of the land, enhancing carbon sequestration and providing diverse habitats for biodiversity	19
Figure 5:	Schematic representation of the model presented by Ethiopia	23
Figure 6:	An integrated approach among the environmental Conventions helps in rehabilitation of degraded land	29
Figure 7:	Strategies to enhance local level programmes so that the communities can implement the environmental Conventions	32
Figure 8:	Water, a key cross-cutting ecosystem service for the Rio Conventions	33
Figure 9:	A farmer meets the concerns of the three Rio Conventions as well as the Poverty Reduction Strategy Paper through sustainable land management on a single plot of land	39
Figure 10:	Working with the local communities	44

Foreword

Developing countries, particularly those affected by drought and desertification, often find themselves confronted with the challenge of coordinating the implementation of the various environmental treaties at the national and local levels. More often than not the approach to implementation of these environmental Conventions is sectoral, and this leads to a compartmentalized outlook on key decision-making, and tends to undermine the effectiveness of implementation. This scenario exists despite the fact that, as Parties to the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD) – the three Rio Conventions – these countries have many possibilities to develop a synergistic approach to the issues pertaining to these treaties. The complexities and challenges associated with the effective implementation of the various multilateral environmental agreements threaten to overwhelm the administrative structures and capacities of many countries.

The objectives of the three Rio Conventions are closely linked to the issues of sustainable development and environmental quality. The complexity of the interactions of climate, land degradation and biological diversity with sustainable livelihoods, particularly in areas affected by drought and desertification, needs to be simplified through a well coordinated approach at the country level.

By holding the workshops on synergy, country Parties to the UNCCD are therefore looking for ways to reap the benefits of close collaboration among the entities and stakeholders charged with implementation of the Rio Conventions. Well-integrated and holistic approaches at the national level have also been called for by the Conference of the Parties (COP) to the UNCCD. The need to avoid duplication of effort, and take advantage of the convergence of interest among the Rio Conventions is an overriding factor in pursuing closer collaboration, particularly at the local level.

The country Parties informed the Secretariat that these consultations involved those who are charged with the responsibility of overseeing the implementation of the environmental Conventions. Other relevant stakeholders, including government ministries and non-governmental organizations (NGOs), were also involved in this exercise, the objective of which was to crystallize the national perception of the issues at stake and to find ways of working more closely together, in order to enable countries to discharge their obligations as Parties to the Conventions. All these efforts are commendable.

Yet the holding of these workshops was not an end in itself. The UNCCD Secretariat is convinced that more work is needed to develop the tools for joint implementation of the Rio Conventions, including possibilities for synergistic programming. Strengthening capacities at the local level for developing synergistic programmes may also be required. In order to develop the tools to strengthen coordination among the key actors, particularly the national coordinating bodies for these environmental Conventions, there is a need to strengthen the capacity to manage an evolving coherent inter-ministerial and inter-departmental system.

The ingredients for this kind of endeavour lie in establishing the key elements for effective coordination as well as programme development, identifying the challenges, and carving out a niche for all actors to play their rightful roles. This may not be an easy task, considering that each Convention comes with its own requirements from decisions taken by its own COP. A strong development and practice of synergy is required in order to avoid duplication of effort and rationalize the available resources at the national and local levels.

Synergy can be achieved through mainstreaming the national action programme to combat desertification (NAP) into other national strategies for sustainable development. The NAP constitutes the ideal land-management platform for promoting the integration of the issues of biodiversity, climate change, desertification and drought in a holistic and coordinated manner into the national policymaking and policy-implementation processes.

Although the geographic and substantive scope of the workshops may not be entirely adequate for the preparation of specific conclusions or recommendations on synergy, the workshops have nevertheless provided invaluable insights and experiences on how to develop the process of synergistic implementation of the environmental Conventions, particularly at the local level. This information can be useful to countries affected by drought and desertification, their development cooperation partners and other interested stakeholders working in this field. Therefore this report on the outcomes of the synergy workshops focuses on the national/local process of developing synergy.

This publication is not another compendium of guidelines or recommendations on the development of synergy, but is rather an attempt to provide information on the lessons learned through the national and local level synergy workshops organized with the support of the UNCCD Secretariat and key partners. It does not present a blueprint, but instead seeks to give information about experiences gained and methods developed so far, aiming to trigger ideas on how to enhance synergistic implementation at the national and local levels.

The publication is primarily targeted at affected countries, but is also expected to benefit development cooperation partners, international organizations and other stakeholders working on the implementation of the environmental Conventions.



Ambassador Hama Arba Diallo
Executive Secretary
United Nations Convention to Combat Desertification



Acknowledgements

The UNCCD Secretariat was able to facilitate the organization of 22 workshops and to participate in two workshops on synergy between the multilateral environmental agreements at regional, national and local level due to the generous support of the Governments of France, Germany, Japan and Netherlands, to whom we are grateful. We would also like to thank Secretariat of the Convention on Biological Diversity (CBD), l'Institut de l'énergie et de l'environnement de la francophonie (IEPF), the Comité permanent inter-états de lutte contre la sécheresse (CILSS) and the United Nations Development Programme (UNDP) for their support.

The editorial team under the efficient coordination of Dr. David Mouat, the Chair of the Group of Experts of the UNCCD Committee on Science and Technology (CST), comprising Judith Lancaster from the Division of Earth and Ecosystem Sciences of the Desert Research Institute in Reno, Nevada, Professor Dr. Ismail H. M. El-Bagouri of Desert Research Center in Cairo, Egypt, and Dr. Fernando Santibañez of Centro AGRIMED, Facultad de Ciencias Agrarias y Forestales, Santiago, Chile, did a commendable job of sifting through the 700 or so pages of workshop reports to come up with a clear and concise piece of work. The final text was completed by the UNCCD Secretariat with the generous support of the Government of Switzerland, to whom we are grateful.

Special thanks go to all the participants in the workshops and those who prepared the final reports. Without their active involvement, their invaluable inputs and the good work of the various rapporteurs, this book could not have been realized. The participants are too many to be enumerated in this text, but they should know that we are deeply grateful to them for their dedication to such a noble cause.

The UNCCD Secretariat would also like to thank Roberto Numiller and Samara Chalal for the photographs that they provided for the UNCCD photo contest and that we have used in this publication.

For further information contact:

United Nations Convention to Combat Desertification (UNCCD)

Postal address: P.O. Box 260129, D-53153 Bonn, Germany

Office location: Langer Eugen, Hermann-Ehlers-Str. 10, 53113 Bonn, Germany

Tel.: +49 228 815 2800

Fax: +49 228 815 2898/99

Email: secretariat@unccd.int

Website: www.unccd.int

List of abbreviations and acronyms

ACTS	African Centre for Technology Studies
CARE	Cooperative for Assistance and Relief Everywhere
CBD	Convention on Biological Diversity
CBO	Community-Based Organization(s)
CEDEAO	Communauté économique des états de l'Afrique de l'Ouest
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CILSS	Comité permanent inter-états de lutte contre la sécheresse
CMS	Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
CST	Committee on Science and Technology (of the UNCCD)
EPA	Environmental Protection Authority
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GM	Global Mechanism (of the UNCCD)
IBC	Institute of Biodiversity Conservation
ICDP	Integrated Community Development Plan
ICR	International Care and Relief
IEPF	Institut de l'énergie et de l'environnement de la francophonie
IRDI	Integrated Rural Development Initiatives
ITDG-EA	Intermediate Technology Development Group – East Africa
IUCN	The World Conservation Union
LWF	Lutheran World Federation
MEA	Multilateral Environmental Agreement
MOU	Memorandum of Understanding
NAP	National Action Programme
NCC	National Coordinating Council
NGO	Non-governmental Organization(s)
NCSA	National Capacity Self-Assessment
NMSA	National Meteorological Services Agency
OECS	Organization of Eastern Caribbean States
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VSI	Voluntary Service International

Note by the Group of Experts of the Committee on Science and Technology

A series of 24 workshops were conducted between 2000 and 2004 to provide information and experience on the development of synergistic activity in implementation of the environmental Conventions, particularly at national and local levels (the annex provides details of those workshops). This book contains an analysis of the outcomes of those workshops and is based on the reports prepared by institutions and/or governments. It provides a summary of the lessons learned, the problems identified and the recommendations that were passed.

Some countries reported that encouraging efforts were being made to address issues relating to the environmental Conventions¹, but many mentioned the need for a “clear road map” to expedite coordination and implementation of policies and mitigating strategies. It must be emphasized that synergy comes about from taking advantage of information at all levels pertinent to an understanding or development of a policy or problem. The materials submitted by contributing countries have been synthesized and integrated. Some figures and tables have been preserved in their original form.

Synergy is achieved when the combined effect of several components of a system exceeds the sum of the individual effects (see box 1). Synergy in the context of this report is achieved when the considerable efforts of intergovernmental institutions, governmental institutions, non-governmental organizations and other bodies are utilized together in the hope of solving some particular problem. A “don’t reinvent the wheel” axiom helps to explain simply that when other existing work is strategically used to solve problems in an integrated fashion, the resultant effort is not only made more efficient, but also provides answers that are more appropriate to the problem. The environmental Conventions were intended to address the pressing global environmental issues of desertification, threats to biodiversity, and global climate change.

It was (and is) recognized that these factors are interrelated: climate change affects desertification; desertification affects biodiversity; climate change affects biodiversity; desertification affects climate (figure 1). The development of strategies to bring about sustainability of a degraded or degrading landscape must take into account the elements of the system and how they interact. Efforts that don’t take into account and integrate work that has already been accomplished or that attempt to provide answers to problems that have already been answered, are a waste of both time and resources, and may not achieve the best results.

¹ Unless indicated otherwise, environmental Conventions refers to the three Rio Conventions (UNCCD, UNFCCC and CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Ramsar Convention on Wetlands.

By integrating analysis and assessment from disparate sources of information – a useful demarche for solving complex systems-oriented problems (that involve desertification) – synergy can be realized. This integration is provided through the use of multi-scalar data and information to solve a particular problem.

The synergy workshops were meant to assist countries in implementing decisions and recommendations of the environmental Conventions, but it must be kept in mind that resources of other international, national, and local organizations and entities must be considered in efforts and strategies designed to solve problems and provide solutions to livelihoods affected by desertification.

