Measuring Policy Coherence among the MEAs and MDGs

Anantha Kumar Duraiappah and Asmita Bhardwaj

2007
The International Institute for Sustainable Development contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change, measurement and assessment, and natural resources management. Through the Internet, we report on international negotiations and share knowledge gained through collaborative projects with global partners, resulting in more rigorous research, capacity building in developing countries and better dialogue between North and South.

IISD’s vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the U.S. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC) and Environment Canada; and from the Province of Manitoba. The institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.
3) RAMSAR ........................................................................................................................................47
4) UNFCCC ....................................................................................................................................48
5) MDGS .......................................................................................................................................49
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 section 3, 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)1 and/or horizontally (along the same levels).2 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.

1 Vertical levels are different in terms of power hierarchies for decision-making purposes.
2 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 (CITES), 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.

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>UNCCD</th>
<th>Ramsar</th>
<th>CITES</th>
<th>UNFCCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>X</td>
<td>1*</td>
<td>2*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNCCD</td>
<td>3*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramsar</td>
<td>4*</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITES</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>UNFCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

1* 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.

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

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...
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. The DPL is computed using the following simple formula.

\[
dpl = \sum_i \sum_j (1 - a_{ij})
\]

and \(0 \leq a_{ij} \leq 1\)

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 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**

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>UNCCD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>445</td>
<td>498</td>
<td>417</td>
<td></td>
</tr>
<tr>
<td>UNCCD</td>
<td>293</td>
<td>147</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>Ramsar</td>
<td>282</td>
<td>106</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>UNFCCC</td>
<td>298</td>
<td>163</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

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

---

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

4 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

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>CCD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td></td>
<td>0.89</td>
<td>1</td>
<td>0.84</td>
</tr>
<tr>
<td>CCD</td>
<td>0.59</td>
<td></td>
<td>0.3</td>
<td>0.54</td>
</tr>
<tr>
<td>Ramsar</td>
<td>0.57</td>
<td>0.21</td>
<td></td>
<td>0.54</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>0.6</td>
<td>0.33</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

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 \((1-a_{ij})\) operator has been completed (step 3).

### Table 3: Table with numerical computations

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>UNCCD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
<th>Row Total</th>
<th>Row Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>X</td>
<td>0.11</td>
<td>0</td>
<td>0.16</td>
<td>0.27</td>
<td>1</td>
</tr>
<tr>
<td>UNCCD</td>
<td>0.41</td>
<td>X</td>
<td>0.70</td>
<td>0.46</td>
<td>1.57</td>
<td>2</td>
</tr>
<tr>
<td>Ramsar</td>
<td>0.43</td>
<td>0.79</td>
<td>X</td>
<td>0.77</td>
<td>1.99</td>
<td>4</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>0.40</td>
<td>0.67</td>
<td>0.84</td>
<td>X</td>
<td>1.91</td>
<td>3</td>
</tr>
<tr>
<td>Column Total</td>
<td>1.25</td>
<td>1.57</td>
<td>1.55</td>
<td>1.40</td>
<td>5.75</td>
<td></td>
</tr>
<tr>
<td>Column Ranking</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 \((ij-i \text{ where } i \text{ and } j \text{ are equal to 4 since this is a 4*4 matrix})\). 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 column-wise 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

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>UNCCD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
<th>MDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>445</td>
<td>498</td>
<td>417</td>
<td>815</td>
<td></td>
</tr>
<tr>
<td>UNCCD</td>
<td>293</td>
<td>147</td>
<td>270</td>
<td>381</td>
<td></td>
</tr>
<tr>
<td>Ramsar</td>
<td>282</td>
<td>106</td>
<td>112</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td>UNFCCC</td>
<td>298</td>
<td>163</td>
<td>80</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td>MDG</td>
<td>445</td>
<td>444</td>
<td>391</td>
<td>321</td>
<td></td>
</tr>
</tbody>
</table>

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 \((1-a_{ij})\) is zero and full policy incoherence if the sum is 20 (if-i or 25-5). Table 5 presents the scores after computation.

Table 5: MEAs and MDG scores after numerical computation

<table>
<thead>
<tr>
<th></th>
<th>CBD</th>
<th>UNCCD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
<th>MDG</th>
<th>Row Total</th>
<th>Row Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>X</td>
<td>0.45</td>
<td>0.39</td>
<td>0.49</td>
<td>0</td>
<td>1.33</td>
<td>1</td>
</tr>
<tr>
<td>UNCCD</td>
<td>0.64</td>
<td>X</td>
<td>0.82</td>
<td>0.66</td>
<td>0.53</td>
<td>2.66</td>
<td>3</td>
</tr>
<tr>
<td>Ramsar</td>
<td>0.65</td>
<td>0.86</td>
<td>X</td>
<td>0.86</td>
<td>0.79</td>
<td>3.17</td>
<td>5</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>0.63</td>
<td>0.8</td>
<td>0.9</td>
<td>X</td>
<td>0.78</td>
<td>3.12</td>
<td>4</td>
</tr>
<tr>
<td>MDG</td>
<td>0.45</td>
<td>0.45</td>
<td>0.52</td>
<td>0.60</td>
<td>X</td>
<td>2.03</td>
<td>2</td>
</tr>
<tr>
<td>Column Total</td>
<td>2.38</td>
<td>2.57</td>
<td>2.63</td>
<td>2.62</td>
<td>2.10</td>
<td>12.32</td>
<td></td>
</tr>
<tr>
<td>Column Ranking</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. UNFCCCs 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 UNCCCD and this is not something we want to achieve.
References


