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# Measuring Policy Coherence among the MEAs and MDGs

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#### Introduction

In the wake of the World Summit for Sustainable Development, the United Nations Environmental Programme (UNEP) Governing Council established the Open-Ended Intergovernmental Group of Ministers (IGM). IGM was assigned two tasks: (i) undertake a comprehensive policy-oriented assessment of existing institutional weaknesses in international environmental governance; and (ii) identify future needs and options to strengthen it (UNEP 2002). Efforts to enhance international environmental governance included—among others—creating synergies and coherence between environmental conventions and supporting the implementation of conventions in Member countries.

Presently there are about 13 global Multilateral Environmental Agreements (MEAs) and/or conventions and about 500 international treaties or other agreements related to the environment. This proliferation of agreements has created concern among international and national communities regarding overlap and duplication of goals and programs. Lack of coherence results in high transaction costs and inefficiencies in achieving convention objectives. This growing concern has made policy coherence the single most important theme in the dialogue on International Environmental Governance (IEG) among various Inter-Governmental Organizations (IGOs) and Multilateral Environmental Agreement (MEAs) regimes.

The need for coherence is obvious. Better coordination and coherence will: (i) reduce the degree of duplication; (ii) reduce initiative fragmentation; (iii) reduce the burden on countries with limited resources to implement various MEAs; and (iv) pool resources in a more efficient manner to achieve common objectives across MEAs.

Positive signs include a growing consensus among various MEA convention secretariats that better coordination is needed. As well, approaches to achieving particular objectives must be more coordinated and coherent. Chapter 38 of Agenda 21, the decisions of UNEP's Governing Council (17/25, 18/9, 19/9C, 20/18B, 21/21), the recommendations of the United Nations Task Force on the Environment and Human Settlements, the United Nations Secretary-General's report to the Millennium Assembly, the Nairobi and Malmo Declarations, and the meetings on the coordination of environmental conventions convened under the aegis of UNEP (UNEP 2001), have all contributed recently to the drive for greater policy coherence and coordination.

In addition to UNEP's leadership role in this area, a number of additional initiatives are being undertaken by other organizations such as United Nations University (UNU), United Nations Development Programme (UNDP), Global Environmental Facility (GEF), International Union for the Conservation of Nature (IUCN) and individual MEA secretariats. For instance, in 1997, UNU established the Inter-Linkages Initiative which included holding an international conference and several regional and national workshops, particularly in Asia and the Pacific. These workshops and conferences focused on the preparation of concrete action plans for implementing MEAs regionally, creation of frameworks for integrated capacity development and increased partnership between various stakeholders to implement these environmental policies (UNU 1999).

The GEF supports inter-linkages between its six focal areas: biodiversity, climate change, international waters, ozone, land degradation and persistent organic pollutants. In the case of individual MEAs, many joint activities include: cooperation between subsidiary scientific and/or technical bodies; joint collaboration in scientific assessments such as the Millennium Ecosystem Assessment; establishment of a joint website by five conventions; and a Joint Liaison Group between the three Rio Conventions (UNEP-WCMC 2004).

Initiatives flowing out of various environmental conventions have yielded a more integrated approach towards environmental management, fostering more effective policy coherence. However, much remains to be done. There is still little effort being made to find coherence between environmental agreements and development initiatives, especially the recently designed Millennium Development Goals (MDGs). Formulated under the Millennium Declaration in September 2000, the MDG's set a precedent by identifying poverty and human well-being as multi-dimensional and focusing on issues beyond economic growth and material welfare. Constituents like health, security, education, gender equality, justice and a stable environment were acknowledged as important. While MDGs are largely an effort of the development community, environmental sustainability is an integral component of all MDG goals such as health, gender empowerment, hunger alleviation and security of water and sanitation needs (IIED 2004). For instance, agriculture, which constitutes the livelihood for many people in various developing countries, is not only linked to the goal of poverty alleviation, but also environmental sustainability. Unsustainable agricultural practices and insecure property rights can contribute to the destruction of biodiversity. The ecosystem services provided by biodiversity are useful in improving crops, increasing soil fertility and controlling agricultural pests and diseases (CIDA 2003). Further, good water and sanitation in urban centers are critically dependent on conservation of ecosystems (IIED 2004). Similarly, the availability of natural resources, such as fuel-wood, impacts the time taken to collect them. The time taken to accomplish these household activities is a barrier to access to education for girls, who are usually responsible for such tasks. Clearly biodiversity conservation is an integral component of improving women's access to education. Despite the fact that the MDGs and MEAs share a number of common aspects, and some of the MDGs speak to environmental issues, with one specifically focusing on the environment, not much has been done to measure or implement policy coherence between the MDGs and MEAs. Perhaps this is so because at a very fundamental level, there is still a lot of confusion on what policy coherence really means and how coherence can be measured. This paper illustrates some methodological tools to define and measure policy coherence.

This paper is structured as follows. Section 1 provides a brief review of the policy coherence literature and highlights some of the key criteria that emerge from the literature to help decision-makers check for policy coherence. Section 2 presents a brief overview of the two-step methodology required to carry out a quantitative measurement of policy coherence. In section3, five of the more prominent MEAs are evaluated for their degree of policy coherence. This is followed in Section 4 with a similar analysis, but with the MDG included in the analysis. The conclusion will remark on lessons learnt and next steps.

#### Section 1. Policy Coherence: Making Sense

Policy coherence is a hot topic these days. And as in hot topics, there are many perspectives and definitions on the issue. Therefore, before we go any further we shall try to illustrate some of the key definitions and ways the concept of policy coherence has been used. To begin, policy coherence is synonymous with terms such as coherent policy-making, policy co-ordination,

policy integration, holistic government and joined-up government coherence (Geerling and Stead 2004).

Challis *et al.* broadly characterize policy co-ordination as "a pursuit of coherence, consistency, comprehensiveness and of harmonious compatible outcomes" (1988). Louise O. Fresco, Assistant Director-General, Food and Agriculture Organization of the United Nations, argues that policy coherence may be a myth or, rather, is based on the three following related myths: (i) we can actually achieve policy coherence; (ii) once policy coherence is achieved, everything will fall into place; and (iii) policy coherence is about trade policies of developed or Organization for Economic Co-operation and Development (OECD) countries (Fresco 2004). The OECD-Development Assistance Committee (OECD-DAC) defines policy coherence as "the systematic promotion of mutually reinforcing policies across government departments and agencies creating synergies towards achieving the defined objective" (DAC 2001). The North-South Institute in Canada defines policy coherence as ensuring policies are coordinated and complementary or at least not contradictory (NSI 2003).

Providing an overall understanding of policy coherence between various components of a policy system, Brissalous (2004) posits that policy integration can be approached vertically (across spatial/organizational levels)<sup>1</sup> and/or horizontally (along the same levels).<sup>2</sup> Two policies are integrated if their objectives, goals, actors, procedures and instruments (or organizations and administrative procedures) are explicitly linked. For example, two policies are considered integrated if their objectives (goals) have several aspects in common, such as a common scope or a unified manner for treating the common aspects of a problem or if common policy structures and procedures such as joint decision-making, collaboration and conflict resolution between both state and non-state actors, exist among policy organizational and administrative bodies.

Another example of integration is when two policies share common actors that also share formal or informal relationships, but for policy integration these relationships must be: collaborative and non-adversarial; actors have shared values; visions or goals; and they abide by the same rules (which might also fall outside organizational mandates).

Duraiappah (2004) comes to similar conclusions when he finds that coherence amongst policies within and across scales is necessary to reduce duplication and fragmentation. He mentions the need for vertical coherence, horizontal coherence, coherence between instruments and institutional and organizational coherence. Horizontal coherence means coherence among policies at each level (national, international and local) before actions are implemented. Vertical coherence integrates instruments, institutions and organizations across scales. Organizational coherence calls for coordination between organizations such as the secretariats of international conventions and national level ministries. Institutional coherence on the other hand demands synergy and the minimization of conflicts among the various formal and informal rules adopted by the various organizations.

Highlighting the importance of goals, Thomas (2004) argues that goal integration can be achieved through the integration of environmental, economic and social dimensions. The result is a simultaneous realization of goals in a single policy, program or project intervention without undermining the integrity of individual goals.

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<sup>&</sup>lt;sup>1</sup> Vertical levels are different in terms of power hierarchies for decision-making purposes.

<sup>&</sup>lt;sup>2</sup> Horizontal levels are similar in terms of power hierarchies for decision-making purposes.

Geerling and Stead (2003) illustrate four types of policy integration (coherence): vertical integration, horizontal integration, inter-territorial integration and intra-sectoral integration. Vertical integration is policy integration between different levels of government. Horizontal integration is policy integration between sectors or professions within one organization. Inter-territorial integration is policy integration between neighbouring authorities or authorities with some shared interest in infrastructure and/or resources. Intra-sectoral integration is policy integration between different sections or professions within one department of an organization such as integration between different environmental sectors (i.e., air quality and noise or biodiversity).

Similarly, Hertin and Berkhout (2004) present four essential ingredients for achieving policy integration: sectoral integration, horizontal communication, sectoral capacity building and policy learning among sectors. Sectoral integration allows the inclusion of environmental mechanisms such as strategic environmental assessments in standard operating procedures or the inclusion of internal environmental expertise in decision-making processes. Horizontal communication attempts to bring together the environmental agendas of different sectors and develop interactions between sectoral and environmental administrations through forums like formalized interdepartmental consultation processes, issue-specific joint working groups, informal discussions, etc.

Although the various studies mentioned above differ in the way they define and characterize policy coherence, the following common features for policy coherence emerge:

- goal integration without compromising the integrity of each goal;
- integration of institutions, administrations and organizations through efforts such as integration of legal arrangements, procedures or instruments, infrastructure, decision-making, etc. between sectors;
- integration at the level of actors responsible for policy implementation or integration among actors.

Overall then, policy coherence among two protocols or policies can be assessed in terms of goals (overall themes), instruments and decisions (ways to achieve the goals), and actors (institutions responsible) for achieving the desired integration.

In the next section, we shall demonstrate how the three criteria identified from the literature review can be used to evaluate the degree of policy coherence among various environmental conventions.

# Section 2: Methodology for Evaluating and Measuring Policy Coherence

We use a two phase procedure to measure the degree of policy coherence. In the first phase, a content analysis is used to determine the frequency of specific words or concepts that appear within documents, books or any printed text pertaining to the instrument or protocol (here

MEAs). The second phase involves using quantitative techniques to convert qualitative information gathered through the content analysis into a numerical measure.

#### Phase one: carrying out a content analysis

To carry out a content analysis on any text, the text is broken down into manageable categories on a variety of levels. Historically, content analyses were time consuming. However, with advances in computational techniques, most documents can now be easily converted into electronic formats. Key words and concepts can then be easily found in these electronic documents using search engines. There are presently specialized computer programs for conducting a content analysis but we shall in this paper limit our analysis to using standard Microsoft Word search engines.

There are two general categories of content analyses. The more commonly used is called conceptual analysis; while a more detailed evaluation is called relational analysis. In this paper we limit our evaluation to a conceptual analysis and leave a relational analysis for a later paper. A conceptual analysis is sufficient at this stage as it incorporates the three criteria mentioned above. This content analysis evaluates policy coherence and provides some initial observations on the degree of policy coherence among various MEAs and MDGs(?). In so doing, it is a first step from which we can then conduct a more detailed relational analysis at a later stage.

We do not go into detail on the methods involved in carrying out a conceptual content analysis in this paper. Instead we list the main steps involved in carrying out a content analysis using MEAs as a sample study. The reader can find more information at the following site:

( http://writing.colostate.edu/guides/research/content/).

#### Step 1

Identify the subject area under investigation. This could be coherence at the national level across ministries, at the international level across Multilateral Environmental Agreements (MEAs) or various poverty reduction initiatives. The methodology does not impose any limits on the number of organizations (MEAs) to be evaluated for policy coherence.

#### Step 2

Identify main organizations and their key documents. This should include strategy documents which spell out the goals, tools or instruments that are being used, and the main actors or organizations identified to play key roles in implementing the objectives of the organization. As suggested earlier, the common features of each of the policy documents can be categorized in terms of goals (overall themes), instruments and decisions (ways to achieve those goals), and actors (institutions responsible) for achieving integration. Once these documents have been identified, key words or concepts in terms of goals, instruments and actors for each of the three main categories are selected. There will therefore be key words associated with the various goals, tools and actors. This is a critical part of the process. For instance, a key instrument under CBD will be in-situ conservation; and under UNFCCC it might be afforestation and reforestation. In this paper the documents searched include the texts of the conventions, strategic plans and/or the latest COP decisions (besides joint programs between conventions). For MDGs, the MDG task force reports prepared under the Millennium Task Force are used. Key words are attached in Annex 1.

