THE SYSTEM OF 130 INDICATORS FOR THE SUSTAINABLE DEVELOPMENT IN THE MEDITERRANEAN REGION

Record of the Workshop in Sophia Antipolis, 11-12 December 2000
# The system of 130 Indicators for the sustainable development in the Mediterranean Region

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Workshop on "The system of 130 Indicators for the sustainable development in the Mediterranean Region"  
(Sophia-Antipolis, 11-12 December, 2000)

1 Workshop opening (Session 1)

Mr. Serge Antoine, co-task manager of the "indicators" activity of the Mediterranean Commission on Sustainable Development (MCSD), and chairman for this session, opened the workshop by recalling the context and the main phase that have led to this workshop.

1.1 Introduction:

Guillaume Benoit, director of the Blue Plan’s Regional Activities Centre, welcomed the participants and stressed the interest in a common system of indicators to report on the progress towards sustainable development on both a national and Mediterranean-wide level.

Arab Hoballah, MAP deputy co-ordinator, reviewed the Mediterranean context in which this workshop is being held: the follow-up of the "indicator" activity of the MCSD, the recommendations of the Contracting Parties that were derived from it and that were approved during the Malta meeting in October, 1999. The Indicators for Sustainable Development (SDI) are useful for assessing progress to sustainable development in the Mediterranean countries. Calculating them is a structuring activity of the National Observatories of the Environment and Development that have recently been set up in certain countries such as Morocco, Tunisia and Lebanon. The 50 indicators calculated by the Blue Plan are now being used in evaluation of MAP and of its activities.

1.2 Recall of the workshop objectives and organisation

Mrs. Aline Comeau, Blue Plan scientific director, restated the goals of this workshop:

- To summarise the calculation and use of the 130 SDIs in the various Mediterranean countries on the regional level,
- Discuss the interest, difficulties and solutions for continuing to set up the SDI system
- Give examples of using SDIs for supporting the analyses of Sustainable Development issues in the Mediterranean region.
- Suggest a work programme for the follow-up of calculation and reporting

This introductory session was followed by 5 more sessions:
- Session 2 was devoted to the presentation of the exercise results;
- Session 3 was devoted to the proposals for changing the definitions of the indicators contained in the glossary;
Session 4 was devoted to the presentation of analyses of major issues based on the SDIs;
Session 5 was devoted to the presentation of initiatives enabling the consolidation of the production and use of an SDI system;
Session 6 was devoted to the presentation of the conclusions of this workshop and to the discussion of continuing this exercise.

Calculating the Mediterranean system of indicators and this workshop rely on the following essential principles:
- We must build on existing foundations without questioning the choices made in previous workshops;
- This is a progressive and continuous process based on a volunteer approach;
- Developing a common Mediterranean set of indicators does not preclude the diversity and calculation of specific indicators.

1.3 Summary of the main SDI initiatives

1.3.1 World wide

Mrs. Cécile Dormoy of the department of analyses at the French Institute for the Environment (IFEN) presented:
- The recent developments in the work on the SDIs by the United Nations Commission for Sustainable Development (UN-CSD).
- The "Indicators" test done in France.
- The test in Tunisia, and the test underway in Morocco.

She mentioned that the programme on Sustainable Development Indicators within the United Nations was launched in response to chapter 40 of Agenda 21 which suggested the development of Indicators of Sustainable Development in order to set up a useful basis for decision-making at all levels.

A five-year working programme on the SDIs was adopted at the 3rd session of the United Nations Commission for Sustainable Development in 1995 with the goal of having a list of indicators for sustainable development between then and 2001, adapted on a national scale and sufficiently flexible to be measured and used in countries with different levels of development and sufficiently standardised to enable comparison.

Selection of the 134 indicators was done in 1995 and 1996 in consultation with the main international agencies (UNEP, FAO, OECD, IUCN...).

The 134 indicators were organised according to the Pressure-State-Response (PSR) framework and, according to the different chapters of Agenda 21 organised into four categories: social, economy, environment and institutions.

Each indicator is described in a standardised methodological sheet, all of which were published in the "Blue Book" in 1996 (translated into French and published in the "Livre Bleu" in 1999).
The indicators were tested in 22 countries in different forms, including shared experience and twinning, e.g. South Africa and Finland, Germany and Brazil, France and Tunisia and France and Morocco.

The test procedure consisted of implementing a National Co-ordination System with a Focal Point agency in the test country and a bilateral committee in cases of twinning, relying on existing cross structures or by implementing work groups. The test was usually co-ordinated by the Ministry of the environment or an equivalent institution.

The test goals are of a political and technical nature. The idea was to:

- To examine the political relevance of the indicators in the national context by identifying national priorities in the field of sustainable development, and the indicators of the list corresponding to these priorities.
- To test the possibility of quantifying indicators by asking what are the indicators of the United Nations list presently being used and by which agencies, and what are the fundamental data gathered in this perspective?

With the test possibly leading to the organisation of different phases of indicator development: data gathering, processing, calculation of indicators, analysis and dissemination.

Stage reports were supplied to the United Nations and the experience shared in international seminars and regional workshops as well as on the CSD's Internet site, http://www.un.org/esa/sustdev/isd.htm.

The French test was carried out by IFEN in 1997 and 1998 and co-ordinated by the Ministry of the Environment.

With the help of a technical working group of 50 experts, the methodological and technical test made it possible to assess the adequacy of the national modes of calculation with the United Nation specifications and the quality of the methodological sheets.

With the help of a working group of 20 experts, the political relevance test made it possible to assess the relevance of the indicators in the national context and their usefulness for decision-making.


The technical test made it possible to note the following:

- 53 indicators regularly calculated and published in France (e.g. GDP per capita, rates of unemployment, growth rates of the urban population, SO₂ emissions…)
- 55 uncalculated indicators, but whose data are available (e.g. 9 indicators are offered on education, and only 2 are utilised in France)
- Numerous methodological differences occur for certain indicators (e.g. access to drinking water, the production of industrial and municipal solid waste, the production of hazardous waste.)
The political test highlighted the following:

− The fact that each SDI is linked to an Agenda 21 chapter is a strong point in the process.
− Certain indicators were innovative (e.g. chapter 10, "Integrated planning approach/land management" and chapter 13, "Sustainable enhancement of mountains"). (to check in Agenda 21)
− Some social, economic and environmental concerns were not included in the selection of indicators.
− Important topics were missing, i.e. transport, tourism, technological risks and noise.
− The relevance of a selection of common indicators for all UN member nations is not easy, which reinforces the interest in a macro-regional approach (e.g. "Pilot study on a EU level: quantification and analysis of 50 indicators of the UN list" (EUROSTAT, 1997), with a new edition to come out in 2001).

The Tunisian test was done in 1998-1999 within the framework of tripartite cooperation between:

− Tunisia with the National Commission for Sustainable Development (NCSD), Ministry of the Environment and National Planning and OTED/ANPE,
− France with the Ministry of National Planning and the Environment and IFEN,
− the regional Mediterranean level with the MCSD and the Blue Plan.

The Tunisian context was favourable for the test with the establishment of the NCSD in 1993, the publication of National Agenda 21 in 1995 and Tunisia’s participation in the work of the MCSD.

There were 3 key stages in the process:

− A workshop for launching the test, gathering thirty institutions.
− A “political relevance” test, identifying during a workshop the indicators most representative of the national issues.
− A “technical” test for assessing the possibilities of calculating indicators through the national statistical system in using questionnaires and interviews.

The test process was well structured with efficient “technical” co-operation. (OTED-IFEN-Blue Plan), support from a scientific committee and strong participation by national institutions.

Assessment of the “United Nations” exercise made it possible to draw few conclusions, including the need to involve all concerned partners (an inter-ministerial exercise), the need for strong institutional support for bringing the exercise to a successful conclusion and the importance of giving indicators for analysis so as to better weigh the relevance.

The Moroccan test is taking place in 2000-2001 with twinning between France and Morocco with the IFEN and ONEM (Moroccan National Environmental
Observatory) as partners and with contribution from the Blue Plan. A workshop for launching the Moroccan test project of the SDI brought together some sixty people from numerous institutions in Rabat in September 2000.

The Moroccan test will be able to use the French and Tunisian experiences. It is to take place within the Mediterranean context and will benefit by synergy with the MEDSTAT programme.

Some fifteen countries carried out a test and submitted their reports. Which led to the composition of a new list of 58 indicators including new issues (transport, means of communication, criminality...), which will be presented at the 9th session of the UN-CSD in 2001.

1.3.2 Mediterranean level:

Mrs. Aline Comeau presented the main Mediterranean initiatives on Indicators by reminding participants of the definitions of indicators and their background and by presenting an assessment of these initiatives.

The indicators make it possible to evaluate situations and the progress made according to the issues considered and are widely used in the reports on the environment and sustainable development.

The main types of indicators are topical describers, indicators of environmental performance and indicators of sustainable development. They may be calculated on different geographical levels: national, regional or local and in different frameworks: policy development and follow-up, project evaluation.

The environmental performance indicators should make it possible to evaluate situations and trends in relation to objectives (targets or recommendations).

The sustainable development indicators should make it possible to integrate major development dimensions: the society, the economy and the environment and to have a meaning for future generations. E.g. Exploitation index of forest resources.

The institutional framework of the work on the SDIs is composed of the Mediterranean Commission for Sustainable Development, MAP/Blue Plan and its Mediterranean Observatory of the Environment and Development.

