MEDITERRANEAN ACTION PLAN

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Strategy for sustainable development follow-up
Main Indicators 2013 Update
MEDITERRANEAN
Strategy for sustainable development follow-up

Preliminary version
May 2013
Are the Mediterranean countries progressing towards sustainable development?

Introduction

The “indicator” fact-sheets, carried out in the framework of the monitoring of the Mediterranean Strategy for Sustainable Development (MSSD), are intended to provide a first answer to the question: “Are the Mediterranean countries progressing towards sustainable development?”

The fact-sheets concern the 34 priority indicators selected in MSSD to monitor the progress made by the Mediterranean countries regarding the main objectives defined for the nine priority issues:

1. Improving integrated water resource and demand management;
2. Managing energy demand and mitigate the effects of climate change;
3. Ensuring sustainable mobility through appropriate transport management;
4. Promoting sustainable tourism;
5. Promoting sustainable agricultural and rural development;
6. Promoting sustainable urban development;
7. Promoting sustainable management of the sea and coastal areas and taking urgent action to put an end to the degradation of coastal zones;
8. Strengthening solidarity, commitment and financing for a sustainable development at regional, national and local levels;

They also concern composite indicators such as the Human Development Index (HDI) and the Ecological Footprint to show the overall progress observed in terms of sustainable development.

The indicators presented in this fourth version are those with sufficient amount of data available from international sources and Plan Bleu reports. Some of them could only be illustrated with case studies. The files are classified with the indicator number (1 to 34) and with its code (see list of indicators). Three versions were previously released in 2007, 2009 and 2011 for the Mediterranean Commission for Sustainable Development (MCSD) meetings.

Note: The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of Plan Bleu concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Geographical framework

These factsheets concern 22 countries or entities bordering the Mediterranean Sea:

<table>
<thead>
<tr>
<th>ISO2 Code</th>
<th>Country or entity</th>
<th>Regions</th>
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</thead>
<tbody>
<tr>
<td>AL</td>
<td>Albania</td>
<td>NMC</td>
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<td>BA</td>
<td>Bosnia-Herzegovina</td>
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<td>LY</td>
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<td>MA</td>
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<td>ME</td>
<td>Montenegro</td>
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<td>MT</td>
<td>Malta</td>
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<td>PS</td>
<td>Palestine</td>
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<td>SI</td>
<td>Slovenia</td>
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<tr>
<td>SY</td>
<td>Syria</td>
<td>SEMC</td>
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<tr>
<td>TN</td>
<td>Tunisia</td>
<td>SEMC</td>
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<tr>
<td>TR</td>
<td>Turkey</td>
<td>SEMC</td>
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</tbody>
</table>

The analysis incorporates the groups of countries traditionally used by Plan Bleu:

- The Northern Mediterranean Countries (NMC) gather twelve countries or entities: AL, BA, CY, ES, FR, GR, HR, IT, MC, ME, MT and SI
- The Southern and Eastern Mediterranean Countries (SEMC) gather ten countries or entities: DZ, EG, II, LB, LY, MA, PS, SY, TN and TR.

The EU-15 Mediterranean countries include four countries (ES, FR, GR, IT). The UE-27 Mediterranean countries also include Cyprus and Malta, members of the European Union since 2004.
Mediterranean Strategy for Sustainable Development Follow-up

Progress of the Mediterranean countries towards sustainable development

Measuring the progress of the Mediterranean countries towards sustainable development is a real challenge that requires consideration of the three sustainable development pillars: Social, Economic and Environmental.

It relies on the implementation of the objectives of the Mediterranean Strategy for Sustainable Development (MSSD) and is based on the 34 priority indicators.

In the absence of a composite indicator, it is possible to follow the trajectories taken by the Mediterranean countries on the social, economic and environmental axes using the Human Development Index (HDI) and the Ecological Footprint (EF).

In this graph, it is assumed that the situation of a country is compatible with sustainable development if its HDI is greater than 0.8 and its Ecological Footprint less than 1.8 hectares per capita.

In 2009, none of the Mediterranean countries was situated in the area (HDI>0.8; EF<1.8), known as “Sustainability area”

Only 6 Mediterranean countries (Palestine, Morocco, Egypt, Syria, Albania and Tunisia) have an Ecological Footprint less than 1.8 global hectares per capita.

Between 2000 and 2009, Only 6 Mediterranean countries decreased their Ecological Footprint ((Malta, Greece, Spain, Israel, France and Italy).

Two groups of countries stand out and correspond to the World Bank countries classification according to their income level:

- Middle-income countries, (Gross national income per capita between 1026 and 12 475 USD in 2012 with low HDI and Ecological Footprint, who have demonstrated a great progress in terms of HDI.
- High-income countries (Gross National Income per capita greater than or equal to 12 476 USD in 2012) with high HDI and Ecological Footprint.

These two groups of countries include respectively:

- The Southern and Eastern Mediterranean countries and the Balkan countries.
- The Mediterranean countries of EU and Israel.

The challenge for the first group of countries is to continue their economic development while improving their HDI by taking the necessary measures to avoid increasing or to reduce their ecological footprint.

The challenge for the second group of countries is mainly to reduce their ecological footprint, while maintaining their HDI at a high level.

**Sources / References**

UNDP, Global Footprint Network and World Bank.

* This observation is also applicable to all the countries on the planet.
<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>CODE</th>
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<tbody>
<tr>
<td>PROGRESS OF THE MEDITERRANEAN COUNTRIES TOWARDS SUSTAINABLE DEVELOPMENT</td>
<td></td>
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<tr>
<td>Gross Domestic Product</td>
<td>GDP</td>
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<tr>
<td>Human Development Index</td>
<td>HDI</td>
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<tr>
<td>Ecological Footprint</td>
<td>EF</td>
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</table>
Are the income gaps between the south and north Mediterranean countries getting smaller?

Although insufficient to measure the development level of the countries, the GDP per capita remains an unavoidable indicator for comparing economic situations in terms of income.

In 2009, the average income per capita in the South and East Mediterranean countries (about 8000 dollars) was 3.5 times lower than the average income in the seven Mediterranean countries of the EU-27.

The EU-27 Mediterranean countries represent for more than 68% of the Mediterranean GDP.

The GDP growth rate in the south and east Mediterranean countries are much higher than those of the EU Mediterranean countries. However, they are considered low when compared to the population growth rates, as the demographic growth is still high in the southern Mediterranean countries.

The new European countries had a strong rise in GDP per capita since 1990 and therefore have limited the gaps with four Mediterranean countries of EU-15.

In 2010, the GDP per capita in Croatia was higher than 50% of the level of the Mediterranean countries of EU-15. Without reaching such levels, the GDP growth per capita in the Balkans is significant.

With more than 25,000 dollars per capita, Israel ranks sixth, between Cyprus and Slovenia, in terms of GDP per capita.

The share of the Mediterranean GDP in the world GDP has slightly decreased during 15 years, from more than 13.5% in 1990 to 11.5% in 2010. Meanwhile, the Mediterranean population remains constant in the world population (about 7%).

**Definition**

The Gross Domestic Product (GDP) is the value of all the goods and services produced in a country in a year. The GDP can be calculated by adding up all the items of income – salaries, interests, profits and rents – or by calculating the expenditure – consumption, investment, public purchases, net exports, (exports less imports) – of an economy.

**Purchasing power parity (PPP):** A conversion factor that indicates the number of units of a country’s currency required to buy in the local market what one dollar could buy in the USA.

By using PPP rather than the exchange rate, the GDP per capita of a country, calculated in units of national currency, can be converted into GDP per capita in dollars, while taking into account the differences in domestic prices for the items being considered (PPP gives the value of a typical basket of goods in different countries).

**Sources / References**

World Bank, World Development Indicators (WDI).
The human development index (HDI) with its three components (health, education and income) enables us to identify and understand the social component of sustainable development.