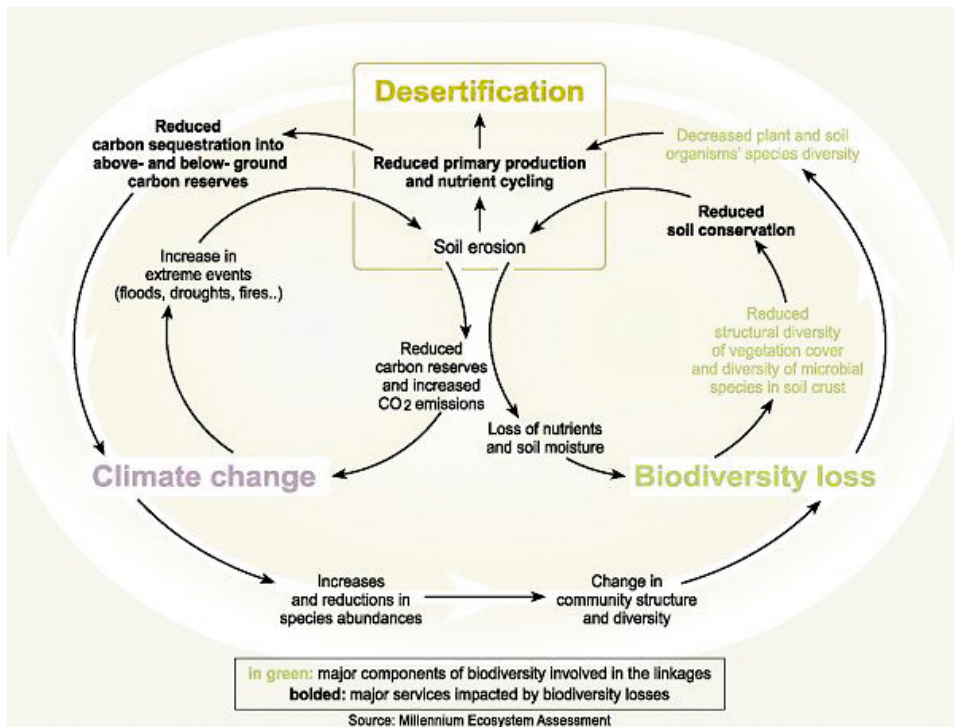


Figure 1: Linkages and feedback loops among desertification, climate change and biodiversity loss

Box 1: The environmental Conventions will spur development by conserving the environment and reducing poverty

What is synergy? (Extract of the report of Eritrea)

Synergy is defined as “interaction or cooperation of two or more organizations, substances or agents to produce a combined effect greater than the sum of their individual effects”. Scientifically, synergy is defined as “the interaction between a set of components in a system which reinforce each other” (Reijntjes et al. 1992). Components of a farm system are said to interact in synergy when, apart from their primary function, they enhance the conditions for the other components.

Therefore, in the context of the environmental Conventions, synergy will promote effective coordination of activities among the implementing institutions at national and local levels.

Community information exchange (Extract of the report of Kenya)

Why have international environmental treaties failed to achieve the results intended in many countries, while their potential is closer to being realized in others? What is lacking? Attempts to answer these questions lead to others, such as:

- Is it possible that the ideas and ideals behind the environmental Conventions are good but national governments lack both institutional and technological know-how to enable their adoption and successful implementation, particularly at the local and community level?
- Are the local communities ill prepared to adopt and also adapt to the tenets and requirements of these treaties?
- Is it possible to craft environmental Conventions in such a manner that they more clearly focus on and serve the purposes of local communities?
- Is it possible to bridge the yawning chasm(s) between the local communities and the environmental Conventions?
- Where is the missing link?

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

This chapter is a summary of the results of the 24 workshops that were conducted between 2000 and 2004 to gather information and experiences on the development of synergistic activity in the implementation of the environmental Conventions¹, particularly at national and local levels. Overall there was a strong degree of similarity between suggestions made by contributing countries, which resulted in considerable duplication of material in their reports. Therefore it was necessary to present the information in a way that would reflect the richness of the thoughts but avoid duplication, and this has been done using bulleted lists. This format, even if abrupt, allowed the major recommendations to be extracted without losing their diversity.



Figure 2: Workshop on Global Environmental Conventions: Synergies at the National Level, Bishkek, Kyrgyzstan, October 2004

1.1 National Coordinating Council

Many countries recommended the formation of an internal central organization to represent the overall umbrella, or national authority, for coordination among the environmental Conventions. Titles for such an organization were proposed, including:

¹ Unless indicated otherwise, environmental Conventions refers to the three Rio Conventions (UNCCD, UNFCCC and CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Ramsar Convention on Wetlands.

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

focal body, autonomous board, joint steering committee, coordination cell at one of the ministries, committee within one ministry, council on sustainable development, and national coordinating council.

Such a body, which could be called a National Coordinating Council (NCC), should include the focal points of the environmental Conventions, decision makers, representatives of the potential implementing agencies, the private sector, non-governmental organizations (NGOs), community-based organizations (CBOs), representatives of stakeholders and representatives of concerned ministries for the respective country. The NCC would hold regular meetings, sponsor specific forums and carry out coordination duties at the national level.

The NCC would have responsibility for:

- Emphasizing the need for synergy among the environmental Conventions as a state policy;
- Establishing key mechanisms for effective coordination of national activities;
- Reviewing existing organizational structures at national and local levels with a view to facilitating synergistic implementation of the environmental Conventions;
- Promoting understanding of obligations relating to the environmental Conventions especially inter-institutional, interdepartmental and inter-territorial visions and collaboration;
- Integrating the concerns of global environmental organizations with national objectives and activities;
- Coordinating and networking with international partners for developing synergy;
- Streamlining terms of reference of the environmental Conventions through affiliated focal point institutions to facilitate synergy;
- Creating a pool of related and proposed synergy programmes;
- Promoting and stressing the participatory role of all relevant stakeholders;
- Promoting harmony among sectoral plans and programmes, and among organizations at the local level;
- Proposing legislation (such as tax reform) for streamlining of national policies, among the main Conventions for implementation;
- Formulating appropriate mechanisms for social incentives, especially at the local level, supporting interactions among the environmental Conventions and promoting conservation of available natural resources;
- Developing guidelines leading to enhanced cooperation, and facilitating consultations with experts from national and international sources as necessary;
- Assessing and coordinating national capacity-building needs (Global Environment Facility/United Nations Development Programme (GEF/UNDP) projects) at national levels;

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

- Encouraging, where needed, the completion of national action plans and programmes pertinent to the Rio Conventions;
- Promoting potential crosscutting projects including use of alternative fuels, poverty reduction, through wise use sustainable development of natural resources, food security and conservation of resources;
- Evaluating and endorsing proposed case studies and projects promoting collaboration among the environmental Conventions;
- Promoting integrated activities for rehabilitation of degraded natural resources;
- Promoting the concept of evaluation of environmental products and services, and its inclusion in developmental planning.

1.2 Institutions and organizations

Each country's participating institutions while reporting to its NCC, would:

- Strengthen local and institutional capacities through appropriate means and training activities;
- Hold an annual national forum and, preferably, periodic specific forums for the discussion of synergy issues;
- Strengthen pertinent information systems and their management to provide the timely and accurate information needed for efficient actions and activities;
- Assess the need for monitoring, and develop plans for its execution;
- Develop strategies for evaluation of progress and impacts achieved by adopting processes for developing synergy;
- Identify capacity-building priorities to be able to access resources from international agencies (GEF, Global Mechanism (GM), etc.);
- Identify expertise and experts at the various institutions;
- Organize training on management skills, project proposal writing, assessment and evaluation;
- Compile specific knowledge on project implementation;
- Promote the development of data sets, technologies and information necessary to facilitate the development of synergy among the environmental Conventions;
- Develop and train qualified manpower and trainers required to develop synergy in projects and activities at local levels;
- Spearhead the introduction, adaptation, transfer and adoption of innovative technologies related to the environmental Conventions implementation;
- Promote research relating to environmental changes developed through interactions among natural and social elements;
- Provide materials, data and success stories with positive impacts of synergistic activities to awareness programmes and media awareness campaigns.

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

1.3 Implementing agencies

The implementing agencies could promote the development of synergy through concrete initiatives such as:

- Adopting problem-solving approaches;
- Identifying processes and solutions to specific problems;
- Developing coordination among implementing agencies to achieve synergy;
- Specifying databases and practical ways for sharing information, maps, documents and reports;
- Collecting, identifying and documenting local and traditional knowledge at local and national levels, and using the collected knowledge to better achieve the objectives of the environmental Conventions;
- Formulating models of synergy to be adopted/adapted;
- Collecting information and lessons learned from the projects that have already been implemented, before developing new ones;
- Including capacity building in the use of synergy models (short cycle of trainings as one of the first phase of the project);
- Providing a standardized database of case studies and actions promoting interactions among environmental Conventions.

1.4 National funding

At the national level, funding activities should be developed so as to facilitate the development of synergy by:

- Establishing and managing national environmental funds;
- Strengthening existing national and international coordination of financing mechanisms;
- Adopting capacity-building activities to identify eligibility of the various institutions and implementing agencies to access funds;
- Calling upon the GEF and other cooperating partners to provide funds for projects promoting synergy based on priorities to expedite actions and activities;
- Providing incentives for best practices in the development of synergy at the local level as proposed by the NCC;
- Providing adequate budgetary funding for awareness campaigns from various resources;
- Compiling information and regulations required by donors and donor agencies;
- Stressing control and transparency in using donor funds to secure management efficiency;
- Allocating funds for evaluating environmental products and services to be incorporated in national development plans through the NCC;
- Providing funding for rehabilitation of degraded areas.