Preliminary work was first carried out by a working group on the MCSD’s indicators, which made it possible to develop a working programme offered by the MCSD to the Contracting Parties. This programme was then approved in Malta in October 1999 as recommendations about:

- The realisation of the common core set of indicators (first set of 130 SDIs);
- The calculation and analysis of indicators in the countries;
- The reinforcement of capacities through the intermediary of the national environmental observatories and the mobilisation of the statistical institutes;
- The realisation every five years of a report on sustainable development in the Mediterranean (with 2002 as the first time-frame).

Over the past few years, the Blue Plan led numerous actions with support from MAP, METAP and the LIFE programme, enabling the participation of more than
300 specialists from the 20 Mediterranean countries on a joint thought-process for indicators in the Mediterranean.


These actions—mainly the workshops in Tunis in 1998 and Sophia-Antipolis in 1999—made it possible to reach a consensus on 130 indicators selected from among 250. 40 indicators also figure in the new UN-CSD list.

The indicators were selected according to the following criteria: relevance and availability, also ease of interpretation, sensitivity to environmental changes and human activities, the quality and periodicity of the data, etc…

Certain reservations were expressed about the relevance, calculation guarantees and updates, with the vision seeming incomplete or even a caricature.

Despite that, the assessment is rather positive, for the selection has been accepted by most of the institutions, and this even means a good departure point for the emerging environmental institutions that have used it as a working framework. The calculation exercise was greeted with a certain enthusiasm by all volunteering countries.

The Tunis workshop on the "Observatories for the Environment and Development" in November 1999 had already made it possible to draw conclusions on the central role of the indicators in the structuring and work of the observatories, with the partners' involvement and publications also playing an important part.

The next stage in 2001 consists in implementing and analysing the indicators on the Mediterranean-region level (the Blue Plan "indicator" sheets) and in the 20 bordering countries.

Numerous documents on the related indicators and actions are available at the Blue Plan website: www.planbleu.org.

1.4 First step in the implementation of the 130 Mediterranean SDI system

Jean-Pierre Giraud of the Blue Plan presented the work done in 2000 and recalled that the goal of the implementation of the system of the 130 Mediterranean SDIs was to reinforce the ability of countries to produce reports and national trend charts on sustainable development and facilitate the making of reports and Mediterranean trend charts on sustainable development.

In the first half of 2000, the Blue Plan finished a set of 50 illustrated sheets based on the data from international sources, improved the bilingual glossary of the definitions of the 130 SDIs and launched the calculation of the SDIs in the volunteering countries in May 2000.

Work in the countries consisted in validating (and filling out) the 50 indicator sheets, testing the definitions presented in the glossary, gathering the available data for calculating the 130 indicators, filling out the forms supplied by the Blue
Plan, making charts, illustrations and analyses for the informed indicators and preparing a presentation for this workshop.

The glossary definitions come for the most part from international sources (UN, FAO, OECD and Eurostat...). For the environmental indicators, the joint Eurostat-OECD questionnaire, the reference document of the project MEDSTAT-Environment, was used to standardise the definitions with the European countries.

1.5 **Presentation of MEDSTAT-Environment project**

Mr. Jean Iotti (MEDSTAT-Environment project manager at the Blue Plan) presented the MEDSTAT-Environment project by stressing the obvious synergy with the Indicators programme.

The MEDSTAT programme was developed to implement the recommendations of the Barcelona declaration. It tends to consolidate the statistical data systems of the 12 southern and eastern Mediterranean countries. It highlights the importance of supplying time series of relevant and consistent data for decision-making and for sustainable economic development.

The MEDSTAT-Environment project is one of the 10 sub-programmes: Tourism, Transport, Migration, External trade, National Accounts, the Non-Observed Economy, Training, Information system and publications.

The MEDSTAT-Environment project includes many phases, such: identification of data sources and gathering existing data; standardisation with the joint Eurostat-OECD questionnaire on the state of the environment; inter-institutional cooperation with the data producers and reinforcing capacity on three priority topics: water, soils and waste.

The relationship between the SDIs and MEDSTAT-Environment are 1) of a technical nature—34 SDI indicators of the 130 are part of the MEDSTAT-Environment questionnaire—and 2) of an institutional nature—the environmental institutions in charge of the SDIs and the statistical institutions, that benefit by the MEDSTAT-Environment project are complementary and are able to create synergy to mutual advantage in the collecting and analysing of environmental data.

Synergy between these two projects should be enhanced by the coherence of the objectives, good timing and mutual benefits.

2 **First assessment, opportunities and difficulties, How to progress? (Session 2):**

2.1 **Mediterranean level: presentation of 50 indicators’ sheets.**

Mr. Wilfrid Deri, seconded to the Blue Plan by the Principality of Monaco, presented a dossier of "indicator" sheets done by the Blue Plan that produces a first Mediterranean trend chart of 50 SDIs (of the 130), the data of which are easily available from international sources.
This dossier also contains a booklet noting the background, the Contracting Parties recommendations and the full list of the 130 indicators and a reading guide. The sheets summarise the trends of indicators for all Mediterranean countries in the form of maps, graphs and remarks. They also include definitions, sources and remarks on the calculation methods.

The following international sources have been highlighted for the coherence of definitions: the UN agencies (ILO, UNESCO, FAO, IEA, etc.), the World Bank, the OECD, the World Tourism Organisation, the International Road Federation, the International Telecommunications Union, the International Union for the Conservation of Nature and Natural Resources, the GEOPOLIS data base, the Secretariat of the Ozone Convention, etc., and the work by the Blue Plan on a Mediterranean level.

The 50 indicators break down by topic in the following manner:

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<th>No.</th>
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<td>2</td>
<td>TERRITORY AND HUMAN SETTLEMENTS</td>
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<td>3</td>
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<td>6</td>
<td>EXCHANGES AND COOPERATION IN THE MEDITERRANEAN</td>
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The following indicators have been treated in the sheets but have posed problems as to data availability.

Certain countries are not well covered in the international sources: Monaco, the Balkan countries prior to 1990 and the Palestinian Territories.

These sheets will be published and widely disseminated in early 2001 and will be updated after inserting whatever remarks come from the countries.

The job will have to be continued in 2001 by filling out the series of missing data, but the difficulties due to the use of different data sources will have to be overcome, which will necessarily lead to a loss of consistency in the definitions and calculation methods.
### 2.2 At the national level: Results of the collection in the countries

Mr. Jean-Pierre Giraud of the Blue Plan presented the calculation summary of the 130 indicators done by the Mediterranean countries. This exercise follows on the indicator activity of the Mediterranean Commission for Sustainable Development in conformity with the recommendations of the Contracting Parties. All the Mediterranean countries in effect showed interest in this joint exercise en May, 2000. A national co-ordinator was named by the MAP focal points in each country between July and September 2000, to conduct the exercise. Despite the short time period, 15 countries sent in the results (up to a week before the workshop). Other countries collected the necessary information without transmitting it to the Blue Plan.

Depending on the country, the national co-ordinator depends on the Ministry of the Environment, the National Observatory for the Environment and Development (NOED), a research institute or the National Statistics Office (NSO). The co-ordinator then proceeded in a different way to gather the information needed for calculating the indicators or the available indicators from numerous institutions involved. In some countries institutional co-operation was favoured and reinforced through meetings that made it possible to explain the objectives and the shared interest in producing a set of indicators on the national level, harmonised with all of the bordering countries. Sometimes the information gathering was done by sending mail to the institutions involved and/or by using easily available publications as information sources.

The Blue Plan had asked the national co-ordinators to concentrate on the 80 indicators not included in the 50 Mediterranean sheets and if possible to check the information contained in these sheets. Most of the countries gave priority to the socio-economic indicators, whereas the others favoured the environmental indicators.

To facilitate the making of this assessment, a list with the following conventions was asked for along with the indicators:

- 0: A non-available indicator, not commented
- 1: A non-available indicator, but commented on
- 2: An available indicator but not commented on
- 3: An available indicator, commented on

This assessment by category of the indicator calculations (noted 2 or 3) figures in the following table. The results, detailed indicator by indicator, can be found in the annex 3.
# Proportion of calculated indicators, per category and country

in %

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</tbody>
</table>

We can also stress that few remarks were made on the 50 Mediterranean sheets, that the numerous indicators contained in these sheets were recalculated by the countries, and that only a few countries commented on the trends of the indicators.

Numerous indicators defined for the coastline were calculated, but very few indicators defined on the country level were broken down for the coastal level.

Done before the workshop, this assessment will be updated as the work is pursued by the different countries. A few differences between this assessment and the
results presented by the countries were noted due to the late reception of the
results and the differences in interpretation can be noted.

2.3 Presentation of the progress status of the calculation of the 130
indicators in some Mediterranean countries.

2.3.1 Algeria

Mr. Kamel Djemouai of the Ministry for National Planning and the Environment
(MATE) presented the situation and the developments in the adoption of the
indicators in Algeria as well as the results of the exercise done for the 130
Mediterranean SDIs.

Starting in 1997 the Secretary of State in charge of the Environment demonstrated
a clear interest in the indicators regarding the decision-makers. Algeria took part
in the workshops organised by the Blue Plan in Beirut on the “Statistics and
Indicators of the Environment” and on the “Indicator of environmental
performance and Sustainable Development Indicators”.

In 1998 a pluridisciplinary "Follow-up and Development of Indicators" group was
set up, and Algeria participated in the Rabat sub-regional workshop on the
Indicators of Environmental Performance (September, 1998). Two questionnaires
on the Sustainable Development Indicators were filled out for the African
Economic Commission and the Arab League.

In 1999, the Secretary of State for the Environment relaunched the
pluridisciplinary "Follow-up and Development of Indicators" group and its
inclusion in the activities of a co-operation project with GTZ. It also participated in
the MEDSTAT-Environment Project in Algeria.

In 2000, the Ministry of National Planning and the Environment developed the
work on the SDIs and participated in the test of the MCSD’s 130 SDIs.

