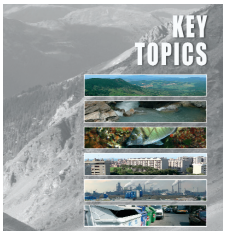
KEY TOPICS

ANNEX



Environmental Yearbook Indicators Database
(http://annuario.apat.it/)

Introduction

Environmental information management and dissemination are among the most important functions performed by the ISPRA (formerly the APAT).

The strategies adopted by the ISPRA (formerly the APAT) underline its far-reaching efforts to disseminate statistical information on-line.

In this context, the *Environmental Indicators Database* - created by the APAT in 2004 -plays an important role. Its two-fold function is to provide operational support to the production process of the Environmental Data Yearbook and to supply information for consultation.

The Database – which currently contains 270 indicator fact-sheets subdivided by themes (atmosphere, biosphere, hydrosphere, waste, etc.) – is one of the widest-ranging and complete environmental data collections available in Italy.

The design of the indicator fact-sheet was arrived at after a review and analysis of existing national and international literature on the standardisation and harmonisation of environmental reporting tools. The structure can be divided into two parts:

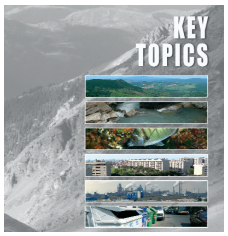
- Meta-data on the indicator
- Data associated with the indicator.

The Environmental Indicators *Database* presents the same characteristics as those indicated by SISTAN for Statistical Information Systems, with the result that it has been included in the National Statistical Programme for 2008-2010.

Website access statistics are positive: in 2008, there were 24,000 “miscellaneous visitors”[1], 36,000 visits, 400,000 pages and 1.2 million accesses, 80% of which were direct accesses or “bookmark accesses”.

Together with the preparation of the 2008 Yearbook, a new release of the *Environmental Indicators Database* was drawn up, in order to further increase ease of operatoon, while streamlining processing and making the information collected easier to consult.

[1] The heading “miscellaneous visitors” represents the number of visitors during a given day. If a user visits the website more than once in a day, the number of visits and pages increases, but the number of “miscellaneous visitors” remains the same.



Prospects for development include, among other improvements, a new mode of consulting, referred to as "Systematisation" as well as the internationalization of the Database.

Structure of the Yearbook Database

The Yearbook Database is a web-based application designed to support the preparation of the Yearbook of Environmental Data. It can be consulted on the Internet site http://annuario.apat.it or accessed directly e from the homepage of the site www.apat.gov.it.

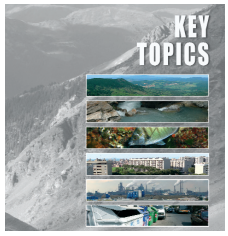
The site is a web application that can be utilised by non-privileged (or *basic*) users to consult the indicator fact-sheets, while privileged (or *data entry*) users can input data (updating of indicator fact-sheets already in the data base or insertion of new ones) and supervisors can co-ordinate the preparation of the Yearbook.

Basic users access the application with a browser, having first entered their username and password on the on-line registration form.

Consultation

The database can be accessed to search for individual indicator fact-sheets containing both meta-data and data, or consolidated indicators can be consulted using filters based on: year of publication of the Yearbook desired[2], thematic area and specific theme. Figure A.1 shows the application's homepage.

[2] The indicator fact-sheets of the Environmental Data Yearbook are available from the 2003 Edition on.



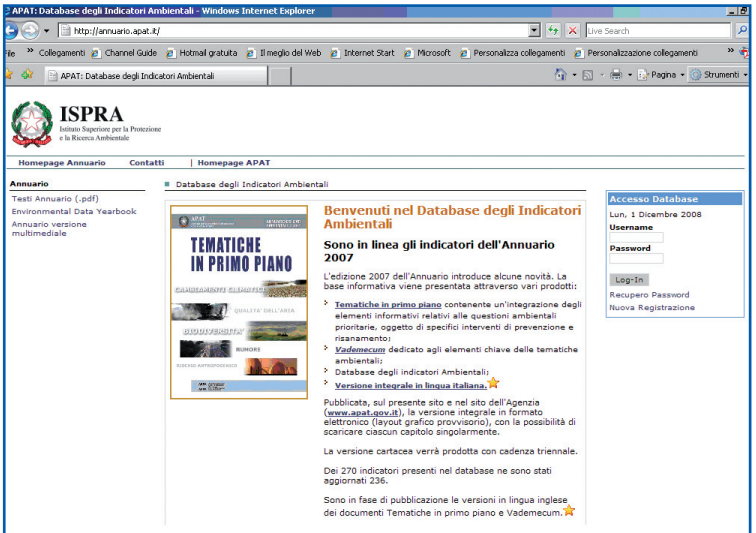
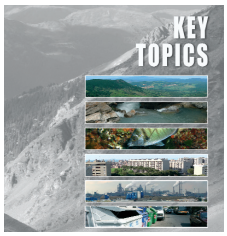