The human development index has been constantly making progress in the Mediterranean countries since 1980. With an average HDI of 0.767 in 2012, the Mediterranean region was above the world average of 0.694.

However, there are great differences between countries:

- 9 countries have high HDI, greater than 0.8: Israel (ranked 16th out of 186 worldwide), France, Slovenia, Spain, Italy, Greece, Cyprus, Malta and Croatia (47th worldwide).
- 8 countries have HDI between 0.7 and 0.8: Montenegro, Libya, Albania, Lebanon, Bosnia-Herzegovina, Turkey, Algeria and Tunisia (94th worldwide).
- 6 countries have HDI lower than 0.7: Palestine, Egypt, Syria, and Morocco with 0.591 is 130th worldwide.

The life expectancy at birth, which accounts for one third of the HDI, shows a gap of 10 years between Italy (82) and Morocco (72).

The gaps in terms of gross enrolment ratio (primary, secondary and higher education) are around 30%.

This rate is 63% in Morocco and 67% in Syria, while it is above 90% in the six Mediterranean countries of the EU-27, as well as in Israel.

**Definition**

The Human Development Index (HDI) is a composite index, developed by the UNDP, that measures the evolution of a country according to three basic criteria:

- Health and longevity, measured by life expectancy at birth.
- Knowledge and education, measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight).
- Standard of living, indicated by GDP per capita (PPP US dollars).

The HDI is standardized and used to classify countries by values between 0 and 1. It is, therefore possible to compare the evolution of the position of countries in the various classifications.

**Precautions / Notes**

An HDI value greater than 0.8 is generally considered high. A value below 0.5 is considered low.

The new methodology used in 2010 need to recalculate the time series and had the effect of decreasing the values of HDI (with a small impact on country rankings).

**Sources / References**

What is the impact of human activities on the environment?

The Ecological Footprint is used to assess the level of the consumption of available resources connected to the human activities. Compared to the Biocapacity, this indicator offers the possibility to calculate the Ecological Deficit or Reserve in a region or country.

All the Mediterranean countries (except Croatia) had an Ecological Deficit in 2009. This means that the environmental capacity of the region is used up faster than it is renewed. (2 Mediterranean region versus 1.5 planet)

From 1995 to 2009, the Ecological Footprint per capita had decreased in Malta, Italy, Israel; and from 2000 in Greece, Slovenia and Egypt.

In 2009, the overall Ecological Footprint in the Mediterranean countries reached 1.4 billion global hectares (gha), that is, almost 8% of the worldwide Ecological Footprint while Mediterranean population is only around 7% of the world population.

Thus, the Mediterranean Ecological Footprint (3 gha/cap) is higher than the planet’s Ecological Footprint (2.6 gha/cap).

The Mediterranean’s Ecological Deficit (1.5 gha/cap) is two times greater than the world’s Ecological Deficit (0.8 gha/cap).

The Ecological Footprint of the northern Mediterranean countries (4.4 gha/cap) is almost two times higher than that of the southern and eastern Mediterranean. Their Ecological Deficit (2.1 gha/cap) is quite serious (47% of the Footprint), and also two times the SEMC deficit.

The gaps between the countries in terms of Ecological Footprint per unit of GDP are therefore reversed.

For example, France consumes 167 gha per million dollars; Italy consumes 163, while Bosnia-Herzegovina consumes 355. Algeria consumes 248 gha per million of dollars and Syria consumes 358 gha per million of dollars.

Definition

Ecological Footprint: A measure of how much biologically productive (land or water) an individual, a population or an activity requires to produce all the resources it consumes and to absorb the carbon dioxide emissions it generates using prevailing technology and resource management practices.

Biocapacity: The capacity of ecosystems to produce useful biological materials used by the economy and to absorb carbon dioxide generated by human, using current management schemes and extraction technologies. The Biocapacity of an area is calculated by multiplying the actual physical area by the yield factor and the appropriate conversion factor.

Ecological deficit / reserve: The difference between the Biocapacity and Ecological Footprint of a region or country. Ecological Footprint and Biocapacity are expressed in units of global hectares.

Precautions / Note

Although Footprint Accounts provide the most comprehensive aggregate indicator of human pressure on ecosystems currently available, they are a work in progress.

Sources / References


Available at www.footprintnetwork.org
### Issues and Objectives

#### Improving Integrated Water Resource and Demand Management

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicators</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Efficiency Index</td>
<td>WAT_P01</td>
</tr>
<tr>
<td>2</td>
<td>Water demand, total and by sector, compared to GDP</td>
<td>WAT_P02</td>
</tr>
<tr>
<td>3</td>
<td>Exploitation index of renewable natural resources</td>
<td>WAT_P03</td>
</tr>
<tr>
<td>4</td>
<td>Share of population with access to an improved water source (total, urban, rural)</td>
<td>WAT_P04</td>
</tr>
<tr>
<td>5</td>
<td>Share of population with access to an improved sanitation system (total, urban, rural)</td>
<td>WAT_P05</td>
</tr>
</tbody>
</table>

- Stabilize water demand (decrease in the North and controlled increase in the South and East).
- Reduce losses and misuse by setting up efficiency objectives for each water use sector.
- Decouple water demand and GDP growth and significantly increase the economic agriculture added value per cubic meter of water used.
- Preserve water resources.
- Achieve the Millennium Development Goals (MDGs) for access to safe drinking water and sanitation.

#### Managing Energy Demand and Mitigating the Effects of Climate Change

<table>
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<th>No.</th>
<th>Indicators</th>
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<tr>
<td>6</td>
<td>Energy intensity (total and by sector)</td>
<td>ENE_P01</td>
</tr>
<tr>
<td>7</td>
<td>Share of renewable energies in energy balance</td>
<td>ENE_P02</td>
</tr>
<tr>
<td>8</td>
<td>Greenhouse gas emissions</td>
<td>ENE_P03</td>
</tr>
<tr>
<td>9</td>
<td>The amount financed by the annex 1 countries in the framework of the Kyoto Protocol flexibility mechanisms to the benefit of other Mediterranean countries</td>
<td>ENE_P04</td>
</tr>
</tbody>
</table>

- Use energy rationally by setting up global objectives and for each sector.
- Develop renewable energies to meet 7% (excluding biomass) of the energy demand by 2015.
- Control, stabilize or reduce emissions of gas.
- Use the Kyoto Protocol flexibility mechanisms to improve the sustainable development of the developing Mediterranean countries.

#### Ensuring Sustainable Mobility Through an Appropriate Transport Management

<table>
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<th>No.</th>
<th>Indicators</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>Motor transport intensity compared to GDP</td>
<td>TRA_P01</td>
</tr>
<tr>
<td>11</td>
<td>The proportion of road transport in terms of land freight transport</td>
<td>TRA_P02</td>
</tr>
<tr>
<td>12</td>
<td>Share of public surface transport (urban and interurban)</td>
<td>TRA_P03</td>
</tr>
</tbody>
</table>

- Decouple the increase of motorized transport and GDP growth.
- Stabilize, or reduce if possible, the proportion of road transport in the overall volume of traffic by using more sea and rail transport.
- Reduce urban vehicle congestion and noise pollution by promoting low-pollutant public transport.

#### Promote Sustainable Tourism

<table>
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<th>No.</th>
<th>Indicators</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Share of “non-seaside resort beds” vs. total number of tourism beds</td>
<td>TOU_P01</td>
</tr>
<tr>
<td>14</td>
<td>International tourism receipts</td>
<td>TOU_P02</td>
</tr>
</tbody>
</table>

- Diversify tourism by developing the tourism offers that enhance Mediterranean diversity (ecotourism, cultural, urban and rural tourism).
- Increase added value of tourism for local communities and actors in developing countries.