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

1.5 Planning

At the national level, planning activities could become a major way to promote the development of synergy if they include coordinated activities such as:

- Training participants in project planning, design and reporting with emphasis on the interactions among the environmental Conventions;
- Implementing joint action planning focusing on activities developed in synergy that benefit local communities;
- Adopting planning based on an integrated approach, including environmental and developmental aspects;
- Assessing, mapping and disseminating environmental risk information, which should be considered in the new projects, policies and investments;
- Planning contingency measures for local environmental disasters such as floods and drought;
- Defining links among the environmental Conventions as short-term, medium-term, and long-term activities and programmes that should be identified to all pertinent stakeholders;
- Identifying common areas and common issues of the different action programmes for the implementation of the environmental Conventions in order to develop joint work programmes.



Figure 3: While planning activities in a synergistic manner, rehabilitating degraded land appears as a priority issue

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

1.6 Stakeholders

In order to develop synergy, all stakeholders should be involved in an integrated approach that would:

- Acknowledge that community involvement at all stages pertinent to the environmental Conventions would greatly increase the success of projects;
- Convene multi-stakeholder workshops and meetings to facilitate the participation of stakeholders;
- Help to identify where the bottlenecks are;
- Draw lessons from best practices developed from related previous and ongoing activities;
- Promote aspects of cost and benefit sharing resulting from synergistic activities;
- Ensure “gender equity” to stimulate participation by women;
- Establish “environmental associations” at the village and rural community levels;
- Improve communication among stakeholders.

1.7 Public and civil society

The public and civil society can play a crucial role in developing synergy but this would necessitate:

- Empowering NGOs to carry out projects involving rural communities that demonstrate the benefits that can result from a synergistic implementation of the environmental Conventions;
- Providing training for integrated environment and development planning;
- Documenting, disseminating or sharing lessons learned from programmes implemented in synergy through media facilities, awareness campaigns and institutions;
- Using established CBOs to serve and promote positive interactions among the environmental Conventions.

1.8 Awareness raising activities

In order to develop synergy, awareness raising activities should be developed to provide better understanding of what synergy is, its focus, and why it is required, to reinforce interaction among the environmental Conventions. In order to achieve this goal, it is necessary to:

- Use appropriate media tools including radio/TV/newspapers;
- Convince policymakers of the needs and advantages of the synergistic implementation of the environmental Conventions;
- Enhance the level of awareness at pertinent levels for the implementation of the environmental Conventions, their role and significance, through the use of appropriate language suitable to the policy makers and stakeholders;

1. SYNERGY: REFLECTIONS AND MAIN RECOMMENDATIONS BY COUNTRY PARTIES

- Initiate education on the environmental Conventions in curricula, targeting schools and various levels of educational institutions;
- Create awareness about the environmental Conventions among politicians, especially local authorities;
- Elaborate and publish materials on the main issues and challenges of the three Rio Conventions for use by all sectors of the population.

1.9 The way forward

In order to assist countries with the development of NCCs, it is recommended that the secretariats of the environmental Conventions encourage governments to demonstrate commitment to the implementation of these Conventions, and to meet their obligations as participating countries. Specific assistance from the secretariats might include:

- Appropriate technology and information to the NCCs;
- Information and assistance for linking national and regional action plans and programmes to the environmental Conventions;
- Support for case studies, pilot projects and areas for win-win solutions promoting synergy (examples; projects relating to several environmental Conventions, such as pasture and livestock management to control desertification and evaluation of dryland biodiversity);
- Compilation and publication of successful stories on promoting synergy among the environmental Conventions;
- International expert consultations as necessary, together with information needed for the development of synergy relating to the implementation of the national action plans and programmes of the environmental Conventions.



Figure 4: Agroforestry – sustainable management of the land, enhancing carbon sequestration and providing diverse habitats for biodiversity

© S.Chatai/AREA-ED

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

2.1 Policy frameworks: strategic and organizational options

2.1.1 Proposed strategies to address synergy

Three countries presenting results on this task recommended a stepwise methodology for strategy development. Each step represents one or a set of actions whose final aim is to develop synergy among the environmental Conventions. However, implementing synergy step by step may turn out to be slow and bureaucratic, which could hamper progress. To avoid this and speed up the process, two or three steps could be combined, under the advice of the implementing institution.

As reported by Ethiopia, the sharing of information about synergy during the workshop resulted in an elaboration of a step-based strategy that could be adopted to implement common thematic provisions of the environmental Conventions. The proposed actions represent a cluster of activities to be performed at various timescales and need to be further elaborated by projects and programmes. An interdisciplinary team from the Environmental Protection Authority (EPA), the Institute of Biodiversity Conservation (IBC), and the National Meteorological Services Agency (NMSA) was established to undertake the drafting of the strategy to develop synergy. The team developed a nine-step process for drafting strategies, action and institutional arrangements for the development of synergy in the implementation of the environmental Conventions. This model was subsequently used as a starting point for discussion at the workshop conducted in Botswana, which adopted a modified version of the initial model. (see box 2).

A six-step strategy proposed by Eritrea is the result of a workshop held in 2003 and is conceptually rather different from the other examples. Their first and very important step proposed changes to government structure so that the implementing institutions would all be part of the same ministry. This would promote cost efficiency and interactions to take advantage of synergy—valuable considerations where human and financial resources are scarce.

The report suggests that environmental programmes at national level to address global concerns will be facilitated by this move, as will local level management programmes and education at all levels. The other steps in this strategy could be carried out regardless of whether or not governmental reorganization were to take place. Synergistic activities included sustainable management of natural resources, promotion of alternative fuels, poverty reduction, capacity-building, environmental public awareness and education, information and data exchange, and documentation of indigenous knowledge and know-how. This report raised two important issues:

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

- Whether or not it would be feasible to synergize projects already in the pipeline;
 - The importance of capacity-building, public awareness and education as fundamental for developing a synergistic implementation of the Conventions.
- Environmental management is frequently labour-intensive, demanding the participation of the public. Therefore, without popular participation at the grass-roots level, it is unlikely to bear fruit, which emphasizes the importance of the human dimension as a key element of the “synergy equation”.

Box 2: Proposals for harmonization of National Biodiversity Strategies and Action Plans (NBSAPs) for the CBD, National Action Programmes (NAPs) for UNCCD and plans and programmes for other environmental Conventions, and their integration into national development strategies

The workshop held in Gaborone, Botswana, considered the model presented by Ethiopia for developing harmonization of NBSAPs for the CBD, NAPs for the UNCCD and plans and programmes for other environmental Conventions. After detailed discussions, the workshop adopted a modified version that suits various national requirements. A diagram of the model is shown in figure 5. The following is a brief description of the various steps of the procedure:

Step 1: Define synergy

In the context of the environmental Conventions, synergy may come when two or more of these Conventions have a common thematic area of implementation (or objective). There are therefore numerous potential areas of synergy. This synergy should be defined and its potential outcomes identified.

Step 2: Identify common thematic areas for synergy

This can be done through content analysis of the environmental Conventions and identification of thematic areas for synergy.

Step 3: Identify common provisions in each thematic area

Review and cross-refer contents of the environmental Conventions and identify provisions in each of the environmental Conventions with the respect to the thematic area under consideration.

Step 4: Convene first national workshop

Convene a national workshop for stakeholder consultations, for identification of problems and for developing participatory project proposals. This could be a mechanism for consolidating prior consultations. It is of course necessary for all stakeholders to be involved in the entire process, where appropriate.

Step 5: Generate a single statement for each thematic area

For each thematic area compare the provisions of the environmental Conventions and then generate a common statement that constitutes the provisions of the environmental Conventions with respect to the thematic area under consideration.

Step 6: For each thematic area, identify parallels or gaps between the national environmental policy and the statement

Use the common statement to analyse the environmental policy (as applicable at national level) and hence identify relevant country policy provisions for each common provision. This step also helps to identify environmental or related policy gaps to implement the environmental Conventions at national level.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Step 7: Convene mini workshops for policymakers

To analyse and identify gaps for each thematic area in relation to approved environmental policies or sustainable development strategies and to determine the need for policy formulation, the group recommended that “Mini-workshops for policy and decision makers” should be held at appropriate stages. These should include adequate representation of all stakeholders.

Step 8: Construct country context statement for each thematic area

Compare and contrast with relevant policy statements of the national environment policy and reconstruct a country-context statement. Implication of the implementation of the areas of common interest of the environmental Conventions is identified here.

Step 9: Formulate national strategies for synergistic implementation with respect to each thematic area

Propose strategies to implement the common provisions of each thematic area by contextualizing with the objectives of the country.

Step 10: Develop/propose action for each strategy statement

Elaborate each strategy by generating essential actions that take into account current policy, strategy, institutional and operational circumstances of the country. At this stage, review (if available) the UNCCD NAP, the CBD NBSAP, and the UNFCCC national adaptation programme of action (NAPA), and other such mechanisms of the other relevant environmental Conventions, to identify major strategies, objectives and actions, which have relevance to synergetic implementation of the environmental Conventions. Synergy is expected to boil down to common actions at field implementation and strategic levels in the country.

Step 11: Formulate institutional mechanisms for implementation, monitoring and evaluation

Conduct mandate analysis of relevant governmental and non-governmental organizations with respect to implementing the action on the ground. This mandate analysis will help identify the lead (executing) institution and implementing (collaborating) institutions for each action identified. The analysis will help in predicting the necessary monitoring and evaluation mechanism to be put in place.

Step 12: Produce draft national strategy and action plan document

At this stage it is expected that all the groundwork to produce a draft national strategy and action plan document will be in place.

Step 13: Convene a national consultative workshop

Convene a national workshop for stakeholder consultations and endorsement of the document and to ensure the active participation of stakeholders in implementation. Recommendations from these workshops will help to enrich the document.

Step 14: Produce final national strategy and action plan document

This document will address national development priorities and strategies.

Steps 2 to 11 could be applied iteratively to develop the final strategy and action plan document.

