



# Young influences

**Mark C. Mifsud** examines the factors influencing Maltese youth, what they know about the environment, and what is important to them.

The major environmental issues in Malta are related to its small size and high population density, which is augmented by an influx of visitors each year. Not much is known about the environmental knowledge of young people in the Maltese islands, or of the main actors that are responsible for the acquisition and development of environmental knowledge amongst young Maltese. Research was undertaken during 2007 and 2008 to address this gap, comprising a class administered questionnaire survey completed by 447 students in the post secondary age range. Stratified sampling was used within the studied colleges and schools to ensure that youth studying languages, sciences, business, and humanities were represented according to the actual percentages at the school level.

## KNOWLEDGE

Students were asked about their knowledge of four major environmental areas: global environmental issues; local environmental issues; knowledge of important concepts; and knowledge of local solutions. For each area, there were six multiple choice questions; each correct answer was given a score of one. The scores were summed together to give the four separate knowledge score, and overall scores across all four areas were also calculated.

The students' knowledge on local environmental issues was at a lower level than that of global environmental issues (see Table 1). One reason for this may be the total

## AT A GLANCE: MALTA

A small archipelago, situated in the Mediterranean between Sicily and Libya, comprising of three inhabited islands and a number of uninhabited smaller islands.

Area: 316 km<sup>2</sup>

Population density: >1300 km<sup>-2</sup>

Tourism: 1.2 million visitors per year<sup>1</sup>

### Main environmental issues<sup>2</sup>:

- waste production and management
- reliance on fossil fuels for energy production
- high private motor usage
- freshwater production requiring a high energy input

absence of Maltese textbooks in the sciences. Malta still heavily relies on imported textbooks from America or the United Kingdom for the sciences. The opinion of young people on the general population with regard to the environment might be summed up in the following statement:

*"It is very bad. People are still not aware enough of the importance of nature. They still litter the environment and harm animals. They do not care because of egoism and ignorance. They are close minded and believe the environment belongs to them"*  
(16 year old female)

▼ **Table 1: Maltese students' scores regarding their knowledge of environmental issues, concepts and solutions to problems. Scores for each of the knowledge areas are out of 6. The overall knowledge score is out of 24.**

	Knowledge of global issues	Knowledge of local issues	Knowledge of important concepts	Knowledge of local solutions	Overall knowledge
<b>Mean score ± variance</b>	3.4 ± 1.8	2.9 ± 1.8	3.2 ± 1.6	2.7 ± 1.3	12.1 ± 10.6

**IMPORTANCE OF LOCAL ISSUES**

Overpopulation was identified as the most important national environmental issue and was mentioned by 50% of the student respondents (see Table 2). The perceived importance of overpopulation as a main national environmental issue may align with the very high population density on the islands, and the boom the building industry was passing through at the time of the surveys: traditional, large townhouses were being demolished to make way for apartments to accommodate the increasing population. Other important national issues identified included air pollution, traffic congestion and solid waste (Table 2), all of which are all directly related to overpopulation.

The importance of these local environmental issues was exemplified by one student's response:

*"My opinion is that we are more interested in digging up the only beautiful environment that's left and building a block of flats for the good of the people. We are an overpopulated island owning more than one car. The air we breathe is exhaust."* (17 year old female)

Other environmental issues were identified by fewer respondents, including, for example, hunting and trapping (which occurs exclusively for birds in Malta). Hunting and trapping issues are main environmental issues as represented in the local media, and this issue can be inflated by political parties in opposition to gain political advantage. Students see this as an important issue, but also recognise the political context and emphasis. The following student recognises the inflated importance awarded to hunting by politicians:

► **Table 2: Ranking of importance of local environmental issues by Maltese students.**

Rank	Environmental issue	Students identifying issue (%)
1	Overpopulation	50
2	Air Pollution	43
3	Traffic Congestion	41
4	Solid Waste	26
5	Hunting and Trapping	16
6	Water Pollution	15
7	Global Warming	12
8	Aquifer Depletion	11
9	Habitat Destruction	11
10	Quarrying and Related Impacts	8.5
11	Ozone Layer Depletion	6.5
12	Liquid Waste	4.5
13	Soil Erosion	4.4
14	Sound Pollution	4.3
16	Biodiversity Depletion	3.8
17	Acid Rain	3.1
18	Production of Particulates from Building Industry	3.6
19	Forest Destruction	1.6

*“Not such a good state, but could be worse. Lots of effort on banning hunting when the major worries should be air and sea pollution.” (17 year old female)*

**IMPORTANCE OF GLOBAL ISSUES**

Global warming was identified as the most important global environmental issue, and was mentioned by 55% of student respondents (see Table 3). This was closely followed by ozone layer depletion (mentioned by 48% of students). Other global environmental issues were less frequently highlighted, although air pollution and forest destruction were concerns for many respondents. Overpopulation was again noted as a concern, but at a global scale.