#### Step 3

Once key words have been selected for the respective organizations, the next step involves checking the main documents of each organization for the key words of other respective organizations. For example, we use a search engine, look for key words identified in the CBD in the main documents of UNCCD, Ramsar, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITIES), and UNFCCC. We then repeat the procedure for the key words of all the other MEAs/MDGs. The number of times the key words occur (called hits) is then tabulated and a matrix is created. We call this the Policy Coherence Matrix (PCM). In the case of existing policy coherence initiatives such as the Joint Liaison Group which is undertaken by CBD and UNFCCC, points for policy coherence are given to both conventions. If the initiative is spearheaded by one convention—say the agro-biodiversity initiative of CBD—then the points are merely allotted to CBD. There exist several initiatives and documents that aim to build synergies amongst the MEAs. One point is given to each instrument or actor identified in the documents that represent these existing synergies. A PCM is created with the points in each box denoting a sum of goals, instruments and actors. Annex 2 provides details on calculations of raw scores between MEAs, and between MEAs and MDGs. Computations on the PCM are carried out in phase two.

#### Phase two

#### Step 1. Creating the PCM

First create the PCM following this template and then insert results of content analysis following the instructions below the PCM.

	CBD	UNCCD	Ramsar	CITES	UNFCCC
CBD	X	1*	2*		
UNCCD	3*	X			
Ramsar	4*		X		
CITES				X	
UNFCC					X

<sup>1\*</sup> and 2\*: Under this row, you will insert the number of times the goals, instruments and actors or keywords relating to UNCCD, Ramsar, CITES and UNFCCC are cited in the CBD documents in an aggregated fashion.

The diagonal matrix is of course empty.

#### Step 2.: Normalizing the Data

In this step, the numbers in the PCM are transformed or normalized to lie between 0 and 1. 0 denotes no citations and 1 is considered full coverage. We use the highest number of hits (the number of times the keywords occur) as the normalizing factor. Therefore, every other number then falls between zero (0) and one (1).

The normalization procedure is necessary because it provides a benchmark from which we infer full policy coherence, zero policy coherence (complete incoherence) or some level between the two. Without the normalization procedure, we cannot say with any confidence what the final number tells us about the degree of policy coherence. It however must be acknowledged that using the criteria of highest number of hits as the normalizing factor can be criticized as

<sup>3\*</sup> and 4\*: Under this column, you will cite the number of times the issues relating to CBD are cited in Ramsar and CCD document.

arbitrary. This may be true. On the other hand, we don't have any other information to use as a base point for comparison, and using the highest number of hits is our best available criteria based on the best available information we have.

Step 3: Computing the Degree of Policy Coherence

In this step, we compute the Degree of Policy Coherence (DPL). The first property of the matrix is that it will always be square by definition. In this paper we use the simple sum of the absolute difference between the off-diagonal elements as the degree of policy coherence<sup>3</sup>. The DPL is computed using the following simple formula.

$$dpl = \sum_{i} \sum_{j} (1 - a_{ij})$$
and  $0 \le a_{ij} \le 1$ 

i and j are the number of organizations (MEAs) we are investigating for policy coherence. The diagonal elements are always one by default;

- full policy coherence occurs when *dpl* is zero;
- zero policy coherence occurs when dpl = (ij) i.

#### Section 3. Policy coherence among MEAS

In this section, we identify the key goals, instruments<sup>4</sup> and actors across a number of key strategy documents for the following five MEAs: (1) The Convention on Biological Diversity (CBD); The United Nations Convention to Combat Desertification (UNCCD); The Convention on Wetlands (Ramsar); and the United Nations Framework Convention on Climate Change (UNFCCC). Annex 1 has a more detailed description of the goals, instruments and actors identified for each MEA and the number of hits that were computed for each MEA. Table 1 below provides the raw scores for the PCM. The calculations of raw scores from key words are contained in Annex 2.

Table 1: Raw PCM scores

	CBD	UNCCD	Ramsar	UNFCCC
CBD		445	498	417
UNCCD	293		147	270
Ramsar	282	106		112
UNFCCC	298	163	80	

Using the score with the highest number of hits (498), Table 1 is normalized (Step 2):

<sup>&</sup>lt;sup>3</sup> A more complicated equation using the least squares method is also possible with the R<sup>2</sup> giving the degree of policy coherence. We leave that for a later paper. (is this still relevant?)

<sup>&</sup>lt;sup>4</sup> Not all the MEA documents investigated contain a mention of actors. Thus, the analysis of those MEAs focus on the goals and instruments for achieving those goals.

Table 2: Normalized scores

	CBD	CCD	Ramsar	UNFCCC
CBD		0.89	1	0.84
CCD	0.59		0.3	0.54
Ramsar	0.57	0.21		0.54
UNFCCC	0.6	0.33	0.16	

The normalized PCM also allows us to carry out diagnostic checks to identify where policy coherence can be increased in the most effective manner. The normalized scores are worked upon and Table 3 reflects the computations once the (1-a<sub>ij</sub>) operator has been completed (step 3).

Table 3: Table with numerical computations

	CBD	UNCCD	Ramsar	UNFCCC	Row Total	Row Ranking
CBD	X	0.11	0	0.16	0.27	1
UNCCD	0.41	X	0.70	0.46	1.57	2
Ramsar	0.43	0.79	X	0.77	1.99	4
UNFCCC	0.40	0.67	0.84	X	1.91	3
Column Total	1.25	1.57	1.55	1.40	5.75	
Column	1	4	3	2		
Ranking						

In Table 3, the final column to the right is the simple addition across the row. This number indicates how well an MEA represents issues relating to other MEAs (row ranking). A similar ranking is provided for the columns as well. The column-wise rankings show how well an MEA issues is reflected in other MEAs.

Table 3 shows that the degree of policy coherence (DPL) between the MEAs is 5.75. Total policy coherence occurs when we get a value of zero (0). Complete policy incoherence in this sample occurs when we get a score of 12 (ij-i where i and j are equal to 4 since this is a 4\*4 matrix). The degree of policy incoherence then is 52 per cent and the policy coherence is 48 per cent (5.75\*100/12).

Looking at the row and column rankings in Table 4, CBD does the best job of representing other MEA issues while Ramsar does the worst. This is understandable since CBD has a greater number of synergy instruments and also has a greater mention of other conventions in its documents. One reason that Ramsar shows such low levels of coherence with other conventions might be that Ramsar is a much older convention (1971) than the Rio Conventions (1992). Greater synergy efforts have taken place amongst the three Rio Conventions. Also, the columnwise rankings shows that CBD is well-represented in other conventions while UNCCD is the worst represented convention. This is a disturbing finding since arid and semi-arid areas contain a large section of rural poor, especially in developing countries. A word of caution is also necessary: before conclusions can be made for a need for higher policy coherence, say in the case

of Ramsar, we need to go back to the key words used in our search and observe why there is a much higher level of hits of issues relevant to CBD in Ramsar while the same cannot be said of Ramsar with respect to the issues of relevance to CBD (see Annex 1 for keywords). The answer might lie in either the goals and instruments but also in actors as well. If this is the case, the analysis might provide some guidance in bringing on board actors who have been overlooked, and these could potentially lead to better outcomes for meeting Ramsar objectives. Another case could be that there is a need for Ramsar to represent CBD as much as CBD represents Ramsar. Ramsar simply covers wetlands areas and CBD is an all-encompassing convention.

#### Section 4. Policy coherence across the MEAs and MDGs

In this section, we carry out a similar exercise as in Section 2 but include MDG documents in the analysis. A detailed documentation of the goals, instruments, and actors, as well as the number of their hits across the various MEAs is presented in Annex 2. The final PCM is presented in Table 4 below.

**Table 4:** PCM for MEAs and MDG

	CBD	UNCCD	Ramsar	UNFCCC	MDG
CBD		445	498	417	815
UNCCD	293		147	270	381
Ramsar	282	106		112	169
UNFCC	298	163	80		176
MDG	445	444	391	321	

Similar to the earlier analysis, we use the highest number of hits as our normalizing point. In this case, the number of MDG-related issues reflected in CBD documents (815). Table 5 shows the scores after normalization (step 2) and computation of policy coherence (step 3).

As before, we get full policy coherence if the sum of (1-a<sub>ij</sub>) is zero and full policy incoherence if the sum is 20 (ij-i or 25-5). Table 5 presents the scores after computation.

**Table 5:** MEAs and MDG scores after numerical computation

	CBD	UNCCD	Ramsar	UNFCCC	MDG	Row	Row
						Total	Ranking
CBD	X	0.45	0.39	0.49	0	1.33	1
UNCCD	0.64	X	0.82	0.66	0.53	2.66	3
Ramsar	0.65	0.86	X	0.86	0.79	3.17	5
UNFCC	0.63	0.8	0.90	X	0.78	3.12	4
MDG	0.45	0.45	0.52	0.60	X	2.03	2
Column Total	2.38	2.57	2.63	2.62	2.10	12.32	
Column	2	3	5	4	1		
Ranking							

The degree of policy coherence according to Table 5 is 12.32. This implies that the percent of incoherence between MDG and MEAs is 62 per cent and incoherence is 48 per cent.

As suspected, there is a significant level of policy incoherence and more can be done to improve the situation. Examining the row rankings then, MDGs have done a good job of accommodating the MEAs at ranking 2 while Ramsar has done the worst followed by UNFCCC. UNFCCC might be doing poorly because a large part of the Convention has been devoted to the creation of markets for carbon or other emission reduction measures and their methodologies. The column rankings reveal that MDGs seem to be well-represented in the MEA documents. Surprisingly UNFCCC is not as well-represented in the MEAs as expected. This is problematic, since climate change is an important environmental issue that affects all MEAs and the achievement of MDGs. UNFCCs poor representation could relate to the dimensions of the adaptation agenda, which are yet to be fleshed out.

A more detailed analysis of policy coherence between the MEAs and MDGs is attached in Annex 2.

#### Conclusion

The results presented in this paper show that we still have a long way to go before we achieve an acceptable level of policy coherence. It should also be acknowledged that the method we use in this paper can be considered a minimum criterion for policy coherence and the actual situation could be worse. For example, the analysis does not capture instruments which might be working against each other. Thus, even when a convention shows high scores, these need not lead to a greater coherence. This incoherence can be captured in a relational analysis whereby positive and negative impacts are recognized. In this study, we explicitly assume that the presence of similar goals produces policy coherence. This may not always be the case and a relational analysis will be needed at the next level of investigation.

Barring the weakness of the approach, PCM does help us identify specific areas where more can be done and extra efforts need to be directed. By observing the actual values computed in the respective matrix cells, the row and column rankings together tell policymakers if there is an asymmetric treatment across respective goals. For example, in terms of comparing Ramsar to other conventions, it ranked the last across rows and thus demonstrated the least success in capturing other conventions. On closer observation, the column ranking of Ramsar is also low the number of times Ramsar issues are reflected in the other conventions and MDG documents is low. This low coherence is a disturbing phenomenon and needs to be addressed. For instance, semi arid wetlands are an important resource for desert areas. Ramsar has a low score versus CCD and vice versa despite the importance of these wetlands. The PCM matrix shows that there is a significant need to improve this relationship. However, the attempts to strengthen these inter-linkages need to be assessed with care. This is so because there are limits to achieving policy coherence. Having overlaps or inter-linkages or strengthening them does not mean we need to achieve a 100 per cent policy coherence. A 100 per cent policy coherence is an undesirable goal. Attempting to do would mean that the identity and objective of an MEA is no different from an MDG. In reality this is not so. A qualitative analysis along with the PCM analysis can help us decipher the limits and achieve healthy interlinkages between overlapping environmental development conventions and goals.

Lastly, while a high percent of policy incoherence amongst the MEAs and MEAs and MDGs is reported and there is need to better the situation, this in no way implies that we need to increase this by 100 per cent. Then there would be no difference between CBD and UNCCD and this is not something we want to achieve.