The workshop group also concluded that holding complementary series of technical and steering committee meetings throughout the process of formulating strategies and action plan for the implementation of the environmental Conventions in synergy, will enhance effective synergy development.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

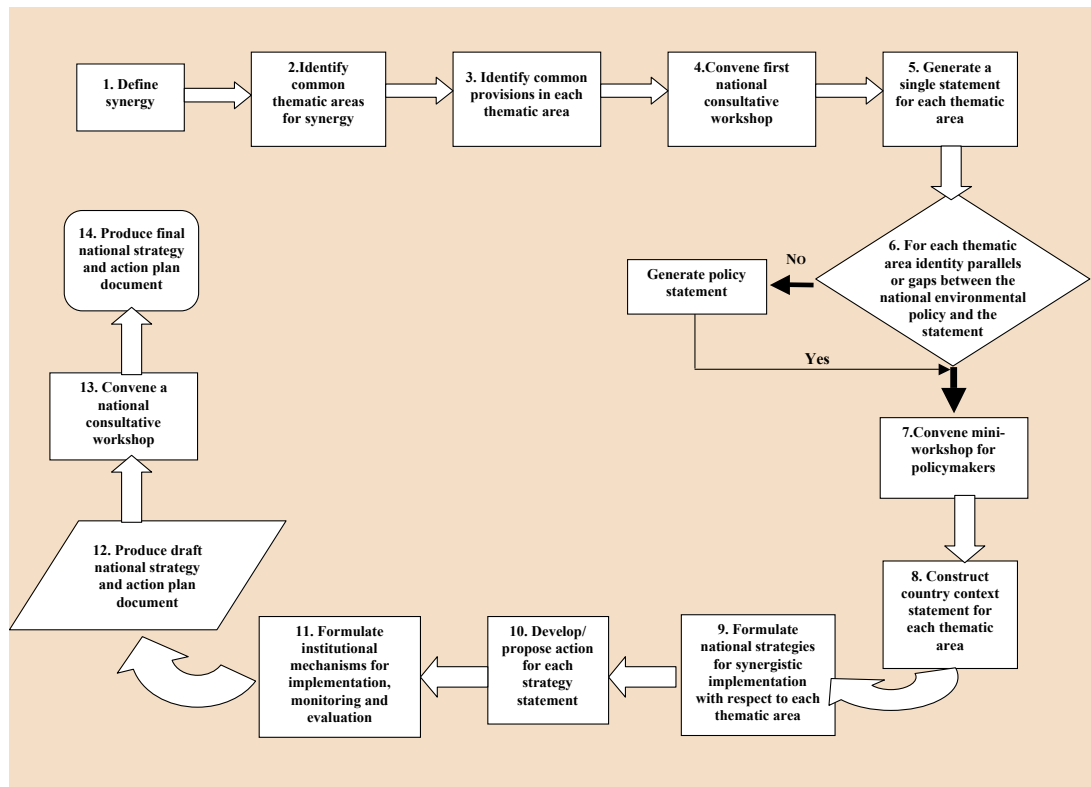


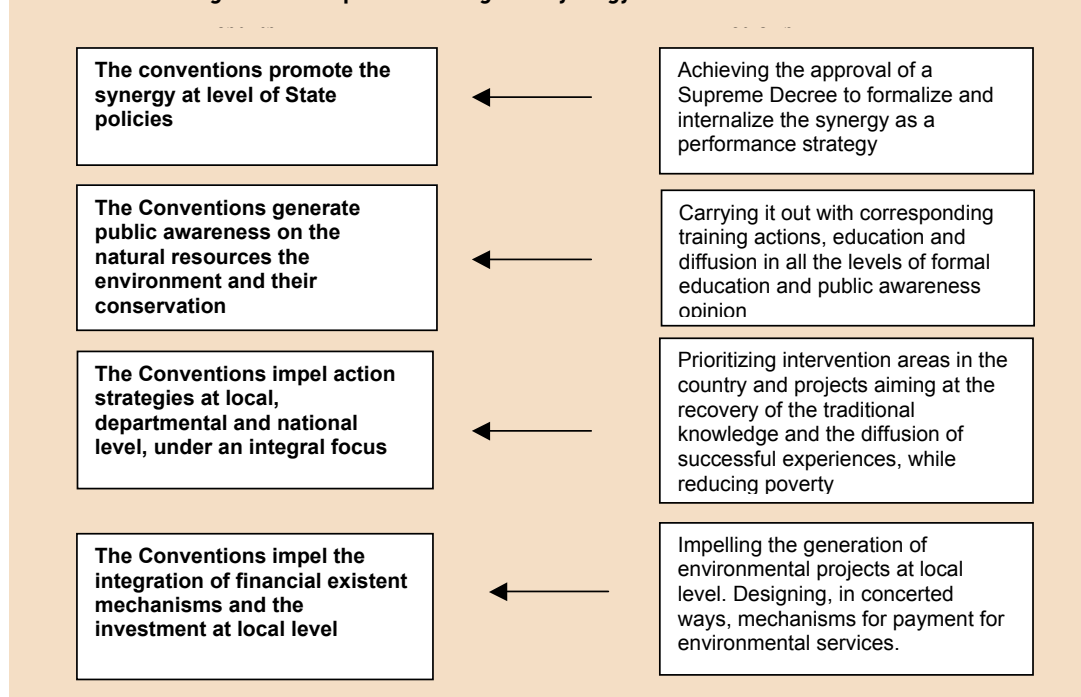
Figure 5: Schematic representation of the model presented by Ethiopia

Bolivia presented a different approach. The participants prioritized the following lines of action to promote synergy among the environmental Conventions, taking into account the cross-cutting issues that the Conventions have in a combined way (box 3):

- National policies, institutions and legal framework;
- Education, training, diffusion and awareness raising;
- Science and technology;
- Financial mechanisms.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

BOX 3: Bolivia's global work plan to strengthen synergy



2.1.2 Examples of policy frameworks

Three countries presented examples of policy frameworks.

One country reported on the results of a workshop to ensure interdepartmental and cross-sectoral collaboration, and pointed out that, in its experience, the problems of cooperation include:

- Insufficient awareness;
- Absence of methodical approaches;
- Absence of coordination;
- Absence of precedent concerning successful collaboration experience;
- Lack of expertise in preparing project papers;
- Absence of collaboration mechanisms.

These problems are probably experienced, in varying degrees, by many countries.

Another report discussed the entry points for integration of the action programmes and plans under the environmental Conventions into the broader national planning process and the proposal to establish a national forum for this purpose. This forum

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

is seen as interfacing with national and local government planning levels and also with civil society/NGO planning efforts, all of which have links to other components of the process including budgeting and environmental planning at district level.

The third country conducted a workshop on the subject of mechanisms and frameworks for the implementation of sustainable development initiatives, and two presentations (by a consulting company) were included as examples in the report. It was admitted that the establishment of an integrated and coordinated environmental management framework for the country would require major government restructuring to upgrade the environmental unit to a department that would take strong political leadership and support. Once the new department was set up, and legislation had been passed to establish its authority, streamlining (or improving) coordination of existing social development commission/psychological science committees, and inclusion of private sector and CBO/NGO bodies, would provide the opportunity for:

- Development and establishment of priority environmental policies;
- Development and implementation of priority environmental standards;
- Regulation of priority environmental “hotspots”;
- Facilitation of improved public education, awareness and information;
- Enforcement of environmental policies and standards.

A less politically controversial alternative, to strengthen existing environmental organizations, was also included in this report. This framework would build upon existing organizational strengths and inter-agency links and address key deficiencies as identified through the existing administrative and operational structure. Operational capacity for the first three of the tasks listed above would be improved, and collaboration with private sector and community groups in the establishment of environmental management programmes would take place. It was admitted that some administrative and political issues may not be addressed by this framework.

2.2 Development of capacity: funding and information sharing

2.2.1 Funding opportunities as reflected by the Parties

Funding and fund-raising are ongoing concerns for many countries, but lack of funding need not necessarily impede progress toward synergistic implementation of the environmental Conventions. Training in proposal writing and the use of exchange programmes to develop business attitudes are both important activities, as is the promotion of sustainability by the creation of income-generating activities at community level.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Potential funding sources identified during one country's workshop include communities, the private sector, the GEF, NGOs, bilateral donors, the government, multilateral bodies, endowments, foundations and individuals. Funds may also be acquired from ongoing initiatives by strengthening existing networks and enhancing and popularizing local initiatives. A taxation system based on the degree of use of the environment may be another method of fund-raising from all the sectors. Proposals may be sent to ongoing initiatives on a continuous basis and an awareness of fund-raising possibilities should be developed.

Mechanisms to ensure efficient flow of finances include joint planning, resource sharing and coordination among agencies at all levels. The establishment of institutional networks for fund-raising and a participatory monitoring and evaluation system involving all the stakeholders should be developed. Compliance will be easier to ensure if a legal mechanism and framework is instituted, and donor portfolios could be studied with a view to influencing donor conditions and reducing rigidity requirements for donors and the environmental Conventions.

There are several factors to consider in the management of funds, for example, transparency, accountability and openness. Guidelines should be developed building trust between the partners involved.

2.2.2 Capacity-building needs

A capacity-building initiative to address needs in areas of biodiversity, climate change and land degradation resulted from a strategic partnership between the GEF secretariat and UNDP. A programme of National Capacity Self-assessment (NCSA) including the integration of emerging scientific and technological information, the development of collective decisions through environmental Conventions, and the development of national policy frameworks, is recommended through this initiative. Two countries submitted reports on this topic, providing suggestions for capacity-building activities, together with operational criteria.

The concepts behind NCSAs reflect the "bottom-up" philosophy practised by the UNCCD Group of Experts. A successful NCSA ensures multi-stakeholder participation, consultation and decision-making through appropriate institutional arrangements, and national ownership and leadership. Governments should make an extensive effort in enhancing capacities of the society to cope with the complex changes that are affecting the environment, some of which are threatening the livelihood of the whole humanity. The action of governments has to be focused in three aspects: enhancement of the capacities of public institutions and agents, to cope with the new situation, to improve education in including contents allowing the future generations to have a better

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

comprehension of global problems, and reinforce technology transfer programmes to mitigate, in the short term, the impacts of global changes, involving climate change, Biodiversity loss and land degradation, specially in rural areas.

2.2.3 Information sharing to enhance practical implementation: views of the Parties

Capacity-building was highlighted in a case study on environmental information systems on the Internet which provide advice on institutional frameworks; issues relating to science, data, information and connectivity; and capacity-building. Standardization of data and controlling the quality of information before it becomes “public” are important tasks, which provide opportunities for capacity-building and the establishment of protocols that could be followed by other countries. System management, packaging of information, and the provision (and maintenance) of adequate dissemination channels are all mentioned in this report.