Rank	Environmental issue	Students identifying issue (%)
1	Global Warming	55
2	Ozone Layer Depletion	48
3	Air Pollution	35
4	Forest Destruction	32
5	Overpopulation	18
6	Biodiversity Depletion	15
7	Water Pollution	14
8	Acid Rain	13
9	Habitat Destruction	10
10	Traffic Congestion	8.7
11	Solid Waste	3.4
12	Aquifer Depletion	2.2
13	Soil Erosion	2.2
14	Production of Particulates from Building Industry	1.8
16	Liquid Waste	1.8
15	Hunting and Trapping	1.6
17	Sound Pollution	1.6
18	Quarrying and Related Impacts	0.2

▲ **Table 3: Ranking of importance of global environmental issues by Maltese students**

**SOURCES OF INFORMATION**

The majority of students received some information from all the listed sources (see Table 4). Results showed that students receive most information from school (65%), television (48%) and the internet (44%). Conversely, fewer students obtain information from government agencies (10%), radio (10%) and billboards (4.3%). Many students stated that there is a lack of environmental awareness of the local general public, with some suggesting that whilst awareness is still low it is increasing.

Rank	Environmental issue	Students identifying issue (%)
1	School	65
2	Television	48
3	Internet	44
4	Books	36
5	Family	33
6	Magazines	17
7	National campaigns	15
8	Friends	12
9	Non-governmental organisation (NGOs)	12
10	Government agencies	10
11	Radio	10
12	Billboards	4.3

▲ **Table 4: Sources of environmental information used by Maltese students.**

**RELIABILITY OF INFORMATION**

Young people were asked to identify the reliability of the listed sources of environmental information (see Table 5). Young people perceived the most reliable sources to be school (56%), books (47%) and the internet (38%). In contrast, radio, billboards and friends were thought to provide less reliable environmental information.

**IMPROVING EDUCATION**

This research sheds light on the effectiveness, or otherwise, of current formal and informal environmental education providers. The importance of schooling as a provider of good and reliable

► **Table 5: Reliability of environmental information as perceived by Maltese students.**

Rank	Information source	Rated 1st for reliable environmental information (% of respondents)
1	School	56
2	Books	47
3	Internet	38
4	Television	37
5	NGOs	34
6	National campaigns	30
7	Magazines	17
8	Family	17
9	Government agencies	14
10	Radio	14
11	Billboards	13
12	Friends	7.6

environmental information has been highlighted in this study. Schools are currently playing a central role in imparting environmental knowledge which is considered to be very reliable by the students themselves. However, more consistency across schools is required and outdoor education needs to be higher on the agenda. Simple activities, such as field visits, appear to be of utmost importance to increase the number of students who study environmental science at higher academic levels, as they expose students to the reality of the environment and the work of environmental scientists. Television has been afforded a high score for provision of information but it has a lower rating with regards to reliability. Political interference seems to be the major obstacle. Vetting by an independent board would perhaps reduce this interference, but gaining trust in such boards in the Maltese islands may be best achieved by employing non-Maltese residents as a means to avoid the risk of perceived political bias. This perception appears to be less negative when the appointee is not of Maltese nationality.

It is clear that students are more knowledgeable about the global environment than about the local environment. This situation has possibly been brought about by a number of factors, but the main concern is the lack of textbooks on the Maltese environment. Rather than let authors try to make ends meet (Malta is a very limited market) and publish the books themselves (as the situation stands now), the government should actively commission authors to publish such books to fill in these lacunae.

NGOs, local policy makers and local educators have to take these findings very seriously when devising new environmental education programmes to ensure that such programmes do not just lead to an accumulation of knowledge, but also to improved pro-environmental behaviour. Researchers should start studying the effectiveness or otherwise of such programmes to influence behaviour, so that maximum benefit is derived from the limited financial and human resources available. **ES**

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**SOURCES**

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