#### References

Brissalouis, Helen. *Policy integration for complex policy problems: What, why and how.* Paper presented in 2004 Berlin Conference on Human Dimensions of Global Environmental Change. 2004.

Challis, L. et al.. Joint approaches to social policy: rationality and practice. Cambridge: Cambridge University Press, 1988.

CIDA. *Promoting sustainable*: Rural development through agriculture, 2003: <a href="http://www.acdi-cida.gc.ca/cida\_ind.nsf/0/ECE27220C9FA44AF85256C4D006A0B4D?OpenDocument">http://www.acdi-cida.gc.ca/cida\_ind.nsf/0/ECE27220C9FA44AF85256C4D006A0B4D?OpenDocument</a>

DAC. From aid effectiveness to development effectiveness: Strategy and policy coherence in fragile states, 2001: http://www.oecd.org/dataoecd/33/11/34258843.pdf

Duraiappah, Anantha. Kumar.. Exploring the Links. UNEP-IISD, 2004.

Fresco, Louise O. "Policy coherence for agriculture and development: A myth [html]." Agriculture 21 Spotlight, 2004: http://www.fao.org/ag/magazine/0406sp.htm

Geerling, Harry and Dominic Stead. "The integration of land use planning, transport and environment in European policy and research." *Transport Policy* 10, 187-196, 2003.

Hertin, Julia and Frans Berkhout. "Analyzing institutional strategies for environmental policy integration: The case of EU enterprise policy." *Journal of Environmental Policy and Planning*. 5(1, 2003): 39-56..

IIED. The Millennium Development Goals and Conservation, 2004: <a href="http://www.iied.org/docs/mdg/MDG2.pdf">http://www.iied.org/docs/mdg/MDG2.pdf</a>

Jones, Tom. "Policy coherence, global environmental governance and poverty reduction." *International environmental agreements: politics, law and economics* 2 (4, 2002): 389-401..

Nilsson, Mans and Asa Persson. "Framework for analyzing environment policy integration." *Journal of Environment and Policy Planning*. 5(4, 2003): 333-359.

NSI. Poverty and policy coherence: A case study of canada's relations with developing countries, 2003: <a href="http://www.nsi-ins.ca/english/pdf/polcoh-canada.pdf">http://www.nsi-ins.ca/english/pdf/polcoh-canada.pdf</a>

Penning-Rosswell, Edmund. . "A general model of promoting the integration of national natural resource management" *GeoJournal* 43(3, 1997): 247-262...

Thomas, Emyr V. "Sustainable development, market paradigms and policy integration", *Journal of environmental policy & planning* 5 (2, 2003): 201-216 2004.

UNEP . General UNEP/IGM/5/2 25 January 2002: Open-ended Intergovernmental Group of Ministers or their Representatives on International Environmental Governance, 2002: http://www.unep.org/IEG//docs/Fina\_final\_Working%20blocks\_160102.doc

\_\_\_\_\_. A policy paper for improving international environmental governance among multilateral environmental agreements: negotiable terms for further discussion, 2001: http://www1.unep.org/meas/3rdconsuloniegdoc3.doc

UNEP-WCMC. Synergies and cooperation, 2004: <a href="http://www.unep-wcmc.org/conventions/harmonization/workshop04/BackgroundSynergies.doc">http://www.unep-wcmc.org/conventions/harmonization/workshop04/BackgroundSynergies.doc</a>

UNU. The interlinkages initiative, 1999: http://www.unu.edu/esd/projects/interlinkages.htm

# Annex 1: Keywords for goals, instruments and actors of MEAs and MDGs

Convention on Biological Diversity

Goals

Goal 1: Conservation and sustainable use of biological diversity

Goal 2: Fair and equitable benefit sharing

Goal 3: Protecting traditional knowledge, innovations and practices

Instruments

#### BIODIVERSITY OF DRY AND SUBHUMID LANDS (CBD AND UNCCD/MDGs)

- implementation of sectoral and cross sectoral plans to conserve dry and sub-humid lands ecosystem goods and services
- comprehensive global-level assessment of the status and trends of dry and sub-humid lands biodiversity
- land-use options that promote biodiversity
- conservation of landraces of drought resistant crop varieties
- prevent the extinction of species with high potential value for medical research and species with widespread known uses as medicinal plants and animals
- tech transfer
- sustainable use of water
- promote sustainable use and consumption of dryland biodiversity
- address challenges from climate change and pollution
- control invasive species
- maintain socio-cultural diversity of communities
- reduce pressures of habitat loss and land use change
- rehabilitation and/or restoration of degraded lands
- sustainable management of production systems
- cooperation for integrated catchment management and endangered species
- strengthening of institutions for land tenure and conflict resolution
- income diversification
- management of invasive alien species
- sustainable use of plant and animal biomass

#### ARTICLE 8J ON TRADITIONAL KNOWLEDGE

- development of *sui generis* systems for protection of traditional knowledge
- ethical code of conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities
- consider effects of GURTs on indigenous communities
- respect traditional knowledge and farmers' rights to the preservation of seeds under traditional cultivation
- protect rights of indigenous communities over traditional knowledge

#### FOREST BIODIVERSITY

- sustainable forest management and ecosystem management
- implementing adaptive management
- facilitating dialogue among all forest stakeholders
- enhancing the effectiveness of payment for environmental services
- reduce negative impacts of other sectoral policies on forest biological diversity
- promote the conservation of the biodiversity of ecosystems
- promote the conservation of species diversity
- promote conservation of genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and indigenous communities
- maintain capacity of ecosystems to deliver goods and services
- maintain socio-cultural diversity of indigenous and local communities
- ensure the fair and equitable sharing of benefits arising out of the use of genetic resources
- address challenges to biodiversity from climate change, and pollution

#### PROTECTED AREAS

- conserve protected areas
- establishing protected areas in marine areas
- conservation and sustainable use of biodiversity in marine areas beyond the limits of national jurisdiction
- protect/restore degraded ecosystems
- connect ecosystems/regional networks of protected areas
- involvement of communities in protected area management
- protection of indigenous people's rights
- protected areas and poverty alleviation
- redirection of perverse subsidies
- further development of tool kits for the identification, designation, management, monitoring and evaluation of national and regional systems of protected areas

#### ISLAND BIODIVERSITY

- develop and apply active conservation methods that integrate ex situ and in situ conservation
- establish marine, coastal and terrestrial protected areas
- improve understanding of ecological processes on islands
- re-establish depleted species into marine ecosystems
- re-establish animal species in terrestrial and freshwater ecosystems from which they have been lost or significantly reduced
- restore degraded mangrove, sea-grass and coral reef ecosystems
- prevent unsustainable harvesting of threatened species
- develop and implement recovery plans for island endangered species
- develop and implement fishery management
- sustainable management/ use of biodiversity-based products
- sustainable use of fish stocks
- sustainable agricultural practices
- promote sustainable aquaculture for protection of island ecosystems
- sustainable forestry systems

- sustainable agriculture for food security
- fire management
- integrated pest management
- value-added tourism
- prevent and reduce coastal erosion, siltation and land/soil degradation
- control ship-source pollution, and prepare contingency plans for oil spills
- contingency plan for control of invasive alien species
- develop bio-prospecting
- establish rights over endemic species and locally generated races and cultivars
- remove harmful subsidies
- develop alternatives to overexploitation of natural resources
- environmental impact assessment process
- safe disposal of hazardous waste
- sustainable mangrove management
- integrate land tenure issues for sustainable forest management
- support indigenous and local communities in developing sustainable resource-based livelihoods
- manage international trade in threatened species
- prevent or reduce soil erosion caused by, inter alia, deforestation, overgrazing, and fires
- protect island traditional knowledge
- develop monitoring techniques to identify and monitor the means by which climate change affects key species
- consider afforestation and reforestation projects that enhance island biodiversity
- reduce chemical and physical degradation of coral reefs
- species restoration
- empower communities to respond to natural disasters
- strengthen ecosystems
- early warning systems
- strengthen disaster preparedness

#### MARINE AND COASTAL BIODIVERSITY

- identification, assessment and monitoring of genetic resources of ocean floor
- area-based regulation to address multiple threats and to zone various uses
- management of risks to the marine biodiversity

#### **MOUNTAIN BIODIVERSITY**

- reduce the decline of populations of selected mountain taxonomic groups
- maintain genetic diversity
- reduce biodiversity loss as a result of legal and illegal international trade
- reduce habitat loss of mountain ecosystems
- reduce and prevent biodiversity loss as a result of competition and predation by invasive alien species
- reduce pollution and their impacts on mountain biodiversity
- support sustainable livelihoods, local food security, and health care

#### BIOLOGICAL DIVERSITY OF INLAND WATER ECOSYSTEMS

- conservation and sustainable use of inland water biodiversity and poverty alleviation/sustainable livelihoods
- conservation and sustainable use of biodiversity of inland water ecosystems
- study potential Impacts of Genetic Use Restriction Technologies (GURTs) on Smallholder Farmers, Indigenous and Local Communities
- streamlining effectiveness of national reporting on inland water ecosystems
- consider Ramsar STRP work and prepare revised guidelines for inland wetlands

### IMPLEMENTATION OF INTEGRATED MARINE AND COASTAL AREA SYSTEMS

- integrated management of coastal zones
- provide for diversification of economy and creation of new activities in coastal area in order to improve existing livelihoods

#### **GLOBAL TAXONOMY INITIATIVE**

documenting taxonomy of various biodiversity systems and communicating knowledge

#### REPORTING

harmonization of National Reporting to biodiversity-related treaties

# ENGAGEMENT OF ORGANIZATIONS AND STAKEHOLDERS IN IMPLEMENTATION

- certification schemes reflecting the full range of biodiversity-related issues
- integration of biodiversity considerations into existing voluntary or mandatory reporting and performance standards

#### AWARENESS-RAISING

• raising awareness by providing information on biodiversity values

#### **BIO-SAFETY**

- bio-safety capacity building
- prevent risks associated with LMOs
- create enabling environment for technology transfer

#### **SUSTAINABLE USE**

- adaptive management
- monitoring
- creation of indicators for sustainable use

#### **IMPACT ASSESSMENT**

- consider biodiversity impacts in environmental impacts assessments
- biodiversity impact assessment to be considered by Ramsar as well
- impact assessment of all projects on traditional communities

#### ACCESS AND BENEFIT SHARING

- access and benefit sharing through capacity-building and technology transfer
- access and benefit sharing though mechanisms for settlement of disputes
- access and benefit sharing through protection and enforcement of intellectual property rights
- assess the role of databases and registers in the protection of traditional knowledge;
- conservation of island ecosystems
- establish rights of local communities over cultivars
- ban on field-testing and commercial use of GURTS

#### **BIODIVERSITY TARGETS**

- develop indicators for assessing progress towards 2010 biodiversity
- adopt integrated land and catchment/watershed/river basin management
- integrate into land-and water-use management approaches to combat climate change
- sustainable use of inland water biodiversity
- sustainable use of medicinal plants and home gardens
- sustainable agriculture
- address land tenure issues
- ensure fair and equitable access for agricultural products
- maintain and restore mangrove ecosystems
- reduce climate change induced bleaching
- develop community plans to address disasters like floods