Figura A.1: *Homepage* Annuario

The application interface is simple, allowing basic users to register on-line by entering their usernames and passwords. The registration form, shown in Figure A.2, calls for compilation of the obligatory items (username, first name, last name and e-mail, all indispensable for access and management of users), in addition to requesting optional information that can be of use in tracing the profiles of users who access the consultation function.



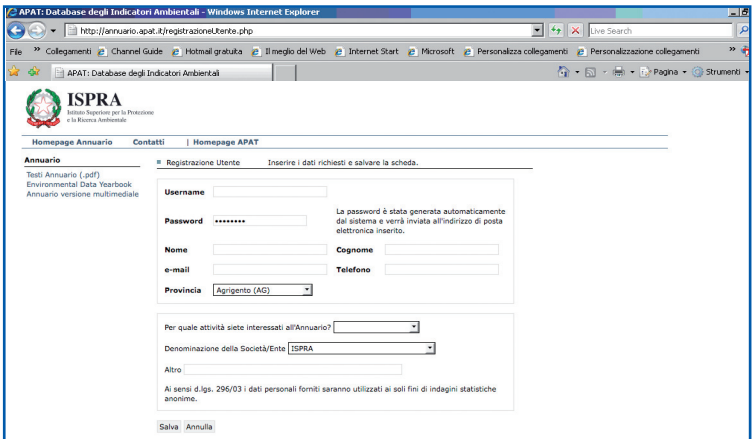


Figure A.2: "User Registration" Form

Once registration has been completed, the user can start navigating by carrying out the login, which involves entering the username selected and the password automatically generated by the system and sent to the e-mail address entered during the registration phase. Should the username or password be lost, the application includes a function that sends the access credentials out once again, after the e-mail address used for registration has been entered. Figure A.3 shows the initial page that appears to the basic user after the login.

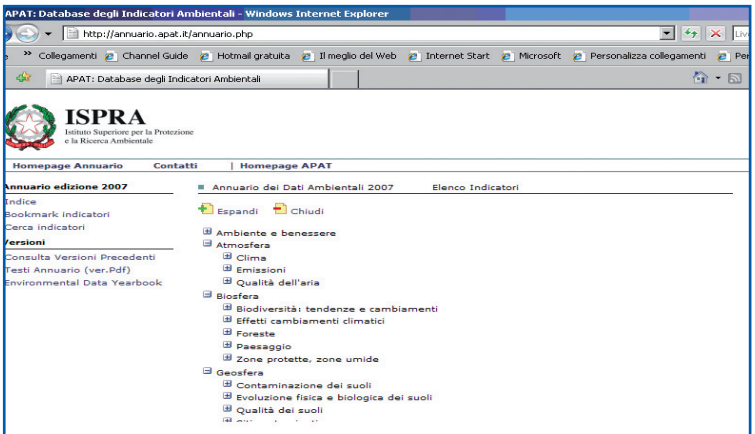
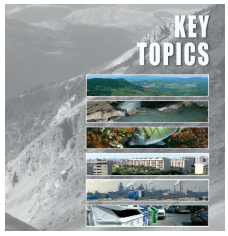


Figure A.3: The Homepage of the basic user



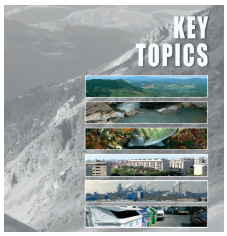
The published Indicators for the different editions of the Yearbook stored in the system can be consulted on this page.
After the desired edition of the Yearbook has been selected, the indicator can be browsed by pressing the "Index" key.

Figure A.4: The "Indicators List" interface

This page can be used for a simple search of the indicators, by clicking on the topic area and the related subsections (Figure A 4).

Advanced searches are performed by clicking on "*Cerca Indicatori*" and filling out, on the new search page (Figure A 5), one or more of the input boxes found on the indicator fact-sheet, based on:

- indicator's name, or keywords;
- words matching part of the "description" entry;
- words matching part of the "purpose" entry.