Concerning this test, the working methodology considered the following: time,
human and material means, holiday periods, staff availability, the comprehension
of the exercise and the limitations of the work to be done for the Ministry and its
partners.

The identification of the partners in July was followed by bibliographical research,
sending out the questionnaires, analysis of the answers, then composition of the
final report. Working groups with numerous targeted partners were organised
around the service in charge of the MATE National Environmental Information
System.
The following table gives the test results:

<table>
<thead>
<tr>
<th></th>
<th>Number of SDIs-Med</th>
<th>Number of SDIs calculated in Algeria</th>
<th>% of SDIs calculated in Algeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Society</td>
<td>17</td>
<td>14</td>
<td>82</td>
</tr>
<tr>
<td>Territory and Human Settlements</td>
<td>27</td>
<td>14</td>
<td>56</td>
</tr>
<tr>
<td>Economic Activities</td>
<td>41</td>
<td>16</td>
<td>39</td>
</tr>
<tr>
<td>Environment</td>
<td>38</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>Actors and policies</td>
<td>6</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Exchanges and Cooperation in the Mediterranean</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Indicators 22, 23, 38, 40, 44, 57, 62, 64, 66, 67, 68, 70, 71, 77, 85, 89, 96, 104, 118, 128 and 130 posed problems due either to the total lack of data and a gathering system or problems of calculation.

Indicator analysis is difficult and requires the enlistment of specialists.

The main problems encountered were the lack of time and the absence of an "indicators" culture. The implementation of a "system of environment and sustainable development indicators" could help better include the calculation of indicators in the daily activities of the Ministry of National Planning and the Environment.

The lack of know-how and the difficulties in mobilising partners requires the organisation of training workshops and exchanges of experiences.

The Ministry of National Planning and the Environment wishes to pursue the "SDI" activity as a routine activity, which requires the implementation of means, the establishment of a network of partner institutions, the setting up of a measurement network and the monitoring of the environment.

In conclusion the work on the international level, such as that done by the Blue Plan, serves as a catalyst for the work on indicators on the national level.

**Discussion**

Mr. George Akl (LEDO) asked how the data holders were identified and how the multiples sources were managed.

In Algeria, the ministry has already a fairly good understanding of the institutions with information, for an initial study on indicators initiated by the Blue Plan in 1997 was followed by the METAP "Indicators of Environmental Performance" project. The choice of the source was made according to the criterion of source levelling, i.e. that the upstream source was favoured.

Ms. Urska Povse (Slovenia) asked if the Ministry of National Planning and the Environment (MATE) were the most appropriate for implementing the work on the indicators?

In Algeria, the ministry has extensive experience in indicator matters, but the National Office of Statistics (ONS) is a preferred partner and has already supplied numerous indicators.
2.3.2 Croatia

Mrs. Sandra Troselj (Ministry of the Environment and Physical Planning) presented the process of calculating the 130 indicators in Croatia by stressing the importance that must be given to such an exercise in order to transcend all difficulties and bring them to a successful conclusion.

Of the 130 Mediterranean indicators, 79 were available, and 69 were calculated, 55 of which on the national level, 11 on the coastal level and 3 for both levels:

<table>
<thead>
<tr>
<th>Category</th>
<th>National level</th>
<th>Coastal level</th>
<th>Both levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Society</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Territory and Human Settlements</td>
<td>6</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Economic Activities</td>
<td>19</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Environment</td>
<td>11</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Actors and policies</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Exchanges and Cooperation in The Mediterranean</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The values of the indicators of 40 Mediterranean sheets among the 50 sheets made by the Blue Plan were compared to those contained in the Croatian statistical compendium, and the following emerges:

- the values are identical for 13 indicators;
- differences were noted for 14 indicators; and
- 13 indicators could not be compared mainly because of differences in the calculating method.

The gathered indicators could not be analysed prior to the workshop because the data arrived too late, because of absence of already available analysis and too-short periods.

In general there is a lack of data for obtaining a summarised perspective and for analysing the issues according to the PSR framework.

The main problems encountered for this exercise were the lack of time, the dispersion of the data in different services and the slowness of bureaucratic procedures.

The solutions foreseen to solve these problems are an improvement in the scheduling of the exercise time, improved motivation among the data holders by giving the project greater importance and by forming a group of specialists for analysing the indicators.

The coming stages will consist of integrating Mediterranean indicators into the 2002-2006 statistical programme which will be developed according to the directive for the statistical compendium. Implementation of the indicator system will be followed by the improvement and the follow-up of these indicators on the national and regional levels.
2.3.3 Spain

Mr. Francisco Cardoso (Ministerio de medio Ambiente) presented the work done on the indicators in Spain by stressing the lack of means and in particular the lack of personnel available for this exercise, as well as the execution period, all of which might explain the poor results. Only 18 per cent of the environmental indicators could be calculated.

Work on the Mediterranean indicators provides a good working framework on the national level. It makes it possible to identify the sources better, including the Autonomies with which the synergy should be strengthened.

An initial list of 85 indicators had already been selected in Spain in a prior national process.

It is important to promote the use of indicators in long-term planning, and this positive experience must be consolidated by devoting more time to it and more personnel by giving it greater importance on the national level.

2.3.4 Morocco

Mrs. Nezha Damnati (ONEM) presented the Moroccan test of the Sustainable Development Indicators (SDIs), which is presently underway with technical and scientific support from the Blue Plan as Mediterranean Observatory and IFEN as French Environment Observatory.

Morocco has already had countrywide experience with the SDIs. They have been used in the National Strategy for the Protection of the Environment and Sustainable Development, the Report on the State of the Environment in Morocco (Rapport sur l'Etat de l'Environnement du Maroc, REMM) and in Regional Environmental Monographs.

The Report on the State of the Environment in Morocco is one of the products from the System of Information and Data on the Environment (Système d'Informations et de Données sur l'Environnement, SIDE). This system will ultimately furnish a Geographical Data Bank based on simple and measurable indicators. The REMM is mainly worked out based on 73 environmental Indicators classified by major topic and according to the Pressure-State-Response (PSR) framework. This framework was chosen to develop a three-part reflex: Know, Assess and Act.

The Moroccan test goals are to examine the relevance of the Sustainable Development Indicators of the United Nations (134 indicators) in the Moroccan context and those developed by the Mediterranean Commission for Sustainable Development (MCSD, 130 indicators), then to select the indicators capable of illustrating issues and identifying the priorities defined by Morocco in environmental and sustainable development matters.

This Moroccan test will be carried out over a 6- to 8-month period and under guidance from the ONEM and the National Committee on the Sustainable Development Indicators (Comité National sur les Indicateurs de Développement Durable, CNIDD).

Established at a start-up workshop in September, 2000, the NCSDI’s main tasks are:
to participate in defining the framework in which the test is to be carried out;
- to identify data sources;
- to make the data required for properly carrying out the project available;
- to assist and follow up in a constant way all phases of the Moroccan test of Sustainable Development Indicators;
- to validate each phase of the Test;
- to organise a national workshop with a view to validating the final report of the national test on the sustainable development indicators;
- and to monitor the indicators tested and adopted on the national level by involved sectors.

The start-up workshop made it possible to make the following recommendations:
- to insert "Sustainable Development Indicator" pages in the Department of the Environment’s website;
- to make the observation of the basic environmental indicators a constant concern of the statistical operations done by the national system of statistical information;
- to spatialise information on the sustainable developmental indicators;
- to involve all partners concerned (ministers, public establishments, national statistical institutes, research agencies, associations…);
- to reinforce institutional support for bringing the exercise to a positive conclusion.
- to identify the priorities, the main way to reinforce or broaden based on an appraisal of what exists;
- to favour the analysis of indicators so as to weigh their relevance.

In conclusion the desired results from this test are the following:
- the pooling of expertise and the comparison of ideas of a large number of players in sustainable development;
- the appropriateness of the selection of indicators to national priorities such as those defined in the national strategy of sustainable development;
- the functioning in an operational manner of the monitoring committee of the Moroccan test of the sustainable development indicators;
- the permanent monitoring of relevant indicators chosen after the Test by the sectors concerned;
- the establishment of an annual report on the SDIs;
- the reinforcement and co-operation between the Moroccan National Observatory of the Environment and IFEN in France regarding sustainable development indicators.

2.3.5 Albania

Mrs. Malindja Vasjari, of the National Environmental Agency (NEA), presented the exercise in Albania by pointing out that the main applications of the indicators in Albania consisted in evaluating the economic development and certain projects

A working programme on indicators was developed and includes the following points:

- a national workshop on the SDIs;
- the development of response indicators in the environmental monitoring programme;
- the installation of an information centre with a data base.

The strong points of this "indicators" programme are the following:

- considerable involvement by the National Environment Agency (NEA);
- updating the National Environment Action Plan (NEAP);
- the priority granted by the government to the environment;
- the existence of numerous projects funded by outside sources;
- the Blue Plan’s contribution.

The weak points are the NEA's lack of means, the limited funds devoted to the environment and the lack of environmental awareness among the general public and the decision-makers.

2.3.6 Egypt

Mr. Moussa I. Moussa (EEAA) presented the main difficulties encountered in calculating the indicators in Egypt and the solutions planned for obtaining results.

The following are the main difficulties encountered:

- the actors are not familiar enough with the indicators;
- a lack of co-operation between players and partners;
- the overload of work incurred by this co-operation, and
- no responsible unit in the EEAA for the relevant processing of indicators.

Among the possible solutions: creating a unit in the EEAA devoted to the indicators, improving relations with partners within the EEAA by using personal relationships and by corresponding in Arabic, training partners (including the CAPMAS) through joint meetings with the Blue Plan.