#### Actors

International Seabed Authority, United Nations Division for Ocean Affairs and the Law of the Sea, United Nations Environment Programme (UNEP), Intergovernmental Oceanographic Commission of the United Nations Educational, Cultural and Scientific Organization (UNESCO), International Plant Protection Committee (IPPC), World Trade Organization (WTO/SPS), Asian development Bank (ADB), African Development Bank (AfDB), Bundesamt für Umwelt Wald and Landschaff (BUWAL), Consultative Group on International Agricultural Research (CGIAR), Conservation International (CI), Convention on Migratory Species (CMS), Food and Agriculture Organization of the United Nations (FAO), Global Environment Facility (GEF), International Center for Agricultural Research in the Dry Areas (ICARDA), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), International Development Research Center (IDRC), International Fund for Agricultural Development (IFAD), International Food Policy Research Institute (IFPRI), Intergovernmental Authority on Development (IGAD), International Institute for Environment and Development (IIED), International Livestock Research Institute (ILRI), International Water Management Institute (IWMI), Land Degradation Assessment (LADA), Millennium Ecosystem Assessment (MA), Man and the Biosphere Programme of UNESCO (MAB), Mediterranean Action Plan (MAP), NBSAP (National Biodiversity Strategy and Action Plan), New Partnership for Africa's Development (NEPAD), Organization of American States (OAS), Sahara and Sahel Observatory (OSS), Recursos e Investigacion para el Desarollo Sustentable (RIDES), Southern African Development Community (SADC), Third World Network of Scientific Organizations (TWNSO), United Nations Convention to Combat Desertification (UNCCD), United Nations Development Programme (UNDP), United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Forum on Forests (UNFF), World Bank, World Conservation Monitoring Center (WCMC), World Heritage Convention (WHC), World Intellectual Property Organization (WIPO), World Resources Institute (WRI), World Wildlife Fund (WWF), World Intellectual Property Organization (WIPO), United Nations Commission on Human Rights (UNHCR), United Nations Forum on Forests (UNFF), the World Bank Forest Law Enforcement Governance (FLEG) International Tropical Timber Organization (ITTO), the United Nations Forum on Forests (UNFF), the Food and Agriculture Organization of the United Nations (FAO), the Center for International Forestry Research (CIFOR), the World Bank, Intergovernmental Panel on Forests/Intergovernmental Forum on Forests, World Heritage Convention, World Heritage Centre, WorldFish Center Wetlands International, WWF International, Ramsar, IUCN Species Survival Commission, Conservation International, BirdLife International, Flora and Fauna International, WWF, the World Resources Institute (WRI), BioNET-INTERNATIONAL, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), UNESCO Man and the Biosphere (MAB), International Pollinator Initiative (IPI), Census of Marine Life (CoML), the Botanical/Zoological Network for Eastern Africa, Partnerships of Enhancing Expertise in Taxonomy (PEET), European Distributed Institute for Taxonomy (EDIT)

References

Draft decisions of COP 8: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-02-en.pdf">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-02-en.pdf</a>

Report of SBSTA 11: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-03-en.pdf">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-03-en.pdf</a>

Island biodiv COP 8: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-13-en.pdf">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-13-en.pdf</a>

Adhoc Group on Article8J: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-05-en.doc">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-05-en.doc</a>

Technology transfer: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-19-add1-en.doc">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-19-add1-en.doc</a>

Thematic programs of work: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-26-en.doc">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-26-en.doc</a>

Adhoc Group on Protected Areas: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-08-en.doc">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-08-en.doc</a>

SBSTA 11 Review of work on dryland and subhumid biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-04-en.doc">http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-04-en.doc</a>

SBSTA 11 on POW on marine and coastal biodiversity: http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-11-en.pdf SBSTA 11 POW on sustainable use: <a href="http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-17-en.pdf">http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-17-en.pdf</a>

COP 8 Report on Cartagena Protocol: <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-09-en.pdf">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-09-en.pdf</a>

SBSTA 11 POW on inland biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-12-en.pdf">http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-12-en.pdf</a>

SBSTA 11 POW on mountain biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-10-en.pdf">http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-10-en.pdf</a>

SBSTA 11 POW on forest biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-14-en.pdf">http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-14-en.pdf</a>

Synergies spearheaded by biodiversity

1) CBD and UNFCCC

#### ADHOC GROUP ON BIODIVERSITY AND ADAPTATION

- undertake assessment of biodiversity considerations in adaptation actions: account for traditional knowledge in climate change projects
- consider impacts of adaptation activities on biodiversity
- biodiversity adaptation framework for considering climate change in biodiversity

#### References:

SBSTA 11 report on adaptation and biodiversity:

http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/information/sbstta-11-inf-05-en.pdf

### OPTIONS FOR REPORTING ON THE IMPACT OF CLIMATE CHANGE ON BIOLOGICAL DIVERSITY

• indicators for assessing the magnitude of effort to reduce the pressure and/or mitigate the impact (LULUCF)

#### References:

SBSTA 11 Report on indicators for climate change:

http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/information/sbstta-11-inf-17-en.pdf

#### INTERLINKAGES BETWEEN BIODIVERSITY AND CLIMATE CHANGE

• ecosystem approach to adaptation and mitigation

#### Mitigation:

- afforestation and reforestation activities in degraded areas and their impact on soil and biodiversity conservation
- forest management and forest protection and its impact on biodiversity Agroforestry and its impact on soil in carbon
- agricultural management and soil carbon
- effect of plantations

- improved management of grazing lands
- management/avoiding degradation of peatlands
- marine ecosystems for carbon storage and effects on biodiversity
- effect of hydropower and renewable energy

Adaptation activities can have positive impacts on biodiversity:

- maintaining and restoring native ecosystems
- protecting and enhancing ecosystem services
- actively preventing and controlling invasive alien species
- managing habitats for rare, threatened, and endangered species
- developing agroforestry systems at transition zones
- paying attention to traditional knowledge
- monitoring results and changing management regimes
- establishment of a mosaic of interconnected terrestrial, freshwater and marine multiple-use reserve protected areas

Adaptation also threatens biodiversity either directly:

- through the destruction of habitats, e.g., building sea walls, affecting coastal ecosystems, or indirectly
- through the introduction of new species or changed management practices, e.g., mariculture or aquaculture

#### **References:**

Adhoc Technical Group on Climate Change and Biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta-10/information/sbstta-10-inf-09-en.doc">http://www.biodiv.org/doc/meetings/sbstta-10/information/sbstta-10-inf-09-en.doc</a>

#### 2) CBD and Ramsar:

#### BIOLOGICAL DIVERSITY OF INLAND WATER ECOSYSTEMS

amended criteria to designate new Ramsar sites incorporating considerations for CBD

#### References:

SBSTA 11 Report on inland biodiversity and Ramsar: <a href="http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-13-en.pdf">http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-13-en.pdf</a>

#### 3) CBD and UNCCD and UNFCCC

# GUIDANCE FOR PROMOTING SYNERGY AMONG ACTIVITIES ADDRESSING BIOLOGICAL DIVERSITY, DESERTIFICATION, LAND DEGRADATION AND CLIMATE CHANGE

- Encouraging collaboration among national focal points
- Collaboration at the level of the convention bodies and secretariats
- Capacity-building at the national level
- Technology transfer at both the secretariat and national levels
- Research and monitoring
- Promoting complementarities between NBSAPs/ NAPs and NAPAs

#### Reference:

SBSTA 11 guidance for synergy amongst CBD/UNCCD and UNFCCC: http://www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/sbstta-11-18-en.doc

# AFRICA RIO WORKSHOP: OTHER THEMATIC AREAS OF SYNERGY (CBD FOR UNFCCC AND UNCCD)

- food security
- land degradation
- water management
- sustainable forest management
- poverty alleviation
- soil conservation
- ecosystem approach
- technology transfer
- trends and indicators
- renewable energy
- public awareness

#### Reference:

Regional workshop in Africa on synergies under the work program on dryland and sub-humid lands: <a href="http://www.biodiv.org/doc/meetings/agr/wsagdl-01/official/wsagdl-01-02-en.pdf">http://www.biodiv.org/doc/meetings/agr/wsagdl-01/official/wsagdl-01-02-en.pdf</a>

#### 4) CBD and MDG1

#### POW ON AGRICULTURAL BIODIVERSITY

- promoting awareness of the links between biodiversity, food and nutrition
- mainstreaming biodiversity into nutrition, agriculture and poverty reduction programmes
- conserving and promoting the wider use of biodiversity for food and nutrition
- enhance the sustainable use of biodiversity
- conservation and sustainable use of crop and livestock genetic diversity
- conservation and sustainable use of neglected and underutilized species
- in situ conservation of germplasm
- conservation and sustainable use of wild resources
- promotion, conservation and sustainable use of important biodiversity associated with agricultural, forestry and aquaculture systems at all levels
- identification and promotion of species of potential value to human food and nutrition
- support to traditional forms of food production
- establishing incentives for crop diversification and the creation of markets for biodiverse food crops
- protection and promotion of biodiversity friendly markets
- sustainable agricultural farming

# CROSS-CUTTING INITIATIVE ON BIODIVERSITY FOR FOOD AND NUTRITION

- promotion of responsible resource management
- applying the ecosystem approach
- support for sustainable livelihoods
- assessment of status and trends of the biological diversity of dry and sub-humid lands
- further development of indicators of biological diversity incorporating MDGs
- promote information on potential impact of climate change and poverty on dry and subhumid lands
- assessment of the socio-economic impact of biodiversity loss and linkage to poverty

- increased agricultural productivity in a sustainable manner
- promotion of sustainable livelihoods, and equitable sharing of benefits
- biodiversity conservation and sustainable use
- maintenance of ecosystem functions and the conservation of landraces of drought resistant crop varieties

Actors: FAO, WHO, the Consultative Group on International Agricultural Research (CGIAR), the International Fund for Agricultural Development (IFAD), the World Food Programme (WFP), the United Nations Children's Fund (UNICEF), United Nations University (UNU). International Union of Nutritional Sciences (IUNS), the International Council for Science (ICSU)

#### **References:**

SBSTA 11 work programme on agricultural biodiversity: <a href="http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-03-add1-en.doc">http://www.biodiv.org/doc/meetings/sbstta-11/official/sbstta-11-03-add1-en.doc</a>

Program of work on agricultural biodiversity (COP 8): <a href="http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-26-add2-en.doc">http://www.biodiv.org/doc/meetings/cop/cop-08/official/cop-08-26-add2-en.doc</a>

#### 5) Common synergy efforts by all conventions

#### VITERBO (CBD/UNCCD AND UNFCCC)

- promotion of forest landscape restoration
- facilitating the interaction between national focal points
- address forest deforestation/ forest fragmentation/conversion of forest to other land uses
- control land degradation
- address threats from invasive alien species
- address jointly threats for forest fires/ biodiversity loss and climate change
- promotion of afforestation and reforestation activities
- promotion of renewable energy and more efficient fuel-wood use
- establishment of early warning systems
- standardization of data
- capacity building and technology transfer
- creation of sustainable livelihoods and forest protection (people-centred approach)
- consider land tenure
- facilitate access to carbon markets
- adaptation to climate change

#### References:

http://www.unccd.int/workshop/docs/finalreport.pdf

#### **JLG GROUP**

- common actions plans between NAPS/ NAPAs and NBSAPs
- adaptation as a cross-cutting area for biodiversity conservation and land management
- ecosystem approach for adaptation
- capacity building
- technology transfer
- joint activities on information, education and awareness

research and systematic observation

#### References:

Report of the Joint Liaison Group:

http://unfccc.int/files/meetings/workshops/other\_meetings/application/pdf/reportjlg5.pdf

#### 2) CONVENTION ON DESERTIFICATION

Goal

Goal 1: Combat desertification and mitigate the effects of drought

#### Instruments

- improved land productivity
- rehabilitation, conservation and sustainable management of land and water resources
- prevent land degradation
- rehabilitation of partly degraded land
- reclamation of desertified land
- promote sustainable development in arid lands
- integration of measures to combat desertification with poverty alleviation
- improve food security systems—improving food stocking and distribution systems
- prepare drought contingency plans
- promote sustainable irrigations plans
- sustainable management of natural resources
- developing efficient/alternative and renewable energy forms
- promote an economic environment conducive to sustainable development: give due attention, to international trade, marketing arrangements and debt
- promotion of alternative livelihoods
- protection and validation of traditional knowledge
- sustainable agricultural practices
- development and efficient use of various energy sources
- enhance the availability of water resources in affected areas
- acquisition and adaptation of technology
- adequate and effective protection of intellectual property rights.
- cooperation in the management and control of pests as well as of plant and animal diseases
- rational management and conservation of soil resources
- exploitation and efficient use of water resources
- conservation and sustainable use of biodiversity
- promote the use of traditional technology
- conservation of wildlife and other forms of biological diversity
- protection against forest fires
- strengthening of capabilities for desertification and drought assessment
- systematic observation
- capacity building, education and public awareness
- increasing incomes and employment opportunities
- developing markets for farm and livestock products
- creating financial instruments suited to local conditions
- encouraging diversification in agriculture

- developing economic activities of a para-agricultural type
- incentives for productive investment
- applying population and migration policies
- promoting the use of drought resistant crops
- application of integrated dry-land farming systems
- measures to conserve natural resources
- sustainable use of scarce land and water resources in affected areas
- poverty eradication and sustainable human development strategies
- early warning systems for drought and desertification
- integrated approach for managing desertification and drought
- better land tenure systems
- managing emergency relief and food aid
- cattle protection schemes and public works
- environmental protection
- monitoring and assessing ecological degradation
- joint programs for the sustainable management of trans-boundary natural resources
- tech inventory preparation
- enhance the availability of water resources in affected areas
- facilitate access to technologies: technology transfer
- find innovative means of financing specially the extensive debt burden
- reforestation and rehabilitation programs in dryland areas
- forecast, control, mitigation and prevention of sand storms
- rangeland management