2.2.4 Synergy and indigenous knowledge

It is interesting, and of some concern, that only one country provided a report on this aspect of synergy among Conventions. Indigenous knowledge is the road map towards survival for every community, and a source of technology worldwide.

There is a worldwide need to document indigenous knowledge. Partnerships with the community to develop marketable technologies and promote needs-driven research will ensure that research is adaptable to local situations and encourage stakeholder participation.

2.3 The future outlook

2.3.1 Proposed activities at the national level

Areas for synergistic approaches

In a workshop discussion about the implementation of the environmental Conventions, one of the reporting countries identified eight areas in which activities could be developed in synergy between the Rio Conventions:

- Capacity-building
- Public awareness at all levels
- Information management and exchange
- Joint action planning
- Building on and sharing emerging “good/bad practices”
- Education and awareness
- Research
- Funding.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

In prioritizing these areas, some were identified as being critical for effecting collaboration and coordination, and being potential entry points for activity:

- Regulatory frameworks
- Coordination - participatory planning, networking, monitoring and evaluation (through district and national forums)
- Training - joint training and needs assessment programmes (where possible)
- Information exchange - sourcing and dissemination of information/data
- Awareness raising - at community and policy levels.

Practical areas for implementation of the UNCCD include:

- Capacity-building at all levels including in the communities
- Clearly defining the roles of different stakeholders
- Public awareness at district, sub-county and village levels
- Promotion of local technologies/resource use
- Enhancement of capacity for information access.

Practical areas for implementation of the CBD include:

- Promotion of appropriate technologies
- Information dissemination, exchange and networking
- Indigenous methods of biodiversity conservation, emphasizing gender roles
- Promotion of co-management by the communities
- Resource mobilization
- Review, evaluation, implementation and monitoring of legal policy.

Practical areas for implementation of the UNFCCC include:

- Data collection, analysis and dissemination
- Conservation and/or creation of carbon sinks
- Modeling climate and ecosystem dynamics.

Specific activities for developing collaboration for the implementation of the UNCCD were identified:

- Development of simplified guides on the Rio Conventions
- Identification and implementation of existing by-laws
- Development of an awareness raising framework on the issues of the Rio Conventions
- Training of experts in developing synergistic projects relevant to the Rio Conventions
- Participatory development of by-laws
- Mainstreaming planning processes at district and sub-county levels
- Establishing and strengthening environment committees
- Carrying out needs assessment surveys
- Development and distribution of training materials

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

- Establishment of resource centres
- Networking.

Specific activities for developing collaboration for the implementation of CBD include:

- Documenting and sharing good practices
- Developing community exchange visits
- Establishing demonstration sites
- Developing joint work plans
- Promoting indigenous conservation technologies and practices
- Establishing a coordinating body, such as the Multi-Stakeholder Integrative Sustainability Planning Task Force
- Establishing a panel of scientists for the Rio Conventions that periodically meets to identify potential projects to be developed in synergy
- Making an inventory of data and information available in existing institutions
- Developing meta-databases and analytical tools
- Developing communication and information systems.

Specific activities for developing collaboration for the implementation of UNFCCC include:

- Enhancing community participation in the preparation and implementation process
- Empowering farmers to demand extension services.



© Semarnap/Deselac

Figure 6: An integrated approach among the environmental Conventions helps in rehabilitation of degraded land

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

2.3.2 National level case studies - strategies for promoting the establishment of common programmes for community information exchange for the implementation of environmental Conventions

2.3.2.1. Sustainable development

In many countries there are good examples of local communities managing their natural resources sustainably. In these situations, the injection of small catalysts, mostly in terms of technological know-how, has led to substantial progress in a relatively short time. In most cases, there is an understanding that sustainable community development is equal to local community participation in identification of priorities, the planning process, the implementation process and the process of maintaining the programmes, policies and projects. Sustainable development encompasses improvements in livelihoods, without undermining present livelihoods and those of future generations, in terms of environmental and institutional stability.

However, the concept of livelihood(s) is frequently misunderstood, as many people see this in terms of income and wealth. What is found, on the contrary, is that quality of life and society, comfort in terms of shelter, security, dignity and pride are, in many cases, important concerns for those whose livelihoods need improving. There are tangible and intangible links between improved livelihoods, sustainable development and implementation of the Conventions – with benefits for natural and human environments.

2.3.2.2. Community-based approach

In order to improve the implementation of the Conventions and enhance synergy, a community-based rather than a government oriented approach is recommended. The capacity of local communities to implement the environmental Conventions will be considerably strengthened if the following measures are instituted:

- Apply environmental Conventions at the community level;
- Develop the culture of working with local communities as equal partners. This means working with people who are struggling to manage common property and enabling them to create useful partnerships; and imparting knowledge needed through participatory techniques, education and training;
- Assist local communities to find solutions to conflicts of interests adversely affecting the cause of the poor, women, children and other minorities;
- Create a smooth chain of information flow and feedback that enables local communities' needs to shape development decision-making and policy formation. Such bottom-up approaches imply that the local communities must understand these issues and this is realized through participatory techniques, training and education.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Strategies to achieve the community-based approach can be instigated at both national and local levels. At the national level, adoption of the following is suggested:

- Develop the implementing legislation and pass it as act in law;
- Establish an international Conventions centre at the national level. Such a centre should serve as a documentation centre for archival, retrieval, dispatch and dissemination. It can also be charged with the duty of reviewing the status of implementation and acting as an information clearing house on all matters relating to the environmental Conventions;
- Include some aspects of relevant Multilateral Environmental Agreements (MEAs), in the education curriculum;
- Create awareness at all levels;
- Encourage greater use of earth observation data, such as remote sensing, to meet the national needs for assessments, monitoring and reporting.

This should encompass getting access to global data banks with a view to building needed technical knowledge, especially when identifying strategies to reduce the vulnerability of affected populations.

2.3.2.4. Strategies to establish communication

Communication is critical at all levels and between all levels. At the local community level, there are strategies that would enhance community programmes sufficiently to facilitate implementation of the environmental Conventions, and could also have wider national impact (figure 7). The institutions responsible for implementing the environmental Conventions need to establish links and partnerships with local communities. Once these are in place, involvement of communities in the process should follow naturally and be associated with capacity-building.

The integration of research findings into local community applications is critical, and a recurring need in all aspects of environmental Conventions activities. In the context of sustainability, assistance to local communities to pre-identify markets for their products, and training for group leaders, are important components. Finally, competitive applications for environmental funds should be encouraged and mentored.

2.3.2.5. Conclusions

A mechanism that links the national focal point(s), charged with the implementation of relevant aspects of the environmental Conventions, to the local community level(s) and vice versa could be developed. Additionally, laws in some countries might need to be amended in order to provide a clear mechanism for co-management of the environment and natural resources at the local level.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

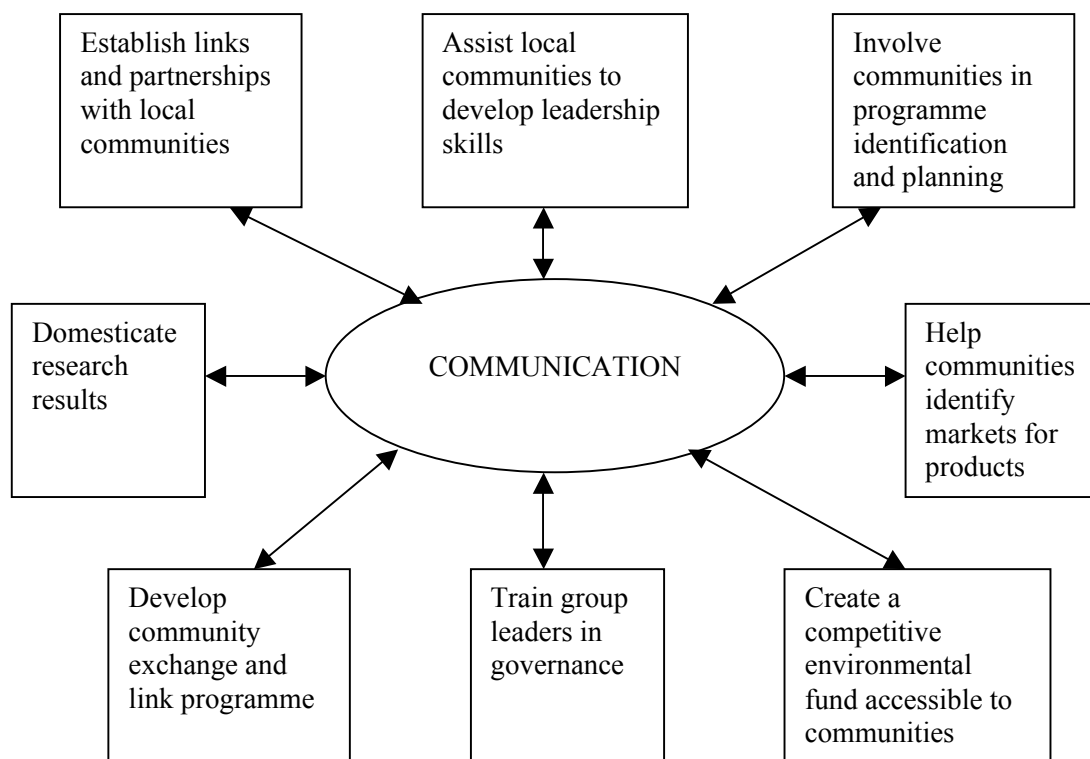


Figure 7: Strategies to enhance local level programmes so that the communities can implement the environmental Conventions

2.3.3 National action programmes and plans and opportunities to develop synergy

Some NAPs reflect one country's policy position, yet recognize that these programmes need to be translated into concrete action. Synergy in the implementation of the Rio Conventions will help to avoid duplication of efforts and promote close collaboration among the implementing institutions, thus boosting efficiency and cost-effectiveness. Certain activities are critically important in the implementation of the Rio Conventions (box 4), but consistently overlap throughout the different national action programmes and plans.