**Note:** The indicators with numbers and codes written in bold are shown in the published fact sheets.

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**2013** Updated on 16/05/2013
### Mediterranean Strategy for Sustainable Development Follow-up

#### Issues and Objectives

<table>
<thead>
<tr>
<th>Promoting Sustainable Agricultural and Rural Development</th>
<th>N°</th>
<th>Indicators</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversify the rural economy by developing non-agricultural activities.</td>
<td>15</td>
<td>Ratio of agricultural population vs. rural population</td>
<td>AGR_P01</td>
</tr>
<tr>
<td>Combat desertification and the loss of productive land by 2015; reduce at least one-third of the present rates of quality agricultural land losses due to erosion, salinization, desertification, urban and other forms of development and abandonment of land.</td>
<td>16</td>
<td>Loss of arable land due to erosion, salinization, desertification, urbanisation and agricultural abandonment of land.</td>
<td>AGR_P02</td>
</tr>
<tr>
<td>Promote sustainable agricultural and rural development programmes, especially in marginal rural areas.</td>
<td>17</td>
<td>Share of public budget allocated to sustainable rural development programmes</td>
<td>AGR_P03</td>
</tr>
<tr>
<td>Increase the agriculture added value by improving the development, recognition and the quality Mediterranean products.</td>
<td>18</td>
<td>Proportion of agriculture quality products and Share of the agricultural land area used by organic farming</td>
<td>AGR_P04</td>
</tr>
</tbody>
</table>

#### Promoting Sustainable Urban Development

| Promote a sustainable urban economy. Anticipate and plan for urban growth. | 19 | Number of cities with over 10 000 inhabitants engaged in an Agenda 21 type process or in urban renewal programmes | URB_P01 |
| Reduce social disparities. | 20 | Proportion of urban population with access to a decent dwelling | URB_P02 |
| Improve the urban environment: Reduce waste generation. Decouple the increase in waste generation and GDP growth. Reduce air pollution. | 21 | Household waste produced per capita and number of uncontrolled landfills | URB_P03 |
|  | 22 | Air quality in the main Mediterranean urban areas, measured by a synthetic indicator which is to be defined (eg ATMO index) | URB_P04 |

#### Promoting Sustainable Management of the Sea and the Coastal Areas and Take Urgent Action to Put an End to the Degradation of Coastal Zones

| Promote balanced development and integrated management of the coastal area. Push back urbanization to prevent artificialization of coastline. Avoid linear and continuous urbanization. | 23 | Share of artificialized coastline | COA_P01 |
| Eliminate operational pollution from ships by 2025. | 24 | Operational pollution from ships | COA_P02 |
| Reduce pollution from land-based sources. | 25 | Proportion of the coastal urban population connected to a sanitation network | COA_P03 |
| Halt or reduce substantially marine and coastal biodiversity loss by 2010. Bring at least 10% of the marine and coastal surface under protection. | 26 | Surface of protected coastal and marine areas | COA_P04 |

Note: The indicators with numbers and codes written in bold are shown in the published fact sheets.
<table>
<thead>
<tr>
<th>ISSUES AND OBJECTIVES</th>
<th>Nº</th>
<th>INDICATORS</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRENGTHEN SOLIDARITY, COMMITMENT AND FINANCING FOR A SUSTAINABLE DEVELOPMENT AT REGIONAL, NATIONAL AND LOCAL LEVELS</td>
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<td></td>
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<tr>
<td>Raise the level of official development aid (ODA) from the European OECD countries to 0.7% of their GNP (MDG) by 2015, and reinforce this support’s contribution to the implementation of the Strategy.</td>
<td>27</td>
<td>ODA allocated as % of OECD DAC EU member countries donors’ GNP; the proportion of the ODA allocated to Mediterranean countries and the proportion contributing to the strategy objectives</td>
<td>COO_P01</td>
</tr>
<tr>
<td>Strengthen reciprocal commitments, solidarity and Mediterranean and Euro-Mediterranean cooperation for the sustainable development.</td>
<td>28</td>
<td>EU net public finance allocates to EU Mediterranean members, candidates, CARDS and MEDA countries (in absolute value and per capita) and proportion contributing to the objectives of the strategy</td>
<td>COO_P02</td>
</tr>
<tr>
<td>Promote implementation of systems to enable funding of SMEs for productive and innovative activities (micro-credit, venture capital, incentives, etc.).</td>
<td>29</td>
<td>Proportion of bank credit allocated to the private sector – Existence of alternative financing systems using bank credit</td>
<td>COO_P03</td>
</tr>
<tr>
<td>Strengthen local authorities’ prerogatives and expertise.</td>
<td>30</td>
<td>Proportion of local government tax receipts as percentage of total tax revenues (government receipts). Proportion of government budget allocated to local authorities.</td>
<td>COO_P04</td>
</tr>
<tr>
<td>Reinforce territorial and social cohesion. Develop public financial mechanisms to support the least favoured regions.</td>
<td>31</td>
<td>Public financial mechanisms to support the least favoured regions</td>
<td>COO_P05</td>
</tr>
<tr>
<td>STRENGTHEN HUMAN CAPITAL AND ACTORS’ INVOLVEMENT: RESEARCH, TRAINING, EDUCATION, AWARENESS-RAISING AND PARTICIPATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure primary education for all</td>
<td>32</td>
<td>Youth literacy rate</td>
<td>HUM_P01</td>
</tr>
<tr>
<td>Eliminate the disparities between girls and boys regarding education</td>
<td>33</td>
<td>Girl/Boy primary and secondary school registration ratio</td>
<td>HUM_P02</td>
</tr>
<tr>
<td>In synergy with the private sector, increase the expenses for research and development by 2015 in order to get closer to the average level in countries with equivalent incomes, stressing the rational use of natural resources, developing environment-friendly technologies as well as enhancing the Mediterranean economic and social know-how and diversity.</td>
<td>34</td>
<td>Public and private expenses for research and development in percentage of GDP</td>
<td>HUM_P03</td>
</tr>
</tbody>
</table>

Note: The indicators with numbers and codes written in bold are shown in the published fact sheets.
Is water use efficiency improving?

It is possible to improve efficiency in all the major sectors of water use (agriculture, industry and domestic). The Mediterranean Strategy for Sustainable Development stresses the need to reduce the amount of water currently being lost or wastage (representing sources for saving) and to increase the added value created per cubic metre of water used.

Some countries set their national targets regarding global and sectorial efficiency, the alternative policy scenario from Plan Bleu for 2025 (compared to 1995) is based on the achievement of the following physical efficiencies at a regional level:

- For drinking water in municipalities: reduce loss rates stemming from distribution to 15% and leakage from users to 10%;
- For irrigation: reduce loss rates stemming from transport and distribution to 10% and increase irrigation efficiency by plot to 80%;
- For industry: extend recycling to 50%.

**Total water use efficiency from 2005-2010 lies between 40 and more than 80% in the Mediterranean countries.**

In some countries (Morocco, Tunisia, Egypt, Lebanon, Syria, Cyprus, Italy) water efficiency in irrigation is very low compared to drinking water.

In Albania and Malta, efficiency performance is better for irrigation than for drinking water.

Between 1995 and 2005-2010, most of the countries achieved encouraging progress in terms of their efficiency in the various water use sectors. In Cyprus and Israel, the total water use efficiency today is higher than 80%.

**Definition**

This index allows the monitoring of progress in terms of the water saved as a result of the demand to reduce the water loss and wastage during the process of both the transport and the use. It is subdivided into total and sectoral efficiency (drinking water, agriculture and industry).

**Precautions / Notes**

The economic efficiency of drinking water depends on invoicing mode (flat rate or metering) and may be distorted by metering malfunctions.