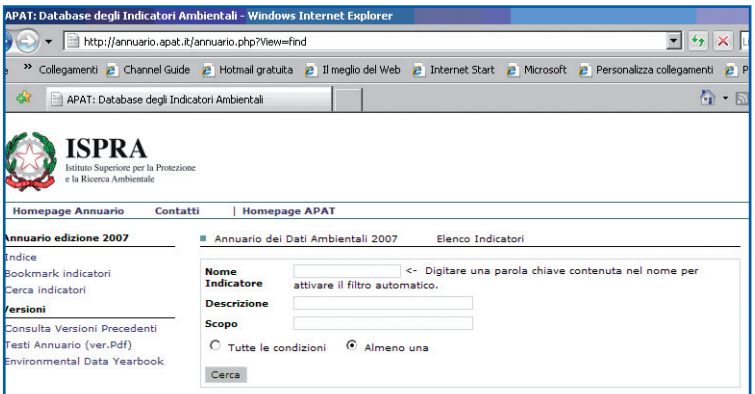


Figure A.5: The "Search " Engine

The outcome of the search is a list of indicators matching the keywords specified in advance by the user.
The fact-sheet for each indicator (meta-data and data) can be viewed.

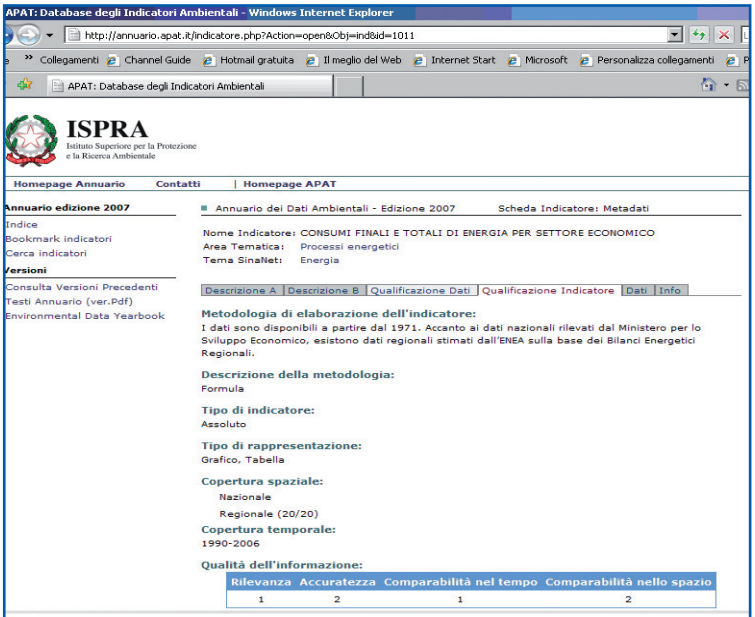
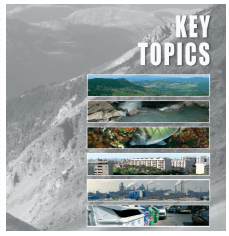


Figure A.6: "Meta-Data Fact-Sheet" Interface



The indicators can be selected using the “Add to Bookmark” function, which makes it possible to create a report (in Html version) with the same structure and information found on the indicator fact-sheets of the Yearbook.

Figure A.7: “Data Section” Interface

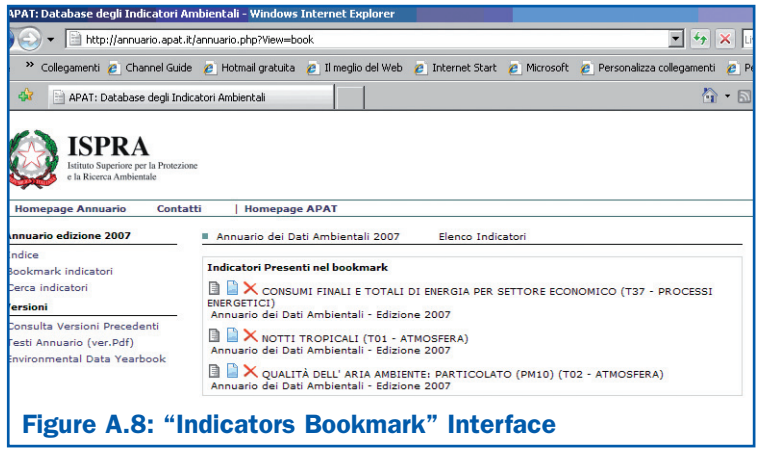


Figure A.8: “Indicators Bookmark” Interface