Information exchange and indigenous knowledge should be added to the key components shown in box 4, and regarded as key activities when constructing an action plan for synergistic operation of the Rio Conventions. Other measures vital for developing synergy among the Conventions include:

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

- Valid organizational changes conducive to collaborative implementation of the Conventions;
- Setting up a “critical focus” to coordinate the various focal points of the Conventions;
- Screening NAPs to identify activities with synergistic impacts on the three Conventions;
- Setting up a “national action plan” for synergy based on the activities identified;
- Identifying projects that synergize the Conventions – to be launched as pilot projects;
- Networking with international partners for synergy including (for example) the GEF, International Waters and the UNCCD, and strengthening local partnerships;
- Deploying local facilitators with appropriate expertise and experience for implementing the action plan for synergy.



© A. de Vanssay

Figure 8: A farmer meets the concerns of the three Rio Conventions as well as the Poverty Reduction Strategy Paper through sustainable land management on a single plot of land

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Box 4: Relations and duplications between the activities in the national action programme and plans in Eritrea

Activity	UNCCD	CBD	UNFCCC
In-situ (on-site) conservation (protected areas)	Alleviates land degradation; potential for economic exploitation through eco-tourism	Enhances plant, wildlife biodiversity; global benefits from biodiversity	Enhances carbon “sink” and “reservoir” contributing to global climate change mitigation
Afforestation of degraded catchments	Alleviates land degradation; enhances vegetation thus facilitating soil and water conservation	Enhances species and habitat diversity; improves fuelwood production – thus relaxing pressure on natural vegetation	Increases carbon “sink” and “reservoir”; thus contributing to global climate change mitigation
Integrated watershed management	Rational water exploitation hence low salination risk; run-off harvesting; terraces, trees conserve soil	Conserves much of watershed’s biodiversity; utilizes parts of it; thus contributing to overall sustainability	Maintains soil organic carbon and above-ground vegetation as carbon “sink” and “reservoir”
Sustainable use of natural resources	Maintains and enhances soil/water resources; alleviates land degradation	Indirectly contributes to biodiversity through ameliorating the physical setting for growth and diversification	Indirectly contributes to global climate change mitigation through enhancing biodiversity
Soil and water conservation.	Alleviates land degradation; slows down desertification	Enhances biodiversity, habitat diversity	Contributes indirectly to climate change mitigation through enhancing vegetation
Promotion of alternative fuels	Reduces deforestation thus enhancing vegetation cover; slows land degradation	Relaxes pressure on vegetation as a source of fuelwood; enhances biodiversity and habitat diversity	Enhances carbon “sink” and “reservoir”; thus minimizing the risk of global warming and climate change

In Eritrea activities that overlap consistently throughout the above Convention implementation frameworks includes sustainable management of natural resources; capacity-building; public awareness and education; promotion of alternative fuels; and poverty reduction.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Box 5: Case study: linking food security, poverty reduction and sustainable development with the Rio Conventions in Eritrea

Introduction

Ecology and population

With a land area of 125,700 km² and a population of about 3.67 million, Eritrea is physically and climatically diverse. About 70 per cent of the landmass receives an annual rainfall of less than 400 mm. The country is prone to drought. There are six agro-ecological zones identified on the basis of climate, altitude, soils and vegetation: the Central Highland Zone, the Western Escarpment Zone, the Green Belt of the Eastern Escarpment of the Highlands, the South Western Lowland Zone, the North Western Lowland Zone and the Coastal Plains Zone.

Food production

This country is structurally food deficient even during good rainfall years, food production meets only about 75 per cent of national food demand. This is due mainly to the prevailing traditional production systems, coupled with low variable rainfall. Thus farmers usually turn to non-farm activities to augment household income and fulfil food needs.

Food security, poverty and sustainable development – a conceptual overview

Food security is defined as access by all people at all times to adequate nutritious food to lead a healthy and productive life. Two forms of food security exist – national and household food security.

National food security is the availability of food in market places at all times from domestic production, commercial imports, or from food imports.

Household food security is the access at all times to food for a healthy life. Food insecurity arises from lack of both national and household capacity to produce or procure food.

Poverty is the inability to obtain sufficient food (2000 to 2100 calories/head/day) and other essential foods and services to live a healthy life. Poverty arises from lack of access to land or agricultural inputs needed to produce food, lack of opportunities for remunerative non-farm employment, inadequate awareness, and lack of family and community support.

Against the above background, Eritrea can be described as being vulnerable to food insecurity and poverty.

National and household food security can be achieved through:

- Increasing local production of food, and timely procurement from international markets in sufficient quantity;
- Improving roads, transport, and marketing systems;
- Increasing opportunities for the poor to earn higher incomes;
- Promoting changes in household dietary habits;
- Preparation of an action plan focusing on priority activities, taking into account available resources and institutional capacities. The plan must also strike a balance between actions for short-, medium- and long-term benefits on a sustainable basis.

However, sustainable development implies the ability of agroecosystems to maintain productivity under stressed conditions (salinity, acidity, toxicity, erosion, fertility loss, etc.). Sustainability thus ensures the stability and persistence of agroecosystem productivity under real or potential conditions.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

However, fluctuation is a normal phenomenon that affects all ecosystems including agricultural ecosystems.

How can the risk of fluctuation on production be minimized?

A systems approach to development is the most effective tool to minimize the risk of fluctuation on production. A systems approach is one in which development is addressed from various angles and disciplines. In the agricultural context, it is likely to produce better long-term results by taking into consideration all relevant agricultural factors i.e. biological, physical, chemical, social and economic. The major factors to be considered are:

- Design of appropriate land use
- Stabilization of soil erosion
- Integration of trees into farming system (agroforestry)
- Maintenance/increase of soil fertility
- Enhancement of soil organic matter and microbial activities
- Maintenance of normal soil pH level
- Improvement of public attitude through sound research and extension approaches.

An overview of the farming systems

The underlying features of the farming systems are:

- Traditional farming practices for subsistence production
- Poor asset base – land fragmented with average farm size ranging between 0.2 and 2 hectares
- Main source of traction – oxen
- Dominant pattern of production – tainted
- Planting material – mainly landrace seeds with low yields
- Cropping system dominated by cereals (about 80 per cent of total rain-fed area) followed by pulses and oil crops.

Production of livestock including poultry and bees

Livestock production is a vital subsector and is indispensable to the achievement of food security. It is, however, traditionally pursued as either a pastoral system that includes lengthy transhumance, or an agropastoral system in which livestock production and arable farming are closely associated and in which transhumance is seasonal over short distances. Use of modern management practices (breeding, nutrition and health) is limited and productivity is low. The mainly free-ranging system is dominated by cattle, sheep, goats, camels, poultry and apiculture. Through improvement in breed quality and nutrition, it should be possible to enhance livestock contribution to meet the food demand.

Major production constraints of the livestock subsector

- Lack of formal tenure to land and natural resources, which discourages investment and sustainable farming and animal husbandry
- Scarce and erratic rainfall; inadequate knowledge of groundwater resources and poor irrigation infrastructure
- High level of erosion leading to low soil moisture retention and fertility
- Traditional farming practices, low-yield varieties and livestock breeds
- Inadequate research and extension services
- Absence of conducive legislation and weak regulatory services
- Absence of clear policy and strategy frameworks and guidelines to guide development in the subsector
- Poor planning, implementation, coordination monitoring and evaluation of programmes and projects
- Weak institutional and organizational capacity.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

Strategies adopted to alleviate the situation

- Landrace crop improvement
- Establishment of a variety of livestock breeds to improve production and reproduction
- Strengthening of the farmer advisory service and improving extension services
- Introduction of integrated farming schemes
- Arresting deforestation and soil erosion
- Decentralization and devolution of activities
- Reviewing of sectoral functions and strengthening of institutional and organizational capacity
- Human resource development
- Improvement in:
 - Rural land management
 - Development of effective water harvesting techniques and irrigation systems
 - Policy formulation, strategic planning, implementation, coordination, monitoring and evaluation
 - Regulatory services
 - Agricultural promotion and development
 - Agricultural research
 - Extension services
 - Marketing services.

Linking food security, poverty reduction and sustainable development with the Rio Conventions.

In the past, natural resources, including life support systems, have been used and abused and, as a result, the environment has suffered severe degradation. This has resulted in:

- Reduction in plant and animal diversity;
- Land degradation with adverse effects on flora, fauna and habitats;
- Shifts in weather patterns e.g. drop in rainfall and increased incidence of drought;
- Spread of desertification due to climatic variations, deforestation, overgrazing and over-cultivation;
- Land and seawater pollution, salination, etc.

In the light of these developments, ratification of the Rio Conventions is a matter of utmost relevance. Needless to say, the Rio Conventions represent a boost to this country's food security and poverty reduction strategies.

UNCCD link with food security and poverty reduction

This country is inherently prone to the threat of pervasive drought and desertification.

Land degradation emanating from overcultivation, overgrazing and deforestation, exacerbated by climatic variations, poses a serious threat. As a result, arable lands continue to lose fertility and food production potential; similarly, grazing lands are progressively losing their capacity to support livestock production.

This scenario is all the more apparent in the northern, north-western, eastern and south-eastern sections of the country where the scale and speed of desertification are apparently great. Land degradation, on the other hand, is serious in the central and southern highlands and their escarpments where the rough topography of the landscape facilitates soil erosion and water loss through run-off. Compounding this problem is the high population density, which exacts a high toll on the natural resource base that supports crop and livestock production.

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

This is foremost an agricultural country with about 70 per cent of its people living off the land through crop and livestock production. Thus, the plight of the people shifts with the vicissitudes of climate and other natural factors. For example, during good rainfall years, farmers produce enough food for them and their families to live seven to nine months. During poor rainfall years, food production plunges drastically – to what is barely sufficient for two to three months.

CBD link with food security and poverty reduction

cereals are barley, wheat, sorghum and pearl millet. Major pulses are fava beans, field peas and chickpea. Sesame and groundnut are the major oil crops. The farming systems depend on landraces as they are well adapted to the environment. Although yields are low, they are stable. These landraces are the foundation of food security and hence should be conserved and improved through breeding. On the other hand, their disappearance would be a serious threat to agriculture and food security as modern cultivars are not so well adapted.

