

# THE COMPUTATION OF SUSTAINABLE INDICATORS FOR THE MALTESE ISLANDS

**Lino Briguglio**

University of Malta

**George Said**

National Statistics Office, Malta

Regional Workshop on Indicators for Sustainable Development

Organised by PLAN BLEU: Regional Activity Centre

Sophia-Antipolis - France

9-12 May 2005

# THE MAIN ACTORS IN MALTA



- The National Statistic Office (NSO)



- Malta Observatory for Sustainability Indicators (SI -MO)



- Malta Environment and Planning Authority (MEPA)

# THE OBJECTIVES OF THE NSO



# NSO COLLABORATION

- Collaboration in the definition of indicators and indicator sets
- Collaboration for DG ENV's annual report & also EUROSTAT Indicators publication
- Share of responsibilities for data collection on a national & international level
- Review of reporting

# DATA NEEDS FOR LOCAL AND EUROPEAN UNION ENVIRONMENTAL POLICIES

- State, pressure and response data, to support political decisions
- Compliance data, to verify effectiveness of legislation

# WHY INDICATORS?

Normally indicators are structured in terms of state, pressure and response. These indicators have to be compiled in response to:

- Conventions or regulations
- Regular data collection on obligatory basis (e.g. joint OECD/Eurostat questionnaire)
- Ad-hoc requests

# DATA SOURCES

- Administrative data
- Direct Measurements
- Surveys
- Modelling
- Observations
- Remote sensing

# ADMINISTRATIVE DATA

- Characteristics: Data is produced from data available in public registers
- Examples: Hazardous waste, protected areas
- Main quality problems: Quality of administrative data, suitability for environmental and for statistical analysis

# MEASUREMENTS

- Characteristics: Data is automatically produced by equipment
- Examples: Measuring Air or Water quality
- Main quality problems: Choice of location of measurement station, details of measurements

# Surveys

- Characteristics: data is collected from all or from a representative selection of units (usually companies or people)
- Examples: Waste generation or treatment, Water use, Discharges of pollutants in water, Pesticide consumption
- Main quality problems: clarity and harmonization of concepts and definitions, quality of the questionnaires, quality of the underlying administrative registers, accuracy of response, treatment of non-response. If only a sample is surveyed, also the choice of sample is crucial

# MODELING

- Characteristics: data is calculated on the basis of related available data, mainly from economic sectors
- Examples: air pollution, exposure to toxic chemicals
- Main problems: Models can range from straightforward areas (as for CO<sub>2</sub> emissions) to complex areas. They can be well elaborated and agreed, or purely experimental. Quality of results also depends strongly on the quality of the underlying data.

# OBSERVATIONS

- **Characteristics:** Data is collected through observing certain phenomena in nature
- **Examples:** Biodiversity
- **Main problems:** Clarity and harmonization of definitions; choice of observed sample; reliability of observations

# REMOTE SENSING

- Characteristics: Photos from satellites or airplanes
- Examples: Land cover
- Main problems: Clarity and harmonization of definitions; precision of photos; interpretation of photos

# CROSS-CUTTING PROBLEMS

- Harmonization of definitions and methodologies
- Data gaps
- Timeliness
- Human resources

# THE INDICATORS FOR MALTA

The first set of sustainability indicators for Malta, in terms of the Blue Plan set, was produced through a collaborative effort between SI-MO, NSO and MEPA

# THE SI -MO PROJECT

The 'Sustainability Indicators Malta Observatory' (hereafter referred to as SIMO) was established on 1st December 2000. SIMO is an organisation hosted by the Islands and Small States Institute within the Foundation for International Studies.

# SIMO MAIN AIMS

To establish a comprehensive, user-oriented system for the collection, evaluation, storage and dissemination of data and information on the environment and sustainable development.

To set up the basis for the eventual development into an independent "National Observatory" that could report internationally on the issue of Sustainability Indicators to international organisations

# THE PROJECT

SI-MO completed a two year project in 2003, in cooperation with other Mediterranean institutions, as part of the so-called MEDERMIS project

# OUTPUTS

The output of SI-MO during its first two years of existence was very extensive and included reports on air quality, fresh water and wastewater, biodiversity and terrestrial and marine ecosystems, solid waste, territories and human settlements and economic activities.

<http://www.um.edu.mt/intoff/si-mo/preliminary.htm>

# OUTPUTS

The most important output of SI-MO was the computation of the 100 indicators based on the MCSD methodology (3 out of the 130 indicators were not applicable for Malta, and data could not be found for the remaining 27 indicators). This exercise was carried out in collaboration with the National Statistics Office.

# THE RELEVANCE OF THE INDICATORS

- They are being used for the build up of the State of the Environment report will soon be published.
- They have been consulted for the drawing up of the Strategy for Sustainable Development which at present is still in draft.
- The Indicators are also used in the monitoring of projects and programmes funded by the EU, for e.g. Structural funds.

# INDICATORS TO MEASURE ENVIRONMENTAL PERFORMANCE

The Malta Environment and Planning Authority (MEPA) uses sustainability indicators to measure progress in the land-use planning field.

MEPA is also a partner in the Interreg III C project DEDUCE that aims to calculate the list of 27 indicators for ICZM as a contribution towards the implementation of the EU ICZM

A number of these indicators are similar to those adopted by Blue Plan.

# POLITICAL WILL IN MALTA

There is a political will to calculate and use sustainability indicators. The former and present Ministers for the Environment have supported the effort by SI-MO.

# POLITICAL WILL IN MALTA

However, the main problem is lack of funds. The Ministry of Rural Affairs and the Environment cannot commit funds for this exercise. The National Office of Statistics has shown interest in the compilation of indicators, and worked closely with SI-MO. It also featured the indicators on its website; [www.nso.gov.mt](http://www.nso.gov.mt). However here again, the problem is lack of funds to continue supporting the exercise.

**THE END**

**THANK YOU FOR YOUR  
ATTENTION**