A working programme still has to be set and a schedule for which arrangements and procedures are underway.

Mr Moussa I. Moussa then presented results for a few air pollution indicators.

2.3.7 Presentation of the MED-ERMIS Project

Mr. Alexandros Lascaratos (Greece) presented the MED-ERMIS project. As a member of the Aid and Development Committee of the OECD and having to allocate a percentage of its GDP to regional assistance projects, Greece developed the MED-ERMIS Project (Environmental Reporting & Monitoring Information System), which involved 6 countries (Cyprus, Egypt, Israel, Lebanon, Malta and
Tunisia) for a budget of 140,000 euros per country. The project is to be done in each country by an NGO or a university. The project has been adapted to each country, and a start-up meeting was organised in November of 2000.

Mr. A. Lascaratos stressed that the effort on the SDIs had to be a broader gathering system and be lasting.

**DISCUSSION**

Mr. Guillaume Benoit (Blue Plan) proposed to strengthen the institutionalisation of data production and data collection in liaison with the statistical institutions and within the framework of the MEDSTAT project.

Mrs. Dalla Costa (ANPA) thinks that the work on the indicators must be included and inserted into a national process. Such is the case in Italy with the ANPA, ISTAT and the topical centres of the EEA. Pursuing this exercise is to be recommended as very important on the regional and national levels.

Mr. Ronan Uhel (EEA) stressed the importance of publishing and circulating the results even in the preparatory phase. The complementarity between statistics and indicators have to be encouraged. Communicating identified gaps on the statistical directors’ level is primary and is possible through the MAP. Without taking the data-holders’ place, it is necessary to communicate by highlighting this information.

Mr. Mohamed Ennabli thinks that there is no basic contradiction between the top-down and bottom-up approaches; each country can add indicators to the common set. Differences and problems between statistics and indicators must not be exaggerated; complementarity must be sought and co-operation encouraged between statistical and environmental institutions.

Mr. Serge Antoine recalled the major future international events to consider such as "Rio+10" and the partners who cannot be ignored like the New York CSD. The MAP must be present on a global level.

Mr. Kamel Djemouai of Algeria would like to see the Blue Plan proposing standardised and more detailed methodologies for gathering information needed in the calculation of indicators such as sampling schemes.

**2.4 Summary of difficulties and outline of solutions**

Aline Comeau and Jean-Pierre Giraud summarised the main difficulties encountered in countries for calculating indicators and roughed out solutions that would have to be implemented in the near future.

The volunteer approach by countries has reached its limits, for the countries are generally faced with a lack of personnel and time and a lack of expertise for the analysis.

‘Indicator’ activities should be included in a long-term process with support from international or bilateral projects such as the MED-ERMIS project with Greece.

The poor ‘Indicator’ culture of national institutions should be remedied by learning through use by publishing reports that use indicators.
With data being dispersed in numerous institutions, administrative procedures are slow, and it is difficult to get potential partners to participate.

To obtain data, a network of partners has to be developed by starting, wherever possible, through personal contacts, then consolidate and formalise the relationships with partners. Organising workshops makes it possible to interest partners in using indicators and establishing a common language.

It is difficult to cover the very broad field of sustainable development. For that, it is necessary to have an official mandate that makes it possible to insist with partners. Likewise, political will makes it possible to clarify the request for indicators and products. But this political will has to be encouraged by circulating (even brief) publications on indicators.

The easiest indicators have to start to be calculated so we don’t get discouraged and schedule the most difficult calculations by having the data-producers act.

International exercises make it possible to give a reference framework to the national undertakings and to get them started.

Practically speaking and to update files before the next MCSD meeting, countries will have to be reminded to continue calculating indicators on all geographical levels and to supply comments on trends and methodologies.

3 Improvement of the indicator’s definitions, proposals for improving the glossary (Session 3)

3.1 Summary of the main questions on the glossary

Mr Jean-Pierre Giraud cited the goals of this third session, which consisted of:
- improving and detailing the definitions presented in the glossary
- detailing the calculation methodologies and procedures

The following rules will have to be followed in order to preserve a certain comparability with a view to standardisation:
- keep a homogenous definition (mainly for indicators taken from international sources)
- adapt the calculation to the national level by using a nearby indicator if the exact definition is not applicable
- be mindful to keep data easily available, and
- maintain a “reasonable” cost for developing the indicator

The main types of comments received by the Blue Plan concern the clarity of definition that has to be specified, the use of a different definition or a nearby indicator and a methodology not adapted to a certain country.

The suggestions made by countries figure in the following table. It proved to be necessary to specify "the average annual growth rate" for all the indicators about growth rates. Certain of these indicators will be accompanied by suggestions from the MAP’s regional activity centres in this session’s follow-up.
<table>
<thead>
<tr>
<th><strong>INDICATORS</strong></th>
<th><strong>COMMENTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Women per hundred men in the labour force</td>
<td>Specify the spread by sector</td>
</tr>
<tr>
<td>4. Human poverty index (HPI)</td>
<td>Use the exact definition of the UNPD</td>
</tr>
<tr>
<td>6. School enrolment gross ratio</td>
<td>Improve the definition</td>
</tr>
<tr>
<td>10. Public expenditure for the conservation and value enhancement of natural, cultural and historical patrimony</td>
<td>This complex indicator is processed by the Centre of the 100 historical sites</td>
</tr>
<tr>
<td>13. Access to safe drinking water</td>
<td>Distinguish between urban and rural</td>
</tr>
<tr>
<td>15. Number of passenger cars per 100 inhabitants</td>
<td>Use the per-1000 inhabitants unit</td>
</tr>
<tr>
<td>16. Main telephone lines per 100 inhabitants</td>
<td>Use the number of main subscriptions</td>
</tr>
<tr>
<td>19. Loss of agricultural land due to the urbanisation</td>
<td>Improve the definition of farming lands (SA or SAU)</td>
</tr>
<tr>
<td>22. Population change in mountain areas</td>
<td>Improve the definition of the mountain areas, favour rural areas</td>
</tr>
<tr>
<td>26. Forest protection rate</td>
<td>Do the hunting reserves enter into forest protection?</td>
</tr>
<tr>
<td>28. Number of tourists nights per km of coastline</td>
<td>Define the coastal areas affected by the calculation</td>
</tr>
<tr>
<td>32. Coastline erosion</td>
<td>Improve the definition</td>
</tr>
<tr>
<td>33. Protected coastal area</td>
<td>Hard to interpret for it is about the land part and the marine part</td>
</tr>
<tr>
<td>34. Oil tanker traffic</td>
<td>Add tonnage</td>
</tr>
<tr>
<td>35. Global quality of coastal waters</td>
<td>Use water-quality classes from the Water 2000 directive</td>
</tr>
<tr>
<td>36. Density of the solid waste disposed in the sea</td>
<td>Expensive and hard-to-implement indicators, require large measuring campaigns</td>
</tr>
<tr>
<td>37. Coastal waters quality in some main “hot spots”</td>
<td>Improve the definition of “hot spots”</td>
</tr>
<tr>
<td>38. Quality of biophysical milieu</td>
<td>Make the definition more precise</td>
</tr>
<tr>
<td>39. Protection of specific ecosystems</td>
<td>Define the notion of sensitive areas</td>
</tr>
<tr>
<td>40. Existence of monitoring programs concerning pollutant inputs</td>
<td>Does not reflect the evaluation of existing programmes</td>
</tr>
<tr>
<td>41. Wastewater treatment rate before sea release for coastal agglomerations over 100 000 inhabitants</td>
<td>Supply data in volume and inhabitants</td>
</tr>
<tr>
<td>42. Harbour equipment ratio in unballasting facilities</td>
<td>Improve the definition</td>
</tr>
<tr>
<td>43. Distribution of GDP (Agriculture, Industry, Services)</td>
<td>Also supply the GDP of the tourism sector</td>
</tr>
<tr>
<td>56. Annual average of wheat yield</td>
<td>Very sensitive to climatic conditions, calculate an average for 5 years</td>
</tr>
<tr>
<td>58. Value of halieutic catches at constant prices</td>
<td>Highly variable according to region</td>
</tr>
<tr>
<td>62. Public expenditures on fish stocks monitoring</td>
<td>Hard to assess on the national level</td>
</tr>
<tr>
<td>65. Number of mines and carries rehabilitated after exploitation</td>
<td>Define the notion of rehabilitation and favour percentage</td>
</tr>
<tr>
<td>69. Energy intensity</td>
<td>Use the GDP in PPA</td>
</tr>
<tr>
<td>70. Energy balance</td>
<td>Problems with conversion rates of renewable energy, Blue Plan recommends using the rates of International agencies</td>
</tr>
<tr>
<td>INDICATORS</td>
<td>COMMENTS</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>73. Structure of transport by mode</td>
<td>Separate national from international transport and include the maritime transport</td>
</tr>
<tr>
<td>74. Density of the road network</td>
<td>Specify the function of the kind of road</td>
</tr>
<tr>
<td>75. Share of collective transport</td>
<td>Hone the definition and the calculation method</td>
</tr>
<tr>
<td>79. Public expenditure on tourism development</td>
<td>Hard to identify the expenses directly or indirectly linked to the development of tourism</td>
</tr>
<tr>
<td>86. Share of distributed water not conform to quality standards</td>
<td>Favour the number of non-matching samples</td>
</tr>
<tr>
<td>104. Area of land contaminated by hazardous wastes</td>
<td>Hard to determine, the number of sites may be known</td>
</tr>
<tr>
<td>107. Cost recovery index of municipal wastes</td>
<td>In the first stage, give management costs of municipal waste</td>
</tr>
<tr>
<td>108. Destination of household wastes</td>
<td>Replace “household” by “municipal waste”</td>
</tr>
<tr>
<td>114. Frequency of excess over air standard (ozone)</td>
<td>Specify the number of times norms are exceeded per station and per year. Use directive 92/72/CE that suggests supplying two value peaks and the number of stations involved</td>
</tr>
<tr>
<td>115. Expenditure on air pollution abatement</td>
<td>Separate government costs from those of other agencies and individuals</td>
</tr>
<tr>
<td>116. Share of clean fuels consumption in total motor fuels consumption</td>
<td>Specify the clean fuel categories according to content</td>
</tr>
<tr>
<td>119. Economic impact of natural disasters</td>
<td>Hard to evaluate</td>
</tr>
<tr>
<td>120. Burnt area per year</td>
<td>Is limited to the surface area of burnt woodland</td>
</tr>
<tr>
<td>122. Number of direct employments linked to the environment</td>
<td>Hard to evaluate the time devoted to the environment</td>
</tr>
<tr>
<td>125. Public expenditure on environmental protection as a percent of GDP</td>
<td>Improve the definition of the activities to be considered</td>
</tr>
<tr>
<td>126. Existence of environment national plans and/or sustainable development strategies</td>
<td>Avoid this kind of indicator (Yes/No) by supplying data on plans and strategies and their execution</td>
</tr>
<tr>
<td>127. Number of Agendas 21 adopted by local authorities</td>
<td>Add projects to be adopted</td>
</tr>
</tbody>
</table>