_____. A policy paper for improving international environmental governance among multilateral environmental agreements: negotiable terms for further discussion, 2001: http://www1.unep.org/meas/3rdconsultoniegdoc3.doc

UNEP-WCMC. *Synergies and cooperation*, 2004: http://www.unep-wcmc.org/conventions/harmonization/workshop04/BackgroundSynergies.doc

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 through 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


References


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:

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:

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:

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:

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:
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
- soil conservation
- ecosystem approach
- technology transfer
- trends and indicators
- public awareness

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

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 bio-diverse 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 sub-humid 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:

Program of work on agricultural biodiversity (COP 8):

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

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: http://www.unccd.int/)

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: http://www.unccd.int/

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**


**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


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 benefit 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:
  - enhancement of energy efficiency
  - promotion of sustainable forest management
  - protection of sinks and reservoirs
  - promotion of sustainable agriculture
  - promotion of renewable energy technologies
  - 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 greenhouse 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

References


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=6

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
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


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, shr-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 low-cost 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
• developed 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 direct 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: http://www.unmillenniumproject.org/documents/HTF-SumVers_FINAL.pdf

Taking action: Achieving gender equality and empowering women:
http://www.unmillenniumproject.org/documents/Gender-complete.pdf

Whose got the power: Transforming health system for women and children:

Prescription for healthy development: increasing access to medicines:

Environment and human well-being: A practical strategy:
http://www.unmillenniumproject.org/documents/EnvironSust_summary.pdf and

Health, dignity and development: What will it take?:

Measuring Policy Coherence Among the MEAs 43
Innovation: Applying knowledge in development:

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

1) CBD

<table>
<thead>
<tr>
<th>CBD</th>
<th>UNFCCC</th>
<th>MDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>Combat desertification</td>
<td>4 wetland conservation</td>
</tr>
<tr>
<td>Insts</td>
<td>prevent land degradation</td>
<td>5 environmental impact assessment</td>
</tr>
<tr>
<td></td>
<td>improved food security</td>
<td>44 integrated mgt of protected areas</td>
</tr>
<tr>
<td></td>
<td>renewable energy</td>
<td>3 threats from invasive species (in general and not part for wetlands)</td>
</tr>
<tr>
<td></td>
<td>promote sus livelihoods</td>
<td>9 coastal zone management</td>
</tr>
<tr>
<td></td>
<td>protect traditional knowledge</td>
<td>4 ecological based indicaors (biodiversity indicaors)</td>
</tr>
<tr>
<td></td>
<td>sustainable agriculture</td>
<td>11 sustainable agriculture</td>
</tr>
<tr>
<td></td>
<td>water resources management</td>
<td>4 water resources management</td>
</tr>
<tr>
<td></td>
<td>integrated pest management</td>
<td>5 reduction of water pollution</td>
</tr>
<tr>
<td></td>
<td>soil conservation</td>
<td>4 sustainable fishery mgt</td>
</tr>
<tr>
<td></td>
<td>wildlife conservation</td>
<td>38 river basin management</td>
</tr>
<tr>
<td></td>
<td>technology transfer</td>
<td>17 mangrove management</td>
</tr>
<tr>
<td></td>
<td>income diversification</td>
<td>3 technology transfer</td>
</tr>
<tr>
<td></td>
<td>protection against forest fires</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>promote drought-res crops</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>poverty eradication</td>
<td>15 community role in poverty eradication: poverty reduction</td>
</tr>
<tr>
<td></td>
<td>early warning system</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>better land tenure systems</td>
<td>5 better land tenure systems</td>
</tr>
<tr>
<td></td>
<td>food aid and emergency relief</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>rehabilitate degraded land</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>capacity building</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>total inst</td>
<td>194</td>
</tr>
<tr>
<td>actors</td>
<td>FAO</td>
<td>87 FAO</td>
</tr>
<tr>
<td></td>
<td>IUCN</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>UNICEF</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>UNEP</td>
<td>9 WWF</td>
</tr>
<tr>
<td></td>
<td>UNF</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>UNF</td>
<td>13 WWF?</td>
</tr>
<tr>
<td></td>
<td>UNU</td>
<td>1 UNESCO</td>
</tr>
<tr>
<td></td>
<td>world bank</td>
<td>12 CMS</td>
</tr>
<tr>
<td></td>
<td>WMO</td>
<td>2 UNP</td>
</tr>
<tr>
<td></td>
<td>GEF</td>
<td>27 Rammar</td>
</tr>
<tr>
<td></td>
<td>LADA</td>
<td>1 world bank</td>
</tr>
<tr>
<td></td>
<td>SADC</td>
<td>1 UNISDR?</td>
</tr>
<tr>
<td></td>
<td>CBD</td>
<td>10 GWA?</td>
</tr>
<tr>
<td></td>
<td>IUCN</td>
<td>41 UNDP</td>
</tr>
<tr>
<td></td>
<td>total actors</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>416</td>
</tr>
<tr>
<td>synergies</td>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>455</td>
<td>498</td>
</tr>
</tbody>
</table>