Rural people in parts of the country still use wild fruits and herbage for food, more so in times of food shortage associated with drought. Thus, the conservation of these resources is vital for the security of their food and livelihood. Their loss would adversely affect the coping mechanisms adopted by the people.

Conservation of the natural vegetation is a matter of critical importance. Forests and woodlands are the source of social and economic survival of rural people, who draw on them for fuelwood and for timber for construction. Thus their conservation and rational use is indispensable for the stability and survival of the people.

Livestock production is a free-range system, so the source of forage for animals is the natural flora. This subsector has co-evolved with the natural ecosystem and cannot survive if forage plants in the ecosystem are lost.

In brief, the livelihood of rural people is heavily dependent on the agricultural and natural ecosystems and will be put to risk if these resources are depleted.

UNFCCC link with food security and poverty reduction

The climatic pattern of this country is marked by incessant fluctuations of rainfall and temperature. Global warming and associated climate change is set to aggravate this condition further, forcing certain crop and livestock species to fail. Thus, under climate change, food shortage looms and there is a prospect of food insecurity.

Sectoral policy

Against this backdrop, the main objective of the agricultural sector is to promote increased and sustained production, thus fostering food security. In the medium term, the primary objective is to attain rapid, sustainable growth and poverty reduction in an environmentally sound manner, led by a dynamic private sector.

National strategies for achieving the set objectives include:

- Adopting integrated development and environmental restoration relevant to agroecological zones;

2. OPTIONS AND OPPORTUNITIES IN DESIGNING NATIONAL POLICY AND OPERATIONAL FRAMEWORKS FOR SYNERGY

- Adopting integrated soil and water conservation techniques to avert soil erosion, and maintain soil fertility;
- Promoting supplementary and irrigated agriculture so as to expand, intensify and diversify crop/livestock production systems;
- Promoting farmers' advisory and research services to upgrade their knowledge, skill and awareness, to facilitate adoption of new technologies to enhance productivity;
- Introducing timely and effective regulatory measures with regard to protecting plant and animal health and the environment.

Conclusion

The Ministry of Agriculture is aware of the threat to food security posed by environmental degradation. The policy of decentralization has provided a boost to the Ministry's efforts to combat environmental degradation, especially land degradation. However, it is important to mobilize and commit additional resources to forestall environmental degradation.



© R. Neumiller/SOS Sahel International

Figure 9: Water, a key crosscutting ecosystem service for the Rio Conventions

3. OPTIONS AND OPPORTUNITIES IN DEVELOPING PROJECTS

Eleven countries submitted reports that involved synergistic options and opportunities in the development of projects. Case studies were given to illustrate how projects implemented in synergy are more effective solutions than those based on single data/information streams and sources. Box 6 presents an example of such a project. It was chosen because of its conceptual background, breadth of scope, and effective development of synergy (“a synergistic approach”).

It is important to recall that the effective taking into account of synergy in project design and implementation involves integrating disparate sources of data and information in the design. The difficulty in achieving this on a case-by-case basis, especially at the local or community level, is locating these various sources. This is not to downplay the difficulty of integration itself.

It is recommended that the following points and observations are considered when developing project concepts:

- The focus of the projects (objectives) should relate to achieving human development goals, in particular poverty alleviation and sustainable development;
- Biodiversity conservation and sustainable use are seen as ways in which the first objective can be achieved;
- Preventing further land degradation, or rehabilitating existing degraded land, was the commonly identified priority;
- The environmental Conventions are seen as means of providing inputs on how relevant considerations can be incorporated into projects. None of the projects puts the Rio Conventions explicitly within the objectives. It is assumed that the priority objective is sustainable human development, which the environmental Conventions should be used to support. The objective, therefore, is development, not synergy.

The synergy arises from recognizing the multifaceted nature of the issues to be addressed and the concomitant diversity of solutions to address them. A conceptual synergistic framework involves the separate parts required to provide solutions to these problems.

3. OPTIONS AND OPPORTUNITIES IN DEVELOPING PROJECTS

Box 6: Case study: initiatives by local communities and civil society: the case of the UNDP/GEF East African cross border biodiversity project

This example involves synergy of diverse groups that are participatory as well as the use of diverse international Conventions.

A participatory site planning process was undertaken at the different sites of the East Africa cross border biodiversity project, including the Namanga hill forest reserve in Kajiado, the Loima hill forest in Turkana and the Taita hills forests in Taita Taveta. Communities formed the backbone of the process and gave a new dimension to the whole exercise. Threats to biodiversity of the forest were listed and examined, and their root causes were analysed. Among the threats that stakeholders listed were destruction of springs by wildlife and livestock due to overgrazing and trampling; forest fires; and tree cutting for charcoal burning and wood carving.

All the activities had an element of identifying methods and mechanisms in a participatory manner to support local communities to develop remedial and alternative livelihood options, which would in turn relieve pressure on the ecosystems. This was accomplished in close collaboration with civil society organizations – the Intermediate Technology Development Group (ITDG-EA) in Kajiado and Turkana and the East African Wildlife Society in Taita Taveta. In the course of implementing the community action plans, a number of Conventions are being implemented, albeit unknowingly. These include: the CBD, the UNFCCC, the Convention on International Trade in Endangered Species (CITES), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the UNCCD.

Of the threats identified, forest fires are discussed here to demonstrate that specific management issues that are of interest to all the above-mentioned Conventions would benefit from cooperation among those Conventions.

Threats identified: forest fires

In the past two decades, extended and frequent droughts coupled with increased pressure on land and unsustainable forest use, especially in the tropics, have led to increased pressure on land and unsustainable use of forests. These have led to an increase in catastrophic fires. Fire is a vital and natural part of ecosystems; people have used fire for thousands of years as a land management tool. Studies have supported this view over the years and so far none has challenged the use of fire as a management tool. But fires have become a major threat to many forests and their biodiversity, mainly because of unsustainable management practices.

The practice in the past has led to a focus on doing something practical about the problem, such as fire prevention, control and management, without a thorough understanding of the underlying causes or the long-term ecological impacts.

Impact of forest fires

Fire can be a natural and important disturbance in many forests but in others it can cause devastation. At the global scale, uncontrolled fires influence the chemical composition of the atmosphere and the reflectivity of the earth's surface.

3. OPTIONS AND OPPORTUNITIES IN DEVELOPING PROJECTS

At the regional and local scale, forest fires:

- Change biomass stocks; alter hydrological cycles with negative effects on marine systems such as coral reefs; reduce visibility to near zero; impact plant and animal species; produce smoke from fires that can significantly reduce photosynthetic activity; impact on forest vertebrates and invertebrates (death); cause loss of species leading to overall decline in species; cause displacement of territorial birds and mammals, which may upset the local balance and ultimately result in the loss of wildlife etc.; detrimentally impact the health and livelihoods of human populations;
- Cause indirect effects that are far reaching and longer term and include stress; loss of habitat, territories, shelter and food; atmospheric-smoke-related impacts on the ozone layer.

Direct and underlying causes of forest fires

There are four main direct anthropogenic causes of forest fires:

- Land clearing;
- Fire being used as a weapon in land tenure or land use disputes;
- Accidental or escaped fires;
- Fires connected with resource extraction especially by the poor e.g. wild honey harvesting and charcoal burning.

It is linked with a genuine lack of awareness of the impact of fires on the ecosystem.

Interventions

The site planning team developed site action plans that attempted to address the problems of forest fires in concert with the other threats. The team came up with the following broad categories that have formed the basis for the current activities being implemented by the local communities with facilitation from civil society and the government:

- Promotion and encouragement of participation of all stakeholders in providing data on fire to forest departments who would keep and maintain the records;
- Promotion and encouragement of participation of all stakeholders in putting out fires;
- Identification and development of appropriate fire management regimes;
- Recognition of local community and multi-stakeholder interest in the use of forests with a view to ensuring sustainable utilization;
- Development of participatory forest management plans that are environmentally sound, including fire management that takes into account biodiversity conservation and local community needs.

In the past three years, no forest fires have been reported in the Namanga Hill forest reserve. This is mainly attributable to the awareness raising campaigns forged by the project through district, divisional and local partners including the community environment committees that have set vigilante groups around the hill. In addition, ITDG-EA trained the communities on methods of modern beekeeping and honey harvesting where fires are not required during harvesting. In the past, young people engaged in wild honey harvesting using crude methods that required fires. This caused havoc to the forests. Now that beekeepers have mastered the new and appropriate technology they are beginning to see the fruits of their labour and can hardly meet the demand for honey.

In many areas where local communities live in and around forests, fire is a major threat to health, livelihood and forest ecosystems. There is therefore a need to develop an awareness of both the negative and positive impacts of fire use in these areas. This will require the use of a range of scientific

3. OPTIONS AND OPPORTUNITIES IN DEVELOPING PROJECTS

and technical inputs presented in an easily accessible format, e.g., mass media and village forums. In order to secure commitment from the community for conservation of the ecosystems, memorandums of understanding and agreements have been signed between the local communities and NGOs and are being kept by all parties, with the government overseeing the process.

Other intervention measures towards strengthening livelihoods include: provision of water outside the forest, provision of alternative grazing systems such as pasture management and hay-making, and development and provision of other income-generating opportunities such as ecotourism, stabilized soil blocks and handicraft making.

Synergy between the environmental Conventions

The case study presented above demonstrates how several environmental Conventions can be addressed in a joint project to combat wild fires. The effects of fire can trigger the following actions, which are directly linked to several Conventions:

- Loss of biodiversity – CBD;
- Forced migration due to loss of habitat - CMS/CITES;
- Destruction of already vulnerable ecosystems – UNCCD;
- Emission of carbon dioxide in the air – UNFCCC.

A study by IUCN/WWF in 2000 revealed that biomass burning contributes about 20 to 40 per cent of the worldwide total carbon dioxide emissions that contribute to global warming.

There is a window of opportunity for collaboration between relevant environmental Conventions in implementing such projects. This will help avoid duplication of work, remove community fatigue through implementation of many micro-projects and save substantial amounts of money.

In conclusion, there is a great need to develop a regional framework based on the recommendations in the East African Treaty and the environmental Conventions that will enable the countries in the region to have a joint policy on cross border natural resources.