Real plot irrigation efficiency is awkward to measure in the field because of the difficulties in evaluating how much water the plants consume and the large number of plots. Each country has its own estimates of average efficiency for the various systems which are based on experimental pilot sites. This efficiency thus tends rather to reflect the distribution of irrigation water according to the main irrigation methods at national level (theoretical average efficiency is estimated at 40% for surface irrigation, 70% for sprinkler and 90% for localised irrigation systems).

**Sources / References**

FAO-AQUASTAT, Blue Plan and its national 2008 and 2010 national reports.
Is water demand becoming more moderate?

Better water demand management, especially for agriculture, is one of the priority actions recommended by the Mediterranean Strategy for Sustainable Development.

This means stabilizing water demand (decrease in the north and a controlled increase in the south and the east). But the water demand and the growth in GDP should also be decoupled by increasing the value added for per cubic metre of water used.

Better demand management also allows the decoupling of the rise in irrigated production and the rise in the use of water for irrigation.

**Overall, the evolution in water demand is alarming in the Mediterranean countries because this resource is often scarce.**

The share of water for agriculture remains high, often higher than 50% in most of the countries and is even close to 90% in Syria and Morocco.

In the Balkan countries and France where the precipitations allow practising a major rain-fed agriculture, the water demand for irrigation is low.

The volume of water used to produce 1000 dollars of agricultural value added goes from about 7 m³ in Slovenia to more than 1000 m³ in Syria and Egypt, and close to 2000 m³ in Libya.

Drinking water demand per capita varies greatly from one country to another, from around 36 m³/year/cap (100 litres/day) in Tunisia and Morocco to about 150 m³/year/cap (410 litres/day) in Albania.

**Definition**

Total water demand is defined as the sum of the volume of water mobilised to meet the various uses, including the quantities lost in production, transport and use of water.

It corresponds to the sum of the water withdrawals, of non-conventional production (desalination, reuse of water, etc.) and of imports less exports.

Water demand in relation to GDP of each activity sector corresponds to the demand for water used divided by the value added in the same sector (agriculture, industry).

**Precautions / Notes**

For agriculture, the indicator could be even more polished by calculating the ratio between irrigation water demand and the value added of the irrigated production.

**Sources / References**

FAO-Aquastat, World Resources Institute, Blue Plan and its national 2008 and 2010 national reports.

World Bank for the agricultural value added and the population.
Is pressure on renewable natural water resources going down?

The preservation of water resources is one of the priority objectives in the Mediterranean countries. Pressure on water resources remains high, especially in the southern and eastern Mediterranean countries.

The Mediterranean countries can be classified into three groups, according to the exploitation index of renewable natural resources:

- The first group of countries’ water withdrawals are close to or go beyond the average annual volume of renewable natural resources (index over 80%). These five countries (Egypt, Malta, Israel, Syria and Libya) are already experiencing great pressure on their natural resources and will have to meet a growing share of their demand with other “non-conventional” resources, like desalination or waste water.

- A second group of countries are with an exploitation index of between 25 and 60% which could experience local or temporary pressure. This is the case for seven countries (Tunisia, Morocco, Algeria, Spain, Lebanon, Palestinian Territories and Cyprus).

- A third group of countries with an index lower than 25%; Italy, Turkey, France, Greece and Balkan countries.

The indexes close to 100 could have several explanations: overexploitation of groundwater (Malta, Libya) or use of return water from agricultural drainage, allowing the gross withdrawals to exceed the primary renewable resources (Egypt).

Calculated at the level of Mediterranean watersheds, the exploitation index is generally higher than the one who was calculated at the national level.

The situation of the countries regarding available resources per capita is slightly different:

- The countries experiencing water shortage with annual resources of under 500 m$^3$/capita: Malta (82 m$^3$/capita), Libya, Palestinian Territories, Israel, Algeria and Tunisia (403 m$^3$/capita).

- The “water-poor” countries with annual resources between 500 and 1000 m$^3$/capita: Morocco (694 m$^3$/capita), Egypt, Cyprus and Syria (980 m$^3$/capita).

- For other countries with annual resources higher than 1000 m$^3$/capita, water is not a limiting factor for economic development.

Definition

This indicator measures the relative pressure of annual withdrawals of renewable natural freshwater resources, including transport loss. The resources of each country are defined by the surface or underground water streams which already exist or are entering in the territory.

Precautions / Notes

The annual available water is calculated over the medium to long term (30 years).

Sources / References

FAO-Aquastat, World Resources Institute, Plan Bleu and its national 2008 and 2010 national reports.
Is access to drinking water increasing?

Sustainable access to an improved water source, in other terms, drinking water, is one of the Millennium Development goals. This means reducing by half, by 2015 (compared to 1990), the proportion of people without access to drinking water.

In 2010, the proportion of the population with sustainable access to a source of drinking water was over 83% in most of the Mediterranean countries. Almost 19 million* people in the Mediterranean countries who mainly live in rural areas did not have access to drinking water.

Many countries (the EU countries, Israel, Lebanon and Turkey) have already reached 100% access to drinking water.

Between 1990 and 2010, Morocco, Tunisia, and Syria made encouraging progress, while in Algeria and Palestine the access rate decreased. In most of the countries, the access to drinking water in urban areas is higher (higher than 97%). The rate is between 85% and 93% in Algeria, Palestine and Syria.

The situation is not as good in rural areas, which for these six countries (Morocco, Algeria, Palestine, Tunisia, Syria and Albania), the rates are between 61 and 94%.

Access to drinking water in the southern and eastern Mediterranean countries (93%) is higher than the world average and it is the same case for their urban areas (95 %) and rural areas (90%).

**Definition**

This indicator represents the population that is supplied with or has reasonable access to sufficient drinking water. “Access” here means a source that produces at least 20 litres per capita per day and located no more than 1000 metres away. (Millennium Development Goals Indicator n°30).

**Precautions / Notes**

The distinction between “urban population” and “rural population” cannot easily be given one applicable definition to all the countries. The national definitions refer in general to the size of the built-up areas; the rural population thus is the rest of the population which is not considered as urban.

The problem of frequent water cut-offs in many Mediterranean countries is not taken into account in this indicator.

This indicator should be made more precise for Mediterranean countries in order to show the progress being made in direct access to domestic drinking water.

**Sources / References**

United Nations Statistics Division, The Millennium Indicators Database.


WHO/UNICEF Joint Monitoring Programme (JMP) for the water supply and sanitation.

*Value 2009 for Libya
Is access to sanitation system improving?

Access to an improved sanitation system (not necessarily including waste water treatment) is important, especially in urban areas where the contact possibility of wastewater of the population is higher.

Access to sanitation is one of the Millennium Development Goals. It means reducing by half by 2015 (compared to 1990), the proportion of people without access to a sanitation system.

In the Mediterranean, about 27 million people do not have access to an adequate sanitation system.

In 2010, the proportion of the population with access to a sanitation system is about 70% in Morocco and 100% in most of the northern Mediterranean countries.

The percentage of the urban population with access to a sanitation system is higher than 95%, with the exception of Morocco (83%) Palestine (92%) and Montenegro (92%).

The disparities between urban and rural areas are still great and the access rate in rural areas can be lower than 70% (Morocco, Tunisia).

The rate of the access to an improved sanitation system in the south and east Mediterranean countries (90%) is higher than the world average (about 61%). It is the same situation for the access rate in urban (93%) and rural areas (81%).

Definition
This indicator represents the population with access to a basic sanitation system for disposal of human excrement of households or the immediate neighbourhood (public wastewater network, septic tanks, etc.). It is one of the Millennium Development Goals Indicators (n°31) and was proposed for the Horizon 2020 initiative.

Precautions / Notes
The fact that facilities are available does not mean that they are used. A town sanitation network should allow for the collection and evacuation of wastewater of all types (cesswater, household water, industrial water, etc.) while ensuring transporting it, the fastest way possible, to the place where it is treated (wastewater treatment plant).