The Blue Plan recommends using the international conversion rates for the monetary and energy indicators, etc. and specifying the coastal regions and/or concerned statistical units by the indicators on the coastal level.

### 3.2 Propositions of modifications by the MAP centres

#### 3.2.1 Regional Activity Centre for Remote Sensing applied to the Environment RAC/ERS

Mrs. Monique Viel (RAC/ERS) presented the possible contribution of remote sensing for calculating certain indicators (8), which generally concern land use and soil degradation.
A study was done by Mr. Benchekroun of the Royal Centre for Remote Sensing (Morocco) to inventory the remote-sensing projects likely to contribute to calculating these indicators. Of 30 projects inventoried:

- 2 projects could supply data for calculating indicator 19, "Loss of arable land due to urbanisation"
- 6 for indicator 25, "Forest area"
- 18 for indicator 93, "Land-use change"
- 1 for indicator 94, "Relative change of arable land"
- None for indicator 27, "Artificialised coastline/total coastline"
- On the other hand, no project was likely to contain data for calculating the following indicators, on which, however, we may have hoped for a contribution by remote sensing
  - 32, Coastline erosion
  - 74, Density of the road network
  - 120, Burnt area per year

The RAC/ERS wishes to contribute to the calculation of indicators in the Mediterranean region by continuing the inventory of remote-sensing projects in the Mediterranean countries (MERSI. Web initiative) and by going more deeply into the analysis of environmental remote-sensing methodologies. (Bibliographical approaches or the implementation of projects/MEDA-DG Environment).

The RAC/ERS recommends that the National Remote-Sensing Centres not be forgotten and that they be included in work on the SDIs.
DISCUSSION

Mr. Jean-Pierre Giraud would appreciate having details on the costs and possible contributions of the RAC/ERS in the effective calculation of the indicators, including those dealing with land use, etc.

Mr. Ronan Uhel noted that the cost of satellite images is going down and that with the availability of such images on the Internet costs will continue to fall.

3.2.2 Regional Activity Centre for Specially Protected Areas, CAR/SPA

Mr. Chedly Reis (RAC/SPA) presented the input from his centre by stressing that it is hard to quantify biodiversity but that certain indicators are already being used in the follow-up to the convention on biological diversity. The practical aspect of the calculation was enhanced by the work framework provided by the Blue Plan.

Indicator 38, "The quality of the biophysical milieu", is to be maintained, although the absence of seed plants does not always indicate a poor-quality milieu and that certain countries do not have Posidonia. The excessive spread of certain species is a good indicator of biophysical quality. The use of varying the area of the marine seed-plant beds is suggested. (cf. GIS posidonia). A plan of action for conserving marine plant-life in the Mediterranean Sea will be implemented in about 2003. The number of cases of appearance of marine species blooms (sea lettuce, ...) is also suggested as an indicator.

For indicator 95 on the "Wetland area", one should not be limited to the surface area classified RAMSAR but include all wetlands.

The name of indicator 96 must be modified: "The number of sea turtles fished per year". What is proposed is "The number of turtles caught per year" in reference to accidental catches.

For indicator 98, "Threatened species", it is important to standardise the terminology and definition with those used by the protocol relating to specially protected areas and the biological diversity in the Mediterranean. The list of species contained in annex 2 of the Protocol must be referred to.

For indicator 99, "Total expenditure on protected areas management", it is important to link the total costs to the size of the protected areas, and domestic inflation and the fluctuating value of the US dollar have to be kept in mind.

Mr. Chedly Rais suggested continuing the co-operation between the RAC/SPA and the Blue Plan to improve the definitions and to contribute to calculating the indicators relating to biodiversity in the Mediterranean countries.

3.2.3 "100 Historic Sites" Centre

Mr. Daniel Drocourt presented a methodological note for calculating indicator 10, "Public expense for conserving and highlighting heritage" on the Marseilles site.

This note details the difficulties of managing an historic site in a highly frequented urban milieu, the various administrations involved and the calculations and estimates of the investment and operating expenses for the site.
The main question is the one of the reproducibility and calculation of this indicator for other, more complex sites as well as acceptance on the national level.

This indicator is fairly complex, especially because of large financial transfers between the different territorial communities involved.

3.2.4 MED POL

Mr. Fouad Abousamra (MED POL) presented his comments for the indicators of the marine milieu by stressing the difficulty of calculations on the regional level.

The comments deal with the following indicators:

35. Global quality of coastal waters: The faecal coliforms concentrations in seawater are not representative of the bacteriological quality of the seawater. Mr. Fouad Abousamra suggested considering the frequency of excessive numbers of faecal coliforms in relation to a standard (European Directives or WHO standards). Concentrations in sediment and living matter are more important than concentrations in seawater. Moreover, reliability limits of the analysis results (PC and DDT) are very weak in a few Mediterranean countries.

36. Density of the solid waste disposed in the sea: the presence of waste does not indicate its origin; for its moves with the stream: This indicator cannot be measured by most of the Mediterranean countries especially at great depths.

37. Coastal waters quality in some main “hot spots”: the classes considered to measure this indicator do not reflect the effects that depend on the receiving environment.

40. Existence of monitoring programs concerning pollutant inputs: it should be noted that the monitoring programmes are operational within the framework of the MED POL III programme. Reference to the Strategic Action Programme is not justified.

41. “Wastewater treatment rate before sea release for coastal agglomerations over 100 000 inhabitants” and 91. “Share of Industrial wastewater treated on site”. The percentages of the quantities of BOD and SSM thrown out with the effluents in relation to the quantities of BOD and SSM produced per day would be more important than the quantity of waste water treated.

42. Harbour equipment ratio in unballasting facilities: It has to be clarified if petrol tankers are considered as part of the merchandise-carrying ships (carrying fuels).

Mr. Fouad Abousamra suggested organising a restricted working group to review certain indicators and hone definitions. MED POL is part of the working group on the marine-milieu indicators within the framework of the Interregional Forum organised under the aegis of the EEA. Italy is ready to welcome a meeting of the working group.

3.2.5 Regional Activities Centre of the Priority Action Programme (RAC/PAP)

Mr. Marko Prem (RAC/PAP) suggested adding a "relevance" feature to each indicator sheet in the glossary. Catchment areas should be added as a new geographical level for which a number of indicators can be calculated with an important meaning for the coastal regions.

The following indicators were commented upon:
19. “Loss of agricultural land due to the urbanisation” : it is suggested that the other changes in land use be considered too.

77. “Number of secondary homes over total number of residences” : illegal constructions of vacation home, more especially near protected areas and in coastal regions, are very important for sustainable development.

92. “Ratio of land exploitation” : the definition of potentially cultivatable land should be specified.

95. “Wetland area” : All wetlands must be considered (RAMSAR or not).

108. “Destination of household wastes” : illegal dumping could be included in this indicator.

Mr. Marko Prem suggested adding two indicators in the longer term:

− the existence of legal instruments such as Environment Impact Studies (EIS), measures of cost recovery and so forth.
− the percentage of illegal construction in relation to all construction.

### 3.3 Propositions of the European Environment Agency

Ronan Uhel (EEA) made general proposals for:

− SDI sheets that should include a “definition” feature in conformity with the glossary one,
− the glossary.

The glossary should display its regional purpose and introduce a relevance feature for evaluating sustainable development and policies, this in relation to the objectives.

He suggested adding more specific references to methodological and technical manuals and the Internet sites describing them. For example, for the calculation of the emission of pollutants into the air, the IPCC emission factors have to be specified.

The basic geographical units must also be specified for analysis, such as fishing and catchment areas, which have to be differentiated from geographical cover for information gathering.

For the indicators calculated on the basis of measurements it is necessary to try to qualify the representativeness of the measurement networks used.

The units of time are necessarily different according to the indicators; certain indicators like water resources should be based on the hydrological cycle.

In order to obtain a sufficient filling rate at first, neighbouring indicators could be used if the data are not available.

The link between the indicators in the glossary and those used in all issue analyses must be constantly maintained.

Moreover, decision-makers only see the usefulness of indicators when they are produced and circulated; there should be no delay in doing so, even if all the data desired are not at hand.
Updating, maintaining and publishing the set of indicators should be planned right now, and the implementation of a routine will be required for up-dating and publishing the “indicator” sheets every year.