#### Actors

Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development (IFAD), Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Environment Programme (UNEP), United Nations Forum on Forests (UNFF), United Nations Human Settlements Programme (UN-HABITAT), United Nations Information Centre in Nairobi (UNIC), United Nations International Strategy for Disaster Reduction (UNISDR), United Nations University (UNU), World Bank, World Health Organization (WHO), World Meteorological Organization (WMO), International financial institutions (IFI) Global environmental facility (GEF), LADA, World Meteorological Organization (WMO), United Nations Development Programme, U.S. Drought Mitigation Centre of the University of Nebraska (USNDMC), the U.S. National Oceanographic and Atmospheric Administration (NOAA), the World Meteorological Organization (WMO), International Research Institute for climate prediction (IRI) of Columbia University, SADC, African Centre of Meteorological Applications for Development (ACMAD), Centre Régional de Formation et d'Application en Agrometeoroloie et Hydrologie Opérationnelle (AGRYMET)

#### References

Elaboration of UNCCD

UNCCD Annex 1 on Regional Implementation

COP 7 Report 2005

COP7 Addendum 2005

CST 6 Early warning systems 2003

CST 5 Benchmarking 2003

CST 6 Traditional knowledge 2003

CST 2 Best practices relating to land degradation and vulnerability

Report of CRIC 2005

(All available at a common address: <a href="http://www.unccd.int/">http://www.unccd.int/</a>)

Synergies by UNCCD

#### 1) UNCCD and CBD and UNFCCC

- harmonize NAPs and NBSAPs and NAPAs
- cooperation on exchange of information, technology transfer, education and outreach, research and systematic observation, capacity building, reporting and climate change impacts and adaptation
- ecosystem approach
- assessment of methodologies for poverty and land degradation
- fill perceived gaps between biophysical, socio-economic and cultural knowledge and activities to combat desertification
- evaluation of common benchmarks and indicators for monitoring and assessment of desertification
- early warning systems

Joint Approach (JA) for enhancement of cooperation and consultation among LFCCs:

- integrated land-use planning, the ecosystem approach, sustainable resource use within forests and (re)afforestation to alleviate pressure on natural forests
- management and rehabilitation of natural forest, woodland, trees and rangeland
- ecosystem management
- communities (including herders) involvement in planning and decision-making
- add value to non-wood forest products in the rural economy
- small-scale industries based on wood and non-wood forest products
- conservation of unique types of forest in the arid, semi-arid and dry sub-humid zones
- renewable energy programs
- identify common biodiversity challenges for development of national biodiversity information management capacities
- development of appropriate forest/land/ecosystem management strategies
- strengthen organization of rural communities
- provide technical information and training
- formulate and develop national forest programs

**Actors:** World Bank, FAO, UNEP, the International Fund for Agricultural Development (IFAD) and the United Nations Development Programme (UNDP)

#### Other synergies (UNCCD and MDG1)

- commodity awareness-raising, with special emphasis on those crops that are traded as commodities and serve as tools to combat desertification
- using gum-producing acacias in dryland rehabilitation

- strengthening of linkages between UNCCD and ICRISAT
- promotion of global regional fire network and training on community-based fire management

#### References:

Relationships with other conventions: <a href="http://www.unccd.int/">http://www.unccd.int/</a>

#### 3) RAMSAR CONVENTION

Goals

**Goal 1:** Conservation and wise use (sustainable use) of wetlands through ecosystem approaches and within the context of sustainable development

Goal 2: Identify and maintain wetlands of strategic importance

Instruments

#### WETLAND ASSESSMENT

- undertaking wetland inventory, assessments and monitoring
- apply the Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance
- maintain ecological character of all Ramsar sites
- monitor condition of Ramsar sites
- environmental impact assessment
- Wetland Risk Assessment Framework
- harmonization of Ramsar guidance on wetland ecological character, inventory, assessment and monitoring
- water-bird population estimates
- economic valuation of wetlands
- guidelines for the rapid assessment of inland, coastal and marine wetland biodiversity
- systematic implementation of environmental flow assessments

#### WETLAND MANAGEMENT

- protecting and rehabilitating catchment areas
- restoring and rehabilitating degraded or lost wetlands
- participation of local communities in wetland conservation
- incorporate cultural values in wetland management plans
- promote international assistance for conservation and wise use of wetlands
- international cooperation for transboundary freshwater and coastal wetlands and river basins
- promoting regional wetland sustainable use initiatives
- promoting sustainable harvesting practices in trade of wetland-dependent plants and animals
- wetland tenure systems and user rights
- identify negative subsidies or incentives for water resources

#### **BIODIVERSITY-RELATED**

- development of site networks of protected areas
- addressing the threats from invasive alien species to wetlands

#### RIVER BASIN MANAGEMENT/COASTAL ZONES

- strategic planning in coastal zones
- river basin management
- integrated land use and water management
- protecting and rehabilitating catchment areas
- establishment of coastal greenbelts of mangroves and other appropriate species

#### IMPACTS - CLIMATE/DROUGHT AND DAMS

- sharing of expertise and information on drought/monitor impacts of droughts in wetland areas
- maintain or restore Ramsar sites to reduce their vulnerability to natural disasters
- protect and rehabilitate peatlands
- wetland management to increase resilience /reduce impact of climate change /floods / drought and desertification
- mitigate socio-economic and ecological impacts of large dams on wetlands
- assistance with monitoring of long-term ecological impacts of disasters

#### **FISHERY**

- sustainable management of wetland ecosystems for fisheries
- conflict resolution for fisheries management

#### WATER MANAGEMENT

- integrated water resources planning
- creation of ecologically based indicators for wetland conservation
- habitat restoration and provision of fish passages
- control of unsustainable aquaculture practices
- reduction of water pollution impact
- community outreach, wildlife monitoring, codes of conduct, certification and education, and awareness-raising for fishing communities

#### **GROUNDWATER**

• sustainable groundwater management

#### LIVELIHOODS ETC.

- poverty reduction (role of local communities)
- build community capacity to sustainably use wetlands to improve livelihoods to increase food security, diversify economies, and add value to wetland products
- enhancing sustainable livelihoods or alternative livelihoods
- support the recovery of coastal wetlands affected by the Indian Ocean Tsunami
- consider/promote traditional knowledge

#### **AGRICULTURE**

- developing more sustainable agricultural practices
- not support agricultural policies that are inconsistent with trade-related agreements
- minimize the adverse impacts of agricultural practices on wetland conservation and sustainable use goals
- and supporting more effective water demand and water resource management across all sectors, especially in the agricultural sector: water resource management

#### Actors

International Standing Committee, Scientific and Technical Review Panel (STRP), Mediterranean Wetlands Committee (MedWet/Com), Ramsar Bureau and its MedWet Coordination Unit, Small Grants Fund and its Endowment Fund, Voluntary Fund for the Convention's Communication, Education, and Public Awareness Programme, Montreux Record, San José Record, Ramsar Advisory Missions, and partnerships with national, regional and international bodies. BirdLife International, IUCN—The World Conservation Union, Wetlands International, and the World Wide Fund for Nature (WWF), CBD, UNCCD, UNFCCC, CMS, World Heritage, and regional conventions with which Ramsar has agreements in place OCs: Other collaborators, including those with which Ramsar has agreements in place, in particular UNESCO's Man and the Biosphere Programme (MAB); Eurosite (the network of European natural heritage management bodies); The Nature Conservancy (TNC), Society of Wetland Scientists (SWS), Center for International Earth Science Information Network, Columbia University, U.S. (CIESIN), The International Association for Impact Assessment (IAIA), Ducks Unlimited (Canada, Mexico and U.S.), South Pacific Regional Environment Program (SPREP), Institute for Inland Water Management and Waste Water Treatment (RIZA, The Netherlands), Niger Basin Authority, and Lake Chad Basin Commission, BirdLife International, IUCN, WWF, Wetlands International, IUCN—The Conservation Union, Food and Agriculture Organization (FAO), Commonwealth Secretariat, The Nature Conservancy (TNC), Society of Wetland Scientists (SWS), Center for International Earth Science Information Network, Columbia University, U.S. (CIESIN), The International Association for Impact Assessment (IAIA), Ducks Unlimited (Canada, Mexico and U.S.), South Pacific Regional Environment Program (SPREP), Institute for Inland Water Management and Waste Water Treatment (RIZA, The Netherlands), Niger Basin Authority, and Lake Chad Basin Commission, World bank, GEF

#### References:

A conceptual framework for the wise use of wetlands and the maintenance of their ecological character: http://www.ramsar.org/res/key\_res\_ix\_01\_annexa\_e.htm

Revised strategic framework and guidelines for the future development of the list of wetlands of international importance: http://www.ramsar.org/res/key\_res\_ix\_01\_annexb\_e.htm

An integrated framework for the Ramsar Convention's water-related guidance: http://www.ramsar.org/res/key\_res\_ix\_01\_annexc\_e.htm

River basin management: additional guidance and a framework for the analysis of case studies: http://www.ramsar.org/res/key\_res\_ix\_01\_annexci\_e.htm

Guidelines for the management of groundwater to maintain wetland ecological character; http://www.ramsar.org/res/key\_res\_ix\_01\_annexcii\_e.htm

Ecological "outcome-oriented" indicators for assessing the implementation effectiveness of the Ramsar Convention: http://www.ramsar.org/res/key\_res\_ix\_01\_annexd\_e.htm

An integrated framework for wetland inventory, assessment and monitoring (IF-WIAM): http://www.ramsar.org/res/key\_res\_ix\_01\_annexe\_e.htm

Guidelines for the rapid assessment of inland, coastal and marine wetland biodiversity: http://www.ramsar.org/res/key\_res\_ix\_01\_annexei\_e.htm

Engagement of Ramsar with other water processes: http://www.ramsar.org/res/key\_res\_ix\_03\_e.htm

Sustainable fishery resources: http://www.ramsar.org/res/key\_res\_ix\_04\_e.htm

Mitigation of impacts of natural phenomenon: http://www.ramsar.org/res/key\_res\_ix\_09\_e.htm

Cross-biomes planning with SIDS: http://www.ramsar.org/res/key\_res\_ix\_20\_e.htm

Ramsar and protected areas: http://www.ramsar.org/res/key\_res\_ix\_22\_e.htm

Cultural values of wetlands: http://www.ramsar.org/res/key\_res\_ix\_21\_e.htm

Wetlands and poverty reduction: http://www.ramsar.org/res/key\_res\_ix\_14\_e.htm

Status of sites: http://www.ramsar.org/res/key\_res\_ix\_15\_e.htm

Agriculture, wetlands and water resource management: http://www.ramsar.org/res/key\_res\_viii\_34\_e.htm

Protection of mangroves: http://www.ramsar.org/res/key\_res\_viii\_32\_e.htm

Wetlands and dams: http://www.ramsar.org/res/key\_res\_viii\_02\_e.htm

NEPAD and Ramsar: http://www.ramsar.org/res/key\_res\_viii\_44\_e.htm Synergies by Ramsar

1) Ramsar and UNFCCC

#### **NEGATIVE REPERCUSSIONS TO SPECIFIC ADAPTATION OPTIONS**

- active transportation of aquatic species poleward could result in the extinction of local wetland species and large changes in ecosystem processes and structures
- interactions resulting from increased stocking and relocation of recreational and aquacultural endeavours
- secondary pressures from new hydrologic engineering structures

#### **CO-BENEFITS OF ADAPTATION MEASURES**

development of infrastructure against sea level rise in a low-lying coastal system
could result in economic gains, although the relative expense of structures such as
ports and trading centres that arise are unlikely to have been costed within the
context of climate change

#### EFFECTS OF MITIGATION ACTIONS

- reforestation or afforestation could benefits increased diversity of flora and fauna, except in cases where biologically diverse non-forest ecosystems are replaced by forests of single or few species
- afforestation can also have various positive or negative impacts on ecosystem functions, such as water run-off and nutrient cycling
- avoiding deforestation can provide co-benefits, including conservation of biodiversity and soil resources and maintenance of forest products
- increasing tree cover can improve and protect soil quality in areas that are vulnerable, stabilize river flows
- planting tree species with high water demand in locations may lead to increased water stress
- avoid degradation of peatlands