Because of differences in the definition of urban population from one country to another, international comparisons can be biased. This indicator should be made more precise in the Mediterranean region in order to show the progress being made according to the type of wastewater collection (individual or collective) and the treatment methods.

Sources / References
United Nations Statistics Division, The Millennium Indicators Database.


WHO/UNICEF Joint Monitoring Programme (JMP) for the water supply and sanitation

Share of population with access to an improved sanitation system
Has progress been made in efficient energy use?

More efficient energy use (energy necessary to produce 1000 dollars of GDP) should help to decouple energy consumption and economic development. The objective proposed by MSSD for all of the Mediterranean countries by 2015 is to reduce the intensity of energy by 1 to 2% per annum per GDP unit by 2015.

The energy intensity is improving slowly in the Mediterranean: the trends observed will not allow reaching the objective of 1 to 2% improvement per year.

While partial decoupling of energy consumption and economic development is undeniable worldwide and in Europe (with an energy consumption growth rate less than half of GDP growth rate over 10 years), it is not the case in the Mediterranean. In fact, the increase in energy consumption is just under GDP growth and almost identical to GDP growth in the southern and eastern Mediterranean countries.

The decrease of the energy intensity between 1990 and 2010 in the Mediterranean countries (0.2% per annum) was below the 1% the objective. In 5 countries, (Albania, Malta, Syria, Tunisia and Slovenia) the decrease was well below the 1% objective. In 2008, the energy intensity of the Mediterranean countries (135 koe/1000 dollars) was higher than the European average (123) and below the world average (183). However, disparities between the countries remain great, even between some countries with equivalent income levels. Energy intensity in Syria, Bosnia-Herzegovina is over 200 while it is lower than 100 in Albania and Malta.

In the high consumption countries (northern Mediterranean), gains in energy intensity, if sufficient, could also result in a slower growth of energy consumption per capita.

Consumption is still high in the European Mediterranean countries (3550 koe/cap) and even 4280 koe/cap in France.

Energy consumption per capita in the SEMC is below 1500 koe/cap (world average being 1800 koe/cap), but growth rates are very different depending on the countries.

**Definition**

Energy intensity, both in total and from each activity sector, is the ratio of final commercial energy consumption per GDP unit/year. It can be broken down into sectors: agriculture, industry, services, transport and households (residential).

**Precautions / Notes**

The very high values for energy intensity should be interpreted with caution for the countries in economic crisis (with low GDP values)

koe : kilo of oil equivalent

**Sources / References**

World Bank, World Development Indicators 2010

International Energy Agency
Is there any progress in the share of renewable energy?

The objective announced in the MSSD was to explore the potential of renewable energy (RE) to meet 7%, excluding biomass, of the energy demand by 2015. **The share of RE in the primary commercial energy balance sheets is not increasing enough sufficiently. A sharp break in the current trends will be necessary to reach the objective of 7% by 2015.**

Nevertheless, renewable energy production is making substantial progress in volume. RE represents about 3.2% of the total primary energy supply in the Mediterranean countries (Same figure in 2000).

At a global level, renewable energy, excluding biomass, represents 3% of the total primary energy supply (6% biomass included).

With biomass, which is often not commercialised, the part of RE represents 7% of the total energy balance sheets, illustrating the importance of this type of energy. The distribution of RE in the Mediterranean is 59% for hydraulic energy, 20% for geothermal energy and the rest 21% concerns solar, wind and other types of energy. In the southern and eastern Mediterranean, the respective percentages are 61%, 16% and 23%.

During 1995 to 2008 in the Mediterranean, RE is has been increasing with an average growth rate of +2.2%, slightly higher than the total primary energy supply (TPES) (2%).

RE (except hydroelectricity and biomass) is greatly increasing (7.9%) but that only concerns 1.3% of TPES.

Hydraulic energy represents a significant share (16%) in the total energy of Albania. This explains the high proportion of RE in the energy balance sheets of this country.

For several decades, the share of coal has remained stable, nuclear energy has also stabilised and gas energy has been rising sharply meet de demand of petrol.

Generally speaking, fossil energy (petrol, coal and gas) dominated the energy supply in 2008 in the Mediterranean: 72% of consumption in the northern countries and 95% in the southern and eastern countries. In northern countries, the rest was mainly made up with nuclear electricity (20%).

**Definition**

This indicator measures the proportion of renewable energy resources (hydraulic, geothermal, solar and wind-powered) in a country’s total energy consumption.

**Precautions / Notes**

This indicator includes only the following types of renewable energy: hydraulic, solar, geothermal and wind-powered. The renewable fuels (solid biomass and animal products, gas and liquid from biomass, municipal and industrial waste) are not included. However, these fuels could constitute a considerable proportion of the energy supplies in the Mediterranean countries.

**Sources / References**

International Energy Agency

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**7. Share of renewable energies in energy balance**

**Share of renewable energy in total primary energy supply**

**Average annual growth rate of total primary energy supply (1998-2008)**
Are the Mediterranean countries controlling their CO₂ emissions and respecting their international commitments?

Not all the Mediterranean countries have the same commitments under the Kyoto Protocol. These 7 countries are officially committed to reduce or control their emissions by 2012, compared to 1990 emissions: Croatia, Monaco and Slovenia (-8%), Italy (-6.5%), France (stabilisation), Spain (+15%) and Greece (+25%). The EU-27 committed to reduce 20% of its CO₂ emissions by 2020.

The Mediterranean countries with no quantified commitment under the Kyoto Protocol nevertheless committed themselves to control their GHG emissions with respect to the Climate Convention and Kyoto Protocol. They can use eligible projects under the Clean Development Mechanism or specific funding as those of the Global Environment Facility.

CO₂ emissions from fossil fuel continue to rise in most Mediterranean countries.

The rise in CO₂ emissions between 1990 and 2009 was higher than the national objectives in all of the countries except France.

The CO₂ emissions from energy have decreased in 2 countries (France, Albania) and have doubled in Turkey, Egypt, Israel and Morocco.

In 2009, one Mediterranean citizen emitted an average of 4.7 tonnes of CO₂ per year, that is, equivalent to the world average, but two-thirds of the emission of a EU-27 inhabitant (7.2 tonnes) and almost 3.7 times less than a USA inhabitant (17.3 tonnes of CO₂ per annum).

In the North, the CO₂ emissions per capita are extremely diverse: from 0.9 tonne per capita in Albania to 8.4 in Greece in 2009. The differences in CO₂ emissions per capita are also significant in the southern and eastern Mediterranean countries: from 1.5 tonnes in Morocco to 10 tonnes in Libya.

These values of CO₂ emissions ratio can be related to the commercial energy consumption. The ratio in the Mediterranean region is around 3 tCO₂/toe, excepted in France (1.5) and in Bosnia-Herzegovina (5.2).

Definition

This indicator corresponds to the aggregate annual national emissions of human origin the main greenhouse gases: CO₂, N₂O, CH₄, HFC, PFC and SF₆.

Precautions / Notes

In this fact sheet, only CO₂ emissions from solid fuels, cement and the gas flaring are taken into account. On average, they make up 80% of the emissions of human origin greenhouse gases.

Sources / References

World Resources Institut – Climate Analysis Indicators Tools (WRI-CAIT)

Carbon Dioxide Information Analysis Center (CDIAC)

United Nations Framework Convention on Climate Change (UNFCCC)
Is the diversification of tourism underway?

Sustainable tourism development calls for diversifying the tourist attractions which represent Mediterranean diversity (ecotourism, urban and rural cultural tourism) and the links between coastal and hinterland territories. Sustainable tourism development also calls for a better distribution of tourist flows to balance the pressure during the high season; for example, by strengthening of congress tourism.

This diversification can be measured in the Mediterranean regions or countries by the evolution in the «non-seaside» tourism that could divert 1/3 of the tourist flow to the coastal area, according to MSSD objectives.