3.4 Conclusions

As far as possible and in preserving a Mediterranean consistency, the maximum of comments and suggestions made by countries and regional activity centres of the MAP and the EEA have to be inserted into the definitions and methodologies of the indicators.

During this session it came out that what has to be done in this kind of exercise is to provide monitoring and improve and deepen the work in a continuous process with all of the Mediterranean countries, also between the Regional Activity Centres of the MAP for the indicators linked to their respective activities. The MEDPOL proposal to start an in-depth examination of the indicators relating to marine pollution in close co-operation with the Blue Plan and the volunteer countries is a very good example of the initiative that should be encouraged for the other topics.

4 Analysis and reports based on the indicators: Examples of SDI use for assessing the progress toward sustainable development (Session 4)

Some concrete examples of using SDIs — both in general reports on the environment and sustainable development and in the analysis of certain issues — are mentioned here to show their usefulness in evaluating progress towards sustainable development and measuring their availability in the Mediterranean countries.

4.1 Transport and Environment in Europe: Issue and indicators

Ronan Uhel presented the mechanism for transport and environment reporting as implemented by the EEA and used for the TERM 2000 report.

The goals of the report are the following:

− Monitor the progress in integrating transport and environmental policies into the EU based on indicators, to help the transport sector become both more eco-efficient and more responsible,
− Helping rationalise the data-gathering system of the member states, Eurostat and the EEA.

The work was done within the framework of co-operation between the Commission (DG Transport, DG Environment and Eurostat) and the EEA.

The challenge consists of combining the data from transport, socio-economics, land use and the environment.

The idea for data-gathering is to use the existing data-gathering networks such as Eurostat and the EEA’s Eionet network. It will be implemented gradually with
several years' worth of activities to improve the availability of data and their quality.

An initial set of 31 indicators was selected according to existing European data bases.

The indicators are selected within the DPSIR (Driving Force, Pressure, State, Impact, Response) framework, applied to the transport sector and must be able to answer in the affirmative 7 questions on political integration:

1. Is the transport’s environmental performance getting better?
2. Are we better in managing transport demands and improving the modes of transport?
3. Are transport planning and layout planning better co-ordinated so that the transport demands are better balanced?
4. Do we optimise the use of the capacity of existing transport infrastructures, and are we evolving towards a better-balanced intermodal transport system?
5. Are we evolving towards a more just and efficient system, one which provides coverage of external costs?
6. What is the improvement speed of the technologies used and how efficient are the vehicles?
7. Are the follow-up and environmental-management tools efficient for supporting policies and decision-making?

The problems encountered were the acceptance of the procedure by the transport sector, the political follow-up and participation by countries.

It is necessary to build a common framework that leads to defining the sector studied, the influences on the environment, the eco-efficiency and the integration of the environment in the economic sectors.

The evaluation of sectors was done according to the following general model:

− The formulation of political demand by the DG Environment and the DG in charge of the sector studied;
− The creation of an policy group with the general directors of the European Commission, Eurostat, EEA and selected countries and NGOs;
− Eurostat and EEA are co-responsible for data gathering;
− Eurostat produces a statistical compendium;
− EEA produces the sector evaluation.

It is important to note that the team formulated policy questions for the "politicians" and published without having all the data.

The main lessons for establishing mechanisms for sector reporting are:

− A consensus on the objectives;
− A process with greater integration;
− Good co-ordination;
− A clear model;
− Participation on the desired level (national, local);
– Indicators adapted to political action.

Mr. Alexandros Lascaratos noted that the institutional framework and the EEA mandate is different from the MAP's, which relies on the volunteer approach of the Mediterranean countries.

Mr. Moussa I. Moussa (Egypt) stressed that a lot of work is required for illustrating the indicators well and circulating them to decision-makers, for the latter very often make judgements according to the presentation of results.

Mr. Arab Hoballah noted that 130 indicators is a common minimum that does not prevent the country from using other indicators.

4.2 Water quality and agriculture in Bosnia: Issue and indicators.

Mrs. Selma Cengic presented the geopolitical context in Bosnia, which is in a reconstruction stage after the war and whose priorities are above all else socio-economic development and institutional and legislative reinforcement.

The water sector is being reorganised and covers four aspects: institutional, legislative, cost recovery, water quality and the development of human resources.

The agriculture sector is also being reorganised. It is one of the sectors with the strongest potential for sustainable development in Bosnia.

Water quality is a priority, but there are only a small number of monitoring stations, and analysis suffers from a lack of data.

The consumption of pesticide per hectare is known by order of size (2.5 kg/ha in farms but 5.6 kg/ha in state-owned farms). Arable-land surface per inhabitant is 0.2 ha/inhab. There is a 4-class quality river classification.

Even if there is little data, it is possible to illustrate good analyses with a few one-off examples and local indicators.

To describe the "water and agriculture" issue, the quantity and quality aspects must absolutely be analysed together, as well as economic aspects.

Of the 130 indicators the following are the most important for "water and agriculture" issues:

– 53. Agriculture water demand;
– 55. Rate of food dependence;
– 84. Exploitation index of renewable resources;
– 89. Existence of economic tools to recover the water costs in various sectors;
– 43. Employment distribution (Agriculture, industry, services).

You'll notice the high, negative impact on the ecosystems of urban and industrial development, hydraulic power stations and agriculture of the 50 past years.

Financial support from the EC has made it possible to begin such responses as:

– the formulation of a new legislative framework;
– the adoption of framework laws on the environment;
– the adoption of sector laws on the environment;
the reorganisation of the institutional framework;
application of the catchment integrated management model (7 basins).

The input of this kind of analysis in Bosnia-Herzegovina is significant and concerns the following:
- the improvement of development-environment strategic planning and the decision-making process;
- the establishment and reinforcement of inter-institutional co-operation;
- the reinforcement of the capacity for developing follow-up tools for evaluating economic growth in relation to the quality of the environment;
- a better understanding of sustainable development.

4.3 **The waste in Greece: Issue and indicators**

Mrs. Flora Gofa presented the issue of waste in Greece by stressing the main problem encountered, which for her is the lack of essential data for calculating indicators, something which rendered analysis difficult.

Other indicators (EEA Environmental Signals indicator-based reports) are presently being gathered and used by Greece by applying the same DPSIR framework.

The reasons for choosing this issue of waste are the following:
- the importance of the issue in Greece in particular;
- the relative availability of data for working out indicators;
- the relevance of the proposed indicators;
- Good adjustment with the OECD’s DPSIR framework.

The main difficulties encountered in this exercise.
- The delay of starting the work programme in Greece;
- The broad range of subjects covered (not strictly environmental);
- The lack of available data or appropriate infrastructure for supplying the data;
- The dispersion of the data sources;
- The lack of training on the indicators and the reporting approach;
- Lack of environmental awareness in decision-makers;
- The lack of essential data for enabling the analysis of trends.

It may be noted that:
- The organisation of the project is well structured;
- Greece has profited by beneficial experience;
- Reservations were expressed on the requests for extending the project;
- Continuous efforts have been made for getting results before the workshop.

In conclusion: the job requested by the Blue Plan is perceived to be an additional load, and a new culture and new expertise must be created in the indicator field.
4.4 Report « Spatial planning and Environment, Policies and indicators » (France)

Cécile Dormoy presented the Report « Spatial planning and Environment, Policies and indicators ». It constitutes a political order from the Ministry of National and Environmental Planning and was published during the French presidency of the European Commission.

This report tries to evaluate the performance in France in environmental and national planning matters in relation to its international, European and national commitments.

70 indicators in 23 sheets each describing an environmental issue were presented with statistics, graphs and remarks for France and the European Union.

An effort was made for evaluating objectives for all the indicators, even for those which do not have quantified political objectives.

For topics such as water and air, there are numerous objectives for pollution reduction that make it possible to evaluate politicians' performance easily. This is not the case for other topics such as biodiversity, countryside and soils, and so forth. There are no objectives for these. As for topics such as noise and waste, data are not available in a form that enables quantification of the selected indicators. Sometimes indirect performance evaluation is possible by examining the Administration's capacity to implement the measures voted on in the political, legislative or regulations framework.

What is interesting about this work, which may be considered as a good example of a national publication based on the indicators, is to evaluate the politicians' performances and to measure the integration of environmental concerns into the sector policies such as agriculture, transportation and energy.

It would be interesting to "Mediterraneanise" the developments of these indicators and to compare the French and European trends with those observed in the Mediterranean countries.

4.5 Coastal regions in the Mediterranean: Issue and indicators

Elisabeth Coudert (Blue Plan) presented the "great" indicators that make it possible to analyse the question of coastal and coastal-region development in the Mediterranean. To do so, we have to define the geographic elements of the system in which the coastal region and the coastal strip figure. The elements of the Mediterranean coastal-region development issue are mainly the Land/Sea interface with its diversity, its complexity and the fragility of the milieus, belonging to different areas: multiple uses in response to particular functions and rationales and the overlapping of the institutional levels: from the commune to the central government, from States to the regional unions (EU, UMA) and to the treaties, conventions and international bodies (NATO, MAP, OECD...).

The indicators must make it possible to understand and describe the interaction between the use of natural milieus and the actors on different scales, this with a view to protecting natural milieus, of foreseeing deterioration in environmental resources and potential conflicts, to control the development of human activity and
to manage and resolve the existing conflicts. These indicators can then help in defining and evaluating policies.

The following categories of indicators are vital for covering this question:

- population and planning, society and human development,
- the economy and activities,
- the environment, resources and natural milieus.