Measuring Policy Coherence Among the MEAs 45
2) CCD

<table>
<thead>
<tr>
<th>CBD</th>
<th>Ramsar</th>
<th>UNFCCC</th>
<th>MDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>biodiversity conservation/traditional knowledge</td>
<td>wetland conservation</td>
<td>0 stabilising emissions</td>
<td>0 reduce hunger and poverty/combat disease/environmental sustainability</td>
</tr>
<tr>
<td>promote drought resistant crops</td>
<td>poverty reduction</td>
<td>sustainable development</td>
<td>24 Diversify on-farm enterprises with high-value products</td>
</tr>
<tr>
<td>assessment of desertification</td>
<td>soil conservation</td>
<td>renewable energy</td>
<td>13 renewable energy</td>
</tr>
<tr>
<td>water resources management</td>
<td>water resources planning</td>
<td>sustainable forest mgt</td>
<td>3 food security</td>
</tr>
<tr>
<td>reduce habitat loss</td>
<td>better livelihoods for food security</td>
<td>early warning system</td>
<td>46</td>
</tr>
<tr>
<td>restore degraded lands</td>
<td>sustainable livelihoods</td>
<td>alternative income</td>
<td>3</td>
</tr>
<tr>
<td>sustainable agriculture</td>
<td>sustainable agriculture</td>
<td>sustainable agriculture</td>
<td>4 promote health</td>
</tr>
<tr>
<td>fire management</td>
<td>river basin management</td>
<td>restore degraded lands</td>
<td>78</td>
</tr>
<tr>
<td>integrated pest management</td>
<td></td>
<td>water resources mg</td>
<td>18</td>
</tr>
<tr>
<td>river basin management</td>
<td></td>
<td>river basin management</td>
<td>4</td>
</tr>
<tr>
<td>afforestation and reforestation</td>
<td></td>
<td>afforestation and reforestation</td>
<td>6</td>
</tr>
<tr>
<td>strengthen disaster preparedness</td>
<td></td>
<td>capacity building</td>
<td>30</td>
</tr>
<tr>
<td>technology transfer</td>
<td></td>
<td>technology transfer</td>
<td>14 mainstream CC responses</td>
</tr>
<tr>
<td>address land tenure</td>
<td></td>
<td>convention inst not affect trade</td>
<td>16 technology transfer</td>
</tr>
<tr>
<td>sustainable livelihoods</td>
<td></td>
<td>soil conservation</td>
<td>8</td>
</tr>
<tr>
<td>sustainable forest management</td>
<td></td>
<td>scientific capacity building</td>
<td>30 removal of agric subsidies</td>
</tr>
<tr>
<td>effective protection of IPRs</td>
<td></td>
<td>trade liberalisation</td>
<td>6</td>
</tr>
<tr>
<td>instrument total</td>
<td>88</td>
<td>123</td>
<td>116</td>
</tr>
<tr>
<td>FAO</td>
<td>7</td>
<td>FAO</td>
<td>7</td>
</tr>
<tr>
<td>CBD</td>
<td>5</td>
<td>UNEP</td>
<td>5</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>9 UNESCO</td>
<td>4 CSD</td>
<td>3 UNESCO</td>
</tr>
<tr>
<td>UNEP</td>
<td>5 IUCN</td>
<td>1 UNEP</td>
<td>5 ICRISAT</td>
</tr>
<tr>
<td>world bank</td>
<td>7 world bank</td>
<td>7 world bank</td>
<td>7</td>
</tr>
<tr>
<td>GEF</td>
<td>96</td>
<td>GEF</td>
<td>96 UNESCO</td>
</tr>
<tr>
<td>UNDP</td>
<td>2 WHO</td>
<td>2 UNEP</td>
<td>5</td>
</tr>
<tr>
<td>CBD</td>
<td>9 Ramsar</td>
<td>0 UNFCCC</td>
<td>9 IUCN</td>
</tr>
<tr>
<td>UNESCO</td>
<td>4</td>
<td>world bank</td>
<td>7 WHO</td>
</tr>
<tr>
<td>IUCN</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>WHO</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>actors total</td>
<td>144</td>
<td>24</td>
<td>111</td>
</tr>
<tr>
<td>TOTAL</td>
<td>250</td>
<td>147</td>
<td>227</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>293</td>
<td>147</td>
<td>270</td>
</tr>
</tbody>
</table>
### 3) Ramsar

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

Measuring Policy Coherence Among the MEAs
4) UNFCCC

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

Measuring Policy Coherence Among the MEAs 48
5) MDGs

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