References: Climate change and wetlands: http://www.ramsar.org/res/key res viii 03 e.htm

#### 2) Ramsar and CBD

#### JOINT WORK PLAN BETWEEN RAMSAR AND CBD

- institutional cooperation to create a joint work plan
- Ramsar—CBD River basin initiative
- cooperation with POW on biodiversity of inland waters
- consider the role of global peatland initiative
- integrate ICZM and CBDs marine and coastal initiative
- consider adoption of guidelines for global action on peatlands
- role of forested wetlands and their potential role in mitigating climate change
- sustainable agriculture and the maintenance of the ecological character of wetlands for maintaining agro-biodiversity
- water allocation and management for the maintenance on ecosystem functions
- analyses of wetlands and biodiversity in relation to river basins and drylands.
- establish ways and means of relevant activities contributing to the CBD Programme of work on biological diversity of dry and sub-humid lands
- strengthening collaborative work on the conservation of the biological diversity of montane peatland systems

- joint efforts to address invasive species
- development of national monitoring programs and indicators for the biological diversity of inland and coastal and marine wetlands
- jointly promote the application of the Strategic Framework for the Future Development of the List of Wetlands of International Importance
- identification of good practice case studies demonstrating wetland sustainable use
- inventories
- sustainable tourism
- linkages financial mechanisms, trade, impact assessment and valuation
- exchange information about the implementation of the respective work plans in the areas of education, communication and public awareness
- harmonize national reporting
- use ecosystem approach
- protected areas management

**Actors:** Wetlands International, IUCN—The Conservation Union and the Food and Agriculture Organization (GISP), IUCN and UNEP-WCMC CMS UNEP CBD iAIA medwet coordination unit

References: http://www.ramsar.org/cop8/cop8\_doc\_19\_e.htm

#### COOPERATION WITH BIODIVERSITY RELATED CONVENTIONS

- development of issue-based modules and harmonization of national reporting requirements
- streamlining and simplifying reporting requirements

**Actors:** UNEP, UNESCO and FAO, and with other relevant intergovernmental organizations such as the Global Biodiversity Information Facility (GBIF), UNEP-WCMC, and the CGIAR

References: Synergies with other IOs: http://www.ramsar.org/res/key\_res\_ix\_05\_e.htm

#### 3) Ramsar and UNCCD

- identification of important wetlands in drylands
- cooperation in the area of experts/ traditional knowledge/ benchmarks and indicators
- contributing to national action programs
- institutional cooperation
- exchange of information and experience
- capacity building
- coordination of programs of work
- joint actions
- reporting actions

**References:** http://www.ramsar.org/moc/key\_ccd\_moc.htm

#### 4) UNFCCC

#### Goals

Goal 1: Stabilizing greenhouse gas emissions (to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner and to allow ecosystems to adapt naturally)

#### Instruments

- promote sustainable development
- promote an open/supportive international economic system that would lead to sustainable economic growth and development
- provide scientific assessment of climate change
- develop policies and measures (P and M) that:
  - o enhancement of energy efficiency
  - o promotion of sustainable forest management
  - o protection of sinks and reservoirs
  - o promotion of sustainable agriculture: 6
  - o promotion of renewable energy technologies
  - o limitation of methane emissions
- regulations on energy efficiency in buildings and appliances, on waste management and on fluorinated gases/ hydrogen technology
- investment in sectors such as natural gas
- prepare national communications on green house gas emissions and action taken towards mitigation and adaptation
- provide climate change insurance
- protection and rehabilitation of areas affected by drought and desertification
- removal of market imperfections that run counter to the objectives of the convention
- research and systematic observation

#### MITIGATION

#### LAND USE, LAND-USE CHANGE AND FORESTRY

- account for greenhouse gas emissions by sources and removals by sinks resulting from cropland management, grazing land management and re-vegetation and afforestation and reforestation activities
- develop methodologies for accounting emissions from sources and sinks

#### **CLEAN DEVELOPMENT MECHANISM**

- promote emission reductions and sustainable development
- undertake small scale afforestation and reforestation activities
- carbon capture and storage under CDM
- energy efficiency and better waste management through CDM projects

#### **TYPES OF PROJECTS**

Renewable energy projects

- D. electricity generation for a system
- E. supply-side energy efficiency improvements—transmission and distribution activities
- F. supply-side energy efficiency improvements—generation

- G. demand-side energy efficiency programmes for specific technologies
- H. energy efficiency and fuel switching measures for industrial facilities
- Type (ii): Energy efficiency improvement projects
- I. energy efficiency and fuel switching measures for buildings
- J. agriculture
- K. switching fossil fuels
- L. emission reductions in the transport sector
- Type (iii): Other project activities
- M. Methane recovery

#### EMISSION TRADING AND JOINT IMPLEMENTATION

- development of international transaction log for emissions trading
- interchangeability of CERs/AAU/RMU etc.

# CREATION OF SPECIAL CLIMATE CHANGE FUND TO FUND ACTIVITIES SUCH AS

- energy efficiency, energy savings, renewable energy and less-greenhouse-gas-emitting fossil-fuel
- research and development relating to transport and industry
- low-carbon development in the transport and industry sectors
- research and development relating to energy efficiency and savings in transport and industry sectors
- climate-friendly agricultural technologies and practices
- afforestation, reforestation and use of marginal land
- solid and liquid waste management for the recovery of methane
- capacity-building
- economic diversification
- energy efficiency in countries whose economies are highly dependent on consumption of fossil fuels and associated energy-intensive products

#### **TECH TRANSFER**

• facilitate and finance transfer of environmentally sound technologies and creation of enabling environments

#### ADAPTATION

- promote development and dissemination of tools for vulnerability and impact assessments
- use of GCMs and other global climate models
- operation of LDC and special climate change fund for adaptation
- identify appropriate indicators of vulnerability of biophysical systems to climate change and variability and socio-economic systems of the LDCs, particularly of their food security systems
- promote research and marketing of flood and drought resistant food and cash crop varieties at regional and national centers of the LDCs
- improve systems of monitoring of diseases and vectors affected by climate change and in this context and improve methods for disease control and prevention

- study the socio-economic and institutional feasibility of micro-insurance and other financial hedging tools for management of risks
- research relationship between adaptation and sustainable development from the prism of poverty reduction
- research and development and tech transfer of adaptation technologies
- promote economic diversification measures to increase coping abilities
- improving regional modeling (downscaling) and scenario building
- early warning mechanisms
- integrating climate risk within infrastructure investments
- improve public awareness and capacity building
- develop plans for coastal zone management
- water resources management
- consider local coping strategies or traditional knowledge

#### COMPLIANCE FOR KYOTO PROTOCOL

compliance system of the protocol

Actors

GCOS, GEO, UNDP, UNEP, CTI, GTOS, IPCC, IEA, UNCSD, Convention on Wetlands, Food and Agriculture Organization of the United Nations (FAO), United Nations Forum on Forests (UNFF), International Strategy for Disaster Reduction (UNISDR), World Water Forum, OECD, CBD, Convention on the Conservation of Migratory Species of Wild Animals (CMS), UNDP, UNU, International Geosphere—Biosphere Programme, GEF

References

Text of the Convention: <a href="http://unfccc.int/resource/docs/convkp/conveng.pdf">http://unfccc.int/resource/docs/convkp/conveng.pdf</a>

Text of the Kyoto Protocol: <a href="http://unfccc.int/resource/docs/convkp/kpeng.pdf">http://unfccc.int/resource/docs/convkp/kpeng.pdf</a>

COP MOP1 Simplified modalities for A and R under CDM: http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=81

COP MOP1 Modalities for A and R under CDM: http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=61

COP MOP1 Further guidance on CDM:

http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=93

COP MOP1 Modalities of CDM:

http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=6

COP/MOP1 Capacity building for Kyoto Protocol http://unfccc.int/resource/docs/2005/cmp1/eng/08a04.pdf#page=5 COP MOP1 Land use land use change and forestry <a href="http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=3">http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=3</a>

COP MOP1 Good practice guidance <a href="http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=10">http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=10</a>

COP MOP1 Guidelines for review of Article8: http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=10

COP MOP1 Procedure of compliance under Kyoto Protocol: <a href="http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=92">http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=92</a>

COP MOP1 Good practice guidance for Article 5: http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=21

COP 11 Technology transfer: http://unfccc.int/resource/docs/2005/cop11/eng/05a01.pdf#page=14

COP 11 Guidance to LDC fund: <a href="http://unfccc.int/resource/docs/2005/cop11/eng/05a01.pdf">http://unfccc.int/resource/docs/2005/cop11/eng/05a01.pdf</a>#page=10

<u>COP 11</u> Five-year program of work in adaptation: <u>http://unfccc.int/resource/docs/2005/cop11/eng/05a01.pdf#page=5</u>

SBI 23 Report: <a href="http://unfccc.int/resource/docs/2005/sbi/eng/23.pdf">http://unfccc.int/resource/docs/2005/sbi/eng/23.pdf</a>

SBSTA 23 Report: http://unfccc.int/resource/docs/2005/sbsta/eng/10.pdf

SBSTA 22 Report: <a href="http://unfccc.int/resource/docs/2005/sbsta/eng/04.pdf">http://unfccc.int/resource/docs/2005/sbsta/eng/04.pdf</a>

SBI 22 Report: <a href="http://unfccc.int/resource/docs/2005/sbi/eng/10.pdf">http://unfccc.int/resource/docs/2005/sbi/eng/10.pdf</a>

SBSTA 23 POW on adaptation: http://unfccc.int/resource/docs/2006/sbsta/eng/04.pdf

SBSTA 23 Policies and measures: <a href="http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf">http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf</a>
<a href="http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf">http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf</a>
<a href="http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf">http://unfccc.int/resource/docs/2005/sbsta/eng/inf06.pdf</a>

#### ESPOO (UNFCCC/ CBD/RAMSAR)

streamlining reporting and harmonization

- technology transfer
- capacity-building
- research and systematic observation
- common sustainable livelihood approaches
- ecological perspectives to address public health
- biodiversity linked measures to mitigate climate change
- adaptation measures to mitigate impacts of climate change on biodiversity
- climate change adaptation measures
- adaptation as a cross-cutting issues
- communication of national focal points
- advancing environmental friendly climate adaptation measures
- national action plans

Actors GEF, UNDP, UNITAR, GCOS, UNU, GEF, Woodshole, IUCN, UNFF, FAO, ITPGR, Ramsar

**References:** http://www.iisd.ca/climate/cespo/jul2.html

#### NAPS AND INTERLINKAGES

- integration of action program of environmental conventions—poverty reduction
- science and education, agriculture, forestry, energy and water supply
- closer links between NAPs and NAPAs in arid, semi-arid and dry sub-humid areas
- liaison between focal points of the conventions and the GEF focal points
- enhance integrated project development and program management
- appropriate incentives at the country level to promote institutional arrangements
- coordination and responsiveness by respective COPs and secretariats
- technical and financial strategic alliances
- increased number of national synergy workshops
- synergy and cooperation between the convention
- identification of the key prerequisites for synergy

References: http://unfccc.int/resource/docs/2005/tp/eng/03.pdf

#### **OPTIONS FOR COLLABORATION:**

- complementarities among the National Biodiversity Strategies and Action Plans (NBSAPs), the National Action Programs (NAPs), and the National Adaptation Programs of Action (NAPAs) for least developed countries of the UNFCCC
- collaboration among national focal points
- collaboration among the scientific subsidiary bodies to the conventions
- creation of JLG
- development of joint work programs or plans
- joint workshops (at the international level)
- joint capacity-building activities, including training, and local, national and regional
- workshops to promote synergy in implementation
- case studies on interlinkages
- facilitation of exchange of information and experience
- inter-accessibility of available web-based data
- cooperation in communication, education and public awareness

- cooperation in the development of advice, methodologies and tools
- efficient communication between the national focal points of the three Rio Conventions
- sharing of information on regular basis to discuss issues relevant to all Rio Conventions
- national-level operational institutional arrangements
- methods and tools, such as checklists, to guide focal points
- consider Rio markers developed by the Development Assistance Committee
- collaboration at the level of the convention bodies and secretariats
- more systematic cross-participation, including through peer review
- joint thematic workshops
- coordinated requests for scientific advice from external bodies
- synergies in capacity building
- synergies in technology transfer
- synergies in reporting