Several examples of using indicators by the Blue Plan can be cited, e.g. the global scripts and the coastal-region scripts:

- The Iskenderun Bay project (Turkey)
- The Coastal Area Management Programmes (CAMP): the Sfax area (Tunisia) and the northeast area of Malta.

It is worth noting than an original approach for the prospective analysis of system sustainability calling for indicators is in the process of being tested within the framework of the Malta CAMP. Within this initiative, the indicators are also used for projecting evolutions into the future and not just for a retrospective view (cf. session 5).

Mr Arab Hoballah (MAP) would like to see the link with the 130 indicators reinforced in the work on the coastal regions and the CAMPs.

Mr. Ronan Uhel (EEA) thinks that the system of the 130 indicators should be modelised so as to better apprehend sustainable development in the Mediterranean region and in the coastal areas.

4.6 Mediterranean coastal regions in Slovenia: Issue and indicators

Anita Velkavrh (Ministry of the Environment and Physical Planning) presented the second Slovenian indicators test, done for the coastal level. A first test was carried out in a three-month period in 1999 on the national level with the Blue Plan.

This second test in 2000 therefore focused on the coastal level, including 3 towns representing 1.7 per cent of the territory and 8 per cent of the population. It included 55 indicators that could be adapted to the coastal regions. It lasted only one month.

The 130 indicators were then tested on the national level, too. In all 146 indicators were tested in the 2 tests on the national level, of which 12 indicators were not available (while of the 55 indicators tested on the coastal level, 10 are not available.

On the national level 9 indicators of 146 were judged to be non-pertinent, and on the coastal level, 4 indicators of 55 were judged to be non-pertinent, and 2 could have been pertinent in small urban areas.

The indicators will be used in a report on the state of the coastal environment and in the national debate on sustainable development.
Concerning the calculation exercise, the Blue Plan glossary is sufficiently clear, but the choice of the indicators should be stable and standardised in relations with the EEA.

The national institutions are the main data sources: the statistical offices, the ministries of the environment, agriculture and defence, the network of MEDPOL measurements and the regional institutions.

Most often "non-sustainability" is expressed by a growing use of natural resources and weak economic and social development.

In conclusion of calculating indicators for the coastal level, we can note that all the observed processes are more intense on the coastal than the national one and that the "sustainable" trends of economic and social development are not that clear.

The advantage of the regional set offered by the Blue Plan is the clarity of its framework and definitions, so as not to duplicate efforts and initiatives, it is necessary to stabilise this common set and try to include or link it to the EEA indicators.

The Ministry of the Environment is not perhaps the most appropriate institution for this type of work. All ministries, especially the statistical office, should be included.

Mr Vito Cistulli (Blue Plan) thinks it will be necessary to compare the indicators among themselves and make the system more dynamic. To do so would require an analytical framework, which would make it possible to link economic and environmental indicators. Such a plan is under development at the Blue Plan for the indicators specific to free trade.

5 Toward a sustainable system of indicators (Session 5)

The availability of pertinent and reliable indicators for analysing issues and for evaluating the progress towards sustainable development has to pass through the implementation of a system of lasting indicators based on inter-institutional co-operation between the producers of information, the specialist agencies, the institutions in charge of the environment and sustainable development.

5.1 The inter-institutional cooperation in Italy

Mme Maria Dalla Costa presented the Italian experience by stressing inter-institutional co-operation. She recalled that there was growing demand for Indicators on the national and international levels. In order to better connect the SDIs with decision-making, it is necessary to organise "cross-fertilisation" meetings that bring together experts, decision-makers and representatives from civilian society.

The exercise’s strong points were the high motivation by the experts and the fact of taking part in an important strategic exercise. But more work has to be provided and numerous inter-institutional meetings have to be organised. They unfortunately eat up a lot of time and money.
There is in Italy a political will that led to the setting up of an interministerial Commission for a national strategy for sustainable development, which has led to a preliminary strategic plan. This demand should be further reinforced by international events such as Rio + 10.

In the coming stages, the Blue Plan will should be an important catalyst for the work on the indicators in Italy.

5.2 The use of indicators in the Malta CAMP

Ms. Joslyn Magro (Central Statistics Office) presented the Maltese experience on the indicators of sustainability within the framework of the CAMP. The Coastal Area Management Programme is being carried out under the aegis of the MAP with a goal of linking the environmental problems to planning.

Focusing on the northeastern portion of the island, the CAMP includes 5 sub-projects:
- Sustainable management of the coast,
- Areas of marine conservation,
- Integrated management of water resources,
  - Management and monitoring of erosion and desertification,
  - Impact of tourism on health, and

3 cross-activities:
- Data management,
- A participatory programme, and
- The systemic analysis of sustainability (SSA).

The Blue Plan is involved in this last activity with a local team composed of representatives of the various ministries.

The SSA process consists of using brainstorming meetings to develop a representation of the system studied, described by the indicators chosen by the stakeholders who define an equilibrium band for each of the indicators.

Graphic representation of the polar-chart or amoeba type make it possible to visualise in a summary way all of the values taken by the set of indicators and to follow evolution in time and in comparison with the balance strip of the set of indicators and thereby visualise the "overall" evolution towards a more sustainable development.

Once the CAMP finished, the list of indicators will be used as a monitoring board of the of the area's situation.

The choice of indicators is primordial. Everyone must be able to understand and use them.
5.3 Observatory and Indicators in Lebanon

George AKL (LEDO, Lebanon) presented the indicator test done by the LEDO in Lebanon. It led to a start-up phase that included:

- the setting up of a policy committee;
- the setting up of a scientific committee, and
- a convention of co-operation for the policy committee.

A second phase of national participation made it possible to select the priority issues during a workshop. A list of indicators for Lebanon was then selected based on the priority issues and with the help of the lists of international indicators such as the set of 130 Mediterranean SDIs.

Of the 90 indicators selected by the LEDO, 52 are shared with the 130 Mediterranean indicators and 36 are specific.

At a second workshop attended by a large number of institutions, priorities were attributed to each indicator. Each institution, responsible for certain indicators, then committed to calculating its indicators. Projects such as the MEDSTAT and the MED-ERMIS can contribute to these calculations.

A report on the state of the environment in Lebanon is planned for 2001. A guide for the environmental and developmental indicators in Lebanon, and an atlas of the environment will be produced. The LEDO is developing a website and a data system on the indicators that will make it possible to visualise all information relative to the indicator and its trends.

The main challenges to be met concern the participation of institutions, the availability of measurements for certain indicators and the effective taking into account of the indicators in decision-making.

Mr. Arab Hoballah felt that to make the implementation of the indicator system lasting, there had to be a political demand followed by a will to use the indicators in decision-making, to consolidate the institutional network by establishing clear relationships between data suppliers and users and to produce and publish in a regular way.

On the Mediterranean level, the work currently underway with the countries should be finished in 2001 and a seminar should be organised in the spring of 2002.

For the next MCSD meeting an assessment will be presented on the development of the Mediterranean indicators system with the definitions being "reviewed".

Mr. Cadarso, (Spain) thinks it premature to make a conclusion on the objectives and would like the work to be filled out by testing the relevance of the indicators even if it means reviewing the indicator list.

5.4 Observatory and Indicators in Tunisia

Mr. Walid Rekik (OTED) presented the Tunisian situation for sustainable development and indicators.

Following on the recommendations of the UNCED (1992), in 1993 Tunisia set up a National Commission for Sustainable Development (NCSD). It adopted a priority
action programme in 1995, i.e. a national Agenda 21, and recommended the use of environmental indicators for monitoring the state of the environment.

The Tunisian test of the United Nations' indicators for sustainable development was carried out under the aegis of the NCSD and with the co-ordination from the Ministry of the Environment and National Planning. The National Agency for the Protection of the Environment (NAPE), through the Tunisian Observatory of the Environment for Sustainable Development (OTED) unit, is the focal-point agency for carrying out the test. In executing the test, the ANPE received French financial support and technical aid from experts of the IFEN and of the Blue Plan.

It is important to emphasise that this test is an on-going thing and is seen as the first stage towards structuring the quantitative data base on sustainable development in Tunisia.

There were several working meetings in Tunis, making it possible in particular to benefit by the experiences of French and Mediterranean tests (MCSD) in defining the process, the rapprochement of methods, the writing of working documents and reports and the technical validation of the test's main phases.

At the meeting for starting the project in 1997, it was agreed to adopt the general test process suggested by the UN-CSD and followed by most of the test countries, i.e. a two-part test:

- a "political relevance" test,
- a "technical" test for evaluating the possibilities of calculating these indicators by the national statistical system.

The "political relevance" test made it possible to retain 121 indicators from the 134 offered by the United Nations and to note the lack or weakness of the indicators for certain questions and issues important in Tunisia such as the coastal systems and tourism.

The technical test made it possible to check that 63 indicators out of 121 were calculated and could be calculated in the short term in Tunisia according to the UN method.

The 63 indicators, as well as certain ones among the set of the 130 Mediterranean indicators, are being quantified with the OTED, but the results have not yet been circulated.

6 Conclusions : Priorities and recommendations (Session 6)

6.1 Toward « reporting » (MED-REP project)

Aline Comeau of the Blue Plan presented the "MED-REP" project proposed by the Blue Plan in October 2000, for EC funding (Third Country Life Programme), but it is under study, and the funding is not a foregone conclusion.

It is part of the dynamic created by the Mediterranean Commission for Sustainable Development (MCSD) and its group on indicators. Its aims are to consolidate the Mediterranean system of indicators and to reinforce the analytical and
observational capacities of the interactions of development and the environment in the Mediterranean countries.

The idea is to create synergy in 3 years between the different environmental institutions of 10 volunteer Mediterranean countries\(^1\) through the simultaneous publication of reports on the major issues of sustainable development in the Mediterranean.