On the same project Uganda reported on the relationship between the project activities and the environmental Conventions

The global environmental Conventions should be viewed at the national level as requiring action by the countries with respect to the physical environment. Uganda has a land area of about 240,000 km², with different ecosystems that are being targeted by the different environmental Conventions. It should be noted, however, that the ecosystems are not in 'boxes' with respect to each of the Conventions.

There are intricate relationships between the environmental Conventions. For example, the CBD deals with the conservation of biodiversity which is located within different habitats including wetlands, dryland areas, forests and water, whereas the Ramsar Convention deals specifically with wetlands that do contain biodiversity. The UNFCCC is also closely related with the CBD and the Ramsar Convention because the destruction of biodiversity ultimately leads to climate change as well as to desertification. Although the UNCCD deals with many causes of desertification, the protection of biodiversity resources is one of the key backbones to fighting desertification. Further, the actions of the communities at the grassroots level are so interlinked that separating actions would be superfluous.

4. SUMMARY

4. SUMMARY

Options and opportunities for policy design and project development: lessons learned, key problems and overall recommendations

This report has aimed to illustrate how the participating countries conceptualize and perceive how to develop synergy and how countries have implemented political and operational frameworks for synergy. In addition, case studies illustrating concrete actions at the local level provide examples of implementation. However, not all of the efforts have been as productive as they might have been in spite of the excellent material provided by the countries. It should be recognized that, in cases where synergy did not feature highly in the process, the countries themselves should not be criticized for “missing the point”; rather it should be acknowledged that the development and acceptance of synergistic solutions to complex problems is likewise complex. The decompartmentalization of activities is a task that needs to be elucidated clearly. This task will not be effected by conducting additional workshops but rather by a more effective communication on synergy.

Other activities conducted or being conducted by the CST Group of Experts, such as the development of the thematic data and metadata network, THEMANET, should go a long way towards assisting in this process. As some of the case studies and other country inputs testify, synergy has occurred at the community or grassroots level and that can serve as a model for other similar efforts.



©IRD – M. Neyra

Figure 10: Working with the local communities

4. SUMMARY

4.1 Lessons learned

The main lessons learned that could be drawn from this review are that:

- Environmental/biodiversity issues are complex and multilayered, and their resolution requires links and partnerships;
- Various stakeholders may have different interests and it is important to have a forum to harmonize the differences;
- Community involvement needs to be carefully undertaken by selecting an approach that is acceptable and appropriate for the socio-cultural groups being targeted; for example, although whole communities may be involved, outputs may be expected at household level;
- In order to promote ownership of initiatives by the local communities, it is necessary to involve them from the start of planning, in the formulation of village-based plans;
- Documentation of all processes is as important as other outputs;
- Dialogue and discussion should be maintained with all the key stakeholders;
- At the grass-roots level, the environmental Conventions have intricate relationships because the local communities do not usually disaggregate their livelihoods;
- The issues involved are complex and solutions equally so. Synergy from a number of sources helps provide solutions that are both expeditious and cost-effective.

4.2 Key problems identified

The key problems identified in the reviewed reports are that:

- Activities that are said to involve synergy often do not do so. Frequently a lack of understanding of synergy impedes the development of positive interactions among the environmental Conventions;
- Participatory mechanisms are incipient or weak. Local populations are not involved in action programmes. A major effort is needed to strengthen participation. Moreover, local efforts often do not have access to disparate sources of information;
- There is often a lack of monitoring programmes, based on reliable and cost-effective indicators/indices, to provide periodic diagnosis of the state of desertification, biodiversity and climate. The principal concerns that need to be addressed include: what is happening?; where?; to what extent?; and what is the concerned population? There is an urgent need to develop appropriate methodology to tackle those concerns. Technical assistance at this level is needed;
- There is limited access to information and data sources. Channels to circulate information on environmental Conventions are restricted and focus on the institutions which are directly involved in one of them, rather than including all institutions involved in all those Conventions;

4. SUMMARY

- There is a lack of coordination among focal points. There are no national mechanisms to facilitate joint actions of the environmental Conventions;
- Weaknesses of institutional capacity affect the ability to meet the necessity of synergistic and coordinated actions to address the complexities of climate change, loss of biodiversity and desertification.

4.3 Recommendations

The main recommendations from the workshops are:

- To strengthen environmental education in order to build capacity. This will allow the implementation of convergent policies addressing the objectives of the Rio Conventions as well as other related, organizations and institutions;
- To provide mechanisms for educational training;
- To encourage capacity-building in order to increase local involvement in formulating and carrying out multidisciplinary programmes. This needs to be especially addressed by policymakers and decision makers;
- To identify specific policy aspects when the development of cooperation is especially important (poverty alleviation, ecosystem protection, watershed management, social equity, etc.);
- To develop mechanisms to increase participation of local populations and to provide training so that users understand the tools and processes used to address complex problems in synergistic ways;
- To assist States to rationalize legal structures and regulations on the basis of success stories. This will reduce impediments to information access;
- To encourage the development of NCCs and provide guidance on their operational activity, without imposing additional layers of administration;
- To create a unified information system including vulnerabilities and impacts of the various institutions that address issues relating to desertification, poverty, and related topics. This will enable the user community to understand and have access to disparate sources of information;
- To promote convergence of local, national, and international institutions (including the Rio Conventions) on issues relating to poverty and desertification.

Other referred texts

- Dennis, R.A. 1999. A review of fire projects in Indonesia 1982–1988. Bogor. Center for International Forestry Research, 112 pp.
- Dillon Consultants, Report on Institutional Strengthening for Environmental Management in the OECS.
- IUCN/WWF. 2000. Report on biomass burning and global warming.
- World Resources Institute. 2005. Millennium Ecosystem Assessment (MA). Chapter 22, Dryland Systems. World Resources Institute, Washington, DC.
- World Resources Institute. 2005. Millennium Ecosystem Assessment (MA). Ecosystem and Human Well-being: Desertification Synthesis. World Resources Institute, Washington, DC.
- Reijntjes, C.B., Haverkort and A. Waters-Bayer. 1992. Farming for the future. MacMillan Press Ltd., London.

Convention on Biological Diversity:

www.biodiv.org

United Nations Convention to Combat Desertification:

www.unccd.int

International Year of Deserts and Desertification:

www.iydd.org

United Nations Framework Convention on Climate Change:

www.unfccc.int

The Ramsar Convention on Wetlands:

www.ramsar.org

The Convention on Conservation of Migratory Species of Wild Animals

www.cms.int

Selected publications on synergy

UNEP World Conservation Monitoring Centre, 2004. Synergies and cooperation: A status report on activities promoting synergies and cooperation between Multilateral Environmental Agreements, in particular biodiversity-related Conventions, and related mechanisms. UNEP-WCMC, Cambridge, UK, 65p.

United Nations University [1999]. Inter-Linkages: Synergies and Coordination between Multilateral Environmental Agreements. UNU, Tokyo.

UNDP, 1997. Synergies in National implementation, the Rio Agreements. UNDP, New York, 81p.

UNCCD, 1999. Review of activities for the promotion and strengthening of relationships with other relevant Conventions and relevant international organizations, institutions and agencies. ICCD/COP(3)/9, 50p.

The Trialogue website: <http://www.gdrc.org/uem/Trialogue/intro.html>

List of Workshops

Annex: List of Workshops

		Place, institution	Date
Regional level workshops			
Africa	Botswana	Gaborone, CBD	13–17 September 2004
	Guinea	Conakry, CILSS, CEDEAO	2–4 October 2000
	Mali	Bamako, CILSS	13–15 August 2001
	Morocco	Marrakesh, IEPF	27–31 January 2003
National level workshops			
Asia	Kyrgyzstan	Bishkek, Ministry of Agriculture, Water Resources and Processing Industry	18–20 October 2004
	Mongolia	Ulan Bator	18–20 June 2001
	Pakistan	Islamabad	18–20 September 2003
	Sri Lanka	Randenigala, Ministry of Environment and Natural Resources	31 July to 2 August 2003
Africa	Benin	Cotonou, Ministère de l'environnement, de l'habitat et de l'urbanisme	12–13 July 2001
	Burkina Faso	Ouagadougou	18–20 September 2001
	Eritrea	Asmara, Ministry of Agriculture	September 2003
	Ethiopia	Addis Ababa, Environmental Protection Authority, National Meteorological Services Agency, Institute of Biodiversity Conservation	30 April to 1 May 2004
	Mali	Bamako, Ministère de l'environnement et de l'assainissement	6–7 August 2002
	Namibia	Grootberg, Ministry of Environment and Tourism, the Namibia Desert Research Foundation	8–11 July 2003
	United Republic of Tanzania	Bagamoyo, Vice President's Office	27–28 December 2001
	Uganda	Kampala, Ministry of Agriculture, Animal Industry and Fisheries	24–25 September 2001
Latin America and the Caribbean	Bolivia	La Paz, Ministerio de Desarrollo Sostenible y Planificación	8–9 August 2001
	Cuba	La Havana, Ministerio de Ciencia, Tecnología y Medio Ambiente	20–23 November 2001
	El Salvador	San Salvador, Ministry of the Environment and Natural Resources	18–19 October 2001
	Venezuela	Caracas, Ministry of Environment and Natural Resources	14–16 November 2001

List of Workshops

Local level workshops		Place, institution	Date
Asia	Kazakhstan	Schuchinsk, Ministry of Environmental Protection	10–13 August 2004
Africa	Kenya	Nairobi, National Environment Management Authority	28–30 May 2003
	Namibia	Grootberg, Ministry of Environment and Tourism, the Namibia Desert Research Foundation	8–11 July 2003
Latin America and the Caribbean	Saint Vincent and the Grenadines	Ministry of Health and the Environment	14–16 September 2004



ISBN: 978-92-95043-15-2





UNCCD, United Nations Convention to Combat Desertification

Langer Eugen

Hermann-Ehlers-Str. 10

D-53113 Bonn Germany

Tel: ++49 228 815 2800 Fax: ++ 49 228 815 2898

E-mail: secretariat@unccd.int - www.unccd.int



ISBN: 978-92-95043-15-2