References: http://unfccc.int/resource/docs/2004/sbsta/inf19.pdf

### 5) MDGs

Goals

Goal 1: Reduce hunger and poverty

Goal 2: Promote gender equality and empower women

Goal 3 and 4: Reduce child mortality and Improve maternal health

Goal 5: Combat HIV/AIDS, malaria and other diseases

Goal 6: Ensure environmental sustainability

Goal 7: Ensure a global partnership for development

#### Instruments

- strengthen the contributions of donor countries and national governments to activities that combat hunger
- improve public awareness of hunger issues and strengthen advocacy organizations
- strengthen developing country organizations that deal with poverty reduction and hunger
- strengthen accurate data collection, monitoring, and evaluation
- promote an integrated policy approach to hunger reduction
- restore budgetary priority to the agricultural and rural sectors
- build developing country capacity to achieve the hunger Goal
- link nutritional and agricultural interventions
- increase poor people's access to land and other productive resources
- empower women and girls
- strengthen agricultural and nutrition research
- remove internal and regional barriers to agricultural trade
- increase the effectiveness of donor agencies' hunger-related programs
- create vibrant partnerships to ensure effective policy implementation
- improve soil health

- improve and expand small-scale water management
- improve access to better seeds and other planting materials
- diversify on-farm enterprises with high-value products
- establish effective agricultural extension services
- promote mother and infant nutrition
- reduce malnutrition among children
- reduce vitamin and mineral deficiencies
- reduce the prevalence of infectious diseases that contribute to mal-nutrition
- build and strengthen national and local early warning systems
- build and strengthen national and local capacity to respond to emergencies
- invest in productive safety nets to protect the poorest from short-term shocks and to reduce long-term food insecurity
- invest in and maintain market-related infrastructure
- develop networks of small rural input traders
- improve access to financial services for the poor and food-insecure people
- provide and enforce a sound legal and regulatory framework
- strengthen the bargaining power of the rural and urban poor in labour markets
- ensure access to market information for the poor
- promote and strengthen community and farmer associations
- promote alternative sources of employment and income
- help communities and households restore or enhance natural resources
- secure local ownership, access, and management rights to forests, .sher-ies, and rangelands
- develop natural resource-based "green enterprises"
- pay poor rural communities for environmental services

### GOAL 2: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

#### **INSTRUMENTS:**

- strengthen opportunities for post-primary education for girls while simultaneously meeting commitments to universal primary education
- guarantee sexual and reproductive health and rights
- invest in infrastructure to reduce women's and girls' time burdens
- guarantee women's and girls' property and inheritance rights
- eliminate gender inequality in employment by decreasing women's reliance
- reduce occupational segregation
- increase women's share of seats in national parliaments and local governmental bodies
- combat violence against girls and women

# GOAL 3 AND 4: REDUCE CHILD MORTALITY AND IMPROVE MATERNAL HEALTH

#### **INSTRUMENTS:**

- promote health systems for sustainable and equitable delivery of technical interventions
- prevent excessive segmentation of the health system
- enhance poor people's access to health care
- increased development aid to strengthen health sector

- increase country level allocation to health sectors
- abolish user fees for basic health services
- address rights and livelihoods of the health workers
- build a cadre of skilled birth attendants
- ensure universal access to reproductive health services
- HIV/AIDS initiatives should be integrated with programs on sexual and reproductive health and rights
- attention to adolescents for services that are sensitive to their increased vulnerabilities
- ensure women's access to quality services for abortion
- revise laws that jeopardize women's health
- better child health interventions
- better child nutrition
- invest in preventing neonatal deaths
- accessibility of emergency obstetric care for all women
- increase the number of skilled birth attendants
- global institutions should commit to long-term investments
- restrictions to funding of salaries and recurrent costs should be removed
- align donor funding with national health programs
- health stakeholders to participate fully in policy development and funding plans
- indicators of health system functioning must be developed and integrated into policy and budget cycles
- health information systems should provide appropriate, accurate and timely information to inform management and policy decisions
- strengthen vital registration systems
- implement progressive financing mechanisms
- reinforce the commitment to health as a right
- establish transparent and participatory decision-making processes
- improve resource allocation to underserved areas based on measures of equity
- create transparency in allocation and expenditure groups claims
- share resources including information and technology
- discourage segmentation of health sector
- reinforce quality in public and private health sectors
- document, monitor, and publicize disparities in health status and healthcare across population groups
- regulate to ensure appropriate public inclusion in health institution management in both the public and private sectors
- use space opened by consumer rights movement for advocating claims
- support and encourage existing civil society organizations to help monitor facilities and providers
- ensure government mechanisms exist to improve responsiveness to health claim
- strengthen the primary healthcare system
- promote universal access to sexual and reproductive health information and services

#### GOAL 5: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

#### **INSTRUMENTS:**

- improve education and behavior change campaign for youth and general population
- voluntary testing and counseling

- harm reduction, behaviour change and condom campaign
- control of sexually transmitted infections
- health systems precautions and blood safety
- ensure equitable access to treatment
- invest in health systems as AIDS services are expanded
- integrate prevention and treatment
- empower women and girls
- plans for orphans and vulnerable children
- expanding international and domestic aid
- empower governments and hold them accountable
- develop surveillance systems for early malaria detection
- promote partnerships for malaria control
- secure affordable access to treatment
- invest in research and development of malaria control tools
- develop efficient systems for the procurement and distribution medicine
- improve technical assistance to build expertise in effective procurement, quality control, and quality assurance systems for medicines
- strengthen national regulatory bodies to eliminate waste and loss of medicines
- Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) and the World Bank Multi-Country HIV/AIDS Program (MAP)
- WHO pre-qualification project to identify good-quality products for HIV/AIDS, tuberculosis, and malaria medicines for procurement by UN agencies
- simplify registration procedures for priority medicines
- international agencies and donors need to make safety and quality of medicines a higher priority by supporting regulatory strengthening and the timely exchange among countries
- strengthen WHO pre-qualification project
- pre-qualify both individual products for high-priority diseases and extend factories producing these products
- international organizations should share information about poor quality medicines
- international organizations should also support existing adverse event monitoring systems
- international organizations should work to strengthen national regulatory capacity through training, capacity building, information sharing of best practices, and sustained funding
- increase in the public sector budget for essential medicine
- reduce prices of medicines in developing countries must be reduced to the minimum sustainable level
- identify and adopt strategies that will permit continued production and supply of lowcost generic medicines for poor populations
- monitor impact of TRIPS compliance
- pharmaceutical companies should be willing to negotiate medicines prices based on a concept of equity
- design policies to favour international competition in the pharmaceutical field
- disseminate health literacy information
- increase the number of qualified health workers and improved distribution, especially in poorer and rural areas

- upgrade curricula for all healthcare workers involved in prescribing and dispensing education
- mobilization of community in healthcare planning and delivery of large-scale treatment programs
- donor financing to subsidize staff wages in critical need areas
- methodologies and clinical trials need to be gender responsive

#### GOAL 6: ENSURE ENVIRONMENTAL SUSTAINABILITY

- promote sustainable agriculture techniques
- restore and manage desertified lands
- increase income in informal forest sector activities
- integrate ecosystem management of river basin systems
- protect and restore representative areas of all major ecosystems
- reduce demand for freshwater, especially in cropping systems
- minimize pollution levels in surface water and groundwater sources
- maintain aquatic biodiversity
- implement an ecosystem-based approach to fisheries management
- restore depleted fish population levels
- establish a network of representative, fully protected marine reserves
- reduce exposure to toxic chemicals in vulnerable groups
- reduce the atmospheric levels of the six key pollutants and methane
- invest in cost-effective and environmentally sustainable energy
- promote and engage climate-friendly carbon and technology markets
- mainstream responses to climate change and variability
- train, recruit, and retain environment experts
- secure sufficient funding for environmental institutions
- reform governmental institutions and improve interagency coordination
- improve governance and gender equality
- national accounting of environmental degradation
- introduce payments for ecosystem services
- reform tax structures
- phase out environmentally harmful subsidies
- develop trade regulations to promote legal, sustainable harvesting of natural resource products
- strengthen property and land-tenure rights
- improve national and international regulatory frameworks
- mobilize science and technology on a national scale
- establish mechanisms for science and technology advice to policymakers
- train civil servants and political decision-makers in environmental management
- provide public access to information
- improve extension training and services so that they are based on locally-derived solutions
- strengthen global scientific assessments
- ensure that all project proposals and poverty reduction strategies submitted to funding agencies include an assessment of their environmental impacts
- establish a system of targeted incremental funding of national environmental programs

- increase funding to countries for implementing existing multilateral environmental agreement
- prioritize sanitation crisis
- countries must ensure that policies and institutions for water supply and sanitation service delivery, as well as for water resources management and development, respond equally to the different roles, needs, and priorities of women and men
- promote users pay for water and sanitation while meeting the needs of the poor households
- planning and investment in sound water resources management and infrastructure
- prioritize sanitation crisis in governmental policy
- pursue investment and reforms in water and sanitation
- sustainable service delivery of water and sanitation
- empower local authorities and communities to manage water supply and sanitation
- ensure gender equity in water resources management
- pursue national poverty reduction strategies countries as a larger framework for coherent water resources development
- support a wide range of water and sanitation technologies

#### GOAL 7: ENSURE A GLOBAL PARTNERSHIP FOR DEVELOPMENT

- liberalization of trade in developing countries by removal of non-tariff barriers, domestic support and export subsidies
- to make developing countries special and differential treatment more effective
- all export subsidies should be abolished
- de-couple all support payments to farmers by 2010 and cap all domestic support measures at 10 percent of the value of agricultural production (on a by-product basis) by 2010 and at 5 percent by 2015
- support for diversification, transportation subsidies for farm products, consumption subsidies for domestic food aid, public assistance for establishing farm cooperatives, or institutions promoting marketing and quality control
- developed countries should bind all tariffs on nonagricultural merchandise at zero by 2015
- developing countries should bind all their tariffs in coherence with their applied rates
- duty-free and quota-free access for all exports from the poorest countries should be extended by all developed countries
- the liberalization of GATS
- developing countries' liberalization to foreign direct investment must be matched by developed country liberalization to foreign labour
- revision of the traditional approach to special and differential treatment to adjust to trade liberalization and real and substantial aid for trade
- a temporary "aid-for-trade fund" to support countries in addressing adjustment costs associated with the implementation of a Doha reform agenda.
- identification of new and existing channels through which this additional funding could made available for relevant targeted projects in developing countries
- openness in services
- better national development strategies that integrate trade as a key component
- increased and effective international financial and technical assistance for developing production and trade capacities
- create a more enabling international trade environment

- adoption of sound complementary policies to manage liberalization
- ensure trade policymaking is appropriately informed by expertise across a range of policy areas
- integrating trade policy into national development plans
- ensure public debate on trade policy
- mutually supportive relationship between trade and other policies at the national and international levels
- Increase research efforts at the national level to ensure that trade policy decisions, including WTO negotiating positions, are based on sound analysis
- increase capacity of bilateral and multilateral assistance to promote technological innovation
- increasing developing country capacity for using technology
- strengthening UN capacity to use scientific and technical advice
- managing benefits and risks of new technology
- protecting rights of inventors while promoting technological development in developing countries
- attracting foreign direst investment
- promote regional markets
- stimulating the creation of small and medium size businesses
- using government procurement to stimulate technological innovation
- increasing participation in international trade
- training decision-makers in science technology and innovation
- increasing the capacity of multilateral and bilateral donors to enhance science and technology

#### References

Halving hunger: It can be done: <a href="http://www.unmillenniumproject.org/documents/HTF-SumVers-FINAL.pdf">http://www.unmillenniumproject.org/documents/HTF-SumVers-FINAL.pdf</a>

Taking action: Achieving gender equality and empowering women: <a href="http://www.unmillenniumproject.org/documents/Gender-complete.pdf">http://www.unmillenniumproject.org/documents/Gender-complete.pdf</a>

Whose got the power: Transforming health system for women and children: <a href="http://www.unmillenniumproject.org/documents/TF4%20Child%20and%20maternal%20health%20summary%20final.pdf">http://www.unmillenniumproject.org/documents/TF4%20Child%20and%20maternal%20health%20summary%20final.pdf</a>