To do this a partner agency in each country of the “observatory for the environment and sustainable development” kind will be identified and shall select a preferred topic, e.g. "population, urbanisation, urban management and sustainable development" or "agriculture, rural development and management of natural resources" or "industry and the environment" or "tourism and coastal regions". And on this topic and with support from the Blue Plan and a national consulting expert, the agency will write a report analysing the issue in its country.

Drawing up the report will serve as a practical exercise for gathering and analysing quantitative information (indicators, maps) as well as qualitative information (case studies, expert pronouncements). The report will assess current responses implemented to resolve the issue in the country.

The various reports will be presented and discussed during a regional workshop where the exchanges will make it possible to improve the contents, especially on possible tools and responses for each issue.

Thus should national facilities such as the National Observatories for the Environment and Development (NOED), officially implemented in some countries, be reinforced in their capacities for expertise and in their partner networks.

Moreover, the teaching and illustration in these different reports will enrich and contribute to the regional report on the environment and development in the Mediterranean region, as desired by the Contracting Parties to the Barcelona Convention (the meeting of October, 1999).

On the longer term, the project will contribute to promoting modes of "sustainable" development by drawing from the capital of knowledge and innovation of the different Mediterranean partners; this capital will in turn be reinforced.

This project is an example of an initiative for obtaining funding to continue the work on the SDIs on the regional level. Unfortunately it concerns only the countries eligible for the Third Country Life Programme\(^2\).

It is now up to all countries to start equivalent initiatives on the indicators in order to mobilise funding and make progress in the work on the 130 indicators.

### 6.2 Workshop conclusions

Mr. Guillaume Benoit noted that the interest of the PSEMs has advanced in relation to the beginning of the "indicators" programme and that the activities on

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\(^1\) Albania, Bosnia-Herzegovina, Croatia, Cyprus, Israel, Morocco, Syria, Tunisia, Turkey and the West Bank and Gaza; Algeria may also be included.

\(^2\) Mr. Moussa (Egypt) regrets that Egypt, who had not sent in the letter of support for the MED-REP project, should be excluded from it, if the project is accepted.
public funds within the framework of the routine activities of the environmental institutions such as the Observatories must be made to last.

Mr. Serge Antoine is optimistic about the future of the work on the indicators but stresses the fact that it is necessary to communicate with the help of journalists and that civil society must be included more.

Mr. Mohamed Ennabli presented the workshop's conclusions:

This calculation phase of the 130 indicators on the national level is a very good exercise because:

− The countries were not indifferent to the theme of the indicators; they have mobilised their facilities, for they became aware of the benefits they would derive from honing such tools.
− Through acts, the exercise materialised a start to implementing the recommendations of the MCSD, which is its main goal.

And this implementation made it possible to highlight the various difficulties encountered: psychological, institutional, material, conceptual and circumstantial. But all these difficulties are clearly surmountable.

Political will is required to surmount the difficulties. But first and foremost, an effort of awareness-raising and clarification is vital for helping politicians in their decision-making in order to induce institutional reforms of interministerial cooperation.

The exercise made it possible to present in real terms an initial assessment illustrating the region’s determination to respond to the recommendations of Agenda 21 which promotes the use of sustainable development indicators. This made it possible for many countries to continue working out indicators on a national scale.

The workshop also made it possible to gather comments and remarks likely to improve the definitions of certain indicators figuring in the glossary.

And finally the workshop demonstrated the interest there is in analysing sector or thematic issues in the light of reliable indicators and the need to perpetuate the calculation of such indicators.

6.3 Priorities of the next stage

The next stage of implementing the system of the 130 Mediterranean indicators will have to consist primarily of:

− finalising the calculation of the 130 indicators on the basis of national sources and organising the follow-up;
− organising the indicators system in countries in order to make it lasting;
− publishing the indicators system adopted, even if only partially, in order to spread its use and to establish a certain routine associated with constant updating;
analysing the indicators calculated with help from the MAP centres so as to elicit relevant information on Mediterranean, regional and local scales; and

- generalising the "issues" approach, which makes it possible to rationalise the use of the indicators for expanding knowledge and follow-up.

6.4 Recommendations

The presentations and debates in the course of this workshop have been summarised by Mr. Ennabli in terms of recommendations for the follow-up of activities.

The Programme's Continuation

- MAP's different regional activity centres are invited to continue this initiative on the SDIs: the Blue Plan as Mediterranean Observatory for the Environment and Development (MOED) but also the other centres for the defining and data gathering required for the indicators that enter their field of competence by using their focal points in the countries.

- Prepare the coming stages, including that of a well-argued aggregation of the sustainable development indicators so as to better define the outlines of a shared vision of sustainable development in the Mediterranean region.

- Prepare for the inevitable time-limit of the mobilisation of indicators to refine the prospective approach and systematic analysis by relying on the major framework indicators specific to the Mediterranean region.

Improving the Glossary

- Consider the suggested remarks and proposals for changes to improve the definitions of the indicators. Specify the indicators to be abandoned because of the insurmountable difficulties in calculating them. This without adding new indicators to the list of the 130 SDIs which are agreed upon by consensus.

- Form working groups (restricted if necessary) to revise certain indicators (especially the marine environment) to highlight ambiguities in the concepts.

- Take the work of other specialised agencies into account for defining new topical indicators and to adapt these indicators to the political processes, and this, through efforts of inclusion, co-ordination and participation.

- If possible, include the contents of the glossary in the sheets.

- Highlight the relevance of the indicators selected in relation to sustainable development issues and current policies as well as the goals of these policies.

- Better link the indicator to the spatial and temporal dimension it is supposed to represent.
TOWARDS SDIS USEFUL FOR DECISION-MAKING

- Insofar as possible illustrate the meaning of the indicator to better exploit the information.
- Use the sustainable development indicators in the report on the environment and development that the MAP is to produce for 2002.
- Encourage the use of sustainable development indicators in the national reports that the Mediterranean countries must produce for the next "Rio + 10" conference and publish them even if the data are only partial.

FAVOUR SYNERGIES AND MAKE THE SDI SYSTEM SUSTAINABLE

- Use existing facilities and programmes to develop synergies between the institutions concerned by the calculation and the use of indicators.
- Tighten the bonds between the programme for calculating indicators and the environmental institutions on the one hand and the MEDSTAT programme and the statistical institutions on the other.
- Reinforce the capacities of the national facilities responsible for indicators by organising national and Mediterranean training courses and workshops.
- Maintain and develop the voluntary spirit but involve and motivate leaders for organising the perpetuation of the system of indicators and ensure the pooling of know-how.
- Encourage national initiatives aimed at implementing indicators that illustrate the evolution of a given issue and are likely to serve as examples to imitate (success story).
- Deploy a special effort in implementing the indicators dealing with the Mediterranean coastal areas that suffer from the most obvious
Annex 1: Agenda
<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Session</th>
<th>Agenda Item</th>
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</thead>
</table>
| Monday December 11th| 9h30     | S1 - Opening     | 1. Introduction  
2. Objectives and context, Organisation of the Workshop  
3. Initiatives on Indicators for Sustainable Development (ISD)  
4. First step in the calculation of the 130 Mediterranean SDI  
5. Presentation of MEDSTAT-Environment project |
|                     | 10h30    | Coffe Break      |                                                                             |
|                     | 11h00    | S2 - First assessment, opportunities and difficulties, How to progress?  | Achievements on the 130 SDI calculation  
1. At the regional level: presentation of the 50 indicators sheets  
2. At the national level: global overview  
3. Presentation of national cases: Algeria, Croatia, Spain |
|                     | 12h30    | Lunch            |                                                                             |
|                     | 14h00    | S2 - First assessment, opportunities and difficulties, How to progress? (follow-up) | 1. Presentation of national cases (follow.) : Morocco, Albania, Egypt  
2. Presentation of the project MED-ERMIS  
3. Summary of the difficulties and outline of solutions |
|                     | 15h30    | Coffe Break      |                                                                             |
|                     | 16h00-17h30 | S3 - Improvement of the indicator's definitions | Proposals for improving the glossary  
1. Summary of the main question on the glossary  
2. Proposals of modifications by the MAP/Regional Activities Centres: RAC/ERS, RAC/SPA, 100 sites, Medpol, RAC/PAP.  
3. Propositions of the European Environment Agency |
| Tuesday December 12th| 9h00     | 4 - Analysis and reports based on the indicators | Examples of SDI use for assessing the progress toward sustainable development  
1. Transportation and environment in Europe - Discussion  
2. Water and agriculture in Bosnia  
3. Waste in Greece  
4. Discussion |
|                     | 10h30    | Coffe Break      |                                                                             |
|                     | 11h00    | S4 - Analysis and reports based on the indicators (follow-up) | 1. Report « spatial planning and Environment » in France  
2. Coastal regions in the Mediterranean  
3. Mediterranean coastal regions in Slovenia  
Discussion |
|                     | 12h00    | Lunch            |                                                                             |
|                     | 13h30    | S5 - Toward a sustainable system of indicators | “Success stories” and observatories. How to improve inter-institutional relationships  
1. Inter-institutional cooperation in Italy  
2. Indicators in the Malta CAMP  
3. Observatory and indicators in Lebanon  
4. Observatory and indicators in Tunisia |
|                     | 15h00-16h00 | S6 - Conclusions: Priorities and recommendations | 5. Towards « reporting » (MED-REP project)  
6. Workshop conclusions  
7. Priorities of the next stage  
8. Recommendations |
Annex 2 : List of participants
<table>
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Annex 3: Results of the calculation of the 130 indicators in the Mediterranean countries (See attached file Annex 3.pdf)