For the moment, a global analysis of this trend of non-seaside tourism is difficult due to a lack of data.

In Slovenia 30,000 tourist beds out of the 40,000 tourist beds, all categories included, were of non-seaside tourism in 2010. It is 75% of total.

In France, in the coastal «department» of Alpes Maritimes and Monaco 83% of the tourist beds are seaside beds. The hinterland only has 23% of the hotels and 13% of the rooms. According to the Touriscope CRT Côte d’Azur, hotel capacity evolved differently from one region to another between 1994 and 2011. The coast experienced a significant decrease in tourism: Mandelieu (-31%), the west coast (-22%), the east coast (-22%) and Antibes-Juan (-19%). The capacity grows in the “middle land” of Grasse (+12%) and Vence (+5%). However, the capacity decreases dramatically in mountain (-40%).

### Definition
This indicator measures the proportion of «non-seaside» beds compared to the total number of beds in all the types of tourist accommodation in the commercial sector (with services) in the coastal regions. Seaside tourism here is defined as tourism in the coastal cities or districts.

### Precautions / Notes
This indicator can be completed by the distribution of the beds, rooms and hotels according to their situation in relation to the coast: coastal city, coastal area, to be defined according to the countries and the availability of the data.

The distribution of the tourist does not necessarily correspond to the tourist number. It should be completed with overnight stays, and visit rates (with a homogeneous definition).

### Sources / References
There is no international database but data is available in the national statistics institutes and services as well as in regional ones of the «tourism observatory» type.

Slovenia: Statistical Office of the Republic of Slovenia (SORS)

Alpes Maritimes and Monaco: Touriscope CRT Côte d’Azur

Source: Observatoire du Tourisme de La Côte d’Azur, Comité Régional du Tourisme Riviera-Côte-d’Azur

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**Indicator TOU_P01**

Updated on 23/05/2013
Mediterranean Strategy for Sustainable Development Follow-up

Is (international) tourism sufficiently profitable?

International tourism is an important sector of economic development in the Mediterranean region, classified as the 1st tourist region worldwide. By providing currency exchange contribution and the induced cultural exchanges, it will be a factor contributing to sustainable development if the impact on the environment is minimized and the wealth that it brings is well spread.

Between 1995 and 2008 most of the Mediterranean countries experienced an overall increase in international tourism receipts; followed by a decline in 2009 that continues en 2010. However, when compare these receipts to GDP, the situations are varied.

In the EU Mediterranean countries (ES, FR, IT and GR), this decrease in international tourism receipts has continued even in percent of GDP. The island-States (CY and MT), very much dependent on tourism, with receipts equal respectively to 22 % and 23 % of GDP in 1995, have had a significant drop in receipts before getting stabilized which is respectively around 10 % and 15 % in 2010).

The Balkan countries have had a great increase in receipts and their situation now is comparable with that of the 1970s. In Croatia, receipts reached 14% of GDP in 2010.

Receipts from international tourism represent about 5% of the total value of global exports of goods and services. In the southern and eastern Mediterranean countries, the statistics are much higher: between 16 and 30 % in most of the countries, over 40 % in Croatia, Albania, Montenegro and almost 100% in Lebanon.

The receipts per capita cover a wide range: receipts could be over 1000 dollars, reaching 2200 dollars in Cyprus and more than 3000 dollars in Malta.

On the other side, they are insignificant in Algeria and Libya (under 30 dollars) and very low in Egypt, but still important in this country.

Definition

Receipts from international tourism refer to the expenditure incurred in the host country by tourists and by non-resident visitors as defined in the tourism satellite accounts in conformity with the UN Statistics Commission.

In the host countries, the international tourism receipts are assimilated as exports including transactions made by tourists as well as by visitors who come for more than one day. However, they do not include the receipts from international transport services and purchased outside the host country.

Precautions / Notes

Low receipts as a percentage of GDP could indicate strong potential for the international tourism development. On the other hand, a high value is an indicator of mono-activity economy, often very sensitive to the international situation. A rise in international tourism receipts does not presume the effective spin-off for the host countries and the local population. The spin-off should be focused on as a case which concerns the impact of tourism on the situation of the local population, such as the creation of new jobs and the increase in income.

Sources / references

UN-WTO (World Tourism Organisation) and World Bank (World Development Indicators)
Is rural development becoming more diversified?

The sustainable development of rural areas requires a reversal of the economic desertification phenomena. The objective of MSSD includes diversifying the rural economy by developing non-agricultural activities.

The relative evolution of agricultural populations and rural populations allows measuring the importance of agriculture in the rural environment and indirectly the diversification of economic activities in rural areas.

In the Mediterranean countries, agricultural populations are continuing to decline.

While the rural population is increasing overall, the agricultural population is continuing to decrease.

In the northern Mediterranean countries, the rural and agricultural populations are falling down, especially in Turkey and Morocco. The agricultural population went down from 10 million in 1961 to 1.2 million in 2012.

In the southern and eastern countries, the rural population increased first, then stabilised, except in Egypt where the growth continues. The agricultural population has slightly increased and then experienced a decline in some countries such as Turkey and Morocco.

The percentage of the Mediterranean agricultural population went down from 60% to 41% between 1990 and 2012. In 2012, it is lower than the world average (76%) but much higher than the European average (16% for the EU-27).

The active agricultural population has fallen to a very low level (below 10% of the active population) in the European countries (except in Greece 11%), in the Balkan countries, as well as in Libya, Lebanon and Israel. In Albania and Turkey, it is higher than 40% and 30% respectively.

**Definition**
This indicator measures the ratio of agricultural population in rural population. The agricultural population is defined as all the people dependent on agriculture, hunting, fishing and forestry: those who actively engaged as well as their dependents.

**Precautions / Notes**
Rural populations are generally defined as complementary to urban populations, thus, the definition can be different from one country to another. The distinction between rural and urban is based on several criteria such as the population of municipalities or cities, the density of the population, the extent of facilities, the proportion of the agricultural population in the active population, and so on.

The thresholds considered for the definition of urban differ greatly from 400 inhabitants in Albania to 10,000 in Italy. This makes international comparisons difficult.

Part of the agricultural population could be urban, thus explains some values above 100% (i.e. in Egypt in 1980).

**Sources / References**
FAO

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**15. Ratio of agricultural population vs. rural population**

![Graph showing the ratio of agricultural population vs. rural population from 1990 to 2012](Image)

- **Source**: FAO

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**Indicator AGR_P01** Updated on 16/05/2013

**Rural**
Is the Mediterranean well ranked in the markets of high quality agricultural products?

The rise in agricultural added value from the development, acknowledgement and marketing of top quality Mediterranean products is a real challenge for agriculture in the region.

The agriculture quality product is not sufficiently referenced in the Mediterranean countries, but the proportion of agricultural land used by organic farming is at least an indicator of the high quality development production.

**Organic farming is experiencing an unprecedented boom in the Mediterranean but only covers a small percentage of the agricultural land in 2011 (2.4%).**

Except in Italy, Slovenia and Spain where organic farming represents respectively 8.7, 6.6 and 6.6% of agricultural land, it concerns between 3 and 4% in Greece and France, between 2 and 3% in Croatia, Cyprus and Egypt less than 2% in the other countries.

There are few organic farms in the Mediterranean countries, but there are over 15 000 in five countries among which stand out Italy and Turkey.

Organic farming has become one of the most dynamic agricultural sectors in the European Union, with 9.4 million hectares in 2011, i.e. 5.3% of agricultural land and about 220 000 farms.

Spain and Italy, situated in the first positions in Europe for its organic farming, ranked respectively 19th and 23rd worldwide in terms of the proportion of land used for organic farming.

**Definition**

This indicator measures:

- The proportion of high quality product (identification, label and appellation of origin, origin-linked product, organic farming) in each Mediterranean country.
- The share of agricultural land used by organic farming

**Precautions / Notes**

Organic systems and products are not always guaranteed.