Prescription for healthy development: increasing access to medicines: <a href="http://www.unmillenniumproject.org/documents/TF5-medicines-Complete.pdf">http://www.unmillenniumproject.org/documents/TF5-medicines-Complete.pdf</a>

Environment and human well-being: A practical strategy: <a href="http://www.unmillenniumproject.org/documents/EnvironSust\_summary.pdf">http://www.unmillenniumproject.org/documents/EnvironSust\_summary.pdf</a> and

Health, dignity and development: What will it take?: http://www.unmillenniumproject.org/documents/What\_Will\_It\_Take.pdf Innovation: Applying knowledge in development: <a href="http://www.unmillenniumproject.org/documents/Science-complete.pdf">http://www.unmillenniumproject.org/documents/Science-complete.pdf</a>

 $\label{thm:model} Trade\ for\ development: \ \underline{http://www.unmillenniumproject.org/documents/TF9-trade-complete.pdf}$ 

## Annex 2: Calculations of policy coherence between MEAs and MEAs and MDG

### 1) CBD

CBD	CCD	Ramsar	UNFCCC	MDG
Goals	Combat desertification	4 wetland conservation	0 stabilise emissions	0 reduce poverty/hunger and envir sust.
Instrmts	prevent land degradation	5 environmental impact assessment	32 promote sustainable development	18 prevent land degradation
	improved food security	44 integrated mgt of protected areas	7 Identify VN indicators esp food security: achv FS?	44 improved food security
	renewable energy	3 threats from invasive species (in general and not part for wetlands)	36 renewable energy	3 promote health by con. Biodiv
	promote sust livelihoods	9 coastal zone management	1 coastal zone management	1 improve (child)nutrition
	protect traditional knowledge	4 ecological based indictaors (biodiversity indictaors)	2 Local coping strategies: traditional knowledge?	51 protect ecosystems
	sustainable agriculture	11 sustainable agriculture	11	sustainable agriculture
	water resources management	4 water resources management	4	water resources management
		sustainable aquaculture	8	river basin management
	integrated pest management	5 reduction of water pollution	2	reduction of water pollution
	soil conservation	4 sustainable fishery mgt	1	sustainable fishery mgt
	wildlife conservation	38 river basin management	3	biodiversity conservation in PA
	technology transfer	17 mangrove management	15 technology transfer	41 technology transfer
	income diversification	3 technology transfer	41 Promote VN tools and impact assessments	8 soil conservation
	protection against forest fires	3	sustainable forest management	16 marine protected areas
	promote drought-res crops	1		Mainstream climate change
	poverty eradication	15 community role in poverty eradication: poverty reduction	15	reduce env harmful subsidies
	early warning system	3	early warning system	3 early warning system
	better land tenure systems	5 better land tenure systems	5	better land tenure systems
	food aid and emergency relief	2		protection of IPRs
	rehabilitate degraded land	1		scientific assessement
	capacity building	13	capacity building	13 scientific capacity building/awareness: 87
				consider TRIPs: access and benefit sharing
				trade liberalisation: effects on species
total inst		194	183	198
actors	FAO	87 FAO	87 FAO	87 FAO
		IUCN	41	UNCTAD
	UNICEF	1 UNFCCC	13	WTO
	UNDP	9 WWF	24 UNDP	9 UNDP
	UNEP	13	UNEP	13 UNEP
	UNFF	13 IWMI?	UNFF	13 UNESCO
	UNU	1 UNESCO	23	ICRISAT
	world bank	12 CITES	15	UNEP-WCMC
		CMS	11 CMS	11 IUCN
	WMO	2 UNEP	13	IFPRI
	GEF	27 Ramsar	61 GEF	27 WFP
	LADA	1 world bank	12 UNFCCC	8 WHO
	SADC	1 UNISDR?	world bank	12
	CCD	10 GIWA?		
	IUCN	41 UNDP	9	
		WHO	5	
total actors		218	314	180
TOTAL		416	501	378
synergies		39	1	39
TOTAL		455	498	417

## 2) CCD

CBD	Ramsar	UNFCCC	MDGs	
biodiversity conservation/traditional knowledge	18 wetland conservation	0 stablising emissions	0 reduce hunger and poverty/combat disease/environmental sustainability	51
promote drought resistant crops	1 poverty reduction	41 sustainable development	24 Diversify on-farm enterprises with high-value products	1
assesment of desertification	1 soil conservation	8 renewable energy	13 renewable energy	13
water resources management	18 water resources planning	18 sustainable forest mgt	3 food secuirty	16
reduce habitat loss	1 better livelihoods for food security	12	early warning system	46
restore degraded lands	11 sustainable livelihoods	12	alternative income	3
sustainable agriculture	4 sustainable agriculture	4 sustainable agriculture	4 promote health	1
fire management	1 river basin management	4	restore degraded lands	78
integrated pest managemnet	1		water resources mgt	18
river basin management	4		river basin management	4
afforestation and reforestation	6	afforestation and reforestation	6 address land tenure	5
	sharing information on droughts	10	capacity building	30
strenghten disaster preparedness	4	technology transfer	14 mainstream CC responses	5
technology transfer	14 technology transfer	14 local coping strategies	16 technology transfer	14
address land tenure	5	convention inst not affect trade	6 increase agri trade	1
sustainable livelihoods	12		soil conservation	8
		scientific capacity building	30 removal of agri subsidies	1
sustainable forest managemnet	3		trade liberalisation	6
effective protection of IPRs	2		address climate change	5
instruments total	88	123	116	306
FAO	7 FAO	7 FAO	7 FAO	7
CBD	5 UNEP	5	UNDP	2
UNFCCC	9 UNESCO	4 CSD	3 UNESCO	4
UNEP	5 IUCN	1 UNEP	5 ICRISAT	
world bank	7 world bank	7	world bank	7
GEF	96	GEF	96 UNESCO	4
UNDP	2 WHO	2	UNEP	5
CBD	9 Ramsar	0 UNFCCC	9 IUCN	1
UNESCO	4	world bank	7 WHO	2
IUCN	1			
WHO	2			
actors total	144	24	111	24
TOTAL	250	147	227	381
	43		43	
	293	147	270	381

### 3) Ramsar

Ramsar	CBD	CCD	UNFCCC	MDGs	
Goals	biodiversity conservation	1 combat desertification/drought	5 stabilising emissions	0 reduce poverty and hunger/environmental sustainability	15
Instruments	technology transfer	3 technology transfer	3 technology transfer	3 promote food security	2
	integrated catchment management	2 sustainable land managemnt	2 sustainable development	3 technology transfer	3
	ecosystem management	3	sustainable agriculture	2 protect ecosystem	1
	integrted wetland sites with PA	9 improved food secuirty	2 coastal zone management	8 minimise water pollution	2
	fishery management	4 sustainable agriculture	2 impacts of natural disasters	13 sustainable agriculture	2
	sustainable agriculture	2	water resources management	37 early warning system	5
	sustainable aquaculture	13	clean eenrgy	1 fishery management	4
	control hazardous substance	1 conservation of biodiversity	1	protect marine reserves	3
	early warning system	5		river basin management	41
	river basin management	41		coastal zone management	8
	coastal zone management	8		clean eenrgy	1
	mangrove management	6		better land tenure	2
	biodiversity indicators	12		address climate change	
	assessment of biodiversity	3			
	water resources management	37 water resources management	37	water resources mgt	37
				trade liberalisation	2
	protect marine reserves	3			
total instt		152	52	67	113
actors	CBD	38 CCD	3 UNFCCC	1 FAO	13
	FAO	13 FAO	13	UNESCO	1
	WWF	7		UNDP	1
	CSD	6 IUCN	8 CSD	6 UNEP	11
	UNEP	11 UNEP	11 UNEP	12 IUCN	8
	IUCN	8 WMO	2	DESA	1
	ISDR	1 WHO	2 ISDR	1 WHO	2
	WMO	2	WMO	2	
	IWMI	2			
	CGIAR	1		World Bank	1
	World Bank	1 World Bank	1 World Bank	1	
	CMS	1	UNDP	1	
	IWMI	2	FAO	13	
	GIWA	1		WHO	1
	WHO	1		UNDP	1
	UNDP	1		UNESCO	1
	UNESCO	1			
	WHO	2			
total actors		90	40	37	41
synergies		39	9	8	
total		282	106	112	169

# 4) UNFCCC

UNFCCC	CBD	CCD	ramsar	MDG
goals	biodiversity conservation	6 combat desertification	4 wetland conservation	0 reduce poverty and hunger/combat disease
intstuments	Afforestation & Refor to enhance island biodiversity	99 rehabilitation of degraded land	4 coastal zone management	1 promote food security
	strengthen disaster preparedness	10 renewable energy/energy efficiency	33	early warning system
	coastal zone management	1 sustainable agriculture: LULUCF	7 strengthen disaster preparedness	10 promote health
	sustainable agriculture:LULUCF	7 research in drought-res crops	2 community cap. for inc. food security	2 rehabilitation of degraded land
		poverty eradication	10	protect ecosystem
	early warning system	2 early warning system	2 sustainable agriculture	7 early warning system
	technology transfer	26 technology transfer	26 technology transfer	26 technology transfer
	local coping strategies	5	integrated water resource plans	1 mainstream CC responses
	scientfic capacity building	63		scientfic capacity building
	integrated water resource plans	1 integrated water resource plans	1	scientfic assessment
		local coping strategies	5	trade liberalisation
				water resource mgt
total instrumer	nts	214	84	47
actors	FAO	3 FAO	3 FAO	3 FAO
	CBD	1 CCD		
	GEF	2 GEF	2	GEF
	UNDP	1 UNDP	1 UNDP	4 UNDP
	WMO	1 UNESCO	1	
	UNFF	1 UNEP	1 UNEP	1 UNEP
	UNESCO	1	UNESCO	1 UNESCO
	UNEP	1	IUCN	IUCN
	world bank	1 world bank	1 world bank	1 world bank
actors total		12	9	10
TOTAL		232	97	57
synergies		66	66	23
TOTAL		298	163	80

## 5) MDGs

MDG	CBD	CCD	Ramsar	UNFCCC	
goals	biodiversity conservation	2 combat desertification/drought	4 wetland conservation	0	0
instrument	s conserve ecosystem goods	1	sust. harvesting of wetland species	3 sustainable development	38
	tech transfer	16 improve food security systems	29 wetland tenure systems	36 energy efficiency	35
	capacity building	16 sustainable irrigations plans	3 identify negative subsidies	6 sustainable forest mgt	3
	address challenges from climate change	8 sustainable mgt of nat resources	9 threats from invasive alien species	2 sustainable agriculture	10
	control invasive species	2 alternative energy	35 river basin/water resource mgt	40 tech transfer	16
	land tenure and conflict resolution	36 promotion of alternative livelihoods	29 reduce Cc impacts on wetlands	8 capacity building	16
	Income diversification	3 protection of traditional knowledge	2 fishery management plans	17 monitoring of diseases	6
	sui generis systems	1 sustainable agricultural practices	10 poverty reduction	64 local coping strategies	2
	ABS through IPR	30 water resources management	40 sustainable agricultural practices	10	
	Respect traditional knowledge	2 technology transfer	16 control pollution	10	
	sustainable forest management	3			
	fishery management plans	17 conservation of soil resources	9		
	Integrated pest management	1 Integrated pest management	1		
	soil conservation	9 conservation of biodiversity	2		
	biodiv. cons to sup SD LH	29 capacity building	16		
	biodiv. cons to sup SD LH	30 capacity building	17		
	protection of IPR	30 better land tenure systems	36		
	sustainable agricultural practices	10 monitoring ecological degradation	1		
		food aid	2		
		reforestation	1		
		traditional knowledge	2		
total	total instruments	234	260	196	126
actors	world Bank	132 world Bank	132 world Bank	132 world Bank	132
	UNDP	17 UNDP	17 UNDP	17 UNDP	17
	world agroforestry center	1 world agroforestry center	1	world agroforestry center	1
	CEISEN	2 CEISEN	2 CEISEN	2 CEISEN	2
	FAO	25 FAO	25 FAO	25 FAO	25
	UNEP	1 UNESCO	18 UNESCO	18 UNESCO	18
	IPPC	3			
	UNESCO	18			
total	total actors	199	195	194	195
TOTAL	TOTAL	435	459	390	321