The farming systems that do not use synthetic inputs by default, for example, the farming practices of organic production methods aim to maintain the quality of the soil, are excluded from the appellation/certification organic farming.

The land used by organic farming is not an indication of the quality of the product associated, nor of the economic and social lifespan of this type of agriculture. In European countries, the data on high quality products is available because the European Union has created protection and valorisation systems for agricultural products and foodstuffs.

**Sources / References**

Is access to decent dwelling improving?

In order to reduce social disparities, it is necessary to deal with the problem of unhealthy dwellings.

One of the consequences of the fast urbanization in the Mediterranean countries resides in the poor access to decent dwelling. The accommodation output is lower than projected and does not meet the demand. Moreover, the high price of accommodation makes it inaccessible to those for whom it was intended.

One quarter of urban population in the world is currently living in slums (about 863 million people). In developing countries, the proportion of urban population living in slums declined from 46% to 33% from 1990 to 2009.

The reduction between 1990 and 2009 is significant in Egypt (7.9 million) and Morocco (2 million), which counts a total of nearly 10 million (over half of the 1990 value).

In Turkey, the population living in slums in 2009 is approximately 6.7 million, which is 12.5% less of the 1990 value (8 million).

In Lebanon, in 2005, more than half of the urban population was living in slums, which is 1.8 million people.

Definition
This indicator measures the proportion of the population with access to decent housing.

Decent accommodation should not show obvious risks that could endanger the physical safety or health and should be equipped to conform to the dwelling use. (Definition according to French law)

Precautions / Notes
Information about decent dwelling is not currently available for all Mediterranean countries.

This indicator is approximated by the proportion of urban population living in slums. The data was collected in the framework of the United Nations Human Settlements Programme. This is one of the indicators of Millennium Development Goals.

This programme defines a household living in slum conditions as a group of people living together, but not in dispose of one or several (in some towns two or more) of the following conditions: safety of the accommodation, structural quality and durability, access to safe drinking water, access to waste water facilities and sufficient living space.

Sources / References
United Nations Statistics Division, the Millennium Indicators Database.


UN-HABITAT: United Nations agency for human settlements
Is land-based sources pollution from coastal cities going down?

Reducing the pollution in the Mediterranean from land-based sources is the subject of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and it is one of the priority goals of MSSD to halve, by 2015, the number of coastal urban inhabitants with no access to sanitation systems.

69% of the Mediterranean coastal cities of more than 10 000 inhabitants are connected to waste water treatment plants, 21% do not have one, while 6% with one currently under construction and 4% have one that is out of service for various reasons. 15% of the Mediterranean waste water treatment plants use tertiary treatment, 55% secondary treatment and 18% primary treatment.

Only six countries have a considerable number of cities connected (Cyprus, Israel, France, Spain, Slovenia and Croatia). Albania and Syria have no system for waste water treatment and the other countries have only a few cities connected.

The cost of upgrading the sanitation systems for the 32 million inhabitants of the coastal towns with over 10 000 inhabitants in the southern and eastern Mediterranean countries, added to the new facilities necessary for the treatment of the 18 million coastal urban population expected by 2025, was estimated by Plan Bleu at about 10 billion euro by 2025.

This amount represents between 2 and 3% of their GDP. The operating expenses could be between 300 and 600 million euro per year.

40% of the cities with a population between 2000 to 10000 inhabitants (673 out of 1699 cities) are not connected to any waste water treatment plant.

Definition

This indicator measures the number of inhabitants (the share of the population) in coastal cities which are connected to waste water sanitation network.

Several sub-indicators are proposed:

- The population connected to sanitation network equipped with waste water treatment plants (differentiating by types of treatment) out of the total population.
- The population connected to sanitation networks without any waste water treatment plant out of the total population.

This indicator was proposed for Horizon 2020

Precautions / Notes

Cost assessment method: on the basis of an average cost of 100 euro/cap equivalent for upgrading and 400 euro/cap equivalent for the new facilities.

A large number of connected cities is not guaranteed a sufficient treatment rate, this being conditioned by the type of waste water treatment plants and their performance.

This indicator is dependent on the definitions of cities (districts, towns) which may differ by country.

Sources / References

UNEP-MAP.MED POL, WHO, Plan Bleu

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**Number of coastal cities of more than 10 000 inhabitants with and without a waste water treatment plant, 2003**

**Source:** MEDPOL/Plan Bleu

**The coastal cities (>10 000 inhab) with and without a waste water treatment plant, 2003**

**Source:** MEDPOL/Plan Bleu
Mediterranean Strategy for Sustainable Development Follow-up

Are the millennium development goals in terms of official development assistance met?

The official development assistance (ODA) for Mediterranean countries, with its contribution to the objectives of the strategy and its use in accordance with the principles of sustainable development, is essential for many Mediterranean countries.

The MSSD objective includes the one defined in the Millennium Development Goals. It entails bringing development aid from the European members of the Development Aid Committee of OECD to 0.7% of their GNP by 2015, while at the same time strengthening the contribution of this aid to implement the strategy.

The Mediterranean countries that belong to the OECD/Development Assistance Committee (DAC) are France, Greece, Italy and Spain.

The public aid supplied by the Mediterranean countries of the DAC, has decreased during the 1990s and then increased in 2000.

In 2011, the net ODA was about 134 billion dollars and 0.31% of GDP of the DAC members.

The Mediterranean countries that benefit from DAC public aid have received about 8 billion dollars in 2011. 90% of this aid was for the southern and eastern Mediterranean countries.

Between 2001 and 2011, the share of ODA received by the Mediterranean countries remained around 6% of the ODA received by all of the developing countries.

Palestine, Morocco, Turkey, and Egypt received in 2011 about 56% of the ODA for the Mediterranean countries.

Compared to the population, ODA ranges from 3 dollars/inhabitant in Egypt to 388 dollars/inhabitant Palestine.

**Definition**

This indicator is a multiple one:

- ODA supplied as a percentage of the GDP of the Mediterranean donor countries which are members of OECD/DAC;
- Share of ODA amount for the Mediterranean countries;
- Share of the aid received contributing to the MSSD objectives.

**Precautions / Notes**

The share of aid received that contributes to the MSSD objectives is difficult to estimate because of the classification for the use of the aid.

**Sources / References**

OECD/DAC database.

Is Euro-Mediterranean solidarity sufficient to meet the challenges in the southern and eastern Mediterranean countries?

The challenges to be taken up in the southern and eastern Mediterranean countries are at least as big as those of the countries that have a prospect of joining the European Union.

The strengthening of the mutual commitments, the solidarity and the Mediterranean and Euro-Mediterranean cooperation for sustainable development are essential to make this region stable.

In 2011, the EU and its Member States were still the biggest international donor, providing 67% of global aid. The European external assistance reached 11 billion euro, of which 8 billion euro were managed by EuropeAid.

In 2011 the Mediterranean countries received 1.226 billion euro, 18% of the EU funds managed by EuropeAid.

In 2011, the Balkan countries received 11% of the Mediterranean aid from EU. The amounts per capita received in the southern and eastern Mediterranean countries (4 euro) were 4.5 times less than those received by the inhabitants of the Balkans (18 euro).

The distribution of European funding by large categories makes it difficult to estimate the share of aid that contributes to the sustainable development and to the objectives of MSSD for the Mediterranean countries.

The share of the funding in the “Social infrastructure and services” category could be the basis for a first estimation: it is 47% for the Mediterranean, 45% for the SEMC and 60% for the Balkans (37% for total EU funding).

**Definition**

This indicator is defined by:
- The amount of the net financing from EU to the Mediterranean countries (in absolute value and per capita), and
- The relative share of these funds that contribute to the MSSD objectives;

The EU funding concerns the following categories:
- Social infrastructure and services (SIS)
- Infrastructure and economic services (IES)
- Production sectors (PS)
- Multi-sector/cross-cutting (MC)
- Commodity aid and general programme assistance (CG)
- Action related to debt (AD)
- Emergency assistance (EA)
- Other/unallocated/unspecified (OTH)

**Precautions / Notes**

The relative share of EU funding for the MSSD goals is not easy to assess and additional data processing is needed for the assessment.

**Sources / References**

European Commission, EuropeAid Cooperation Office

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**EU net public financial flows (In the Mediterranean region and contributing to the Strategy objectives)**

**EU net public financial flows in 2011 (euro per capita)**

<table>
<thead>
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<th>Country</th>
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<th>TH</th>
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Source: EuropeAid

**EU net public financial flows per sector in 2011 (%)**

- **Balkans**: ISS, ISE, SP, PT, BG, AD, AU, ALJT
- **PSEM**: ISS, ISE, SP, PT, BG, AD, AU, ALJT
- **MED**: ISS, ISE, SP, PT, BG, AD, AU, ALJT
- **Total**: ISS, ISE, SP, PT, BG, AD, AU, ALJT

Source: EuropeAid
Can private enterprises, including SMEs, benefit from credit to finance their investments?

The development of SMEs finance systems for productive and innovative activities (microcredit, venture capital, incentives, etc.) is one of the objectives for setting up efficient banking services.

In several countries of the south and eastern Mediterranean, the public sector takes up a large share of the domestic credit.

Since 1995, the domestic credit allocated to the private sector has been increasing in most of the Mediterranean countries, except in Tunisia, Egypt and Libya.

In the Mediterranean region, the share of domestic credit allocated to the private sector in 2010 was relatively low; This share is lower than 50% in 6 countries of which Algeria (16%) and Libya (11% in 2009).

In 2010, the domestic credit allocated to the private sector was greater than the GDP in five countries (Cyprus, Spain, Lebanon, Malta and Italy).

While the use of micro-credit is widespread in Asia, it is yet little generally used in the Mediterranean countries.

Definition
Multiple indicator:
- Share of bank credit allocated to the private sector
- Existence of alternative credit systems other than bank credit

Domestic credit for the private sector refers to the financial resources provided for the private sector, such as credits, purchase of non-participating securities, trade credits and other accounts that establish a repayment obligation. Public credit is included in the case of some countries.

The alternative finance systems of bank credit may concern investments in venture capital and micro-credit allocated to those that are excluded from the conventional banking system.

Sources / References
World Bank, World Development Indicators.
International Finance Statistics.
Is the literacy rate of young adults improving?

The literacy rate of young adults reflects the primary education received in the previous decade.

Access to primary education is a key issue for the Millennium development goals as well for the UNESCO « Education for All » programme.

The MSSD has taken up this objective in the Mediterranean for all the young adults, by insisting on its importance in rural areas and for girls in order to reduce the disparities yet significant in the Mediterranean.

Since 1990, the literacy rate of young adults has increased significantly in all of the southern and eastern Mediterranean countries. It is satisfactory in most of the northern Mediterranean countries.

The Mediterranean average (97%) falls above the world average (90%).

The ratio of the literacy rate of girls compared to boys less than 1 indicates a lack of education for girls.

This situation exists in 9 countries in 2005-2010: Montenegro, Libya, Greece, Tunisia, Turkey, Syria, Algeria, Egypt and Morocco.

Definition

Literacy rate between ages 15 to 24 is presented as a percentage of the total population of this age group. People are considered as literate when they can read, write, and understand a short simple article concerning their daily life. (Millennium Indicator n°8).

Precautions / Notes

Measurement of literacy can vary from a simple question “Can you read and write?” to various evaluation tests to assess the levels of literacy. In some cases, literacy is roughly measured in censuses with self-report or by estimating the population not attending school or uneducated.

The definitions of literacy used in the national surveys often differ from that of UNESCO. The types of survey carried out in different countries to estimate the literacy rate are also different from one another and from year to year.

The data resulting from these surveys should, therefore, be considered with caution.

Sources / References

UNESCO, Institute for Statistics.

The Millennium Development Goals Report 2012-United Nations

United Nations Statistics Division, The Millennium Indicators Database.
Are we going in the direction of achieving gender parity at all levels of education?

“Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring full and equal access for girls to basic education of good quality with the same chances to success.” This is one of the objectives inspired by the results of regional conferences for UNESCO’s «Education for all» programme. It was also in the Millennium Development Goals and in the MSSD.

According to UNESCO, school age girls represent 60% of the 113 million children not attending primary school in the world.

60 countries will not achieve the UN Millennium Declaration’s equality goal to 2015, according to the Education for All Global Monitoring Report.

Since 1990, the situation of girls’ education in the Mediterranean countries has improved significantly: in 2011, the parity index for the gross combined enrolment rate is over 99% in 12 countries.

The gross combined enrolment rate is over 97% in 11 countries, but efforts must be made for the secondary education because the gross enrolment rate at this level is over 97% in only 8 countries. In 8 countries the rate is less than 90% and under 95% in 9 countries if the combined rate is considered.

The enrolment rate in primary education is over 96% in all of the Mediterranean countries except in Croatia, Palestine and Bosnia and Herzegovina.

Definition

This indicator is the parity index between girls and boys for the gross enrolment rate (primary, secondary and combined) defined by UNESCO.

It refers to the number of girls enrolled in primary and secondary schools, in public and private schools compared to the number of boys.

The gross enrolment rate is the ratio of the number of students enrolled in schools at different grade levels (such as elementary, middle school and high school), regardless their age, and is expressed as a percentage of the population in the official age group corresponding to this level of education.

Precautions / Notes

This indicator is not an accurate measurement of school access for girls because the improvements of the report may reflect an increase enrolment of girls receiving education or a decrease in the case of boys.

The gross enrolment rate could be over 100% because of late admission and/or because of repetition.

Sources / References

UNESCO, Institute for Statistics.
UNESCO, Education for All Global Monitoring Report, January 2010
United Nations Statistics Division, The Millennium Indicators Database.

Indicator HUM_P02 Updated on 23/05/2011
Is the financial effort for research and development improving?

Among the MSSD objectives concerning the rational use of natural resources, the development of environmentally friendly techniques, as well as promoting the economic, social know-how and the diversity of the Mediterranean are essential.

This means increasing expenses, in synergy with the private sector, on research and development (R&D) in order to approach the average level of the countries with equivalent incomes by 2015.

Globally, most countries spend between 0.25% and 1% of their GDP on research and development (R&D). The expense in EU-27 countries is about 2% of the GDP in 2010.

The amount of national public expenditures on research and development expressed as a percentage of GDP is increasing in all Mediterranean countries, except 4 countries (Croatia, Malta, Egypt and Bosnia and Herzegovina) but remains low overall.

Except in Israel where national public expenditures on research and development is about 5% of its GDP, the percentages are between 1 and 2.5% in France, Slovenia, Spain, Italy, and Tunisia and less than 1% in other Mediterranean countries.

The maximum of public expenditures for research and development per capita is about 1300 dollars per inhabitant in Israel.

The share of expenditures on research and development in GDP of private sector is significant in many countries but it cannot be analysed for the whole Mediterranean region.

**Definition**

This indicator is made up of two sub-indicators that are defined as:

- The share allocated for R&D of the operational budget of the public sector;
- The share of the R&D expenditures in the GDP of private sector.

The expenses on R&D include the operating expenditures and investments (including overheads) for creative and system-based activities dedicated to increase knowledge. This amount includes both fundamental and applied research as well as experimental development work leading to new devices, products or processes.

**Precautions / Notes**

Expenses on R&D are not necessarily oriented to the sectors supporting sustainable development or contributing to MSSD goals.

**Sources / References**

UNESCO, UNDP.